

Schizotypal profile according to Cloninger's model: an approach in patients with dual diagnosis

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Introduction

Dual diagnosis (DD) is the co-occurrence, in the same person, of a mental disorder and a substance use disorder (SUD). Studies analyzing personality traits of patients with DD and their possible differential profile are very limited. More concretely, the schizotypal profile, characterized by high Self-transcendence, and low Self-directedness and Cooperativeness has been proposed as a possible vulnerability marker for the development of schizophrenia [1], [2].

Objectives

To prospectively study the differential characteristics of a subgroup of patients admitted to a psychiatric unit with a schizotypal profile according to Cloninger's model in relation to the rest of the patients admitted in the same period.

Material and methods

We assessed all patients admitted into a dual diagnosis unit along three years by collecting sociodemographic and clinical characteristics. We grouped into two categories based on whether they had schizotypal profile (Schizotypal; N=15) or not (Non-Schizotypal; N=152) according to the Temperament and Character Inventory-Revised (TCI-R). Psychiatric diagnosis was obtained according to DSM-IV criteria. Depending on whether the measurement of a variable was categorical or scaled, group differences were tested using either χ^2 or 2-tailed, unpaired t tests. All analyses were performed using SPSS software (SPSS Inc, Chicago, Ill). Statistical significance was determined using the .05 level and 2-tailed tests of significance.

Results

We show the results of 167 patients that were admitted in our dual diagnosis unit. Most patients were males (85,63%); mean age was 39,7 \pm 9,6 and mean length of admission were 18,8 \pm 10 days. Most prevalent non-SUD psychiatric disorders were psychotic disorder (29,9%), personality disorder (28,7%), depressive disorder (12%), adjustment disorder (9%), bipolar disorder (6,6%) and anxiety disorder (6%). In our sample, most common substances of abuse were alcohol (43,7%), cocaine (34,7%), cannabis (6,6%), heroine (5,4%) and sedatives (5,4%).

Schizotypal subjects showed higher prevalence of anxiety disorders (26,7% vs. 6,6%; p=0,007), and personality disorders (66,7% vs. 28,3%; p=0,002) but not schizophrenia (33,3% vs. 34,2%; p=0,95) nor even psychotic disorders (13,3% vs. 17,8%; p=0,67). In respect to substance use, they had higher prevalence of cocaine SUD (73,3% vs. 46,7%; p=0,049), and earlier onset of alcohol consumption (17,2 \pm 3,1 vs. 14,8 \pm 3,6; p=0,031). No differences were seen in psychiatric (60% vs. 41,4%, p=0,166) or addictive (40% vs. 48%, p=0,553) family background.

Differences in personality traits according to TCI-R between both groups can be seen in [table 1](#).

GAF scale score similarly in Schizotypal subjects versus non-Schizotypal subjects at admission (42,5 \pm 9,2 vs. 45,3 \pm 9,9; p=0,394) and at discharge (63,5 \pm 7,8 vs. 65,6 \pm 9,0; p=0,477). There weren't also significant differences between both groups in demographic and familiar/personal backgrounds.

Table 1. Personality traits according to TCI-R results in both groups.

		Schizotypal		No Schizotypal		p
		Mean	SD	Mean	SD	
Temperament						
Novelty seeking		65,4	13,4	55,4	10,0	<0,001*
	Exploratory excitability	50,3	13,8	47,0	9,8	0,222
	Impulsiveness	65,9	13,4	54,7	10,8	<0,001*
	Extravagance	63,7	11,3	60,3	11,9	0,279
	Disorderliness	62,9	14,1	53,3	11,2	0,002
Harm avoidance		58,5	12,2	60,3	12,1	0,585
	Anticipatory worry	61,2	13,3	61,9	12,4	0,828
	Fear of uncertainty	48,9	11,2	50,1	11,5	0,680
	Shyness	53,1	12,9	56,0	10,6	0,323
	Fatigability	59,8	13,9	59,5	12,0	0,932
Reward dependency		45,5	10,5	47,0	10,2	0,585
	Sentimentality	53,9	13,1	51,9	10,3	0,483
	Openness to warm communication	48,8	11,6	47,2	10,7	0,576
	Attachment	42,2	11,4	44,9	11,0	0,365
	Dependence	40,7	7,6	46,9	10,5	0,028
Persistence		51,0	12,3	46,9	11,9	0,209
	Eagerness of effort	50,6	11,2	48,3	10,6	0,433
	Work hardened	45,6	10,7	44,8	13,1	0,810
	Ambitious	55,5	13,4	50,2	10,6	0,073
	Perfectionist	49,6	12,0	46,8	10,9	0,355
Character						
Self-directedness		45,6	10,7	44,8	13,1	0,810
	Responsibility	55,5	13,4	50,2	10,6	0,073
	Purposeful	49,6	12,0	46,8	10,9	0,355
	Resourcefulness	24,7	5,9	36,3	11,0	<0,001*
	Self-acceptance	23,9	10,6	36,2	12,1	<0,001*
	Enlightened second nature	32,9	11,1	37,6	15,1	0,238
Cooperativeness		34,5	7,6	41,0	12,4	0,008
	Social acceptance	37,0	8,8	46,6	8,7	<0,001*
	Empathy	31,1	9,9	35,4	10,5	0,135
	Helpfulness	28,8	7,2	41,4	10,8	<0,001*
	Compassion	31,3	10,6	44,8	10,6	<0,001*
	Pure-hearted conscience	43,8	7,4	46,4	10,4	0,345
Self-transcendence		39,2	13,6	42,7	9,6	0,353
	Self-forgetful	32,3	14,7	44,4	14,6	0,002
	Transpersonal identification	32,7	10,6	42,1	10,0	<0,001*
	Spiritual acceptance	68,1	5,2	50,3	7,9	<0,001*

* p \leq .05, **p \leq .01, ***p \leq .001: Significance levels.

Conclusions

We could not confirm the hypothesis that subjects with a schizotypal profile according to the Cloninger model presented schizophrenia or other psychotic disorders more frequently than the other subjects in our sample. Furthermore, no differences were observed between both groups in the global scores of psychiatric severity, neither at the beginning nor at the end of hospital admission.

References

- [1] J. E. Marquez-Arrico, S. López-Vera, G. Prat, and A. Adan, "Temperament and character dimensions in male patients with substance use disorders: Differences relating to psychiatric comorbidity," Psychiatry Res., vol. 237, pp. 1–8, Mar. 2016.
- [2] L. Río-Martínez, J. E. Marquez-Arrico, G. Prat, and A. Adan, "Temperament and Character Profile and Its Clinical Correlates in Male Patients with Dual Schizophrenia," J. Clin. Med., vol. 9, no. 6, p. 1876, Jun. 2020.