Chilean Validation of the Operationalized Psychodynamic Diagnosis - Structure Questionnaire (OPD-SQ) for Personality Structure

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Abstract

Background

This is the validation of the Operationalized Psychodynamic Diagnosis - Structure Questionnaire (OPD-SQ)

Methods

A clinical sample of 399 adults and a nonclinical sample of 50 healthy adults completed measures of depression, attachment, psychiatric symptomatology and distress. Internal consistency and concurrent validity were assessed. Test-retest and Reliable Change Index were also calculated, as the ability of the OPD-SQ to distinguish between the clinical and control subsamples.

Results

High internal consistencies were found; significant differences between clinical and non-clinical samples, and significant associations with psychiatric symptomatology, depression and psychological distress.

Conclusion

The Chilean OPD-SQ has good reliability, and discriminates between clinical and healthy samples.

Background

Traditional categorical and descriptive diagnoses, based on symptomatology as a solitary approach to mental disorder and suffering are increasingly being questioned. Complementary, more comprehensive systems aim at factors beyond symptomatology and also consider the patients' strengths, their experience of the disorder, and other core aspects of psychopathology, in order to achieve a person-centred diagnosis[1]. Personality structure and characteristics are particularly important for this novel way to approach psychopathology, as they comprise basic capacities and vulnerabilities for normal as well as impaired functioning. Broadly speaking, personality is here understood as a predisposing factor for various mental disorders (a vulnerability factor), as well as influencing the presentation of such disorders: severity of symptoms, subjective experience of the disorder, and treatment response.

Personality Function and Psychopathology

International research on dimensional models of personality functioning was considerably increased since the formulation of Criterion A (Levels of Personality Functioning; LPFS) of the Alternative Model of Personality Disorders (AMPD) of the DSM-5, which comprises four domains in two broad areas of functioning regarding the self (identity, self-direction) as well as interpersonal functioning (empathy, intimacy)[2,3]. Contemporary studies point towards the conclusion that Levels of Personality Functioning can be adequately reliably measured and shows validity in a variety of measures of psychopathology[4]. Differently from the ICD 11, the fifth version of the Diagnostic and Statistical Manual of Mental Disorders (DSM 5)[5] did not evolve towards a formal endorsement of a dimensional approach of personality and its disorders, but rather moved those perspectives into Section III ("Emerging Measures and Models"). ICD-11 from the World Health Organization (WHO) went one step further. Similar to the DSM-5 proposal, personality disorders will be diagnosed on a severity scale which includes basic problems or vulnerabilities in the areas of self and interpersonal functioning[6].

The models formulated by the DSM-5 AMPD and ICD-11 are based on a rich tradition of mostly psychodynamic and interpersonal approaches to measure personality functioning or integration. For example, this dimensional perspective is shared among several measurement instruments like the Shedler-Westen Assessment Procedure (SWAP)[7], the Structured Interview of Personality Organization (STIPO)[8], which follows Otto Kernberg's model, or the Mental Functioning Dimension of the Psychodynamic Diagnostic Manual[9]. A similar perspective was proposed by the OPD-2 in 2006[10]. Here personality functioning is also conceptualized as dimensional rather than categorical, with a description of a number of areas of personality function to be evaluated independently to facilitate therapeutic interventions: a particular functional vulnerability can be discovered and prioritised in psychotherapy (e.g. vulnerability or deficit in impulse control, see Table 1), using the support of healthy functional strengths (e.g. self-perception, see Table 1). For a comparison between the LPFS and the OPD-2 see Zimmermann et al[11].

