# 1  Human Connectome Project (HCP)

List of phenotypes used from the HCP dataset

| Variable | Description |
| --- | --- |
| **Alertness** | |
| MMSE_Score | Mini Mental Status Exam Total Score |
| PSQI_Score | Pittsburgh Sleep Questionnaire Total Score |
| **Cognition (Delay Discounting)** | |
| DDisc_AUC_200 | Area Under the Curve for Discounting of $200 |
| DDisc_AUC_40K | Area Under the Curve for Discounting of $40,000 |
| **Cognition (NIH Toolbox)** | |
| CardSort_Unadj | Dimensional Change Card Sort Test: Unadjusted Scale Score |
| CogCrystalComp_AgeAdj | Cognition Crystallized Composite: Age Adjusted Scale Score |
| CogEarlyComp_AgeAdj | Cognition Early Childhood Composite: Age Adjusted Scale Score |
| CogFluidComp_AgeAdj | Cognition Fluid Composite: Age Adjusted Scale Score |
| CogTotalComp_AgeAdj | Cognition Total Composite Score: Age Adjusted Scale Score |
| Flanker_Unadj | Flanker Inhibitory Control and Attention Test: Unadjusted Scale Score |
| ListSort_Unadj | List Sorting Working Memory Test: Unadjusted Scale Score |
| PicSeq_AgeAdj | Picture Sequence Memory Test: Age-Adjusted Scale Score |
| PicVocab_AgeAdj | Picture Vocabulary Test: Age-Adjusted Scale Score |
| ProcSpeed_AgeAdj | Pattern Comparison Processing Speed Test: Age-Adjusted Scale Score |
| ReadEng_Unadj | Oral Reading Recognition Test: Unadjusted Scale Score |
| **Cognition (Penn Tests)** | |
| IWRD_TOT | Word Memory: Total Number of Correct Responses |
| PMAT24_A_CR | Progressive Matrices  Number of Correct Responses |
| SCPT_SEN | Short Continuous Performance Test  Sensitivity |
| SCPT_SPEC | Short Continuous Performance Test  Specificity |
| VSPLOT_TC | Variable Short Penn Line Orientation Test: Total Number Correct |
| **Emotion (NIH Toolbox)** | |
| AngAffect_Unadj | Anger-Affect Survey: Unadjusted Scale Score |
| AngAggr_Unadj | Anger-Physical Aggression Survey: Unadjusted Scale Score |
| AngHostil_Unadj | Anger-Hostility Survey: Unadjusted Scale Score |
| FearAffect_Unadj | Fear-Affect Survey: Unadjusted Scale Score |
| FearSomat_Unadj | Fear-Somatic Arousal Survey: Unadjusted Scale Score |
| EmotSupp_Unadj | Emotional Support Survey: Unadjusted Scale Score |
| Friendship_Unadj | Friendship Survey: Unadjusted Scale Score |
| InstruSupp_Unadj | Instrumental Support Survey: Unadjusted Scale Score |
| LifeSatisf_Unadj | General Life Satisfaction Survey: Unadjusted Scale Score |
| Loneliness_Unadj | Loneliness Survey: Unadjusted Scale Score |
| MeanPurp_Unadj | Meaning and Purpose Survey  Unadjusted Scale Score |
| PercHostil_Unadj | Perceived Hostility Survey: Unadjusted Scale Score |
| PercReject_Unadj | Perceived Rejection Survey: Unadjusted Scale Score |
| PercStress_Unadj | Perceived Stress Survey: Unadjusted Scale Score |
| PosAffect_Unadj | Positive Affect Survey: Unadjusted Scale Score |
| Sadness_Unadj | Sadness Survey: Unadjusted Scale Score |
| SelfEff_Unadj | Self-Efficacy Survey: Unadjusted Scale Score |
| **Emotion (Penn Emotion Recognition Test)** | |
| ER40ANG | Number of Correct Anger Identifications |
| ER40FEAR | Number of Correct Fear Identifications |
| ER40NOE | Number of Correct Neutral Identifications |
| ER40SAD | Number of Correct Sad Identifications |
| ER40_CR | Number of Correct Responses |
| ER40_CRT | Correct Responses Median Response Time (ms) |

| In-Scanner Task Performance | |
| --- | --- |
| Emotion_Task_Face_Acc | Accuracy % during FACE blocks in EMOTION task |
| Relational_Task_Acc | Average accuracy % during RELATIONAL task |
| Social_Task_Perc_Random | Overall % of stimuli that the subject rated as 'random' in SOCIAL task |
| Social_Task_Perc_TOM | Overall % of stimuli that received a 'social' rating in SOCIAL task |
| WM_Task_Acc | Accuracy across all conditions in working memory task |

| Language | |
| --- | --- |
| Language_Task_Math_Avg | Language Task MATH difficulty level |
| Language_Task_Story_Avg | Language Task STORY difficulty level |

| Motor (NIH Toolbox) | |
| --- | --- |
| Dexterity_Unadj | 9-hole Pegboard Dexterity Test: Unadjusted Scale Score |
| Endurance_Unadj | 2-minute Walk Endurance Test: Unadjusted Scale Score |
| GaitSpeed_Comp | 4-Meter Walk Gait Speed Test: Computed Score |
| Strength_Unadj | Grip Strength Test: Unadjusted Scale Score |

| Personality (Neuroticism/Extroversion/Openness Five Factor Inventory) | |
| --- | --- |
| NEOFAC_A | Agreeableness |
| NEOFAC_C | Conscientiousness |
| NEOFAC_E | Extraversion |
| NEOFAC_N | Neuroticism |
| NEOFAC_O | Openness to Experience |

