

## Data supplement

**Table DS1** Z-scores (mean (s.d.)) and comparisons of cognitive domains and measures of IQ among good-outcome, poor-outcome and healthy control groups

	Poor outcome <sup>b</sup>	Good outcome	Analysis				
			F <sup>c</sup>	P	Good v. poor	Good v. control	Poor v. control
<i>Cognitive domains<sup>c</sup></i>							
Verbal learning & memory							
Entire FEP sample	−1.3 (1.1)	−0.8 (0.9)	21.60	<0.001	0.001**	0.001**	<0.001**
FES	−1.3 (1.1)	−0.9 (0.9)	18.59	<0.01	0.04*	<0.01*	<0.01*
Non-FES	−1.3 (1.1)	−0.6 (0.8)	9.87	<0.01	0.05*	0.08	<0.01*
Visual learning & memory							
Entire FEP sample	−1.5 (1.3)	−1.2 (1.1)	19.50	<0.001	0.229	<0.001**	<0.001**
FES	−1.5 (1.3)	−1.2 (0.9)	19.72	<0.01	0.39	<0.01*	<0.01*
Non-FES	−1.6 (1.3)	−1.2 (1.3)	11.89	<0.01	1.00	<0.01*	<0.01*
Working memory							
Entire FEP sample	−1.0 (1.2)	−0.4 (0.9)	17.40	<0.001	0.003**	0.171	<0.001**
FES	−1.0 (1.2)	−0.5 (1.0)	8.75	<0.01	0.05*	0.21	<0.01*
Non-FES	−1.1 (1.0)	−0.4 (0.8)	6.91	<0.01	0.05*	0.41	<0.01*
Speed of processing							
Entire FEP sample	−1.2 (1.3)	−1.0 (1.2)	11.98	<0.001	1.000	<0.001**	<0.001**
FES	−1.2 (1.3)	−1.2 (1.2)	12.07	<0.01	1.00	<0.01*	<0.01*
Non-FES	−1.3 (1.2)	−0.7 (1.0)	8.05	<0.01	0.29	0.04*	<0.01*
Reasoning/problem-solving							
Entire FEP sample	−1.4 (1.9)	−1.2 (1.4)	8.95	<0.001	0.909	0.003**	<0.001**
FES	−1.4 (1.8)	−1.4 (1.3)	10.07	<0.01	1.00	<0.01*	<0.01*
Non-FES	−1.7 (2.3)	−0.7 (1.4)	6.47	<0.01	0.11	0.29	<0.02*
Attention							
Entire FEP sample	−1.4 (1.2)	−1.0 (1.1)	17.82	<0.001	0.067	<0.001**	<0.001**
FES	−1.4 (1.2)	−1.1 (1.1)	16.22	<0.01	0.48	<0.01*	<0.01*
Non-FES	−1.5 (1.2)	−0.8 (1.0)	10.95	<0.01	0.18	0.01*	<0.01*
<i>WAIS-III – IQ Measures<sup>d</sup></i>							
Verbal							
Entire FEP sample	−0.9 (1.0)	−0.5 (1.0)	9.46	<0.01	0.03*	0.09	<0.01*
FES	−0.9 (1.1)	−0.6 (1.0)	7.86	<0.01	0.34	0.05	<0.01*
Non-FES	−1.0 (1.0)	−0.3 (1.0)	4.72	0.01	0.13	0.71	<0.01*
Performance							
Entire FEP sample	−1.5 (1.8)	−1.2 (1.3)	11.52	<0.01	0.60	<0.01*	<0.01*
FES	−1.5 (1.8)	−1.5 (1.3)	12.59	<0.01	1.00	<0.01*	<0.01*
Non-FES	−1.5 (2.0)	−0.8 (1.4)	6.44	<0.01	0.31	0.10	<0.01*
Full							
Entire FEP sample	−1.2 (1.3)	−0.8 (1.0)	12.85	<0.01	0.12	<0.01*	<0.01*
FES	−1.2 (1.3)	−1.0 (1.0)	12.26	<0.01	0.95	<0.01*	<0.01*
Non-FES	−1.3 (1.4)	−0.6 (1.0)	6.85	<0.01	0.17	0.14	<0.01*

FEP, first-episode psychosis; FES, first-episode schizophrenia; WAIS-III, Wechsler Adult Intelligence Scale – third edition.  
a. Group numbers: entire first-episode psychosis sample: poor=78, good=73; first-episode schizophrenia: poor=64, good=46; non-first-episode schizophrenia: poor=14, good=27. Z-scores for controls (n=31) are mean=0.0 and s.d.=1.0 by definition.  
b. Global model evaluated with one-way ANOVA: first-episode psychosis d.f.=2, 179; first-episode schizophrenia d.f.=2, 108; non-first-episode schizophrenia d.f.=2, 39.  
c. Group differences for entire first-episode psychosis sample evaluated with Bonferroni pair-wise comparisons adjusted for multiple comparisons; group differences for first-episode schizophrenia and non-first-episode schizophrenia patients evaluated with Bonferroni t-tests.  
d. Group differences evaluated with Bonferroni t-tests.  
\*P significant at 0.05.  
\*\*P significant at 0.008 (0.05/6 – corrected for multiple comparisons as per MANOVA design).

