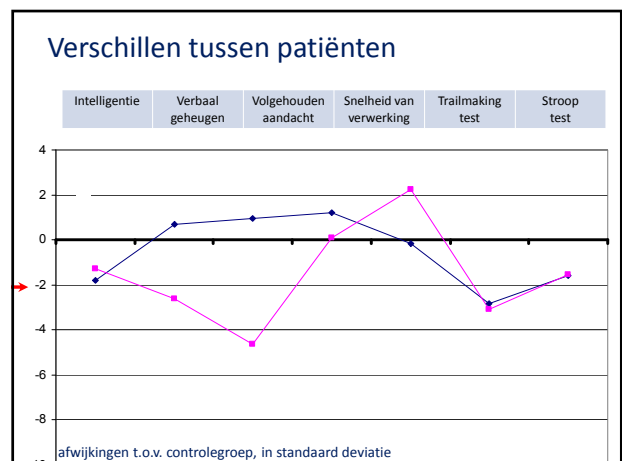
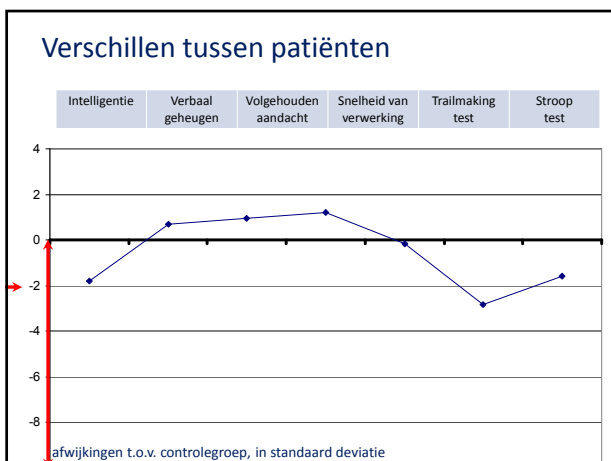
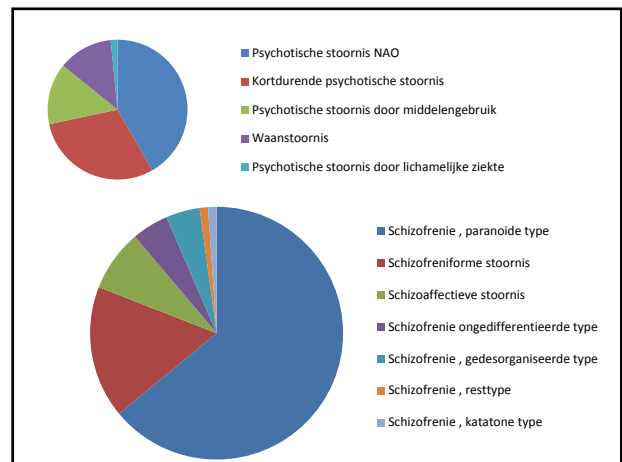
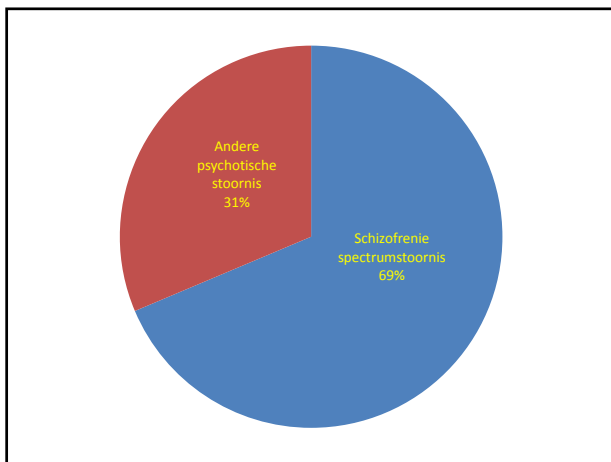
