



Data release first 500 participants

More than 500 participants successfully finished all three assessments of the HBS. In this data release we aim to make the first 500 full datasets available and also additional data of participants who dropped out during the study. Keep in mind that even of the 500 participants who finished the study, there will still be missing data.

Content preliminary data release

The tables on the following pages describe per measure the status of the data in this data release. For each data item it is mentioned if data has been cleaned (C), processed (P), uploaded in repository (U), and if metadata is available (M). The smileys indicate which steps have been completed. We can only issue data if all steps have been done. However, this is the status for 300 participants of earlier preliminary releases. We assume that we will be able to have the data for 500 participants available, but cannot guarantee this. If you want to request data, please note that the readiness of the data also depends on the type of data (e.g. MRI data requests will take longer than questionnaire data requests).

Please note that many of these data items have undergone quality assurance only once. It is still possible that there are mistakes and we hope for your collaboration in finding those. If you are under time pressure or expect perfectly curated data, we kindly ask you to wait for the final data release. If you ask for any data that is not listed in this table as uploaded to repository, please be aware that we might need considerable time to issue this data.

Please use the check-boxes for all the data that you want to request and send this table along with your data request!

Table	Available
Table 3. Pre-visit online questionnaires.	Yes
Table 4. Physiological assessments.	Partly
Table 5: Bio-samples and silicone wristband.	Partly
Table 6. Neuroimaging at the campus.	Partly
Table 7. Cognitive, affective, and behavioral assessments at the campus.	Partly
Table 8. Sensory assessments.	No
Table 9. Post-visit online questionnaires.	Yes
Table 10. Post-visit online assessments.	Yes
Table 11. Individual Differences in Language Skills test battery.	Partly



Table 3. Pre-visit online questionnaires.

C=cleaned, P=processed, U=uploaded in repository, M=metadata available

Domain	Name of the questionnaire	Abbreviation	What does it measure?	A1	A2	A3	Status data release				Request
							C	P	U	M	
General information	Demographics - age	-	Age at time of first lab visit	x			😊	😊	😊	😊	
	Demographics - sex	-	Sex of participant	x			😊	😊	😊	😊	
	Demographics - handedness	-	Handedness	x			😊	😊		😊	
	Demographics - education	LIS	Highest level of education	x			😊	😊	😊	😊	
	Demographics - household	LIS	Household composition	x	x	x	😊	😊	😊	😊	
	Demographics - income	LIS	Household income	x	x	x	😊	😊	😊	😊	
	Demographics – advanced	LIS	Occupation, highest level of education, type of dwelling, country of birth, country of birth parents, household income	x	x	x	😊	😊	😊	😊	
	Pregnancy	PRE	Number of pregnancies, time to pregnancy, pregnancy outcome, hormones (anticonception), current child wish	x			😊	😊	😊	😊	
	Menstrual cycle	MCY	Menstrual cycle	x	x	x	😊	😊	😊	😊	
Lifestyle	Smoking history	SMH	Past behavior, age of onset	x			😊	😊	😊	😊	
	Smoking	SMH	Current behavior, frequency, and quantity	x	x	x	😊	😊	😊	😊	
	Fagerstrom Test of Nicotine Dependence	FND	Nicotine dependence (for current or ever smokers)	x	x	x	😊	😊	😊	😊	
	Alcohol	ALC	Frequency and quantity in the last month, age of onset of alcohol use, binge drinking	x	x	x	😊	😊	😊	😊	



