SUPPLEMENT - Comorbidies

The data describes various diagnoses or conditions observed among individuals in the dataset. The conditions and their respective frequencies are as follows:

Medicated-Attention Deficit Hyperactivity Disorder (ADHD) (n=39)

- **Arthritis:** Observed in 1 case.
- **Atrioventricular Block:** Observed in 1 case.
- **Bipolar II Disorder:** Observed in 1 case.
- Deficits in Attention, Motor Control, and Perception (DAMP): Observed in 1 case.
- **Dyscalculia:** Observed in 1 case.
- **Dyslexia:** Observed in 1 case.
- Emotionally Unstable Personality Disorder (EUPD): Observed in 2 cases.
- Mental and Behavioral Disorders Due to Opioid Dependence Syndrome:
 Observed in 1 case.
- Receptive Language Disorder: Observed in 1 case.
- Spastic Diplegia Cerebral Palsy: Observed in 1 case.
- **Spinal Stenosis:** Observed in 1 case.

Unmedicated- Attention Deficit Hyperactivity Disorder (ADHD) (n=52)

- Deficits in Attention, Motor Control, and Perception (DAMP): Observed in 1 case.
- Developmental Expressive Language Disorder: Observed in 2 cases.
- **Diabetes Type II:** Observed in 1 case.
- **Dyslexia:** Observed in 4 cases.
- Expressive Language Disorder: Observed in 2 cases.
- Heart Failure (previous): Observed in 1 case.
- **Hypopituitarism:** Observed in 1 case.
- **Idiopathic Epilepsy:** Observed in 1 case.
- Mental and Behavioral Disorders Due to Opioid Dependence Syndrome:
 Observed in 1 case.
- **Obesity:** Observed in 1 case.
- **Personal History of Traumatic Brain Injury:** Observed in 1 case.
- Sensorineural Hearing Loss: Observed in 1 case.
- **Unspecified Bipolar Disorder:** Observed in 1 case.
- **Unspecified Social Phobia:** Observed in 1 case.

Autism Spectrum Disorder (ASD) (n=33)

- Bulimia Nervosa: Observed in 1 case.
- **Diaphragmatic Hernia Without Obstruction or Gangrene**: Observed in 1 case.
- **Dyscalculia:** Observed in 1 case.
- **Dyslexia:** Observed in 1 case.
- Eating Disorder, Unspecified: Observed in 1 case.
- Emotionally Unstable Personality Disorder (EUPD): Observed in 1 case.
- **Obsessive-Compulsive Disorder (OCD):** Observed in 1 case.
- Other Specified Diseases of Pancreas: Observed in 1 case.
- Personality Disorder Not Otherwise Specified (PD-NOS): Observed in 1 case.
- Post-Traumatic Stress Disorder (PTSD): Observed in 4 cases.
- Scoliosis Unspecified: Observed in 1 case.
- Takayasu's Arteritis: Observed in 1 case.
- Thyrotoxicosis Unspecified: Observed in 1 case.
- **Unspecified Non-Organic Psychosis:** Observed in 1 case.

Combination of Unmedicated Attention Deficit Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD) (n=31)

- Bone Tumor: Observed in 1 case.
- **Bulimia Nervosa:** Observed in 1 case.
- Crohn's Disease: Observed in 1 case.
- Dyscalculia: Observed in 1 case.
- **Dysgraphia:** Observed in 1 case.
- Dyslexia: Observed in 2 cases.
- **Emotionally Unstable Personality Disorder (EUPD):** Observed in 3 cases.
- **Gender Identity Disorder (GID):** Observed in 1 case.
- Mental and Behavioral Disorders Due to Multiple Drug Use and Use of Other Psychoactive Substances: Observed in 1 case.
- Pedophilia: Observed in 1 case.
- Tinnitus: Observed in 1 case.
- **Tourette's Syndrome:** Observed in 1 case.
- Other Disorders of the Pituitary Gland: Observed in 1 case.