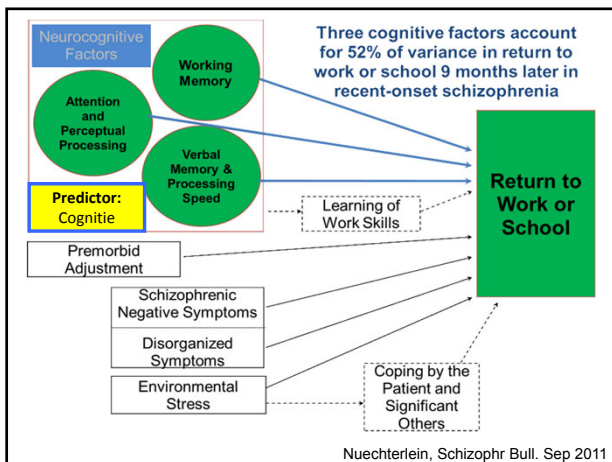
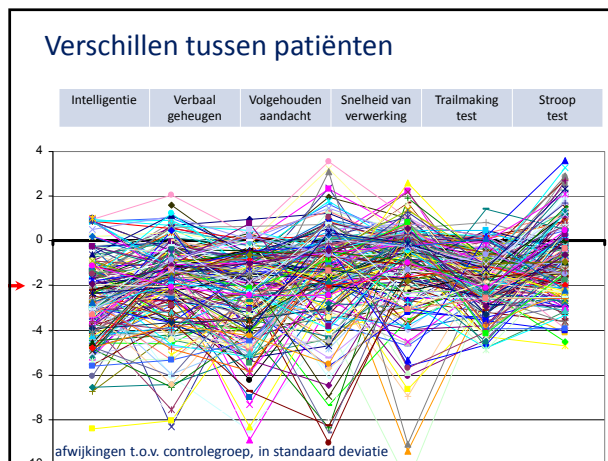
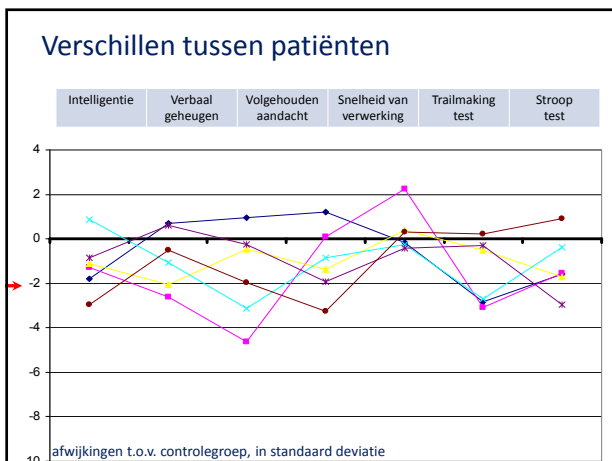