	Alcohol Use Disorder Identification Test	AUD	Heavy alcohol use and associated problems	x	x	x	😊	😊	😊	😊	
	Substance matrix Mate-q	SMQ	Amount and frequency of substance use	x	x	x	😊	😊	😊	😊	
	Food Frequency Questionnaire	FFQ	Quantitative food intake	x							
	Sedentary Behavior Questionnaire	SBQ	Sedentary behavior in various domains (e.g. home, work, transportation)	x	x	x	😊	😊	😊	😊	
	Pittsburgh Sleep Quality Index	PSQ	Sleep quality	x	x	x	😊	😊	😊	😊	
	Dream Recall Frequency Scale	DRF	Dream recall	x	x	x	😊	😊	😊	😊	
	The Internet Gaming Disorder Scale	IGD	Problematic gaming	x	x	x	😊	😊	😊	😊	
	The Social Media Disorder Scale	SMD	Problematic social media use	x	x	x	😊	😊	😊	😊	
	Short Media Multitasking Measure	MMI	Use of different media simultaneously	x	x	x	😊	😊	😊	😊	
Well-being	Satisfaction with life scale	SLS	Well-being	x	x	x	😊	😊	😊	😊	
	Cantril ladder	CAN	Well-being	x	x	x	😊	😊	😊	😊	
	Five Facet Mindfulness Questionnaire – Short Form	FFM	Mindfulness	x	x	x	😊	😊	😊	😊	



Table 4. Physiological assessments.

C=cleaned, P=processed, U=uploaded in repository, M=metadata available

Domain	Measure	Location	A1	A2	A3	Status data release				Request
						C	P	U	M	
Physical activity	Fitness	Campus	x	x	x					
	Sedentary behavior	Home ¹	x	x	x					
Stress	Heart rate	Campus	x	x	x					
		Home ¹	x	x	x					
	Heart rate variability	Home ¹	x	x	x					
	Carotid artery dilation	Campus	x	x	x					
	Skin conductance	Home ¹	x	x	x					
	Skin temperature	Home ¹	x	x	x					
	Startle eye-blink	Campus	x	x	x					
	Subjective stress levels	Campus	x	x	x					
		Home ²	x	x	x					
Sleep	Sleep duration	Home ¹	x	x	x					
	Sleep stages	Home ¹	x	x	x					
Body composition	Weight	Campus	x	x	x	😊	😊	😊	😊	
	Height	Campus	x	x	x	😊	😊	😊	😊	
	Waist-hip circumference	Campus	x	x	x	😊	😊	😊	😊	
	Body fat	Campus	x	x	x	😊	😊	😊	😊	
	Fat weight	Campus	x	x	x	😊	😊	😊	😊	
	Total body water	Campus	x	x	x	😊	😊	😊	😊	
	Skeletal muscle mass	Campus	x	x	x	😊	😊	😊	😊	
	Body fat mass index	Campus	x	x	x	😊	😊	😊	😊	
	Fat-free mass index	Campus	x	x	x	😊	😊	😊	😊	
Pain	Subjective pain levels	Campus	x	x	x					
		Home ²	x	x	x					
	Electrical pain thresholds	Campus	x	x	x					
Cardiovascular	Blood pressure	Campus	x	x	x	😊	😊	😊	😊	
	Carotid artery reactivity	Campus	x	x	x	😊	😊	😊	😊	



¹ By wearable device (only processed data will be available in first data release, no raw data), ² By ecological momentary assessment (EMA).

Table 5: Bio-samples and silicone wristband.

C=cleaned, P=processed, U=uploaded in repository, M=metadata available

Bio-sample	Measure	Location	A1	A2	A3	Status data release				Request
						C	P	U	M	
Stool	Gut microbiota [#]	Home	x	X	x	😊	😊	😊		
	Fecal metabolome [#]	Home	x	X	x					
Urine (first morning)	Ions, such as calcium, potassium, sodium, magnesium	Home	x	X	x	Only samples, no data available				
Saliva	Cortisol levels (short term; two baseline samples)	Home	x	x	x					
	Cortisol levels (short term; before, immediately after, and 20 minutes after acute challenge)	Campus	x	x	x					
Blood - EDTA plasma	DNA	Campus	6 ml*			Only samples, no data available				
Blood - PAX gene	RNA	Campus	3x 2,5 ml*	3x 2,5 ml*	3x 2,5 ml*	😊				
Blood - EDTA plasma	Pro-inflammatory cytokines [#]	Campus	4x 10 ml* 1x 3 ml*	4x 10 ml* 1x 3 ml*	4x 10 ml* 1x 3 ml*	😊	😊	😊	😊	
Blood - serum	Future analyses (e.g., antibodies, proteomics)	Campus	10 ml*	10 ml*	10 ml*	Only samples, no data available				
Blood - heparin plasma	Future analyses (e.g., hormones, metabolomics)	Campus	2x 10 ml*	2x 10 ml*	2x 10 ml*	Only samples, no data available				
Hair	Cortisol levels (long term) [#]	Campus	x	x	x					
Silicone wristband	Exposure to chemicals in the surrounding environment	Home	x	x	x	Only samples, no data available				



*The indicated volumes refer to whole blood volumes. #So far, only available in subset samples (235 samples were analysed for gut microbiota, 225 for fecal metabolome, 699 for pro-inflammatory cytokines, 101 for hair cortisol).



