

## ST1: Factor loadings of 28 IGC items for 484 people with FEP, following principal axis factor

### analysis with Varimax rotation

Dimensions	Factors <sup>a</sup>				
	1 (Manic symptoms)	2 (Reality distortion)	3 (Negative symptoms)	4 (Depressive symptoms)	5 (Disorgan- ization)
<b>1. Manic symptoms</b>					
Heightened subjective functioning	<b>0.86</b>	-0.08	-0.08	-0.06	-0.03
Rapid subjective tempo	<b>0.83</b>	-0.04	-0.06	-0.03	0.01
Expansive mood	<b>0.82</b>	-0.07	-0.07	-0.06	-0.04
Expansive delusions & hallucinations	<b>0.63</b>	0.13	-0.07	-0.07	0.07
Overactivity	<b>0.62</b>	-0.01	0.01	0.08	0.24
Socially embarrassing behavior	<b>0.40</b>	0.16	0.11	-0.12	0.22
<b>2. Reality distortion</b>					
Delusions of reference	0.11	<b>0.46</b>	-0.0009	0.21	0.09
Delusions of persecution	-0.08	<b>0.43</b>	-0.07	0.03	0.18
Delusions of control	-0.06	<b>0.37</b>	0.0002	-0.03	0.14
Bizarre delusions & interpretations	-0.09	<b>0.41</b>	-0.04	-0.15	0.23
Miscellaneous delusions	0.08	<b>0.38</b>	-0.08	0.08	0.07
Non-specific auditory hallucinations	-0.09	<b>0.55</b>	0.10	0.06	-0.33
Non-specific visual hallucinations <sup>b</sup>	0.003	0.24	0.03	0.03	-0.08
Non-affective auditory hallucinations	-0.08	<b>0.61</b>	0.11	-0.14	-0.30
Altered perception	0.12	<b>0.31</b>	-0.01	-0.06	0.03
Non-specific psychotic experiences	0.01	<b>0.34</b>	-0.02	0.01	-0.01
Experience of disordered form of thoughts	0.05	<b>0.48</b>	0.03	-0.08	0.12
Depersonalization & derealization <sup>b</sup>	-0.01	0.24	0.04	0.04	-0.004
<b>3. Negative symptoms</b>					
Flat & incongruous affect	-0.12	0.02	<b>0.65</b>	0.01	0.12
Poverty of speech	-0.07	-0.11	<b>0.69</b>	-0.007	-0.04
Non-verbal communication	0.09	-0.03	<b>0.73</b>	0.17	-0.04
Self-neglect	-0.01	0.09	<b>0.37</b>	0.02	0.19
Motor retardation	-0.09	0.01	<b>0.61</b>	<b>0.36</b>	-0.18
<b>4. Depressive symptoms</b>					
Special features of depressed mood	-0.06	0.04	0.13	<b>0.84</b>	-0.06
Depressed mood	-0.17	-0.06	0.04	<b>0.82</b>	-0.05
Depressive delusions & hallucinations	-0.09	0.005	0.13	<b>0.58</b>	-0.09
<b>5. Disordered beliefs</b>					
Emotional turmoil	0.16	0.12	0.23	-0.02	<b>0.38</b>
Incoherent speech	0.10	0.06	0.003	-0.12	<b>0.46</b>

<sup>a</sup> Factor loadings following Varimax rotation. Loadings  $\geq \pm 0.30$  are presented in bold. Loadings rounded to 2 decimal places, or 1 significant digit for values  $< \pm 0.01$

<sup>b</sup> IGC item did not load  $> \pm 0.30$  onto a specific factor, but strongest loadings were associated with *reality distortion*