Table 1
Structural personality functions according to the Axis IV of the OPD-2

Domain	Function	Sub-function
Perception/cognition	Self-perception	Self-reflection
		Affect differentiation
		Identity
	Object perception	Self-object differentiation
		Whole object perception
		Realistic object perception
Regulation	Self-regulation	Impulse control
		Affect tolerance
		Regulation of self-esteem
	Regulation of relationships	Protecting relationships
		Balancing interests
		Anticipation
Communication	Internal communication	Experiencing affect
		Use of fantasies
		Bodily-self
	External communication	Making contact
		Communicating affect
		Empathy
Attachment	Attachment to internal objects	Internalization
		Utilizing introjects
		Variability of Attachment
	Attachment to external objects	Capacity for Attachment
		Accepting help
		Detaching from relationships

Most of these measures, including the OPD-2 in its original version, require for their administration and evaluation a trained observer using a manual. Despite their reliability, both the administration of the test (1 to 2 hours interview) and the training of the raters are time consuming and costly[10]. A self-report instrument is a valuable contribution to the research of personality structure, but also to clinical practice, because it allows to find a common language with the patient that closely resembles their actual experience, values the patient perspective and can be therefore used for joint treatment planning[12,13].

Operationalized Psychodynamic Diagnosis: Rationale

The OPD-2, at the base of the present self-report questionnaire (OPD-SQ) brings together descriptive and symptomatologic criteria with clinically-relevant psychodynamic domains, which guide the clinician in the indication and planning of psychotherapy, and allow for the specific evaluation of changes achieved by psychotherapeutic interventions. The OPD-2 organizes diagnostic information in five axes: Axis I: Experience of Illness and Prerequisites for Treatment; Axis II: Interpersonal Relations; Axis III: Conflict; Axis IV: Structure and; Axis V: Psychic and Psychosomatic Disorders[10,11]. In what follows, we limit our description to Axis IV, namely the Levels of Structural Integration. (For detailed descriptions of Axes I-III and V, see[10,14]).

Psychic structure evolves around two lifelong tasks, the development of capacities for interpersonal relatedness and the development of self-definition or identity, underpinned by functions oriented towards self-regulation and the relationship between the self and its internal and external objects. Impaired structure is usually rooted in adverse developmental conditions, i.e. actual experiences of abuse or neglect, which compromises the acquisition of related capacities. While personality structure itself is conceived by the developers of the OPD-2 as the overall organization or arrangement of mental dispositions, its manifestations can be observed and described in a variety of functions. Table 1 lists these domains, functions and sub-functions considered by Axis IV of the OPD-2[10]. A well-integrated structure fosters the creative and flexible availability of regulatory and adaptive psychic functions, allowing for a homeostatic equilibrium which is not rigid or immutable. It is at the same time the basis for dealing with developmental tasks across the life-span integrating new information to stablish new regulatory rules and modify existing ones[10]. The OPD levels of structural integration axis us usually rated by trained experts and has received considerable empirical support regarding reliability and validity[11]. In addition, the OPD system is widely used in the German health-care system, with an experience of training and clinical application for more than 25 years.

In summary, the evaluation of this Axis allows not only for the assessment of the structural integration of personality in a continuum from functional to dysfunctional, but also to appraise the specific vulnerabilities and strengths of an individual, which facilitates the planning of psychotherapeutic interventions in the clinical context and to identify the kind of deficits implicated in various psychopathologies within a research context. This with the time- and training-saving advantages of a short self-report.

The Operationalized Psychodynamic Diagnosis – Structure Questionnaire (OPD-SQ)

This article introduces the Spanish-language version of the Operationalized Psychodynamic Diagnosis - Structure Questionnaire (OPD-SQ)[12], originally developed and published in German. It is a self-report questionnaire which measures several different dimensions related to structural abilities and vulnerabilities, following the rationale of Axis IV of the Operationalized Psychodynamic Diagnosis System (OPD-2)[10]. The OPD-SQ is based on the definition of OPD levels of structural integration as described above. Through its 95 items, where participants indicate the degree to which they identify with each statement, the questionnaire evaluates personality function by measuring four personality domains, each of which, in turn, can be oriented towards the self or towards others. These domains are: a) perception/cognition, b) regulation, c) emotional communication, and d) attachment. The original German version of the measure yielded evidence in favour of its reliability, reporting internal consistencies between 0.72 and 0.91 for its various scales in several samples[12].