Benoem de kleuren:

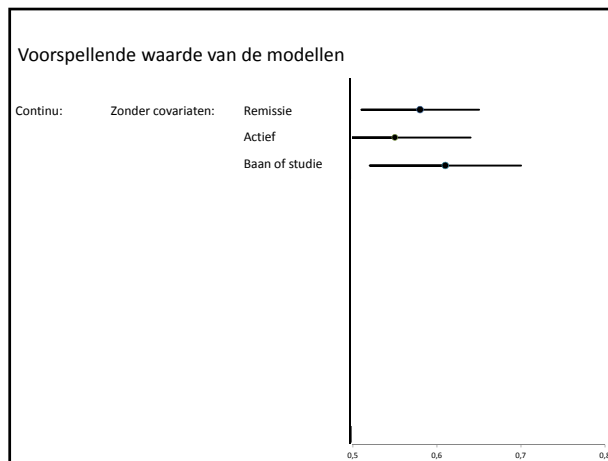
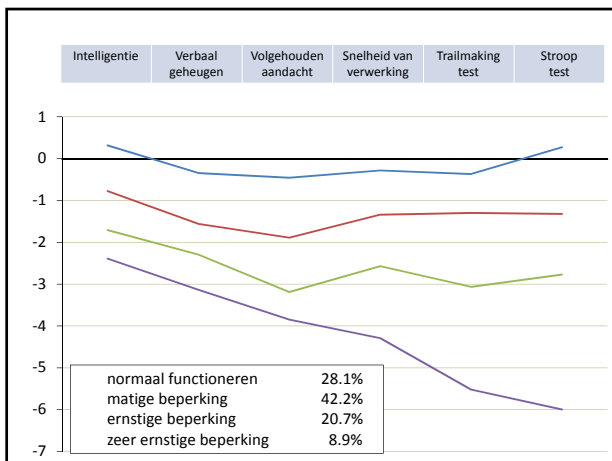
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GROEN	PAARS	ROOD
GEEL	ROOD	BLAUW
BLAUW	GEEL	ROOD
GROEN	BLAUW	BLAUW
GEEL	BLAUW	ORANJE

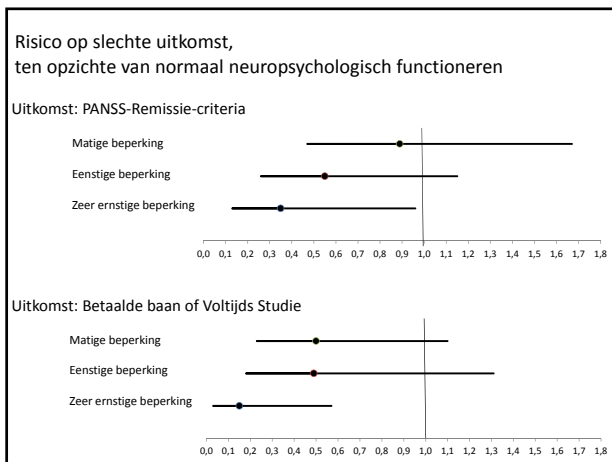
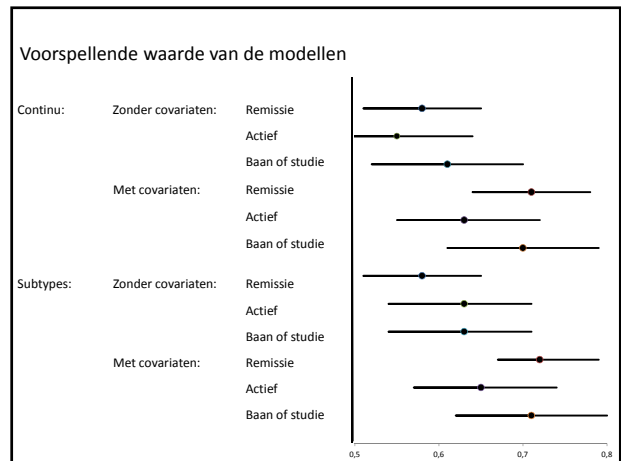
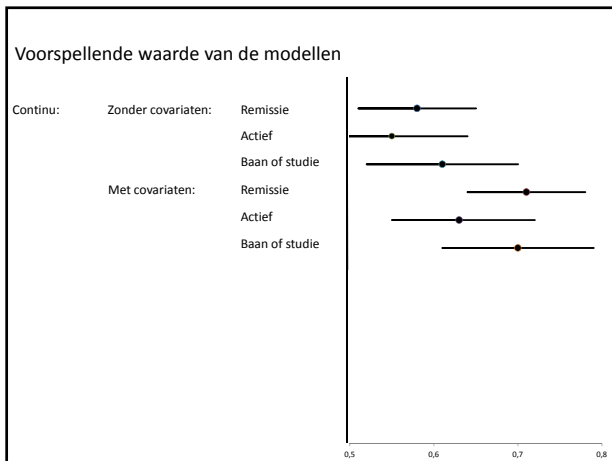
Vervolg de pijlen:





