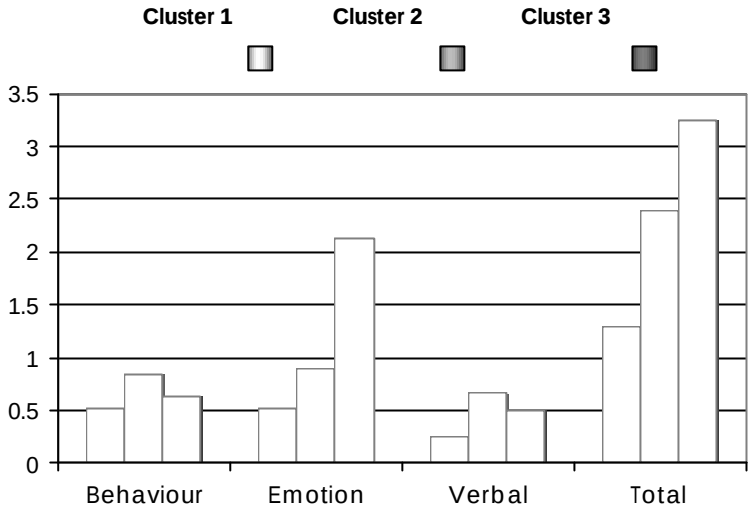


- *Premorbid adjustment*

The results of the analyses of covariance between the developmental clusters and PAS and PSAS scores are displayed in Table 4.43.

Table 4.43 Developmental clusters and Phase III-rated previous adjustment: Analyses of covariance

		Cluster 1 $\bar{x}$; SD	Cluster 2 $\bar{x}$; SD	Cluster 3 $\bar{x}$; SD	Dummy 1 d; p; 95%CI*	Dummy 2 d; p; 95%CI*
PAS	***A.Sociability & withdrawal***	1.05; 1.24	1.16; 1.13	1.75; 1.28	-0.69; **0.171** -1.69 to 0.31	*NS*
	A.Peer relations	0.76; 0.89	0.55; 0.83	0.88; 1.13	*NS*	*NS*
	A.Socio-sexual life	0.76; 1.41	0.76; 1.42	1.25; 1.49	*NS*	*NS*
	Adulthood total	2.57; 2.54	2.47; 2.52	3.88; 1.13	-1.34; **0.193** -3.38 to 0.69	-1.37; **0.154** -3.27 to 0.53
	G.Education	0.76; 0.77	0.68; 0.74	0.63; 0.74	*NS*	*NS*
	G.Occupation	0.24; 0.44	0.61; 1.42	0.00; 0.00	*NS*	*NS*
	G.Constancy	0.90; 1.34	1.00; 1.43	0.88; 1.25	*NS*	*NS*
	G.Independence	2.95; 1.20	3.32; 1.66	3.38; 1.41	*NS*	*NS*
	G.General functioning	1.29; 1.31	1.21; 1.34	1.38; 0.92	*NS*	*NS*
	G.Social-personal adjust.	1.00; 0.63	1.32; 0.70	1.63; 1.06	-0.64; **0.040** -1.26 to -0.03	*NS*
	G.Interest in life	1.86; 0.96	2.00; 0.70	2.38; 1.06	-0.53; **0.139** -1.23 to 0.18	*NS*
	G.Energy level	1.81; 1.54	1.82; 1.31	2.38; 1.41	*NS*	*NS*
	G.General total	11.10; 5.53	12.08; 6.29	12.63; 4.34	*NS*	*NS*
	Total scale	13.67; 6.94	14.55; 8.03	16.50; 5.29	*NS*	*NS*
PSAS	***C.Sociability & isolation***	1.57; 0.94	2.16; 1.11	2.40; 1.95	*NS*	*NS*
	C.Peer relations.	1.57; 0.76	1.48; 0.59	2.20; 1.79	*NS*	-0.76; **0.074** -1.59 to 0.08
	C.Scholastic perform	3.29; 1.44	3.04; 1.79	3.60; 1.14	*NS*	*NS*
	C.Adaptation to school	1.36; 0.74	1.24; 0.52	1.20; 0.45	*NS*	*NS*
	C.Interests	2.57; 1.09	2.48; 1.26	3.40; 0.89	*NS*	-0.95; **0.115** -2.13 to 0.24
	Childhood total	10.36; 3.30	10.40; 3.10	12.80; 5.02	*NS*	-2.71; **0.106** -6.01 to 0.60