## ST2: Null & univariate multilevel models of symptom dimensions in the ÆSOP First Episode Psychosis sample

	Symptom dimension <sup>a</sup>				
	Reality distortion	Negative symptoms	Manic symptoms	Depressive symptoms	Disorganization
<b>Null models</b>					
<i>Random effect</i>					
Intra-class correlation coefficient	4.92%	0.74%	0.73%	<0.001%	3.11%
$\chi^2$ p-value	0.03	0.35	0.34	1.00	0.05
AIC	539.51	1160.90	1611.43	939.26	-422.96
<b>Univariate models</b>					
<i>Individual-level fixed effects</i>	<b>EES (95%CI)</b>	<b>EES (95%CI)</b>	<b>EES (95%CI)</b>	<b>EES (95%CI)</b>	<b>EES (95%CI)</b>
Age (years)	-0.0001 (-0.004, 0.003)	-0.004 (-0.01, 0.003)	-0.01 (-0.02, 0.002)	0.004 (-0.001, 0.01)	0.0007 (-0.0006, 0.002)
Sex (men vs. women)	0.02 (-0.05, 0.10)	0.19 (0.04, 0.34) <sup>b</sup>	-0.24 (-0.49, 0.002)	-0.16 (-0.27, -0.04) <sup>b</sup>	0.02 (-0.005, 0.05)
White British	1	1	1	1	1
White, other ethnicities	0.19 (0.03, 0.34) <sup>b</sup>	0.05 (-0.25, 0.35)	-0.23 (-0.72, 0.25)	0.04 (-0.19, 0.28)	-0.01 (-0.07, 0.04)
Black Caribbean	0.13 (0.03, 0.22) <sup>b</sup>	-0.13 (-0.31, 0.06)	-0.05 (-0.34, 0.25)	-0.07 (-0.21, 0.08)	-0.02 (-0.06, 0.01)
Black African	0.21 (0.09, 0.33) <sup>b</sup>	0.02 (-0.22, 0.25)	0.28 (-0.10, 0.66)	-0.01 (-0.20, 0.18)	-0.05 (-0.09, -0.003) <sup>b</sup>
Indian subcontinent	-0.12 (-0.35, 0.10)	-0.28 (-0.72, 0.17)	-0.21 (-0.93, 0.52)	0.08 (-0.27, 0.44)	-0.01 (-0.19, 0.13)
Mixed, white & black Caribbean	-0.18 (-0.44, 0.09)	0.52 (-0.002, 1.04)	0.33 (-0.51, 1.18)	-0.002 (-0.42, 0.41)	0.03 (-0.07, 0.12)
Other ethnicities	0.09 (-0.08, 0.26)	0.05 (-0.28, 0.38)	0.19 (-0.34, 0.73)	0.12 (-0.14, 0.38)	-0.03 (-0.10, 0.03)
<i>Area-level fixed effects</i>					
SE London vs. Nottinghamshire	0.22 (0.14, 0.30) <sup>b</sup>	-0.13 (-0.29, 0.02)	0.02 (-0.24, 0.29)	0.13 (0.002, 0.25) <sup>b</sup>	-0.06 (-0.08, -0.03) <sup>b</sup>
Population density <sup>c</sup>	0.10 (0.06, 0.13) <sup>b</sup>	-0.02 (-0.10, 0.05)	0.04 (-0.09, 0.16)	0.05 (-0.01, 0.11)	-0.03 (-0.04, -0.01) <sup>b</sup>
Deprivation (IMD) <sup>c</sup>	0.04 (-0.01, 0.10)	-0.02 (-0.11, 0.08)	-0.10 (-0.24, 0.06)	-0.07 (-0.15, -0.001) <sup>b</sup>	-0.01 (-0.03, 0.004)
Inequality (IMD) <sup>c</sup>	-0.06 (-0.12, -0.01) <sup>b</sup>	-0.003 (-0.10, 0.10)	0.04 (-0.12, 0.19)	0.009 (-0.07, 0.09)	0.02 (0.0006, 0.04) <sup>b</sup>
Own-group ethnic density <sup>c</sup>	-0.07 (-0.11, -0.02) <sup>b</sup>	0.03 (-0.05, 0.11)	0.01 (-0.11, 0.14)	-0.004 (-0.07, 0.06)	0.02 (0.003, 0.03) <sup>b</sup>
Local election voter turnout <sup>c</sup>	-0.08 (-0.14, -0.03) <sup>b</sup>	0.07 (-0.03, 0.17)	0.04 (-0.13, 0.20)	0.02 (-0.06, 0.10)	0.03 (0.008, 0.05) <sup>b</sup>

AIC: Akaike Information Criterion; 95%CI: 95% confidence interval; EES: estimated effect size on transformed scale; IMD: Index of Multiple Deprivation

<sup>a</sup> Figures rounded to 2 decimal places, or where between -0.01 and 0.01 rounded to 1 significant digit.

<sup>b</sup> Significant at p<0.05

<sup>c</sup> Z-standardized effect sizes correspond to change in symptom dimension associated with a 1 standard deviation change in the neighborhood variable, except for the centre-variable which reports change in effect size in Southeast London compared with Nottinghamshire

**ST3: Multivariate adjusted area-level effects in selected symptom dimensions by broad ethnic subgroup**

	Symptom dimension <sup>a</sup>		
	Reality distortion EES (95% CI)	Depressive symptoms EES (95% CI)	Disorganization EES (95% CI)
<b><i>Area-level fixed effect (Southeast London vs. Nottinghamshire)</i></b>			
White British group	0.13 (0.003, 0.26) <sup>b</sup>	0.24 (0.06, 0.473) <sup>b</sup>	-0.05 (-0.10, -0.01) <sup>b</sup>
Black and Minority Ethnic group	0.21 (0.07, 0.34) <sup>b</sup>	0.15 (-0.07, 0.37)	-0.09 (-0.14, -0.03) <sup>b</sup>

EES: estimated effect size; OR: odds ratio; 95% CI: 95% confidence interval

<sup>a</sup> Effect sizes adjusted for all variables included in final models presented in Table 3.

<sup>b</sup> p<0.05