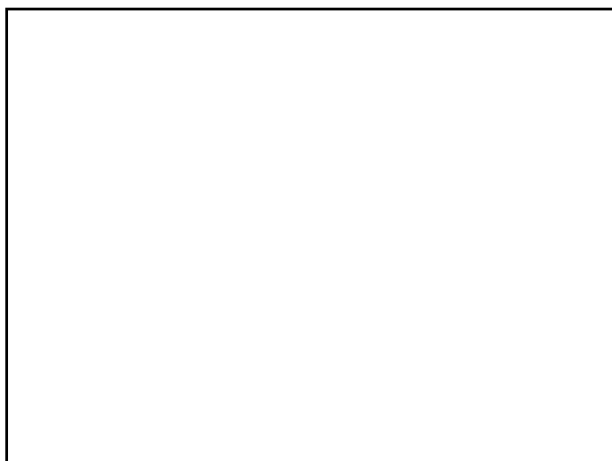
- ### Psychosis Recent Onset Groningen Survey
- Representatief cohort
 - recent onstane psychose
 - n=405
 - Cognitieve subtypes
 - hierarchische en k-means cluster analyse
 - Uitkomst: ROM
 - Ernst van symptomen: PANSS-remissie
 - Dagelijkse activiteiten, Werk en Studie
 - Covariaten: bij 'baseline'
 - PANSS positief, negatief en algemeen
 - Dagelijkse activiteiten, Werk en Studie
 - Opleiding
 - follow-up: Gemiddeld 108 maanden





Resultaten

- Er zijn zeer grote verschillen tussen patiënten in neurocognitief prestaties
 - Een grote groep presteert goed of redelijk goed
- Voorspellende waarde van neurocognitie voor symptomatisch en functioneel herstel is beperkt
 - Neurocognitieve subgroepen hebben voorspellende waarde
 - De kleinste subgroep, die zeer slecht presteert, functioneert op termijn veel slechter dan de andere subgroepen



N = 405		
Leeftijd(jaar)	27,6 (jr)	(SD 8,4 jr)
Gender man n	288	(71.1%)
Diagnosen n (%):		
Schizofrenie spectrumstoornis:	278	(68.6%)
Schizofrenie , paranoide type	178	(44.0%)
Schizofrenie , gedesorganiseerde type	12	(3.0%)
Schizofrenie , katatone type	3	(0.7%)
Schizofrenie ongedifferentieerde type	13	(3.2%)
Schizofrenie , resttype	3	(0.7%)
Schizofreniforme stoornis	47	(11.6%)
Schizoaffectieve stoornis	22	(5.4%)
Andere psychotische stoornis:	127	(31.4%)
Waanstoornis	16	(4.0%)
Psychotische stoornis NAO	53	(13.1%)
Kortdurende psychotische stoornis	38	(9.4%)
Psychotische stoornis door middelengebruik	18	(4.4%)
Psychotische stoornis door lichamelijke ziekte	2	(0.5%)

Overview of the demographic and clinical data -2

Positive and Negative Symptom Scale (PANSS score):

Positive subscale	12.7	(SD 4.8)
Negative Subscale	14.2	(SD 5.6)
General Pathology scale	29.7	(SD 7.7)

Age of psychosis onset (yr)

	25.6	(SD 8.1)
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Duration of Untreated Psychosis (months):

< 1 month	36	(8.9%)
1 - 2 month	32	(7.9%)
2 - 3 month	31	(7.7%)
> 3 month	183	(45.2%)
Missing data	123	(30.4%)

Number of psychotic episodes

1	320	(85.1%)
2	37	(9.8%)
3	19	(5.1%)
Missing data	29	(7.2%)

Duration of illness (months)