Table 6a. Neuroimaging at the campus.

C=cleaned, P=processed, U=uploaded in repository, M=metadata available

Scan	Description	A1	A2	A3	Status data release				Request
					C	P	U	M	
T1w 3D MPRAGE	Anatomical scan	x	x	x	😊	😊	😊	😊	
rfMRI	Resting-state functional scan followed by resting-state questionnaire	x	x	x	😊	😊	😊	😊	
mfMRI	Movie functional scan	x	x	x	😊	😊	😊	😊	
Scout, fieldmap, single-band reference EPIs	Auxiliary scans	x	x	x					
Diffusion-weighted imaging scan	Structural connectivity characterizations and white matter tissue microstructural modelling	x			😊	😊	😊	😊	
High-resolution T1w 3D MP2RAGE anatomical scan	Quantitative T1 and cortical myelin mapping		x		😊	😊	😊	😊	
High-resolution T2*w scan	Quantitative T2* and magnetic susceptibility mapping for identification and quantification of iron deposition across the brain			x	😊	😊	😊	😊	

Table 6b. Imaging-derived phenotypes

C=cleaned, P=processed, U=uploaded in repository, M=metadata available

	Description	A1	A2	A3	Status data release				Request
					C	P	U	M	
Imaging-derived phenotypes		x	x	x	😊	😊			



Table 7. Overview of cognitive, affective, and behavioral assessments at the campus.

C=cleaned, P=processed, U=uploaded in repository, M=metadata available

Domain	Name of task	Measure	Description	A1	A2	A3	Status data release				Request
							C	P	U	M	
Cognition	Foraging task	The tendency to explore alternatives vs. to exploit a chosen alternative	Participants are presented with a tree and have to decide whether to harvest it for apples and incur a short harvest delay or move to a new tree and incur a longer travel delay	x	x	x	😊	😊		😊	
	Serial random-dot motion discrimination task	How predictions from the past are weighted with uncertain sensory information in the present	Participants judge the motion direction of moving dots (up vs. down) and receive auditory feedback about the correctness of their response	x	x	x					
	Reward-driven reach-adaptation task	How willing people are to search for more rewarding outcomes in a motor task	Participants make shooting movements toward a target while holding a handle that records pulling and hand rotation movements	x	x	x					
	Paired associate memory task	Associative Memory	Participants memorize the associations between pictures of people and names in a study phase and the memory for these associations is	x	x	x					



			tested in a test phase using a cued-recall-test								
	Tower of London	Executive function (planning)	Participants are presented with a startling array of different colored, same-sized balls and are requested to move the balls one-by-one, with as little moves as possible to a predefined goal array.	x	x	x					
Affect	Contextual fear generalization task	Fear generalization	Participants are instructed to attend to the presented stimuli and learn to predict the shock in multiple contexts while assessing eye-blink startle electromyography, subjective report, and avoidance tendencies.	x	x	x					
	Emotion regulation task	Subjective mood	Participants are asked to actively regulate their emotions while either neutral or aversive pictures are presented on the computer screen	x	x	x	😊	😊		😊	
		Physiology									
	Self-referent encoding Task	Positive and negative memory bias	Participants endorse and memorize positive and negative words	x	x	x					
Stimulus-response compatibility task	Automatic approach or avoidance tendency	Participants are presented with pictures (alcohol vs. soda) and are instructed to approach or avoid a certain condition	x	x	x						



Behavior	Columbia card task	Risk preference	A card game that gives participants the repeated choice between risky options and safe options	x	x	x					
	Food auction task	Reliable index of people's preference for hedonic (short-term reward) vs. healthy food (long-term reward)	Participants bid on different food items (e.g., package of M&Ms, apple)	x	x	x					

Table 8. Sensory assessments.