	Cluster 1 $\bar{x}$; SD	Cluster 2 $\bar{x}$; SD	Cluster 3 $\bar{x}$; SD	Dummy 1 d; p; 95%CI*	Dummy 2 d; p; 95%CI*
A.Sociability & isolation	1.93; 1.27	2.12; 1.09	3.20; 1.48	-1.29; **0.051** -2.59 to 0.01	-1.07; **0.080** -2.27 to 0.13
A.Peer relations	1.64; 0.63	1.52; 0.65	2.20; 1.79	*NS*	-0.73; **0.078** -1.56 to 0.09
A.Scholastic perform	3.64; 1.91	3.80; 1.61	3.80; 0.84	*NS*	*NS*
A.Adaptation to school	1.57; 1.16	1.84; 1.37	1.20; 0.45	*NS*	*NS*
A.Interests	2.79; 1.05	2.72; 1.37	3.60; 0.89	*NS*	-0.92; **0.140** -2.16 to 0.32
Adolescence total	11.57; 4.60	12.00; 4.47	14.00; 4.06	*NS*	*NS*

*Parameters adjusted for gender

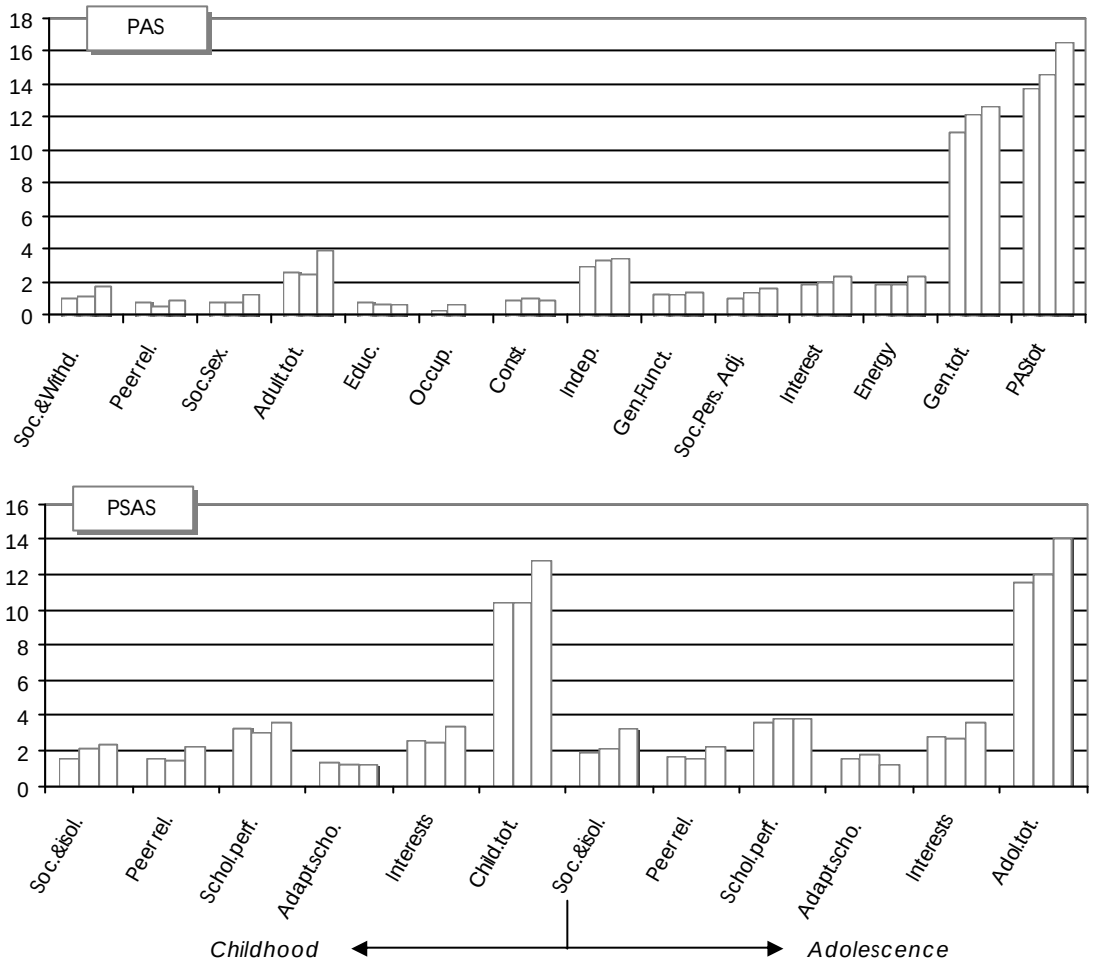
With respect to the PAS scale, Cluster 3 exhibited a statistically significant poorer social-personal adjustment than Cluster 1 (p=0.040), and a trend to show a poorer previous sociability (p=0.171), poorer general adult previous adjustment (p=0.193) and lesser interest in life (p=0.139) than Cluster 1. Cluster 3 subjects also displayed a poorer general adult previous adjustment than Cluster 2 at a trend level (p=0.154).

