

ADDITIONAL FILE 6

Relationship between neuropsychological test scores with clinical and psychopathological variables

Table 5 shows the main relationships between clinical and neuropsychological variables by means of bivariate analyses. The scores on the majority of neuropsychological test were related to BMI, followed by time of duration of the disorder and age of onset. The sustained attention, measured with the SMDT, was related to the use of drugs. The time of the copy of the ROCFT was related to the use of drugs and with severity of the illness, “status”: there were significant differences between patients “with no evidence of the disorder” and those “with evidence of the disorder” regarding time of the copy of the ROCFT.

Table 5: Statistically significant relationship between clinical and neuropsychological variables

Neuropsychological test	Clinical variable	Test	Statistics
Total LNS	BMI*	Spearman's <i>rho</i>	0.40
P-corrected by age	Age of onset*	Spearman's <i>rho</i>	0.34
C-corrected by age	Age of onset*	Spearman's <i>rho</i>	0.31
SMDT score	Age of onset*	Spearman's <i>rho</i>	0.29
	Duration of illness (years)*	Spearman's <i>rho</i>	-0.33
	Use of drugs (yes/no)**	t-Student	t=3.2, df=72
	BMI*	Spearman's <i>rho</i>	0.38
ROCFT copy time (min)	Use of drugs***	U-MW	Z -1.948 range (32.71, 41.79)
	Status* ³	U-MW	Z -2.25 range (32.11, 42.61)
	BMI*	Spearman's <i>rho</i>	-0.28
ROCFT memory time (min)	BMI*	Spearman's <i>rho</i>	-0.31
ROCFT memory quantitative (direct)	BMI*	Spearman's <i>rho</i>	0.37

*U-MW: U-Mann Whitney, χ^2 : chi-square; Coef: correlation coefficient; * $p < 0.05$; ** $p < 0.001$;*

**** $p = 0.051$; ¹Only AN and BN; ²The relationship disappeared when the sample was reduced to AN and BN.*

¹ Time of duration of illness (< 10 years; ≥ 10 years). ²Use of drugs (no; yes). ³Status³ (no current evidence of illness, evidence of illness).

The statistically significant correlations between psychopathological and neuropsychological tests are summarized in Table 6. The main results can be summarized as follows: There were found no significant correlations between the neuropsychological test scores and the eating disorder psychopathological measurements, namely BSQ, “Drive for Thinness” or “Bulimia” subscales of the EDI-2,

except for the correlation between the ROCFT qualitative measurement of the copy and “Drive for thinness” of the EDI-2. Inhibitory attention, “Interference”, correlated positively with the DES total scores and “Absorption” subscales. Sustained attention, SMDT score, correlated with depression, and the measurements on the ROCFT with several subscales of the ACTA, EDI-2, DES and anxiety trait (Table 6).

Table 6: correlations between neuropsychological and psychopathological variables

Variable	Related Variable	Test	Statistics
Total LNS	Maturity fear *	Spearman	<i>rho</i> -0.29
SpanLN	Decission*	Spearman	<i>rho</i> -0.29
Interference	Perfectionism *	Spearman	<i>rho</i> 0.03
	DES-absorption *	Spearman	<i>rho</i> 0.34
	DES-total *	Spearman	<i>rho</i> 0.32
SMDT	Depression (yes/no)*	U-Mann Whitney	Z -2.07 range (23.49, 32.64)
ROCFT copy quantitative	Maintenance *	Spearman	<i>rho</i> -0.33
	Relapse *	Spearman	<i>rho</i> 0.28
	Interoceptive awareness*	Spearman	<i>rho</i> 0.29
	Social insecurity *	Spearman	<i>rho</i> 0.30
	STAI-trait *	Spearman	<i>rho</i> 0.28
ROCFT copy qualitative	Precontemplation**	ANOVA	F 3.9 df 5
	Contemplation *	ANOVA	F 2.63 df 5
	Action *	ANOVA	F 3.23 df 5
	Drive for thinness**	ANOVA	F 3.4 df 5
ROCFT memory quantitative	DES-amnesia*	Spearman	<i>rho</i> 0.30
ROCFT memory qualitative	Action	Kruskal-Wallis	Chi 12.36
Order index	Contemplative*	Spearman	<i>rho</i> 0.28
	Decission *	Spearman	<i>rho</i> 0.31
	Perfectionism *	Spearman	<i>rho</i> 0.30

Statistical significance * $p < 0.05$ ** $p < 0.01$