This self-report measures the four dimensions mentioned above through 95 items divided in four scales. Each dimension is represented in their polarities self-other, giving the OPD-SQ a total of 8 subscales. Each of these 95 items is a statement followed by a Likert scale, where the participant must indicate their level of agreement with the statement (0 = totally disagree; 4 = totally agree). The items and scales are organised as following:

(1) Cognitive abilities: composed of 29 statements divided into the subscale Self-Perception (12 statements) and the subscale Object Perception (17 statements).

(2) Regulation abilities: twenty-five affirmations divided into Self-Regulation (13 statements) and Regulation of Relationships (12 statements).

(3) Communication abilities: Made of 25 statements divided into Emotional Internal Communication (11 statements) and Emotional External Communication (14 statements).

(4) Attachment abilities: Comprising 16 statements within the subscales of Attachment to Internal Objects (8 statements) and Attachment to External Objects (8 statements).

The authors of the original German measure allowed for maximum one missing response on each scale to rate the questionnaire during validation (in clinical practice, more missing responses could be allowed, depending on the content of those unanswered questions). The questionnaire yields partial scores for each scale and subscale, and a total score for the structural functioning of the subject. Higher scores represent worse functioning. Table 2 details the sub-scales of the OPD-SQ.

Table 2
Summary of the OPD-SQ subscales, sub-functions assessed, example items (translated from Spanish for illustration) and internal reliability (Cronbach's α).

Subscale	Sub-function included	N° of items	Example item	Internal Reliability (Cronbach's α)		
				Control sample	Clinical sample	Total sample
Self-Perception	Reflection of self	4	I find very difficult to describe myself	.865	.915	.923
	Differentiation of affects	4	I often don't know very well how I am feeling			
	Identity	4	Sometimes I feel or do things that do not match with myself			
Object Perception	Self-object differentiation	7	Sometimes I doubt whether someone else is thinking something about me, or if it just my imagination	.792	.865	.874
	Holistic object perception	4	If the other person is not in my same mood, we will not work-out			
	Realistic object perception	6	People tell me that I always end up picking the wrong friends			
Self-Regulation	Regulation of impulse	4	Sometimes I get so angry that I do not respond for my actions	.725	.874	.883
	Tolerance of affects	5	Sometimes my emotions are so strong that they scare me			
	Self-Regulation-esteem	4	I find it difficult to overcome when someone criticizes me			
Regulation of Relationships	Regulation of Relationships	6	When I am angry I tend to damage my relationships	.727	.850	.851
	Anticipation	6	Sometimes I misjudge how my behavior affects others			
Internal Communication	Experiencing of affects	4	It is difficult to perceive my own emotions	.550	.767	.780
	Utilizing fantasies	3	My fantasies and ideas vitalize and enrich me			
	Body-self	4	I am often incapable of perceiving well my body			
External Communication	Establishing contact	4	I find it difficult to establish contact with other people	.672	.685	.684
	Communicating affects	6	I have been told that I do not show my feelings			
	Empathy	4	When someone is having a bad time, I tend to worry			
Attachment to Internal Objects	Internalization	4	I often think of certain people who could harm me	.703	.835	.842
	Utilizing introjects	4	I find it difficult to do something good for myself			
Attachment to External Objects	Accepting help	4	I find it difficult to ask others for help	.477	.677	.682
	Dissolving attachment	4	Separations and goodbyes are difficult to me			

