

**Table DS1** Occupations in the case group, control group and their relatives by patients' psychiatric morbidity<sup>a</sup>

Degree of relationship	Relation to patient	Scientific occupations				Artistic occupations <sup>b</sup>			
		Case group		Control group		Case group		Control group	
		Scientific, n (%)	Non-scientific, n	Scientific, n (%)	Non-scientific, n	Artistic, n (%)	Non-artistic, n	Artistic, n (%)	Non-artistic, n
<b>Schizophrenia</b>									
Patient	-	86 (0.36)	23 726	1285 (0.60)	211 788	322 (1.35)	23 490	2622 (1.23)	210 451
1st	Parent	197 (0.56)	35 121	1284 (0.41)	310 936	487 (1.38)	34 831	2877 (0.92)	309 343
1st	Sibling	241 (0.78)	30 710	1601 (0.56)	282 400	443 (1.43)	30 508	3126 (1.10)	280 875
1st	Offspring	78 (0.47)	16 484	908 (0.62)	144 950	242 (1.46)	16 320	1841 (1.26)	144 017
2nd	Parent's sibling	105 (0.71)	14 785	764 (0.53)	142 063	177 (1.19)	14 713	1411 (0.99)	141 416
2nd	Half-sibling	20 (0.33)	5976	167 (0.33)	51 101	73 (1.22)	5923	634 (1.24)	50 634
2nd	Sib's offspring	9 (0.06)	14 698	190 (0.17)	109 199	123 (0.84)	14 584	790 (0.72)	108 599
3rd	Cousin	15 (0.11)	13 972	197 (0.18)	106 740	110 (0.79)	13 877	829 (0.78)	106 108
2nd	Paternal half-sibling	12 (0.35)	3378	119 (0.41)	28 758	44 (1.30)	3346	344 (1.19)	28 533
2nd	Maternal half-sibling	8 (0.31)	2596	55 (0.25)	22 344	29 (1.11)	2575	218 (0.97)	22 181
<b>Bipolar disorder</b>									
Patient	-	130 (0.59)	21 909	1046 (0.53)	195 524	346 (1.57)	21 693	2259 (1.15)	194 311
1st	Parent	126 (0.59)	21 278	734 (0.39)	186 183	241 (1.13)	21 163	1646 (0.88)	185 271
1st	Sibling	164 (0.83)	19 517	1058 (0.58)	181 278	271 (1.38)	19 410	2037 (1.12)	180 299
1st	Offspring	178 (0.76)	23 149	1303 (0.64)	201 687	330 (1.41)	22 997	2751 (1.36)	200 239
2nd	Parent's sibling	66 (0.76)	8595	442 (0.53)	82 601	97 (1.12)	8564	862 (1.04)	82 181
2nd	Half-sibling	14 (0.45)	3129	83 (0.31)	26 911	36 (1.15)	3107	355 (1.32)	26 639
2nd	Sib's offspring	24 (0.21)	11 204	118 (0.14)	83 264	96 (0.86)	11 132	640 (0.77)	82 742
3rd	Cousin	12 (0.15)	7803	93 (0.16)	59 551	57 (0.73)	7758	438 (0.73)	59 206
2nd	Paternal half-sibling	8 (0.45)	1768	56 (0.37)	15 131	24 (1.35)	1752	225 (1.48)	14 962
2nd	Maternal half-sibling	6 (0.44)	1356	26 (0.22)	11 733	12 (0.88)	1350	101 (0.86)	11 658
<b>Unipolar depression</b>									
Patient	-	453 (0.28)	160 227	6812 (0.49)	1 386 082	1803 (1.12)	158 877	15 118 (1.09)	1 377 776
1st	Parent	431 (0.36)	119 502	4047 (0.39)	1 038 828	1091 (0.91)	118 842	8918 (0.86)	1 033 957
1st	Sibling	491 (0.47)	105 096	5794 (0.59)	972 543	1146 (1.09)	104 441	10 730 (1.10)	967 607
1st	Offspring	1 242 (0.58)	214 739	13 396 (0.70)	1 913 505	2892 (1.34)	213 089	25 644 (1.33)	1 901 257
2nd	Parent's sibling	291 (0.52)	56 164	2769 (0.52)	533 848	622 (1.10)	55 833	5405 (1.01)	531 212
2nd	Half-sibling	51 (0.23)	22 223	647 (0.34)	188 810	244 (1.10)	22 030	2174 (1.15)	187 283
2nd	Sib's offspring	83 (0.12)	69 075	940 (0.18)	517 216	452 (0.65)	68 706	3896 (0.75)	514 260
3rd	Cousin	62 (0.13)	47 239	618 (0.17)	358 016	313 (0.66)	46 988	2673 (0.75)	355 961
2nd	Paternal half-sibling	41 (0.33)	12 208	405 (0.39)	102 866	158 (1.29)	12 091	1389 (1.35)	101 882
2nd	Maternal half-sibling	10 (0.10)	9993	206 (0.24)	85 305	86 (0.86)	9917	846 (0.99)	84 665

a. Relatives of those in the case group were not allowed to have any event of schizophrenia, bipolar disorder or unipolar depression.

b. Including visual and non-visual artistic occupations.