Control group (n=78)

- **Arthritis:** Observed in 1 case.
- **Asthma:** Observed in 1 case.
- **Atopic Dermatitis (unspecified):** Observed in 1 case.
- Crohn's Disease: Observed in 1 case.
- Heart Failure (previous): Observed in 1 case.
- **History of Hypophysis Tumor (operated):** Observed in 1 case.
- Irritable Bowel Syndrome: Observed in 1 case.
- Menopausal and Female Climacteric States: Observed in 1 case.
- **Premenstrual Tension Syndrome:** Observed in 1 case.
- Psoriatic Arthritis: Observed in 1 case.
- **Recurrent Depressive Disorder (in remission):** Observed in 1 case.
- **Ulcerative Colitis:** Observed in 1 case.

SUPPLEMENT – Medication Dosages and Active Ingredients

This supplement categorizes the medications by their active ingredients and provides a quantification of how often each medication and dosage appear in the dataset. It helps give an overview of the medications administered and their frequencies across the sample.

Medicated-Attention Deficit Hyperactivity Disorder (ADHD) (n=39)

Active Ingredient	Frequency	Dosage (mg)	Total Count (Dosage)
Bupropion	1	150	1
Dexamphetamine	2	5	2
	2*	5	1
	1*	20	1
	1	30	5
	1	40	4
	1	50	12
	1	60	4
Duloxetine	1	60	1
Enalapril	1	20	1
Fluoxetine	2	20	3
1 IMUACUIIC	3	20	1
Guanfacine	1	20	1
Hydroxyzine	1	12.5	1
Lamotrigine	1	100	2
Lamon ignit	1	200	1
Levothyroxine	1	50	1
Melatonin	1	3	1
Meiatonin	1	5	6
	1	7.5	2
Methylphenidate	1	18	5
Memyiphemuate	1	20	1
		27.5	
	1 2	30	1 1
	1	30	
	<u>1</u> 1	36 36	2 5
	1		
	1	40	2
	1	45 54	1
Mintaganin :	1	54	7
Mirtazapine	1	5 7.5	2
D	1	7.5	2
Propiomazine	1	10	1
n 11	1	25	2
Propranolol	2	40	1
Reboxetine	1	4	1
Sertraline	1	50	5
	2	100	1
	1	120	1

Venlafaxine	1	75	3
	1	225	1
Zolpidem	1	10	1

Notes: *= the person assumes the medication on demand.

Unmedicated-Attention Deficit Hyperactivity Disorder (ADHD) (n=52)

Active Ingredient	Frequency	Dosage (mg)	Total Count
			(Dosage)
Acetylsalicylic acid	1	75	1
Alimemazine	1*	20	1
Atorvastatin	1	80	1
Bisoprolol	1	5	1
Buprenorphine	1**	125	1
Bupropion	1	150	1
Citalopram	1	40	1
Escitalopram	2	10	1
Fluoxetine	2	20	1
Lamotrigine	1	150	2
Levothyroxine	1	137.5	1
-	1	200	1
Melatonin	1	3	1
	1	10	1
Propiomazine	1	25	1
Propranolol	1*	10	1
Ramipril	1	10	1
Sertraline	1	50	1
	1	100	1
Spironolactone	1	12.5	1
Venlafaxine	1	37.5	1
	1	150	1
	1	225	1
Vortioxetine	1	10	1

Notes: *= the person assumes the medication on demand; **= One time per month.

Autism Spectrum Disorder (ASD) (n=33)