The original German questionnaire[12] found high positive correlations with general psychopathology, attachment insecurity as well as neuroticism, and negative with Openness, Agreeableness and Conscientiousness The instrument was able to discriminate between a healthy control sample and a clinical sample comprising both ambulatory and hospitalized patients with a high effect size (Cohen's d = 1.50). It yielded good internal consistencies in all scales (Cronbach α between 0,72 and 0,91). Subsequent research found a significant positive correlation (r = .62) between OPD-SQ and OPD LSIA expert-ratings and incremental validity in predicting the number of personality disorders[13]. It differentiates between depressed patients with vs. without a comorbid diagnosis of borderline personality disorder[15], and is associated over and above a categorical diagnosis with negative affectivity in individuals in inpatient psychotherapy[16]. The OPD-SQ is significantly associated with other measures of personality dysfunction, including the General Assessment of Personality Disorder (GAPD)[17], and other questionnaires[18], including trait- and performance-based measures of emotional experience and a high association with the Level of Personality Functioning Scale - Self Report[19]. A 12 item screening version[20] was also related (r = .78) to LPFS expert-ratings and reflective functioning[21]. From a clinical perspective, OPD-SQ scores showed relevant associations with slopes of plasma glucose in type 2 diabetes patients[22], eating disorder profiles[23], bipolar disorder[24], trauma symptom severity[25], to name some areas of research. A preliminary study on the Chilean version[26] also reported good to excellent internal consistencies in all scales (Cronbach α between 0,71 and 0,93), and was able to discriminate between healthy and patient samples (d = 1.05). It also showed positive correlations with psychological distress measured with the Outcome Questionnaire – 45 Item version (OQ-45)[27] and with depressive symptomatology measured with the Beck Depression Inventory (BDI-I)[28].

Methods

Participants

Our sample consisted of 449 adult participants of which 50 were healthy controls (11.14%). The clinical sample was composed of 399 patients attending mental health services at 22 different primary health centres in Santiago's Metropolitan Area. They were informed of the study and invited to participate when informed of their first appointment. Exclusion criteria were: age under 18, those seeking treatment for substance use issues, and those with psychotic symptoms, cognitive dysfunction or eating disorder. Inclusion criteria for the clinical sample was scoring above the Chilean cut-off for depression in the Beck Depression Inventory (a score of 14 or above). The healthy control sample comprised adults who also lived in Santiago. They were contacted through 27 volunteers of this study (each volunteer could invite a maximum of three participants), and invited to participate in a study related to depression and personality. Exclusion criteria were current psychological or psychiatric treatment or the intention of starting treatment. All participants provided signed consent. Table 3 shows the demographic characteristics of our sample. Samples were comparable in gender and age, but the clinical sample had a slightly bigger proportion of participants with university degrees.

Table 3
Demographic characteristics of this study's sample

	Healthy control sample	Clinical sample	Total sample
Age: mean (SD)	34.42 (14.49)	36.20 (13.72)	35.97 (13.81)
Gender: n(% of female)	30 (60.00%)	287 (76.33%)	317 (74.41%)
Education n (%)			
Illiterate	-	-	-
Primary school uncompleted	-	4 (1.25%)	4 (1.03%)
Primary school completed	2 (4.00%)	9 (2.82%)	11 (2.84%)
High school uncompleted	2 (4.00%)	17 (5.33%)	19 (4.90%)
High school completed	15 (30.00%)	96 (30.09%)	111 (30.08%)
Technical college completed	14 (28.00%)	65 (20.38%)	79 (21.41%)
University or higher degree	17 (43.00%)	128 (40.12%)	145 (39.30%)
Occupation n (%)			
Housewife	9 (18.00%)	37 (12.21%)	46 (13.03%)
Student	20 (40.00%)	87 (28.71%)	107 (30.31%)
Employee	14 (28.00%)	97 (32.01%)	111 (31.44%)
Freelancer	6 (12.00%)	27 (8.91%)	33 (9.35%)
Unemployed	-	19 (6.27%)	19 (5.38%)
Not working for medical reason	-	23 (7.59%)	15 (4.25%)
Retired	1 (2.00%)	9 (2.97%)	18 (5.10%)
Other	-	4 (1.32%)	4 (1.13%)

Instruments

Beck Depression Inventory (BDI-I)

Self-report measuring depressive symptomatology through 21 items[28,29]. It has been translated and validated in several countries, including Chile[30]. Each item is scored from 0 to 3 (e.g. Item 1, score 0 = "I do not feel sad"; score 3 = "I am so sad and unhappy that I can't stand it"). The version used has excellent internal consistency (Cronbach's α = .92). The Chilean cut-off point for the diagnosis of depression is a score of 14 or above[31].