| Psychiatric and Life Function (Achenbach Adult Self-Report) | |
| --- | --- |
| ASR_Aggr_T | Aggressive Behavior Gender and Age Adjusted T-score |
| ASR_Anxd_Pct | Anxious/Depressed Gender and Age Adjusted T-score |
| ASR_Attn_T | Attention Problems Gender and Age Adjusted T-score |
| ASR_Extn_T | Externalizing Gender and Age Adjusted T-score |
| ASR_Intn_T | Internalizing Gender and Age Adjusted T-score |
| ASR_Intr_T | Intrusive Gender and Age Adjusted T-score |
| ASR_Rule_T | Rule Breaking Behavior Gender and Age Adjusted T-score |
| ASR_Soma_T | Somatic Complaints Gender and Age Adjusted T-score |
| ASR_TAO_Sum | Sum of Thought, Attention, and Other Problems Raw Score |
| ASR_Thot_T | Thought Problems Gender and Age Adjusted T-score |
| ASR_Totp_T | Total Problems Gender and Age Adjusted T-score |
| ASR_Witd_T | Withdrawn Gender and Age Adjusted T-score |

| Sensory | |
| --- | --- |
| Mars_Final | Mars Final Contrast Sensitivity Score |
| Odor_Unadj | NIH Toolbox Odor Identification Age 3+ Unadjusted Scale Score |
| PainInterf_Tscore | NIH Toolbox Pain Interference Survey Age 18+: T-score |
| Taste_Unadj | NIH Toolbox Regional Taste Intensity Age 12+ Unadjusted Scale Score |

# 2   Philadelphia Neurodevelopmental Cohort (PNC)

List of phenotypes used from the PNC dataset

| Variable | Description |
| --- | --- |
| **Letter N-Back (LNB) task** | |
| LNB_MCR | Number of Correct Responses to for 1-Back and 2-Back Trials |
| LNB_MRTC | Mean of the Median Response Time for Correct Responses for 1-Back (TP) and for 2-Back (TP) Trials |
| **Motor Praxis (MP) task** | |
| MP_MP2RTCR | Median Response Time for Correct Mouse Click Responses |
| **Penn Age Differentiation Test (PADT)** | |
| PADT_A | Total Correct Responses for All Test Trials, by genus |
| PADT_PC | Percent Correct Responses for All Test Trials, by genus |
| PADT_SAME_PC | Percent Correct Responses to Test Trials with No Age Difference, by genus |
| PADT_T | Median Response Time for All Test Trials, by genus |
| **Penn Conditional Exclusion Test (PCET)** | |
| PCET_ACC2 | Calculated Accuracy Measure |
| PCET_CAT | Number of Categories Achieved |
| **Penn Continuous Performance Test (PCPT)** | |
| PCPT_T_FP | Total of Incorrect Responses to Number Trials (TP) and Letter Trials (FP) |
| PCPT_T_FPRT | Median Response Time for Incorrect Responses to Number Trials (TP) and Letter Trials (TP) |
| PCPT_T_TP | Total of Correct Responses to Number Trials (TP) and Letter Trials (TP) |
| PCPT_T_TPRT | Median Response Time for Correct Responses to Number Trials (TP) and Letter Trials (TP) |
| **Penn Emotion Differentiation Test (PEDT)** | |
| PEDT_A | Total Correct Responses for All Test Trials, by genus |
| PEDT_ANG_PC | Percent of Correct Responses for Anger Trials, by genus |
| PEDT_FEAR_PC | Percent of Correct Responses for Fear Trials, by genus |
| PEDT_HAP_PC | Percent of Correct Responses for Happy Trials, by genus |
| PEDT_PC | Percent of Correct Responses for All Test Trials, by genus |
| PEDT_SAD_PC | Percent of Correct Responses for Sad Trials, by genus |
| PEDT_SAME_PC | Percent Correct Responses to Test Trials with Neutral Difference, by genus |
| PEDT_T | Median Response Time for All Test Trials, by genus |
| **Penn Emotion Identification Test (PEIT)** | |
| PEIT_CR | Total Correct Responses for All Test Trials, by genus |
| PEIT_CRT | Median Response Time for Total Correct Test Trial Responses, by genus |
| **Penn Face Memory task (PFMT)** | |
| PFMT_IFAC_RTC | Median Response Time for Total Correct Test Trial Responses |
| PFMT_IFAC_TOT | Total Correct Responses for All Test Trials |
| **Penn Line Orientation Test (PLOT)** | |
| PLOT_PC | Percent Correct Responses for All Test Trials, by genus |
| PLOT_TC | Total Correct Responses for All Test Trials, by genus |
| PLOT_TCRT | Median Response Time for Correct Trials, by genus |
| **Primary Mental Abilities Test (PMAT)** | |
| PMAT_CR | Total Correct Responses for All Test Trials, by genus |
| **Penn Verbal Reasoning Test (PVRT)** | |
| PVRT_CR | Total Correct Responses for All Test Trials, by genus |
| PVRT_RTCR | Median Response Time for Correct Verbal Reasoning Responses, by genus |
| PVRT_RTER | Median Response Time for Incorrect Verbal Reasoning Responses, by genus |

| Penn Word Memory task (PWMT) | |
| --- | --- |
| PWMT_KIWRD_RTC | Median Response Time for Total Correct Test Trial Responses |
| PWMT_KIWRD_TOT | Total Correct Responses for All Test Trials |

| Visual Object Learning Test (VOLT) | |
| --- | --- |
| VOLT_SVT | Total Correct Responses for All Test Trial |
| VOLT_SVTCRT | Median Response Time for Total Correct Responses |
| VOLT_SVTIRT | Median Response Time for Incorrect Responses |

| Wide Range Achievement Test (WRAT) | |
| --- | --- |
| WRAT_CR_RAW | Total Raw Score |
| WRAT_CR_STD | Total Standard Score |