**Table DS2** Associations between case group psychiatric morbidity and domain-specific creative occupations<sup>a</sup>

Degree of relationship	Relation to patient	Odds ratio (95% CI)			
		Scientific	Artistic <sup>b</sup>	Visual artistic	Non-visual artistic
<b>Schizophrenia</b>					
Patient	–	0.63 (0.51–0.79)	1.14 (1.01–1.28)	1.30 (1.13–1.49)	0.88 (0.71–1.08)
1st	Parent	1.46 (1.27–1.69)	1.58 (1.45–1.74)	1.53 (1.37–1.72)	1.64 (1.42–1.90)
1st	Sibling	1.44 (1.26–1.65)	1.32 (1.19–1.46)	1.25 (1.10–1.43)	1.44 (1.24–1.67)
1st	Offspring	0.81 (0.65–1.01)	1.21 (1.06–1.38)	1.38 (1.18–1.62)	0.97 (0.77–1.21)
2nd	Parent's sibling	1.33 (1.09–1.63)	1.21 (1.04–1.41)	1.13 (0.93–1.36)	1.36 (1.07–1.73)
2nd	Half-sibling	1.12 (0.73–1.73)	1.03 (0.81–1.30)	1.00 (0.72–1.37)	1.06 (0.75–1.50)
2nd	Sib's offspring	0.39 (0.21–0.75)	1.21 (0.99–1.48)	1.29 (1.00–1.67)	1.11 (0.81–1.51)
3rd	Cousin	0.64 (0.39–1.07)	1.08 (0.88–1.32)	0.87 (0.65–1.16)	1.38 (1.04–1.83)
2nd	Paternal half-sibling	0.91 (0.51–1.61)	1.12 (0.83–1.52)	0.96 (0.62–1.48)	1.32 (0.86–2.02)
2nd	Maternal half-sibling	1.36 (0.69–2.68)	1.22 (0.85–1.75)	1.30 (0.82–2.05)	1.09 (0.60–1.99)
<b>Bipolar disorder</b>					
Patient	–	1.17 (0.98–1.41)	1.42 (1.27–1.59)	1.42 (1.23–1.64)	1.44 (1.20–1.73)
1st	Parent	1.64 (1.37–1.96)	1.36 (1.19–1.54)	1.25 (1.06–1.48)	1.49 (1.22–1.82)
1st	Sibling	1.50 (1.27–1.77)	1.25 (1.10–1.43)	1.19 (1.01–1.40)	1.38 (1.12–1.70)
1st	Offspring	1.29 (1.10–1.50)	1.09 (0.97–1.22)	0.98 (0.84–1.13)	1.25 (1.06–1.47)
2nd	Parent's sibling	1.45 (1.12–1.88)	1.09 (0.88–1.34)	1.20 (0.94–1.54)	0.92 (0.63–1.35)
2nd	Half-sibling	1.51 (0.89–2.55)	0.90 (0.63–1.28)	0.81 (0.49–1.35)	0.98 (0.60–1.62)
2nd	Sib's offspring	1.73 (1.13–2.65)	1.19 (0.97–1.47)	1.03 (0.78–1.36)	1.44 (1.06–1.95)
3rd	Cousin	1.10 (0.63–1.93)	1.06 (0.81–1.38)	1.17 (0.83–1.65)	0.96 (0.64–1.44)
2nd	Paternal half-sibling	1.30 (0.64–2.63)	0.94 (0.60–1.46)	0.96 (0.52–1.75)	0.91 (0.48–1.75)
2nd	Maternal half-sibling	2.19 (0.98–4.92)	1.06 (0.61–1.86)	0.77 (0.32–1.86)	1.41 (0.68–2.90)
<b>Unipolar depression</b>					
Patient	–	0.62 (0.57–0.69)	1.08 (1.03–1.14)	1.12 (1.05–1.19)	1.01 (0.93–1.09)
1st	Parent	1.00 (0.91–1.10)	1.12 (1.05–1.19)	1.13 (1.05–1.22)	1.10 (0.99–1.21)
1st	Sibling	0.81 (0.74–0.89)	1.00 (0.95–1.07)	1.01 (0.93–1.09)	1.01 (0.92–1.11)
1st	Offspring	0.87 (0.82–0.92)	1.04 (1.00–1.08)	1.02 (0.97–1.07)	1.07 (1.01–1.14)
2nd	Parent's sibling	1.02 (0.90–1.15)	1.10 (1.01–1.20)	1.09 (0.99–1.21)	1.11 (0.97–1.28)
2nd	Half-sibling	0.72 (0.55–0.96)	0.99 (0.87–1.13)	1.01 (0.85–1.20)	0.95 (0.78–1.16)
2nd	Sib's offspring	0.75 (0.60–0.93)	0.92 (0.84–1.01)	0.91 (0.80–1.03)	0.94 (0.81–1.09)
3rd	Cousin	0.85 (0.66–1.09)	0.94 (0.83–1.05)	1.00 (0.86–1.15)	0.85 (0.71–1.02)
2nd	Paternal half-sibling	0.92 (0.68–1.27)	1.00 (0.85–1.17)	1.02 (0.82–1.26)	0.96 (0.76–1.23)
2nd	Maternal half-sibling	0.45 (0.24–0.85)	0.89 (0.72–1.11)	0.90 (0.68–1.20)	0.87 (0.62–1.23)

a. Relatives of those in the case group were not allowed to have any event of schizophrenia, bipolar disorder or unipolar depression.

b. Including visual and non-visual artistic occupations.

c. Accountants and auditors.