

## Discriminative capacity for functional impairment of the Personality Inventory for DSM-5 Short Form in patients with substance use disorder

### *Capacidad discriminativa del deterioro funcional del Inventario de Personalidad DMS-5 Short Form en pacientes con trastorno por uso de sustancias*

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The specialized literature shows that personality disorders (PD) are highly comorbid with substance use disorder (SUD). The greater dysfunctionality and worse therapeutic response of comorbid patients (Van Den Bosch & Verheul, 2007) highlight the need to assess personality among patients with SUD.

The Alternative Personality Disorder Model (APDM) proposed in the DSM-5 presents the organization of personality traits on a dimensional basis (Krueger & Markon, 2014). One of the most commonly used instruments to assess this model is the DSM-5 Personality Inventory (PID-5; Krueger, Derringer, Markon, Watson & Skodol, 2012). It has been considered necessary to find formulas which reconcile the dimensional approach with the categorical decisions of clinical practice (Alarcón, 2010). In this regard, normative cut points have been suggested for the PID-5 which are intended to facilitate clinical decisions (Gutiérrez et al., 2017; Samuel, Hopwood, Krueger, Thomas & Ruggero, 2013).

Despite studies showing links between the higher trait values and functional and psychosocial maladjustment (Keeley, Flanagan & McCluskey, 2014), no study to date has analyzed the PID-5's discriminative capacity with regard to functional impairment. This study analyzes the sensitivity and specificity of each of the traits to detect functional im-

pairment in a group of patients with SUD. In addition, we compare the use of a functional and a normative criterion to establish cut points which represent pathological functioning in the APDM traits.

The study involved 178 patients with SUD attending outpatient addiction treatment centers. Men constituted 82.6% of the sample, with a mean age of 41.28 years ( $SD = 11.24$ ).

The Spanish version of the PID-5 Short Form was administered (Díaz-Batanero, Ramírez-López, Domínguez-Salas, Fernández-Calderón & Lozano, 2019). Functional disability was assessed with the World Health Organization Disability Assessment Schedule (WHODAS 2.0; Üstün et al., 2010).

The instruments were administered by a psychologist with experience in the assessment of patients 15 days after the start of treatment. This study was approved by the ethical committee of the University of Huelva.

ROC curves were estimated, with a total score on the WHODAS 2.0 of  $> 25$  as a threshold to classify patients with moderate to extreme disability (Üstün et al., 2010). Cut points were estimated to offer the best balance between sensitivity and specificity in accordance with the functional criterion, with minimum specificity set at .70. These were compared with the normative cut points, calculating T-scores  $> 65$  (Gutiérrez et al., 2017).

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Of the sample, 35.4% had moderate or extreme disability. AUC values ranged from .503 (95% CI = [.41, .59]) (Attention seeking) to .787 (Depression) (95% CI = [.71, .86]), with a mean of .657. AUC values > .7 were observed in: Anhedonia, Anxiety, Depression, Distractibility, Eccentricity, Irresponsibility, Perseveration, and Submissiveness. However, six traits do not show discriminatory

ability: Attention seeking, Grandiosity, Intimacy avoidance, Manipulativeness, Restricted affectivity, and Rigid perfectionism. The cut points using the functional criterion were higher in all traits which are discriminatory of functional deterioration with respect to those obtained according to normative criteria (except Submission and Risk Taking).

Table 1. Results of the ROC analyses and estimated cut points based on normative and functional disability criteria.