Concerning PSAS scores, Cluster 3 tended to exhibit poorer peer relations (p=0.074), lesser interests (p=0.115), and a poorer overall social adjustment (p=0.106) during childhood than Cluster 2 subjects. During adolescence, Cluster 3 also tended to display a poorer sociability (p=0.080), poorer peer relations (p=0.078) and lesser interests (p=0.140) than Cluster 2 subjects. In addition, they showed a poorer sociability than Cluster 1 subjects (p=0.051).

No statistically significant nor trend differences were observed on the distribution of SCID-I psychiatric diagnoses by cluster (p=0.557).

For a graphic representation of previous adjustment differences, see Figure 4.16.

Figure 4.16 Phase III-rated previous adjustment by cluster


PAS
18
16
14
12
10
8
6
4
2
0
Soc.&Wthd.
Peer rel.
Soc.sex.
Adult.tot.
Educ.
Occup.
Const.
Indep.
Gen.Funct.
Soc.Pers. Adj.
Interest
Energy
Gen.tot.
PAStot
PSAS
16
14
12
10
8
6
4
2
0
Soc.&isol.
Peer rel.
Schol.perf.
Adapt.scho.
Interests
Child.tot.
Soc.&isol.
Peer rel.
Schol.perf.
Adapt.scho.
Interests
Adol.tot.
Childhood
Adolescence

2.3 Relationship between Phase III psychometric schizotypy and Phase III neurocognitive measures

Firstly, we performed Pearson correlations among the O-LIFE factors and neuropsychological indexes. Secondly, given the difference on the attentional functioning of both cohorts (Index and Control), we stratified these analyses by cohort and looked for differences in the relationship among the variables according to the group in order to control for possible biases associated to this variable. Tables will show general correlations, while specific differences derived from the stratification will be noticed apart.

2.3.1 O-LIFE and sustained attention

Table 4.44 exhibits the results of Pearson correlations analyses among O-LIFE factors and CPT-IP indexes.

Table 4.44 Pearson correlation analyses among O-LIFE factors and sustained attention (CPT-IP)

