

Supplementary Table 1. Covariate Adjustments Used by Each Study

Disorder	Brain measure	Covariates
Bipolar disorder	Cortical thickness and surface area	Age, sex, scan center, ICV (surface area only)
Bipolar disorder	Subcortical volume	Age, sex, ICV
Depression	Cortical thickness and surface area	Age, sex, scan center
Depression	Subcortical	Age, sex, scan center, ICV
Schizophrenia	Cortical thickness and surface area	Age, sex
Schizophrenia	Subcortical	Age, sex, ICV
OCD	Cortical thickness and surface area	Age, sex, scan center, ICV (surface area only)

OCD	Subcortical	Age, sex, scan center, ICV
ASD	Cortical thickness and surface area	Age, sex, scan center (groups matched on ICV)
ASD	Subcortical	Age, sex, scan center (groups matched on ICV)
Epilepsy	Cortical thickness and surface area	Age, sex, ICV
Epilepsy	Subcortical	Age, sex, ICV
ADHD	Cortical thickness and surface area	Age, sex, scan center, ICV (surface area only)
ADHD	Subcortical	Age, sex, ICV

Supplementary Table 2. Additional information pertaining to the genomewide association studies (GWASs)

Disorder	Number of cases	Number of controls	Estimated SNP-h ² (SE)	References	Link to dataset
ADHD	20,183	35,191	0.23 (0.014)	Demontis et al., 2019 (Nat Genet)	https://www.med.unc.edu/pgc/results-and-downloads
Autism spectrum disorder	18,382	27,969	0.20 (0.016)	Grove et al., 2019 (Nat Genet)	https://www.med.unc.edu/pgc/results-and-downloads
Bipolar disorder	20,352	31,358	0.35 (0.016)	Stahl et al., 2019 (Nat Genet)	https://www.med.unc.edu/pgc/results-and-downloads
Epilepsy	15,212	29,677	0.11 (0.017)	The International League Against Epilepsy Consortium on Complex Epilepsies , 2018 (Nat Commun)	http://www.epigad.org/gwas_ilae2018_16loci.html
Major depressive disorder	170,756	329,443	0.06 (0.0023)	Howard et al., 2019 (Nat Neurosci)	http://dx.doi.org/10.7488/ds/2458 (MDD dataset excluding 23andMe)
Obsessive compulsive disorder	2,688	7,037	0.33 (0.048)	International Obsessive Compulsive Disorder Foundation Genetics Collaborative (IOCDF-GC) and OCD Collaborative Genetics Association Studies (OC GAS) 2018 (Mol Psychiatry)	https://www.med.unc.edu/pgc/results-and-downloads
Schizophrenia	36,989	113,075	0.24 (0.009)	Ripke et al., 2014 (Nature)	https://www.med.unc.edu/pgc/results-and-downloads