Table DS2 Raw dataset								
		Poor outcome <sup>a</sup>		Good outcome <sup>b</sup>		Control <sup>c</sup>		
		Mean	s.d.	Mean	s.d.	Mean	s.d.	
Verbal memory	LMI-immed	FEP	32.28	11.01	38.04	9.72	48.00	11.40
		FES	32.67	11.00	36.78	10.46		
		non-FES	30.50	11.30	40.19	8.04		
	LMII-delayed	FEP	19.01	8.16	22.63	8.23	30.35	8.86
		FES	19.16	8.05	21.48	8.39		
		non-FES	18.36	8.92	24.59	7.69		
	LMII-recog	FEP	23.96	3.39	25.78	2.93	26.68	2.37
		FES	23.84	3.40	25.65	3.34		
		non-FES	24.50	3.44	26.00	2.08		
Visual memory	VRI-immed	FEP	86.05	13.81	91.42	10.51	98.48	7.17
		FES	85.92	13.67	92.50	8.54		
		non-FES	86.64	14.97	89.59	13.20		
	VRII-delayed	FEP	66.78	22.98	74.06	16.73	91.16	13.00
		FES	67.14	22.87	75.42	15.71		
		non-FES	65.14	24.32	71.74	18.42		
	VRII-recog	FEP	44.56	3.00	44.71	2.44	46.58	1.88
		FES	44.53	3.13	44.52	2.16		
		non-FES	44.71	2.40	45.04	2.88		
<i>Working memory</i>								
<i>Verbal</i>								
Digit Span – Forward	FEP	9.14	2.30	9.77	2.11	10.00	2.21	
	FES	9.13	2.31	9.80	2.27			
	non-FES	9.21	2.33	9.70	1.86			
Digit Span – Back	FEP	5.83	2.39	6.67	2.12	7.58	2.42	
	FES	5.94	2.35	6.54	2.13			
	non-FES	5.36	2.59	6.89	2.14			
<i>Non-Verbal</i>								
Spatial Span – Forward	FEP	7.92	1.80	8.93	1.92	9.48	1.67	
	FES	7.97	1.89	8.89	2.19			
	non-FES	7.71	1.33	9.00	1.36			
Spatial Span – Back	FEP	7.26	1.87	7.93	1.93	8.74	1.91	
	FES	7.25	1.93	7.85	2.16			
	non-FES	7.29	1.64	8.07	1.49			
<i>Speed of processing</i>								
Digit Symbol	FEP	64.24	15.62	68.07	13.96	87.45	12.85	
	FES	65.06	15.64	65.93	15.45			
	non-FES	60.50	15.55	71.70	10.24			
Trail Making A	FEP	36.55	17.97	35.10	13.13	31.16	9.29	
	FES	37.18	19.04	37.06	14.41			
	non-FES	33.64	12.05	31.74	9.96			
<i>Reasoning and problem-solving</i>								
Block Design	FEP	42.36	14.33	43.41	11.90	52.81	8.59	
	FES	42.36	14.56	41.61	11.34			
	non-FES	42.36	13.73	46.48	12.41			
Trail Making B	FEP	84.62	44.48	74.27	26.37	60.16	15.98	
	FES	81.19	38.62	79.09	27.31			
	non-FES	100.29	64.55	66.07	22.88			
<i>Attention</i>								
d2 Concentration Performance	FEP	139.67	39.56	153.37	37.87	189.10	38.00	
	FES	140.30	39.58	150.46	38.50			
	non-FES	136.79	40.83	158.33	36.96			
<i>IQ measures</i>								
Verbal IQ	FEP	54.91	14.83	61.07	13.47	67.48	13.05	
	FES	55.19	15.05	59.72	13.53			
	non-FES	53.64	14.23	63.37	13.31			
Performance IQ	FEP	43.62	14.73	46.63	10.25	57.29	7.21	
	FES	43.66	14.73	44.74	10.06			
	non-FES	43.43	15.30	49.85	9.93			
Full-scale IQ	FEP	98.53	27.48	107.70	20.76	124.77	17.48	
	FES	98.84	27.49	104.46	20.90			
	non-FES	97.07	28.44	113.22	19.68			

FEP, first-episode psychosis; FES, first-episode schizophrenia. LMI-immed, changed to Logical Memory I-immediate Recall; LMII-delayed, changed to Logical Memory II-Delayed Recall; LMII-recog, changed to Logical Memory II-Recognition; VRI-immed, changed to visual reproduction-immediate Recall; VRII-delayed, changed to Visual Reproduction II-Delayed Recall; VRII-recog, changed to Visual Reproduction V-Recognition.

a. FEP: *n*=78; FES: *n*=64; non-FES: *n*=14.  
b. FEP: *n*=73; FES: *n*=46; non-FES: *n*=27.  
c. *n*=31.