	10.4	(SD 12.6)
--	------	-----------

Overview of the demographic and clinical data -3

Antipsychotics n (%):

no antipsychotic	79	(19.5%)
Risperidone	119	(29.4%)
Quetiapine	33	(8.1%)
Olanzapine	134	(33.1%)
Aripiprazol	22	(5.4%)
Clozapine	12	(3.0%)
Other antipsychotic medication	28	(6.9%)

Dose at week 6 in Haldoperidol Equivalents

	6.3 mg	(SD 3.9 mg)
--	--------	-------------

Concomitant drugs at week 6: n (%):

None / Not applicable / Missing	94	(23.2%)
Benzodiazepines	136	(33.6%)
Anti-Depressants	64	(15.8%)
Anti-cholinergics	54	(13.3%)
Mood Stabilizers	9	(2.2%)
Other	48	(12%)

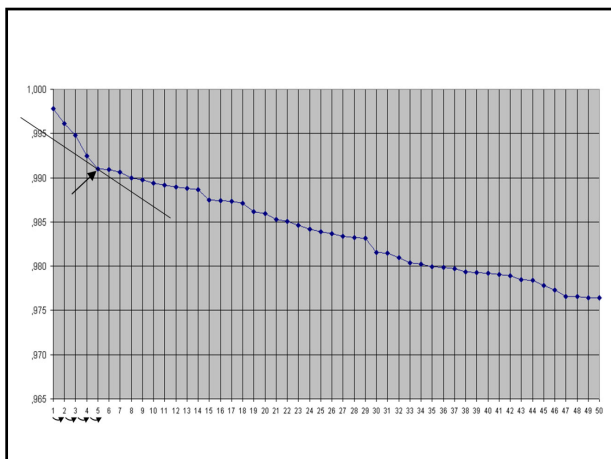
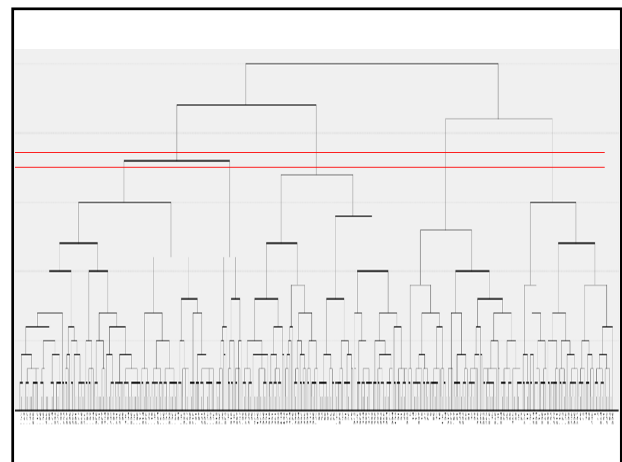
Alcohol and other substances n (%):

Alcohol	161	(39.8%)
Cannabis	118	(30.0%)
Stimulants or Cocaine	6	(1.5%)
None / not applicable / Missing data	138	(34.1%)

Bepaling van beperkingen

- Criteria DSM-5, Sectie III
- Afwijkingen t.o.v. controlegroep, in standaard deviatie:

binnen normale grenzen	< 0,5 SD
mild	0,5 tot 1 SD
matig	1 tot 2 SD
ernstig	> 2 SD



Symptomatic outcome, as Remission on PANSS-R

Prediction of Low PANSS-R Items (95% C.I.)				
	Without covariates (N=253)		With covariates (N=216) ^b	
	Odds Ratio	Area	Odds Ratio	Area
Model 1: Continuous measure		0.58 (0.51-0.65) *		0.71 (0.64-0.78) *
Total Performance	1.25 (1.01-1.54) *		1.01 (0.77-1.33)	
Model 2: Per subtype		0.58 (0.51-0.65) *		0.72 (0.66-0.79) *
Very Severe Impairment	0.35 (0.13-0.96) *		0.45 (0.12-1.63)	
Severe Impairment	0.55 (0.26-1.15)		1.10 (0.45-2.66)	
Moderate Impairment	0.89 (0.47-1.67)		1.29 (0.62-2.67)	