Experiences in Close Relationships Scale (ECR)

It assesses the attachment style of individuals in their romantic relationships[32]. Two dimensions comprise the scale: i) anxiety and ii) avoidance. This scale has been used to measure attachment in Chilean samples, reaching reliability indexes of .84 for the anxiety scale and .83 for the avoidance scale[33].

Operationalized Psychodynamic Diagnosis – Structure Questionnaire (OPD-SQ)

A 95-item self-report to measure personality function, described in the introduction to this paper. An English language version can be found here: http://strukturdiagnostik.de/international-versions/ .

Outcome Questionnaire (OQ-45.2)

A 45-item self-report developed by Lambert et al.[27]. It measures current psychological distress in three areas of functioning, namely symptomatic (25 items; e.g.: "I tire quickly"), interpersonal relations (11 items; e.g.: "I feel unhappy in my marriage/significant relationship") and social role (5 items; e.g.: I am not working/studying as well as I used to"). The Chilean version used has excellent internal consistency (Cronbach's α = .93), good test-retest reliability (r = .84) and positive correlations with similar instruments (.53 – .88). It is sensitive to psychopathology and change[27,34,35]. The Chilean version considers a score of 73 or more as clinical cut-off, and a change score of 17 as Reliable Change Index (RCI)[36].

Symptom Checklist, Revised (SCL-90-R)

A 90-item self-report designed to evaluate a broad range of psychological problems and symptoms of psychopathology[37]. It takes 12–15 minutes to administer, yielding nine scores along primary symptom dimensions and three scores among global distress indices. Symptoms assessed are somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. The three indices are Global Severity Index (GSI), Positive Symptom Distress (PSDI), and Positive Symptom Total (PST). The Chilean version used in this study has reported good internal consistency (α = 0.64 to 0.82 for the various scales), and there are thorough norm values for the country's population[38].

Procedure

This study counts with ethical approvals from the Bioethics Committee of the Southeast Metropolitan Health Service and the Ethics Committees of the Psychology School of the Pontificia Universidad Catolica de Chile, Universidad de la Frontera, Universidad del Desarrollo, Universidad Gabriela Mistral and Universidad Alberto Hurtado. Participation was voluntary for the clinical sample. Patients were informed that their treatment would not be compromised by their decision to participate. Healthy control participants received a compensation of approx. USD $15 for two research sessions: the first one consisted in the collection of demographic data, OPD-SQ, BDI and OQ-45. One month later, participants returned to complete the OPD-SQ again. All participants signed an informed consent letter. Once this letter was signed, participants completed the self-report measures in presence of a research assistant, in case they had doubts about the instruments.

Analysis Plan

Data were analyzed using SPSS 25[39]. For internal reliability, Cronbach's alphas were calculated for the total measure and subscales, and for the clinical, healthy control and total samples. Nonparametric Spearman correlation coefficients were calculated between the scales of the OPD-SQ. Means and standard deviations were calculated for each scale and each sample. One-month test-retest reliability was calculated using Spearman correlations in the nonclinical sample, given that they did not receive psychotherapy during that month. The Reliable Change index was then calculated, together with the clinical cut-off point for each scale, according to the method suggested by Jacobson and Truax[40]. To ascertain whether the OPD-SQ distinguished between clinical and healthy samples, Mann–Whitney U tests were used, for scores were not normally distributed according to previous Kolmogorov-Smirnov tests. Concurrent validity was assessed using Spearman bivariate correlations between the OPD-SQ and other measures.