	AUC [95%CI]	p	Functional criterion	Sensitivity	Specificity	Normative criterion	Sensitivity	Specificity
Anhedonia	.744 [.66 - .82]	<.001	1.87	.710	.722	1.25	.823	.583
Anxiety	.770 [.70 - .84]	<.001	2.37	.613	.765	1.78	.806	.574
Attention seeking	.503 [.41 - .59]	.949	0.87	.403	.722	1.49	.145	.835
Insensitivity	.595 [.50 - .68]	.036	0.62	.436	.748	0.64	.436	.748
Deceitfulness	.648 [.56 - .73]	.001	0.87	.403	.739	1.02	.403	.774
Depression	.787 [.71 - .86]	<.001	1.12	.677	.765	0.95	.742	.696
Distractibility	.777 [.70 - .84]	<.001	2.12	.677	.757	1.54	.855	.574
Eccentricity	.760 [.68 - .83]	<.001	1.62	.678	.730	1.33	.726	.591
Emotional lability	.648 [.56 - .73]	.001	2.12	.516	.722	2.03	.516	.722
Grandiosity	.557 [.46 - .64]	.209	0.87	.290	.782	1.24	.177	.896
Hostility	.688 [.60 - .77]	<.001	1.62	.565	.765	1.56	.565	.765
Impulsivity	.642 [.55 - .72]	.002	2.12	.403	.730	1.60	.758	.609
Intimacy avoidance	.585 [.49 - .67]	.078	1.87	.387	.765	1.15	.468	.643
Irresponsibility	.702 [.62 - .78]	<.001	1.37	.532	.801	0.92	.774	.487
Manipulativeness	.574 [.48 - .66]	.105	0.87	.355	.735	1.27	.226	.878
Perceptual dysreg.	.635 [.54 - .72]	.003	0.87	.403	.774	0.87	.403	.774
Perseveration	.713 [.63 - .79]	.001	1.87	.565	.747	1.54	.662	.661
Restricted affectivity	.543 [.45 - .63]	.346	1.62	.355	.725	1.41	.516	.614
Rigid perfectionism	.574 [.48 - .66]	.106	1.62	.339	.713	1.82	.290	.791
Risk taking	.631 [.54 - .72]	.004	1.12	.532	.703	1.65	.323	.896
Separation insec.	.677 [.59 - .75]	<.001	2.12	.435	.774	1.61	.677	.643
Submissiveness	.703 [.62 - .78]	<.001	1.12	.548	.765	1.47	.468	.861
Suspiciousness	.669 [.58 - .75]	<.001	1.62	.468	.713	1.30	.629	.609
Unusual beliefs and experiences	.639 [.55 - .72]	.002	1.62	.3556	.783	1.03	.581	.574
Withdrawal	.684 [.60 - .76]	<.001	1.62	.532	.735	1.23	.597	.835

The results show that the PID-5 has good discriminative capacity for dysfunctionality assessed by the WHODAS 2.0 in most traits. Previous studies have shown this relationship, particularly in the dimensions Comprehension and Communication, Relationships and Participation in society (Díaz-Batanero et al., 2019; Keeley et al., 2014). Greater discriminative capacity has been observed in traits linked to Negative affectivity, a dimension associated with higher levels of pathology and dysfunctionality (Watson, Stasik, Ro & Clark, 2013). Conversely, the traits of Attention seeking, Insensitivity, Grandiosity, Hostility, Impulsivity, Intimacy avoidance, Manipulativeness, Restricted affectivity and

Rigid perfectionism have not shown discriminative capacity. Congruently, previous studies found that Attention seeking, Grandiosity, Restricted affectivity, Intimacy avoidance and Rigid perfectionism yielded minor differences between clinical and community samples (Gutiérrez et al., 2017).

Of the 25 traits, 17 presented higher cut points using the functional criterion than those obtained with normative and rational criteria (Samuel et al., 2013). Overall, it could be suggested that the use of normative criteria would be more suitable for population epidemiological studies. However, functional criteria could be more useful in cli-

nical samples, allowing therapists to plan more specific treatments for disorders which cause patients greater functional disability.

Assessing functional maladjustment exclusively with self-reports can be a limitation. Optimal use of multiple data sources could improve behavior prediction in psychopathological and functional assessment. Future studies should complement data obtained with information provided by other close informants.

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### Conflicts of interest

None declared.

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