Functional outcome				
Prediction of Level of Activity (95% C.I.)				
		Without covariates (N=242)		With covariates (N=210)
		Odds Ratio	Area	Odds Ratio
Model 1: Continuous measure				
a. Outcome Active, but no paid job or full-time study:		0.55 (0.47-0.64)		0.63 (0.55-0.72) *
Total Performance		1.25 (0.99-1.57)		1.19 (0.90-1.56)
b. Outcome Paid job or full-time study:		0.61 (0.52-0.70) *		0.70 (0.61-0.79) *
Total Performance		1.40 (1.07-1.83) *		1.18 (0.86-1.64)
Model 2: Per subtype				
a. Outcome Active, but no paid job or full-time study:		0.63 (0.54-0.71) *		0.65 (0.57-0.74) *
Very Severe Impairment		0.15 (0.04-0.57) *		0.24 (0.05-1.02)
Severe Impairment		1.26 (0.53-2.99)		1.33 (0.51-3.48)
Moderate Impairment		0.71 (0.33-1.50)		0.77 (0.35-1.74)
b. Outcome Paid job or full-time study:		0.63 (0.54-0.71) *		0.71 (0.62-0.80) *
Very Severe Impairment		0.15 (0.03-0.57) *		0.27 (0.05-1.52)
Severe Impairment		0.49 (0.18-1.31)		0.87 (0.28-2.66)
Moderate Impairment		0.50 (0.23-1.10)		0.61 (0.25-1.46)

RESULTS

- 4 subgroups of cognitive performance:
 - normal performance (NP; 28.1%),
 - moderate impairment (MI; 42.2%),
 - severe impairment (SI; 20.7%)
 - very severe impairment (VSI; 8.9%).
- Outcome:
 - VSI associated with high risk compared to other subgroups:
 - keeping symptoms
 - staying unemployed or inactive
 - Symptomatic remission, activity level and employment status were better explained by cognitive subgroups than by separate cognitive tests or general cognitive performance.

Table 2
Cognitive subtypes of patients at Start of treatment and at Follow up in Routine Outcome Monitoring (ROM), including duration of Follow Up.

	Start of treatment		Routine Outcome Monitoring	
	n	(%)	n	(%)
Normal performance	114	(28.1)	66	(26.5)
Moderate Impairment	171	(42.2)	104	(41.8)
Sever Impairment	84	(20.7)	55	(22.1)
Very Severe Impairment	36	(8.9)	24	(9.6)
Total	405		249	

Months
108
111
106
107
108
 $\chi^2=1.626, p=0.654$

Table 3:
Clinical characteristics of subtypes at baseline, clustered on basis of cognitive performance.

	NP (n=114)	MI (n=171)	SI (n=84)	VSI (n=36)	Statistics	P
Age at Assessment (median)	26.30 yr	27.7 yr	27.7 yr	28.8 yr	Kruskal-Wallis	0.621
Gender (male)	64.9%	77.8%	65.5%	72.2%	$\chi^2=7.152$	0.067
Activity level						
Paid job	28.6%	35.0%	33.7%	25.2%	$\chi^2=2.991$	0.393
All structured daily activities	59.5%	56.4%	47.5%	34.3%	$\chi^2=8.503$	0.037 *
Education, followed or reached:						
elementary school	13.2%	11.1%	12.0%	27.8%		
secondary school	14.9%	26.3%	50.6%	47.2%	$\chi^2=54.427$	0.000 **
high school	50.0%	49.7%	31.3%	16.7%		
university	21.9%	12.3%	6.0%	8.3%		
Diagnostic Group:						
schizophrenia spectrum	58.8%	73.1%	72.6%	66.7%	$\chi^2=7.378$	0.061
PANSS-score (median):						
positive symptoms	12.1	12.3	13.8	13.0	Kruskal-Wallis	0.043 *)
negative symptoms	12.5	14.1	15.6	17.3	Kruskal-Wallis	0.000 **
general psychopathology	27.8	29.3	32.4	30.4	Kruskal-Wallis	0.001 **
Antipsychotic med. (median):						
haloperidol eq. in mg	6.1 mg	6.1 mg	6.6 mg	6.6 mg	Kruskal-Wallis	0.678
Substance use, present state:	29.5%	36.4%	38.9%	35.5%	$\chi^2=1.884$	0.597