Results

Internal Consistency

The 95 items of the OPD-SQ showed an excellent internal consistency (α = .97) for the full sample. The clinical sample showed an α = .97 while the healthy control sample yielded an α = .93, both excellent.

Internal consistencies of the OPD-SQ scales are listed in Table 2. They ranged between α = .92 and α = .68 for the full sample, between α = .91 and α = .67 for the clinical sample and between α = .87 and α = .48 for the healthy control sample. Table 4 shows that all scales of the OPD-SQ were positively and significantly correlated to each other.

Table 4
Spearman correlation coefficients between the scales of the OPD-SQ. All coefficients are significant at p < .001

	2	3	4	5	6	7	8
1. Self-Perception	.793	.863	.712	.782	.438	.817	.610
2. Object Perception		.757	.759	.653	.445	.779	.621
3. Self-Regulation			.780	.713	.435	.801	.640
4. Regulation of Relationships				.587	.520	.726	.534
5. Internal Communication					.402	.728	.513
6. External Communication						.440	.306
7. Attachment to Internal Objects							.646
8. Attachment to External Objects							

Test-Retest Reliability

The nonclinical sample (n = 50) was retested after one month (mean days = 31.55; SD = 3.86). The total score for the OPD-SQ showed good test-retest reliability (rho = 0.87; p < 0.001). All subscales showed acceptable to good test-retest indexes ranging between rho = 7.22 and rho = 0.82 (all p < 0.001). The

Reliable Change Index for this sample was 0.44.

Discrimination between clinical and nonclinical samples

Table 5 shows means, standard deviations of all measures used in the study grouped by subsample. Regarding depressive symptomatology, the clinical sample is above the score of 14 proposed as clinical cut-off for Chilean adults[28,31], and it is significantly higher than the healthy control sample (U = 2517.50; p < 0.001; d = 0.89).

Table 5
Descriptive statistics and clinical differences of this study's measures. BDI: Beck Depression Inventory; OPD-SQ: Operationalized Psychodynamic Diagnosis – Structure Questionnaire; OQ-45: Outcome Questionnaire 45; ECR: Experience in Close Relationships; U: Mann-Whitney U test, d: Cohen's d; *p < .05; **p < .001; [c]only clinical sample; [n]clinical subsample (15 participants);[m]clinical subsample (14 participants).

Measure		Healthy control		Clinical		U	d	Clinical cut-off
		Mean	SD	Mean	SD			
BDI		7.20	5.80	22.76	11.76	2294.50**	0.93	
OPD-SQ	Total Score	1.35	0.44	2.14	0.72	2885.00**	0.81	1.65
	Self-Perception	1.14	0.73	2.42	1.11	2782.50**	0.83	1.65
	Object Perception	1.19	0.58	2.00	0.85	3355.00**	0.71	1.52
	Self-Regulation	1.26	0.57	2.32	0.94	2756.00**	0.83	1.66
	Regulation of Relationships	1.35	0.61	2.05	0.88	4020.00**	0.59	1.64
	Internal Communication	1.15	0.47	1.91	0.79	3401.00**	0.70	1.43
	External Communication	1.41	0.50	1.58	0.62	6367.00	0.20	1.49
	Attachment to Internal Objects	1.34	0.69	2.25	1.01	3454.00**	0.70	1.71
	Attachment to External Objects	1.99	0.57	2.61	0.76	3942.00**	0.63	2.26
OQ-45	Total Score	47.74	17.74	86.72	28.74	2503.00**	0.90	
	Symptom Distress	27.78	11.05	53.49	19.16	2464.00**	0.90	
	Interpersonal Relations	10.66	4.82	18.37	7.08	3470.00**	0.75	
	Social Role	9.30	3.89	14.87	5.66	3940.00**	0.68	
ECR[c]	Anxiety			3.87	1.25			
	Avoidance			4.16	0.75			
SCL-90-R[c]	Somatization			1.66	0.89			
	Obsessive-compulsive			2.08	0.92			
	Interpersonal Sensitivity			1.55	0.96			
	Depression			2.00	0.99			
	Anxiety			1.69	0.96			
	Hostility			1.00	0.79			
	Phobic Anxiety			1.10	0.97			
	Paranoid Ideation			1.27	0.89			
	Psychoticism			1.30	0.78			
	Global Severity Index (GSI)			1.60	0.78			
	Positive Symptom Total (PST)			57.35	20.47			
	Positive Symptom Distress (PSDI)			2.34	0.56			
Likewise, the mean of the clinical sample is above the Chilean cut-off for the OQ-45 (73 or above), and significantly different from the nonclinical sample (U = 2664.50; p < 0.001; d = 0.87).								

