## Supplementary Table 1. Description of the genotyped sample

Group	$N^{l}$	Fraction	Mean age (SE)
		female	
Total sample	86,292	54.84	61.47 (0.06)
Schizophrenia	583	36.02	57.80 (0.61)
Bipolar disorder	500	63.60	65.78 (0.76)
Artist	1,024	44.43	57.30 (0.47)
Actor	168	55.36	56.88 (1.22)
Dancer	17	76.47	52.24 (3.32)
Musician	504	32.14	54.60 (0.68)
Visual artist	229	72.49	59.66 (0.84)
Writer	194	29.90	62.08 (1.00)

Note that artists may be included in multiple categories of artist (actor, dancer, musician, visual artist, and writer).

**Supplementary Table 2.** Prediction of 20 common diseases by polygenic risk scores for schizophrenia and bipolar disorder

-		Schizophrenia score <sup>1</sup>			Bipolar disorder score <sup>1</sup>		
Disease	N	OR	P value	$R^{2}$ (%)	OŔ	P value	$R^{2}$ (%)
ADHD	595	1.06	0.22	0.024	1.02	0.74	0.0018
Alzheimer's Disease	2322	1.06	0.013	0.038	1.03	0.24	0.0085
Atrial Fibrillation	5411	0.98	0.15	0.0072	1.00	0.83	0.00017
Bladder Cancer	774	1.07	0.071	0.040	1.01	0.79	0.00091
Breast Cancer	2814	1.01	0.72	0.00062	1.01	0.79	0.00034
COPD	1065	1.03	0.39	0.0082	1.01	0.70	0.0016
Cataract	2291	0.99	0.62	0.0013	0.98	0.30	0.0057
Colon Cancer	1126	1.02	0.48	0.0047	1.01	0.77	0.00081
Cystitis	1345	0.99	0.64	0.0018	0.98	0.45	0.0046
Deep Vein Thrombosis	936	1.01	0.77	0.00097	1.03	0.47	0.0058
Dyslexia	668	1.05	0.24	0.022	1.03	0.47	0.0086
Glaucoma	2614	0.97	0.24	0.0079	1.00	0.86	0.00019
Kidney Stones	3476	0.99	0.51	0.0019	1.00	0.87	0.00011
Myocardial Infarction	5247	1.00	0.86	0.00011	1.02	0.29	0.0039
Peripheral Artery Disease	1460	0.95	0.054	0.030	1.00	0.96	$2.0 \times 10^{-5}$
Prostate Cancer	2457	1.01	0.54	0.0020	1.02	0.30	0.0056
Psoriasis	1303	0.98	0.44	0.0065	1.04	0.28	0.013
Stroke, Ischaemic	2673	1.01	0.76	0.00046	0.99	0.48	0.0024
Type 2 Diabetes	1884	0.99	0.72	0.00099	1.02	0.49	0.0036
Ulcerative Colitis	810	0.97	0.37	0.010	1.00	0.98	1.1 x 10 <sup>-5</sup>

<sup>1</sup>derived using a *P* value threshold of 0.2. ADHD, Attention Deficit Hyperactivity Disorder

## **Supplementary Table 3.** Prediction of profession by polygenic risk scores for schizophrenia and bipolar disorder

		Schizophrenia score <sup>1</sup>		Bipolar disorder score <sup>1</sup>			
Profession	N	OR	P value	$R^{2}$ (%)	OR	P value	$R^{2}$ (%)
Farmer	1104	0.99	0.81	0.00073	1.07	0.056	0.046
Fisherman	1154	1.03	0.42	0.0078	0.98	0.52	0.0048
Executive, Employer	1331	0.96	0.17	0.020	1.02	0.43	0.0067
Manual Laborer	3001	0.98	0.47	0.0035	0.98	0.27	0.0081
Serviceman, Salesman	3426	0.96	0.038	0.026	0.99	0.48	0.0031

<sup>&</sup>lt;sup>1</sup>derived using a *P* value threshold of 0.2

## **Supplementary Table 4.** Prediction of artist category by polygenic risk scores for schizophrenia and bipolar disorder

		Schizophrenia score <sup>1</sup>		Bipolar disorder score	
Artist category	N	OR	P value	OR	P value
Actor, dancer	181	1.09	0.30	1.13	0.12
Musician	504	1.11	0.031	1.18	0.00073
Visual artist	229	1.24	0.0016	1.11	0.12
Writer	194	1.33	0.00013	1.23	0.0066

derived using a *P* value threshold of 0.2