NP = Normal Performance, MI=Moderate Impairment, SI=Severe Impairment, VSI=Very Severe Impairment

Table 4:
Outcome of subtypes of patients, clustered on basis of cognitive performance.

	NP	MI	SI	VSI	Statistics	P
Activity Level						
No activities	19 (29.2%)	41 (40.6%)	17 (32.1%)	17 (73.9%)		
Structured daily activities	23 (35.4%)	35 (34.7%)	26 (49.1%)	3 (13.0%)	$\chi^2=20.350$	0.002
Paid job or a fulltime study	23 (35.4%)	25 (24.8%)	10 (18.9%)	3 (13.0%)		
PANSS-R						
All items 3 or lower	39 (61.9%)	68 (59.1%)	25 (47.2%)	8 (36.4%)	$\chi^2=6.404$	0.094
Any item 4 or higher	24 (38.1%)	47 (40.9%)	28 (52.8%)	14 (63.6%)		

NP = Normal performance, MI = Moderate impairment, SI = Severe impairment, VSI = Very severe impairment

Table 5b: Parameter estimates of cognitive performance on PANSS-R^c.

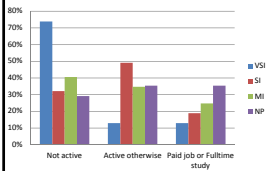
	Prediction of low PANSS-R items			
	Without covariates (N=253) OR (95% C.I.)	P-value	With covariates (N=216) ^f OR (95% C.I.)	P-value
Model 1: Cognitive Performance as a continuous measure				
Total Cognitive Performance	1.25 (1.014-1.540)	0.037*	1.01 (0.772-1.332)	0.921
Model 2: Cognitive performance of patient subtype ^b				
Very Severe Impairment	0.35 (0.129-0.962)	0.042*	0.39 (0.112-1.396)	0.149
Severe Impairment	0.55 (0.262-1.153)	0.113	0.89 (0.365-2.188)	0.805
Moderate Impairment	0.89 (0.474-1.672)	0.718	1.09 (0.531-2.230)	0.818

^aReference category is outcome 'Having no structured activities'. ^bReference category is subtype 'Normal cognitive performance'. ^cAt least one PANSS-R-item higher than 3. ^dAdjusted for the effect of following measures at baseline: level of education, PANSS positive, negative and general symptom scores, and structured activities. OR = Odds Ratio. C.I. = Confidence Interval.

Three levels of activity: Percentages

	Not active	Active otherwise	Paid job or Fulltime study	Total
VSI	74%	13%	13%	100%
SI	32%	49%	19%	100%
MI	41%	35%	25%	100%
NP	29%	35%	35%	100%
Total:	39%	36%	25%	100%

Three activity levels (percentage)



Two levels of activity; results more significant

3 levels:

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20,350 ^a	6	,002
Likelihood Ratio	19,903	6	,003
Linear-by-Linear Association	9,214	1	,002
N of Valid Cases	242		

^a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5,80.

2 levels:

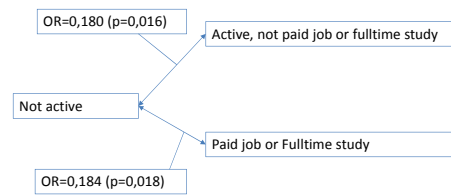
Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15,588 ^a	3	,001
Likelihood Ratio	15,454	3	,001
Linear-by-Linear Association	7,215	1	,007
N of Valid Cases	242		

^a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8,93.