The OPD-SQ was also able to distinguish between clinical and nonclinical samples, using either the total score or each one of the scales. This is consistent with the authors' hypotheses: a clinical sample is expected to show a lower level of structural functioning, as it is shown in Table 5. The table also lists the calculated clinical cut-off scores for this sample in each scale of the OPD-SQ. The clinical cut-off for the total score of the OPD-SQ was 1.65.

Relationship between the OPD-SQ and other measures

Correlations of the OPD-SQ and measures of attachment, psychological distress (OQ-45), depressive symptomatology (BDI) and general psychopathology are shown in Table 6. These significant and positive correlations suggest that increased structural functioning impairment is associated with more severe general and depressive symptomatology, and with psychological distress. In the case of attachment anxiety, correlations with all scales of the OPD-SQ are positive and direct. While with attachment avoidance relationships are generally inverse, with the exception of Object Perception.

Table 6
Spearman correlations between the OPD-SQ and measures of psychological distress, depression symptoms and attachment. SD: Symptom Distress; IR: Interpersonal Relations; SR: Social Role. BDI: Beck Depression Inventory; ECR: Experiences in Close Relationships; SCL: Symptom Checklist; GSI: Global Severity Index; PST: Positive Symptom Total; PDSI: Positive Symptom Distress; *p < 0.05; **p < 0.01; [c]only clinical sample.

	OPD-SQ Total	Self-Perception	Object Perception	Self-Regulation	Regulation of Relationships	Internal Communication	External Communication	Attachment to Internal Objects	Attachment to External Objects
OQ-45 total	0.767**	0.738**	0.608**	0.742**	0.615**	0.686**	0.328**	0.718**	0.547**
OQ SD	0.780**	0.769**	0.624**	0.761**	0.595**	0.688**	0.314**	0.728**	0.578**
OQ IR	0.633**	0.577**	0.502**	0.586**	0.569**	0.587**	0.317**	0.587**	0.426**
OQ SR	0.527**	0.494**	0.405**	0.517**	0.431**	0.471**	0.241**	0.507**	0.363**
BDI	0.649**	0.657**	0.547**	0.631**	0.480**	0.569**	0.226**	0.625**	0.505**
ECR Anxiety[c]	0.429**	0.438**	0.420**	0.460**	0.353**	0.207*	0.433**	0.301**	0.468**
ECR Avoidance[c]	-0.239**	-0.189*	0.292**	-0.185**	-0.193*	-0.089	-0.165	-0.130	-0.228**
SCL Somatization[c]	0.478**	0.454**	0.434**	0.408**	0.364**	0.489**	0.279**	0.469**	0.353**
SCL Obsessive-compulsive[c]	0.580**	0.623**	0.474**	0.630**	0.600**	0.631**	0.561**	0.639**	0.452**
SCL Interpersonal Sensitivity[c]	0.697**	0.653**	0.559**	0.527**	0.461**	0.576**	0.236*	0.572**	0.381**
SCL Depression[c]	0.641**	0.624**	0.507**	0.578**	0.520**	0.614**	0.361**	0.637**	0.459**
SCL Anxiety[c]	0.595**	0.578**	0.468**	0.587**	0.483**	0.557**	0.358**	0.583**	0.389**
SCL Hostility[c]	0.427**	0.386**	0.378**	0.442**	0.377**	0.363**	0.285**	0.340**	0.333**
SCL Phobic Anxiety[c]	0.589**	0.611**	0.411**	0.548**	0.443**	0.599**	0.416**	0.532**	0.404**
SCL Paranoid Ideation[c]	0.578**	0.563**	0.536**	0.501**	0.461**	0.544**	0.375**	0.535**	0.368**
SCL Psychoticism[c]	0.715**	0.689**	0.605**	0.649**	0.592**	0.629**	0.458**	0.664**	0.499**
SCL GSI[c]	0.688**	0.675**	0.556**	0.639**	0.553**	0.646**	0.417**	0.658**	0.475**
SCL PST[c]	0.663**	0.647**	0.565**	0.590**	0.544**	0.653**	0.460**	0.626**	0.413**
SCL PSDI[c]	0.544**	0.528**	0.414**	0.548**	0.427**	0.466**	0.244**	0.528**	0.458**