		UnEx ? ; p	CogDis ? ; p	IntAnh ? ; p	ImpNon ? ; p
Numbers	***Omission errors***	-0.08; 0.451	0.03; 0.797	-0.11; 0.334	0.03; 0.755
	Commission errors	**0.19; 0.097**	0.09; 0.440	0.09; 0.440	0.01; 0.943
	Distraction errors	0.01; 0.910	0.14; 0.217	0.14; 0.217	-0.03; 0.797
	ß	**-0.18; 0.108**	-0.07; 0.526	0.01; 0.956	-0.05; 0.658
	Reaction time	**-0.16; 0.171**	0.04; 0.729	-0.11; 0.365	0.05; 0.676
	d' numbers	0.02; 0.856	-0.01; 0.922	0.12; 0.273	0.01; 0.899
Shapes	***Omission errors***	0.04; 0.729	**0.21; 0.062**	-0.11; 0.320	0.08; 0.469
	Commission errors	**0.21; 0.056**	**0.19; 0.083**	0.09; 0.428	0.02; 0.846
	Distraction errors	**0.17; 0.126**	0.07; 0.524	-0.00; 0.969	-0.04; 0.710
	ß	0.03; 0.802	-0.04; 0.700	-0.09; 0.404	**-0.15; 0.196**
	Reaction time	0.02; 0.881	0.05; 0.689	-0.12; 0.318	-0.01; 0.902
	d' shapes	-0.08; 0.482	**-0.23; 0.039**	0.03; 0.802	-0.08; 0.504
	Mean d'	-0.03; 0.784	-0.13; 0.239	0.09; 0.426	-0.03; 0.773

Sample size: n=80

As can be observed, Cognitive Disorganization was statistically significant and positively associated to a poorer shapes d' (p=0.039). At a trend level, this factor was positively associated to more omission errors (p=0.062) and commission errors (p=0.083) in the shapes version.

Unusual Experiences was positively associated, at a trend level, with more commission errors (p=0.097), a lower ß (p=0.108), and a lower reaction time (p=0.171) in the numbers version. In addition, this factor was associated with more commission errors (p=0.056) and more distraction errors (p=0.126) in the shapes version.

Impulsive Nonconformity was also associated, at a trend level, with a lower ß (p=0.196), indicating a more impulsive and risk-taking style of response, maximising hits though increasing errors.

Stratification of these analyses by cohort revealed no noticeable differences in the relationship between sustained attention and psychometric schizotypy according to the cohort.

2.3.2 O-LIFE and executive functioning

Table 4.45 displays the results of Pearson correlation analyses among O-LIFE factors and the different executive functioning tests applied.

Table 4.45 Pearson correlation analyses among O-LIFE factors and executive functioning tests

		UnEx ? ; p	CogDis ? ; p	IntAnh ? ; p	ImpNon ? ; p
WCST	***Errors***	0.11; 0.334	**0.25; 0.025**	**0.18; 0.111**	0.08; 0.486
	Perseverations	0.07; 0.560	**0.17; 0.126**	-0.05; 0.645	0.02; 0.848
	PE	0.06; 0.612	0.14; 0.210	-0.04; 0.711	0.05; 0.685
	NPE	0.12; 0.283	**0.27; 0.015**	**0.31; 0.006**	0.08; 0.457
	CLR	-0.14; 0.207	**-0.30; 0.006**	**-0.22; 0.056**	-0.09; 0.410
	Categories	-0.11; 0.334	**-0.25; 0.025**	**-0.23; 0.039**	-0.03; 0.772
	Trials to 1st cat.	0.04; 0.731	0.09; 0.425	**0.32; 0.004**	-0.04; 0.751
	FMS	-0.03; 0.788	-0.09; 0.408	0.05; 0.654	-0.15; 0.177
SCWT	***#Word-Colour***	0.11; 0.349	-0.13: 0.251	-0.14; 0.228	**0.18; 0.109**
	Interference	**0.16; 0.165**	**-0.15; 0.194**	**-0.16; 0.167**	**0.18; 0.120**
VF	***Total F.A.S.***	0.13; 0.245	0.05; 0.640	**-0.21; 0.066**	0.15; 0.188
	Total AN	0.01; 0.934	**-0.16; 0.153**	**-0.22; 0.047**	0.09; 0.409

Sample size. WCST: n=80; SCWT: n=79; Verbal Fluency (VF): n=80.

As can be seen in Table 4.45, the O-LIFE positive factor Unusual Experiences was unrelated to executive functioning indexes, excepting for a light but non-significant positive association with the SCWT Interference index (p=0.165).