Nominal Regression: 'Base' changed from LAST to FIRST

```
NOMREG Activity(BASE=FIRST)ORDER=ASCENDING) BY Subtypes_New WITH EDUC_PHD_4deling
/CRITERIA CIN(95) DELTA(0) MXITER(100) MXSTEP(5) CHKSEP(20) LCONVERGE(0)
PCONVERGE(0.000001)
SINGULAR(0.00000001)
/MODEL
/STEPWISE=PIN(.05) POUT(0.1) MINEFFECT(0) RULE(SINGLE) ENTRYMETHOD(LR)
REMOVALMETHOD(LR)
/INTERCEPT=INCLUDE
/PRINT=PARAMETER SUMMARY LRT CPS STEP MFI.
```

OR's, based on 'Not active' in stead of 'Paid job or Fulltime study'



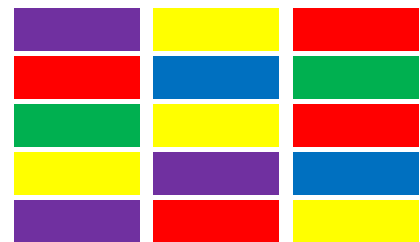
Stroop - test 1

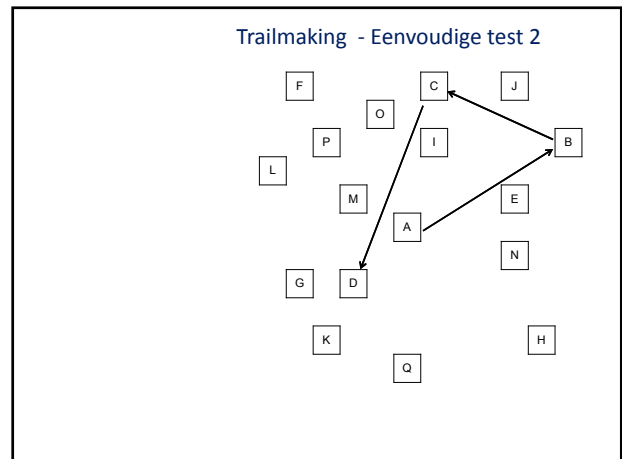
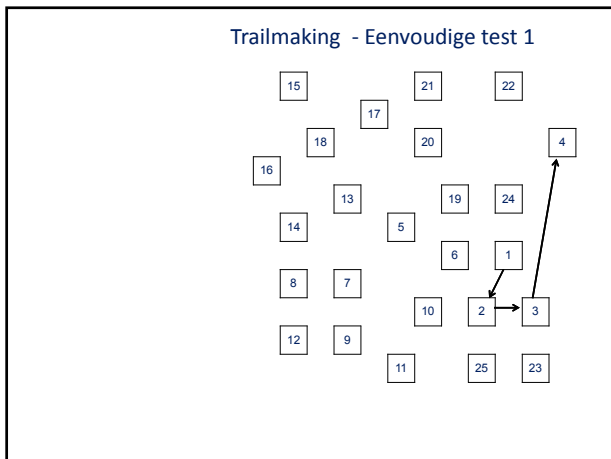
Read:

ROOD GEEL ROOD
 GROEN PAARS ROOD
 GEEL ROOD BLAUW
 BLAUW GEEL ROOD
 GROEN BLAUW BLAUW
 GEEL BLAUW ORANJE

Stroop - test 2

Call:





3	7	2	9	1	Snelheid van belang	8	4	2

Bepaling van beperkingen

- Criteria DSM-5, Sectie III
- Afwijkingen t.o.v. controlegroep, in standaard deviatie:

binnen normale grenzen	< 0,5 SD
mild	0,5 tot 1 SD
matig	1 tot 2 SD
ernstig	> 2 SD