Active Ingredient	Frequency	Dosage (mg)	Total Count (Dosage)
Acetylsalicylic acid	1	75	1
Agomelatine	1	25	1
Aripiprazole	1	10	1
Atorvastatin	1	40	1
Bisoprolol	1	5	1
Disoproior	1	2.5	1
	2	25	1
Bupropion	1	300	1
Duloxetine	1	20	1
	1	30	1
Diazepam Doxazosin	<u>l</u> 1	8	<u>l</u> 1
	1		1
Escitalopram	1	10	1
T71	4	20	1
Fluoxetine	5	20	1
	2	30	1
Hydroxyzine	1	25	1
Lamotrigine	1	50	1
	1	100	1
	1	200	1
	2	300	1
	1	400	1
Levomeprazine	2	25	1
Levothyroxine	1	100	1
Melatonin	3	5	1
Meiatomii	2	10	1
Matanualal	1	25	<u>l</u> 1
Metoprolol	1		1
Mirtazapine	l 1	30	1
Olanzapine	1	10	1
Oxazepam	l	10	1
Paroxetine	3	20	1
Propiomazine	5	25	1
	1	32.5	1
Propranolol	1	40	1
Promethazine	1	15	1
	2	25	1
Quetiapine	2	25	1
- •	3	100	1
Ramipril	1	10	1
Risperidone	1	1	1
Sarilumab	1	2**	1
Sertraline	$\frac{1}{2}$	50	1
DEI II AIIIIE	3	100	<u>1</u> 1
			1
X 7. 1 4	1	200	1
Valsartan	1	320	1
Venlafaxine	3	150	1
	1	225	1

	1	300	1
Vortioxetine	1	10	1
Zolpidem	1	10	1
Zopiclone	2	5	1

Notes: *= the person assumes the medication on demand; **= One time per month.

Unmedicated-Attention Deficit Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD) (n=31)

Active Ingredient	Frequency	Dosage (mg)	Total Count (Dosage)
Duloxetine	1	60	1
Enalapril	1	100	1
Escitalopram	1	5	1
Fluoxetine	2	20	1
	2	60	1
Hydroxyzine	4	25	1
Insulin glargine	1	300 (ml)	1
Lamotrigine	1	10	1
8	1	250	1
	2	300	1
Levothyroxine	1	50	1
·	1	75	1
	1	125	1
Melatonin	1	2	1
	2	4	1
	1	5	1
	3	10	1
Mirtazapine	2	15	1
Olanzapine	3	5	1
-	1	30	1
Oxazepam	1	5	1
	3	10	1
Pregabalin	2	150	1
Propiomazine	1	12.5	1
	4	25	1
	1	32.5	1
Quetiapine	3	25	1
	1	50	1
Sertraline	1	50	1
	4	100	1
	1	200	1
Somatropin	1	12	1
Vortioxetine	1	5	1
	3	10	1
Venlafaxine	1	225	1
	1	37.5	1
	2	75	1
Zopiclone	1*	5	1
	1	7.5	1

Notes: *= the person assumes the medication on demand.

Control group (n=78)

Active Ingredient	Frequency	Dosage (mg)	Total Count (Dosage)
Adalimumab	2**	40	1
Allergy pill	1*	-	1
Azathioprine	1	-	1
Betablocker	1	100	1
Cetirizine	1	-	1
Citalopram	1	30	1
Enalapril	1	5	1
Isotretinoin	1	-	1
Melatonin	1*	4	1
Progesterone	1	-	1
Sertraline	1	100	1
	1	150	1
Sumatriptan	1*	-	1

Notes: *= the person assumes the medication on demand; **= Two times per month; -= Dosage not listed because the person does not remember the specific amount.

SUPPLEMENT – Psychometric Properties

We calculated the concurrent validity for the exploratory neuropsychological tests.

The concurrent validity between *Motor Speed*, subtest of *Trail Making Test* of *Delis-Kaplan Executive Function System (D-KEFS)* and *Motor Time*, subtest of *Bender-Gestalt II* in our sample was ρ =0.52 (p<.001) and the split-half reliability was rs=0.69. The concurrent validity between the *Perception Time*, subtest of *Bender-Gestalt II* and *Symbol Search*, subtests of *Wechsler Adult Intelligence Scale (WAIS-IV)* in our sample was r=-0.72 (p<.001), and the split-half reliability was rs=0.77.

The concurrent validity between *Copy Task*, *Visual Reproduction II (VR-II)* of Wechsler *Memory Scale III (WMS-III)* and *Cube Analysis*, subtests of *Visual Object and Space Perception Battery (VOSP)* in our sample was ρ =0.28 (p<.001) as well, between *Copy Task*, *Visual Reproduction II (VR-II)* of *Wechsler Memory Scale III (WMS-III)* and *Silhouettes*, subtests of *Visual Object and Space Perception Battery (VOSP)* was ρ =0.20 (p=.002).