C=cleaned, P=processed, U=uploaded in repository, M=metadata available

Domain	Measure	Duration (minutes)	A1	A2	A3	Status data release				Request
						C	P	U	M	
Vision	Contrast sensitivity	5	x							
	Visual acuity	5		x						
	Color vision	5			x					
Hearing	Hearing ability	1	x	x	x					

Table 9. Post-visit online questionnaires.

C=cleaned, P=processed, U=uploaded in repository, M=metadata available

Domain	Name of the questionnaire	Abbreviation	What does it measure?	A1	A2	A3	Status data release				Request
							C	P	U	M	
Exposure	Toxicology/Exposure	TOX	Exposure from environment	x	x	x					



Health	Over-the-counter medication	OCM	Use of nonprescription medication like pain relievers, cough suppressants, etc.	x	x	x	😊	😊	😊	😊	
	Health complaints	HEC	Complaints like tiredness, nausea, back pain, headache, etc.	x	x	x	😊	😊	😊	😊	
Mental Health	Adult ADHD Self-Report Scale	ASR	Symptom scale for ADHD	x			😊	😊	😊	😊	
	Autistic Trait Questionnaire	ATQ	Autistic traits	x			😊	😊	😊	😊	
	Self-Report Inventory of Depressive Symptomatology	IDS	Presence and severity of depressive symptoms	x	x	x	😊	😊	😊	😊	
	Anxiety Sensitivity Index	ASI	Anxiety (trait)	x			😊	😊	😊	😊	
	State and Trait Anxiety Inventory	STS	Anxiety (state)	x	x	x	😊	😊	😊	😊	
	Perceived Stress Scale	PSS	Stress	x	x	x	😊	😊	😊	😊	
	Utrecht Burnout Scale	UBO	Burnout	x	x	x	😊	😊	😊	😊	
	Reactive Proactive Aggression Questionnaire	RPQ	Aggression	x	x	x	😊	😊	😊	😊	
	Daily hassles and uplifts	DHU	Daily hassles and uplifts	x	x	x	😊	😊	😊	😊	
	Cognitive emotion regulation questionnaire	CER	Cognitive regulation of emotion	x	x	x	😊	😊	😊	😊	
Life events	Childhood Trauma Questionnaire	CTQ	Adverse childhood experiences		x		😊	😊	😊	😊	
	Life events	LIE	Threatening life experiences	x	x	x	😊	😊	😊	😊	
Social/	UCLA loneliness scale	ULS	Loneliness	x	x	x	😊	😊	😊	😊	



Relationship	Need to belong scale	NBS	Belongingness	x	x	x	😊	😊	😊	😊	
	Multidimensional scale of Perceived Social Support	MDP	Perceived social support	x	x	x	😊	😊	😊	😊	
Work	Exposure to work	WRK_A	Working hours, working schedules, type of employment	x	x	x	😊	😊	😊	😊	
	Survey Work-home Interaction – NijmeGen	WRK_B1	Work-life balance	x	x	x	😊	😊	😊	😊	
	Workplace commitment	WRK_B2		x	x	x	😊	😊	😊	😊	
	Employability	WRK_B3		x	x	x	😊	😊	😊	😊	
	Questionnaire on the Experience and Evaluation of Work	WRK_C	Job characteristics	x*			😊	😊	😊	😊	
Politics	Populism index	POL	Attitude toward populism	x	x	x	😊	😊		😊	
	Political efficacy	POE	Attitude towards national government and politics	x	x	x					
	Political participation	POP	Political activities	x	x	x					
	EU membership	EMQ	Attitude towards EU membership	x	x	x	😊	😊		😊	
Personality	BIG-5 NEO-FFI-3	BIG	Openness to experience, conscientiousness, neuroticism, extraversion, and agreeableness	x			😊	😊	😊	😊	
	Sensory Processing Sensitivity	SPS	High sensitivity			x	😊	😊	😊	😊	
	Barratt Impulsiveness Scale	BIS	Impulsiveness		x		😊	😊	😊	😊	
	Self-control	SCO		x			😊	😊	😊	😊	
	New general self-efficacy scale	SEE	Self-efficacy		x		😊	😊	😊	😊	
	Dispositional greed	DGR	Greediness			x	😊	😊	😊	😊	



