

The Codebook.pdf file was generated on 2023/04/03 by Christine Krebs

-----  
GENERAL INFORMATION  
-----

1. Title of dataset: MasterfileFullSample.csv
2. Title of Publication: Investigating Compensatory Brain Activity in Older Adults with Subjective Cognitive Decline
3. Published in: Journal of Alzheimer's Disease  
DOI: 10.3233/JAD-221001
4. Authors: Christine Krebs, Esther Brill, Lora Minkova, Andrea Federspiel, Frauke Kellner-Weldon, Patric Wyss, Charlotte E. Teunissen, Argonde C. van Harten, Anna Seydell-Greenwald, Katharina Klink, Marc A. Züst, Anna-Katharine Brem, Stefan Klöppel
5. Contributor information: Christine Krebs, project member  
Contact person for questions:  
Name: Christine Krebs  
Role/Function: Project member  
Institution: University Hospital of Old Age Psychiatry and Psychotherapy, Bern  
Mail: Christine.krebs@unibe.ch
6. Date of data collection: 10/2020-11/2021
7. Geographic location of data collection:  
University Hospital of Old Age Psychiatry and Psychotherapy, Bern  
Cantonal Hospital of Lucerne
8. Keywords describing the subject of your dataset:  
'Subjective cognitive decline', 'episodic memory', 'spatial abilities',  
'compensatory brain activity'
9. Information about funding sources that supported the collection of the data:  
Funding agency name: Swiss National Science Foundation  
Grant number: 32003B\_189240
10. Missing data: NA

-----  
SHARING/ACCESS INFORMATION  
-----

1. Licenses/restrictions placed on the data:  
CC BY-NC 4.0
2. Links to publications that cite or use the data:  
<https://content.iospress.com/articles/journal-of-alzheimers-disease/jad221001>
3. Was data derived from another source? no.

-----  
DATA & FILE OVERVIEW  
-----

1. File List: MasterfileFullSample

File format: .csv

Short description: The file includes all relevant data from the behavioural assessment, the fMRI tasks, volumetric data from the structural MRI and demographic data for the sample. Additionally, it contains blood related data for 38 participants (e.g., plasma amyloid beta and pTau181 measures).

Date of creation: 2023/04/03

-----  
DATA-SPECIFIC INFORMATION FOR: MasterfileFullSample  
-----

1. Number of variables: 52

2. Number of cases/rows: 52 cases, 53 rows

<u>Variable name</u>	<u>Description</u>
ID	Subject identifier
RHCTot	Right hippocampal volume
LHCTot	Left hippocampal volume
TIV	Total intracranial volume
HCTot	Total hippocampal volume
HippAtrophy	Hippocampal atrophy (total hippocampal volume was scaled by total intracranial volume and the results subtracted from one)
Age	Age
YoE	Years of formal education
Sex	weiblich = female, männlich = male
MoCAsum	Total score of the Montreal cognitive assessment
GDSsum	Total score of the geriatric depression scale
compEM	Composite score of the three auditory verbal learning test scores
compSpatW	Composite score of the three Rey-Osterrieth complex test scores
SiteNum	Study site, 1 = Bern, 2 = Lucerne

AccRota	Accuracy in rotation condition in the spatial abilities fMRI task
AccTrans	Accuracy in translation condition in the spatial abilities fMRI task
AccLumRota	Accuracy in luminance rotation condition in the spatial abilities fMRI task
AccLumTrans	Accuracy in luminance translation condition in the spatial abilities fMRI task
RtLumTrans	Reaction time in luminance translation condition in the spatial abilities fMRI task
RtLumRota	Reaction time in luminance rotation condition in the spatial abilities fMRI task
RtTrans	Reaction time in translation condition in the spatial abilities fMRI task
RtRota	Reaction time in rotation condition in the spatial abilities fMRI task
TrialsLumTrans	Number of trials in the luminance translation condition in the spatial abilities fMRI task
TrialsLumRota	Number of trials in the luminance rotation condition in the spatial abilities fMRI task
TrialsTrans	Number of trials in the translation condition in the spatial abilities fMRI task
TrialsRota	Number of trials in the rotation condition in the spatial abilities fMRI task
AccCuRc	Accuracy in the cued recall condition in the episodic memory fMRI task
RtCu	Reaction time in the cued recall condition in the episodic memory fMRI task
AccRecog	Accuracy in the recognition condition in the episodic fMRI memory fMRI task
RtRecog	Reaction time in the recognition condition in the episodic memory fMRI task
LearningSumAVLT	Total learning sum across five rounds in the auditory verbal learning test
DelRecAVLT	Number of remembered words in the delayed recall in the auditory verbal learning test
immediateRecAVLT	Number of remembered words in the immediate recall after interfering word list in the auditory verbal learning test

ROCEnc	Encoding test score in the Rey-Osterrieth complex figure test
ROCDelRec	Delayed recall test score in the Rey-Osterrieth complex figure test
ROCRec	Immediate recall test score in the Rey-Osterrieth complex figure test
Apoe	Apoe genotype
BDNFGen	BDNF genotype
BDNF genotype recoded	BDNF genotype recoded
pTau	Plasma pTau181 pg/ml
Abeta40	Plasma amyloid beta 40 pg/ml
Abeta42	Plasma amyloid beta 42 pg/ml
GFAP	Glial fibrillary acidic protein pg/ml
NFL	Neurofilament light chain pg/ml
Amyloid42_40	Plasma amyloid 42/40 ratio
ApoeCar	Carrier of at least one ApoE ε4 allele (yes, no)
pTauDummy	Plasma pTau181 values higher than cut-off (yes, no)
TauNum	pTauDummy numeric (1 = yes, 2 = no)
AmyloidDummy	Amyloid 42/40 ratio lower than cut-off (yes, no)
AmyloidNum	AmyloidDummy numeric (1 = yes, 2 = no)
ADpat	Amyloid positive participant according to cut-off scores in amyloid42/40 ratio and/or pTau181 (1 = yes, 2 = no)
ApoeNum	ApoeCar numeric (1 = yes, 2 = no)

Specialized formats used: pg/ml = Picograms per millilitre