In contrast, Cognitive Disorganization was positively and statistically significant associated with more errors (p=0.025), more non-perseverative errors (p=0.015), less conceptual level responses (p=0.006), and less categories achieved (p=0.025) in the

WCST. At a trend level, this factor was associated with more perseverations (p=0.126) in the WCST, a lower SCWT interference (p=0.194), and less words generated (p=0.153) on the Animal Naming test.

The negative schizotypy factor, i.e. Introverted Anhedonia, was associated with more WCST non-perseverative errors (p=0.006), more WCST trials needed to complete the first category (p=0.004), less WCST categories achieved (p=0.039), and less words generated on the Animal Naming test (p=0.047) at a statistically significant level. At a trend level, this factor correlated with more WCST errors (p=0.111), less WCST conceptual level responses (p=0.056), a lower SCWT Interference index (p=0.167), and less words generated on the F.A.S. test (p=0.066).

Impulsive Nonconformity was associated at a trend level with more correct items named in the SCWT interference trial (p=0.109), and higher inhibitory control (p=0.120).

Stratification of these analyses by cohort revealed that the association between Cognitive Disorganization and poor WCST performance only was present in the Control cohort. As a result, the pattern of correlations mentioned above was non-significant in Index subjects. No relevant differences in the pattern of associations by cohort were observed for the rest of executive functioning indexes.

2.3.3 O-LIFE and memory

Results of Pearson correlations analyses among O-LIFE factors, on the one hand, and the CVLT and the Spatial Working Memory test, on the other hand, are offered in Table 4.46.

Table 4.46 Pearson correlation analyses among O-LIFE factors and memory tests

		UnEx ? ; p	CogDis ? ; p	IntAnh ? ; p	ImpNon ? ; p
CVLT	***List A total***	**0.24; 0.030**	0.13; 0.254	0.02; 0.823	0.12; 0.276
	List B	0.13; 0.247	0.06; 0.587	**-0.24; 0.028**	0.10; 0.366
	List A6.1	**0.22; 0.046**	0.12; 0.272 *	0.04; 0.747	0.10; 0.385
	List A6.2	**0.19; 0.082**	0.03; 0.772 *	0.13; 0.265	0.11; 0.350
	List A7.1	0.14; 0.207	0.00; 0.994 *	0.11; 0.344	0.05; 0.671
	List A7.2	0.16; 0.168	0.01; 0.935 *	0.06; 0.598	0.09; 0.446
	Semantic cluster	0.12; 0.277	0.10; 0.393	-0.03; 0.819	0.09; 0.414
	Serial cluster	-0.02; 0.849	-0.03; 0.780	0.05; 0.645	0.00; 0.999
	Slope	0.05; 0.633	0.12; 0.292	0.07; 0.524	**0.19; 0.095**
	Perseverations	0.03; 0.809	0.02; 0.877	-0.11; 0.323	-0.12; 0.279
	Total intrusions	**-0.17; 0.122**	-0.13; 0.233	**-0.16; 0.149**	0.14; 0.231
	Recognition hits	**0.16; 0.148**	0.01; 0.955	-0.03; 0.789	0.13; 0.258
	List B vs. A1	-0.01; 0.910	0.01; 0.958	**-0.30; 0.007**	0.12; 0.285
	A6.1 vs A5	0.01; 0.910	-0.04; 0.702	-0.10; 0.353	-0.13; 0.236

	A7.1 vs A6.1	-0.10; 0.395	-0.04; 0.700	**-0.16; 0.159**	-0.04; 0.745
	Discrimin. vs A7.1	-0.10; 0.389	0.01; 0.957 *	-0.13; 0.256	-0.00; 0.967
SWM	***% overall accur.***	-0.11; 0.336	**-0.29; 0.008**	**-0.27; 0.015**	**0.17; 0.130**
	% left accuracy	**-0.17; 0.140**	**-0.27; 0.014**	-0.07; 0.509	0.01; 0.932
	% right accuracy	-0.00; 0.963	**-0.17; 0.123**	**-0.33; 0.003**	**0.31; 0.005**

* Terms in which interaction by cohort has an effect.