	Dark triad	DTR	Narcissism, Machiavellianism, psychopathy	x			😊	😊	😊	😊	
	Social investment attitudes	SIS	Attitudes toward corporate social responsibility		x		😊	😊	😊	😊	
Literacy	Numeracy test	NUT	Mathematical abilities		x						
	Financial literacy	FLI	Financial attitudes, skills			x					
	Graph literacy	GLI	Ability to understand the meaning of graphs	x							
	Cultural intelligence	CIN	Ability to relate and work effectively across cultures			x					

*Participants fill out their job characteristics at the first assessment. In the second and third assessments, they fill out their job characteristics only in case of a new job.

Table 10. Post-visit online assessments.

C=cleaned, P=processed, U=uploaded in repository, M=metadata available

Domain	Online task	What does it measure?	A1	A2	A3	Status data release				Request
						C	P	U	M	
Decision-making	Higher-order risk preferences	Risk attitudes, prudence, and temperance in financial decision-making	x	x	X	😊	😊	😊	😊	
	Equality equivalence test	Social preferences	x	x	x	😊	😊	😊	😊	
	Ambiguity	Ambiguous risk attitudes	x	x	x					
	Trust game	Trust and trustworthiness	x	x	x	😊	😊	😊	😊	
	Public good game	Altruism, conditional reciprocity	x	x	x	😊	😊	😊	😊	
	Time preferences	Temporal discounting	x	x	x	😊	😊	😊	😊	
Language	Narrative reading	Comprehension of and immersion into a narrative	x	x	x					
Cognition	Meta-cognition		x	x	x	😊	😊	😊	😊	
Solidarity	Vignettes	Culpability, in/out group	x	x	x					



Table 11. Individual Differences in Language Skills test battery.

C=cleaned, P=processed, U=uploaded in repository, M=metadata available

Domain	Online task	What does it measure?	A3	Status data release				Request
				C	P	U	M	
Cognition	Auditory simple and choice reaction time task	Processing speed	x					
	Letter comparison	Processing speed	x					
	Visual simple and choice reaction time task	Processing speed	x					
	Digit span (forward & backward)	Auditory working memory	x					
	Corsi block tapping (forward & backward)	Visual working memory	x					
	Raven's advanced progressive matrices	Non-verbal intelligence	x	😊	😊	😊	😊	
Linguistic knowledge	Stairs4Words (2 Runs)	Linguistic experience: Vocabulary	x					
	Peabody Picture Vocabulary Test	Linguistic experience: Vocabulary	x					
	Idiom recognition test	Linguistic experience: Knowledge of idiomatic expressions	x					
	Spelling test	Linguistic experience: Spelling	x					
	Author recognition test	Linguistic experience: Print exposure	x					
	Prescriptive grammar	Linguistic experience: Prescriptive grammar knowledge	x					
Linguistic processing	Picture naming	Word production	x					
	Rapid automatized naming	Word production	x					
	Verbal fluency	Word production	x	😊	😊	😊	😊	
	Antonym production	Word production	x					
	Maximal speech rate	Word production	x					
	Phrase generation	Sentence production	x					
	Sentence generation (active/passive sentence formulation)	Sentence production	x					
	Sentence generation (event apprehension)	Sentence production	x					
	Spontaneous speech	Sentence production	x	😊	😊	😊	😊	
	Non-Word monitoring in non-word lists in noise	Word comprehension	x					
	Rhyme judgment	Word comprehension	x					
Lexical decision	Word comprehension	x						



	Semantic categorization	Word comprehension	x					
	Word monitoring in sentences in noise	Sentence comprehension	x					
	Grammatical gender cues	Sentence comprehension	x					
	Verb-specific selective restrictions	Sentence comprehension	x					
	Self-paced reading	Sentence comprehension	x					