

Specific Complaints of the Global Domains of an Integrated Hierarchical Model of Psychopathology



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Objectives

Verify which 'Specific Problems' (SP) of the *Restructured Form of the Minnesota Multiphasic Personality Inventory-2* (MMPI-2-RF; Ben-Porath & Tellegen, 2008; 2009) are associated with each one of the four broad domains (Internalizing, Externalizing, Detachment, and Thought Disorders) of the Integrated Hierarchical Model of Psychopathology proposed (Markon, 2010; Fusté et al., 2012; Ruiz et al., 2013; 2018).

Method

The clinical sample was comprised of 377 outpatients (55.7% women) aged 18 to 73 years old ($M = 37.8$; $SD = 11.5$) who were attending various psychiatric and psychology centers from Barcelona (Catalonia, Spain). They were all administered the MCMI-III (Millon, Davis, & Millon, 1997; 2007) and MMPI-2-RF (Ben-Porath & Tellegen, 2008; 2009) as part of their psychological assessment process.

Results

We performed zero-order correlations between each one of the four domains and the specific problems scales. Given that the significance of product moment correlations is an effect size measure (Meyer et al., 2002), the interpretation of relationships was made not only on the basis of statistical significance but also in terms of their magnitude. We, therefore, chose to emphasize only those correlations that reached or exceeded a large effect size ($r > .50$; Cohen, 1988) (Table 1).

Table 1. Zero-order correlations between each one of the four domains and the specific problems scales. Correlations $\geq .50$ are shown in bold type. All correlations $\geq .50$ are significant at $p < .001$

	MLS	GIC	HPC	NUC	COG	SUI	HLP	SFD	NFC	STW	AXY	ANP	BRF	MSF	JCP	SUB	AGG	ACT	FML	IPP	SAV	SHY	DSF
Internalizing	.66	.46	.55	.67	.75	.63	.58	.71	.66	.59	.67	.56	.50	.26	.12	.21	.48	.59	.51	.12	.26	.46	.39
Externalizing	.20	.19	.13	.35	.40	.42	.33	.38	.32	.29	.24	.52	.17	-.06	.60	.58	.65	.50	.40	-.14	.03	.21	.26
Detachment	.51	.14	.23	.15	.36	.35	.48	.57	.56	.27	.22	.06	.19	.16	-.13	-.04	-.00	-.04	.19	.57	.59	.64	.35
Thought Disorders	.25	.24	.31	.46	.51	.49	.40	.40	.39	.32	.41	.42	.30	.11	.34	.32	.57	.51	.43	-.11	.18	.32	.42

Next, we conducted several multiple regression analysis to examine how much of the factor variance could predict each set of specific problems. The collinearity was analyzed and the *Durbin-Watson* test was applied to determinate the possible inter-correlation among residuals.

F1: Internalizing

Predictive variables	ΔR^2	β	p
Cognitive complaints (COG)	.562	.136	.000
Self-doubt (SFD)	.119	.140	.000
Anxiety (AXY)	.079	.164	.000
Anger Proneness (ANP)	.037	.117	.000
Suicidal Ideation (SUI)	.029	.150	.000
Neurological complaints (NUC)	.021	.124	.000
Inefficacy (NFC)	.015	.108	.000
Disaffiliativeness (DSF)	.009	.078	.000
Stress/Worry (STW)	.008	.100	.000
Head Pain Complaints (HPC)	.004	.098	.000
Adjusted $R^2 = .881$			

The *Internalizing* domain (F1) is explained in an 88.1% by a combination of *Internalizing* and *Somatic problems* scales, with the Anxiety and Suicidality scales with higher weight. The analysis of collinearity reveals a low Tolerance for the Cognitive complaints ($T = .43$) and for Neurological complaints ($T = .44$). This could be explained by the high correlations between Cognitive complaints (COG) and NUC ($r = .58$), NFC ($r = .57$), SFD ($r = .56$) and ANX ($r = .52$). The Neurological complaints scale also correlates with high magnitude with HPC ($r = .59$) and COG ($r = .58$).

F2: Externalizing

Predictive variables	ΔR^2	β	p
Aggression (AGG)	.419	.190	.000
Juvenile Conduct Problems (JCP)	.147	.331	.000
Substance Abuse (SUB)	.058	.234	.000
Anger Proneness (ANP)	.045	.170	.000
Self-doubt (SFD)	.026	.134	.000
Activation (ACT)	.009	.078	.001
Adjusted $R^2 = .699$			

The *Externalizing* domain (F2) is explained mainly by Aggression, Behavioral problems, and Substance abuse scales in an 69.9%. The specific problems Juvenile Conduct Problems (JCP) and Substance Abuse (SUB) are the best predictors of this domain. Problems of collinearity were not detected.

F3: Detachment

Predictive variables	ΔR^2	β	p
Shyness (SHY)	.404	.222	.000
Interpersonal Passivity (IPP)	.129	.215	.000
Social Avoidance (SAV)	.093	.253	.000
Self-Doubt (SFD)	.061	.179	.000
Malaise (MLS)	.027	.208	.000
Activation (ACT)	.023	-.183	.000
Help/Hopelessness (HLP)	.021	.132	.000
Adjusted $R^2 = .753$			

The *Detachment* domain (F3) is mainly explained in an 75.3% by *Interpersonal problems* (Shyness, Interpersonal passivity, and Social avoidance), and *Internalizing problems* (Self-doubt & Help/Hopelessness). Feelings of Malaise are also significant of this domain. No problems of collinearity. The *Thought Disorders* domain (F4) is explained in an 58.3% by a mixture of *Externalizing* (Aggression and Activation), *Somatic/Cognitive* (Malaise), and *Interpersonal* (Disaffiliativeness) scales. Once again, as in F1 the Cognitive complaints scale presents a low Tolerance ($T = .43$), maybe because it correlates with Activation ACT ($r = .51$), Suicidal Ideation (SUI) ($r = .49$), and Head Pain Complaints (HPC) ($r = .43$).

F4: Thought Disorders

Predictive variables	ΔR^2	β	p
Aggression (AGG)	.329	.236	.000
Cognitive complaints (COG)	.108	.127	.010
Disaffiliativeness (DSF)	.067	.211	.000
Activation (ACT)	.021	.089	.039
Malaise (MLS)	.018	-.225	.000
Shyness (SHY)	.014	.141	.001
Juvenile Conduct Problems (JCP)	.012	.129	.000
Suicidal Ideation (SUI)	.011	.140	.001
Head Pain Complaints (HPC)	.011	.124	.004
Adjusted $R^2 = .583$			

Conclusions

The specific complaints of the first three domains are consistent with their content, which supports the relationship between the complementary scales of Specific Problems (SP) and the Restructured Clinical (RC) Scales. The domain of the Thought Disorders (TD), instead, seems to be characterized by the heterogeneity of the complaints. However, such specific complaints are also consistent with the broad domain of 'Psychoticism' (Disaffiliativeness, Shyness, Aggression) of which TD are a specific part (evaluated with the RC6 and the RC8 scales).



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