Discussion And Conclusions

This study has shown the psychometric properties of the OPD-SQ[12] in its Spanish-language version for use in Chilean populations. This self-report constitutes a dimensional way of measuring structurally relevant personality competences and vulnerabilities as understood by the OPD-2 Diagnosis System[10]. This measure is framed by a dynamic and dimensional conception of personality functioning, which enriches categorical diagnoses.

The OPD-SQ showed good levels of internal consistency, it was able to distinguish clinical from nonclinical samples and yielded significant and direct correlations with measures of depressive symptomatology and psychological distress. The same pattern of results was found for each one of the 8 scales comprising the OPD-SQ. All these results are in line with the theoretical tenets of this questionnaire: an impoverished personality function is expected to be associated with severity of symptoms and psychological distress. Likewise, a higher level of personality functioning is theoretically, a marker for mental health. These first promising results in a fully powered study are a call for further studies.

This instrument can be used both in research and clinical context however, further research is needed to ascertain the correspondence between information yielded by the OPD-SQ and that obtained by coding the OPD-2 interview in a larger sample, in order to evaluate the potential of this self-report to guide

therapeutic decisions. This would allow not only to elucidate the association between OPD-based instruments, but also to explore the similarities between self-observation and the observations made by a professional.

Mental health is influenced by individual, social and contextual variables, and their interaction[41]. Notwithstanding the focus of this study being individual vulnerability (specifically personality structure), it is necessary to keep in mind the role of social and contextual sources of vulnerability (like poverty, chronic physical health issues, exposure to violence, discrimination and inequality) in the development and course of psychological problems, like depression. Future research should look into the interaction between those social determinants and personality structural function.

However, this instrument is in line with the contemporary direction towards more functional and dimensional diagnosis in mental health, for the benefit of our individual patients[42].

Declarations

Ethics approval and consent to participate

This study counts with ethical approvals from the Bioethics Committee of the Southeast Metropolitan Health Service and the Ethics Committees of the Psychology School of the Pontificia Universidad Catolica de Chile, Universidad de la Frontera, Universidad del Desarrollo, Universidad Gabriela Mistral and Universidad Alberto Hurtado. All the methods were carried out according to these institutions' research guidelines. Participation was voluntary for the clinical sample. Patients were informed that their treatment would not be compromised by their decision to participate. Healthy control participants received a compensation of approx. USD $15. All participants signed an informed consent letter.

Consent for Publication

Not applicable

Availability of Data and Materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing Interests

The authors have declared that they have no competing or potential conflicts of interest.

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Authors' Contributions

Nicolás Lorenzini: Formal analysis, methodology, writing – original draft; Guillermo de la Parra: Conceptualization, investigation, project administration, writing – review & editing; Paula Dagnino: Data curation, investigation, funding acquisition, writing – review & editing; Elyna Gomez-Barris: Data curation, resources; Carla Crempien: Data curation, resources; Johannes C. Ehrenthal: Supervision, writing – review & editing.

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