Sample size. CVLT: n=80; Spatial Working Memory (SWM): n=80.

Unusual Experiences was associated, in general, with good verbal memory performance. This factor was positively correlated with more words recalled, in total, from List A (p=0.030). Likewise, positive schizotypy was associated with a better recall in short-delay recall trials (List A6.1: p=0.046; List A6.2: p=0.082) and, to a lesser degree, with a better recall in the long-delay cued trial (p=0.168). Scores on Unusual Experiences were also associated with less intrusions (p=0.122) and more recognition hits (p=0.148), at a trend level. As to spatial working memory, positive schizotypy was associated, at a trend level, with poorer left accuracy (p=0.140).

Cognitive Disorganization showed no statistically significant nor trend associations with verbal memory, but interesting results appeared when we stratified these analyses by cohort (see below). Concerning spatial working memory, Cognitive Disorganization scores were correlated at a statistically significant level with a poorer overall performance (p=0.008) and a poorer left accuracy (p=0.014). At a trend level, a poorer right spatial working memory performance (p=0.123) was also observed.

Introverted Anhedonia scores were correlated at a statistically significant level with less words recalled from the CVLT List B (p=0.028) and a poorer recall of List B in relation to List A recall (p=0.007). Likewise, negative schizotypy was associated, at a trend level, with less intrusions (p=0.149) and a worse performance in the long-delay free-recall trial in relation to the short-delay free-recall trial (p=0.159). As regards spatial working memory, Introverted Anhedonia was associated at a statistically significant level with a poorer overall accuracy (p=0.015), and an especially poorer right accuracy (p=0.003).

Impulsive Nonconformity scores were correlated, at a trend level, with a higher slope (p=0.095). As to spatial working memory, this factor was associated with a statistically significant better right accuracy (p=0.005) and, at a trend level, with a better overall accuracy (p=0.130).

Stratification of these analyses revealed a different pattern of associations among Cognitive Disorganization and verbal memory according to the cohort. On the one hand, only in Control subjects, this factor was correlated, at a trend level, with worse verbal memory performance, as evidenced in a poorer short-delay cued recall (?= -

0.22; p=0.187), a poorer long-delay cued recall (?= -0.26; p=0.111), and a poorer long-delay free recall (?= -0.23; p=0.161). In contrast, scores on this factor were correlated in Control subjects with better discriminability in relation to the long-delay free-recall trial (?= 0.38; p=0.020). On the other hand, only in Index subjects, Cognitive Disorganization was associated with good verbal memory performance, i.e., a trend to show higher short-delay free-recall (?= 0.27; p=0.089), higher short-delay cued recall (?= 0.24; p=0.129) and higher long-delay cued recall (?= 0.21; p=0.176). In contrast, this factor was correlated in Index subjects with worse discriminability in relation to the long-delay free recall trial (?= -0.24; p=0.122).

Therefore, stratification of the correlation analysis indicates that Cognitive Disorganization was associated with poorer recall versus good discriminability in Control subjects, whereas good recall versus poorer discriminability was exhibited by Index subjects.

2.3.4 Correlations among the O-LIFE factors

Finally, Pearson correlations among the O-LIFE factors were performed in order to explore their pattern of associations in our sample.

Table 4.47 Pearson correlation analyses among the schizotypal factors

	UnEx ?; p	**CogDis** ?; p	**IntAnh** ?; p	**ImpNon** ?; p
UnEx				
CogDis	**0.67; <0.001**			
IntAnh	0.14; 0.203	**0.35; 0.002**		
ImpNon	**0.40; <0.001**	**0.50; <0.001**	0.02; 0.872	

Sample size. n=80.

As can be seen, Cognitive Disorganization was the most non-specific factor, as it correlated with all the rest of O-LIFE dimensions. Positive schizotypy (Unusual Experiences) correlated, apart from Cognitive Disorganization, with Impulsive Nonconformity. The most specific factor was Introvertive Anhedonia (negative schizotypy), which correlated only with Cognitive Disorganization.