

Title/nature of data: *Neuropsychology measures for Framingham Heart Study participants*

Dataset: vr_np_2013_a_0960d

Study description:

The primary objective of the MRI and Cognitive study was to establish baseline measures of brain morphology and cognitive function in the Original cohort survivors. This dataset contains all NP measures for participants in any of the FHS cohorts.

The study comprised of a 50-90 minute neuropsychological test battery that also included some measures of physical functioning

Exclusion criteria for the brain MRI scan included those who could not undergo MRI due to claustrophobia, presence of a pacemaker or any other source of metal in their body.

There are separate variables in another dataset that permit one to exclude persons with dementia, stroke or other neurological disease that could affect interpretation of MRI brain volume or white matter hyperintensity volume data.

This dataset contains all available NP measures through 2012 for participants in the Original, Offspring, and OMNI cohorts and NP measures through 2013 for participants in the Third Generation cohort. There is one line of data for each NP battery that a participant completed. (N=11375)

Relevant Publications:

Reference	Pubmed ID
Debette S, Bis JC, Fornage M, et al., Seshadri S, Breteler MM, Schmidt R, Launer LJ, Longstreth WT, Jr.: Genome-wide association studies of MRI-defined brain infarcts: meta-analysis from the CHARGE Consortium. <i>Stroke</i> 2010; 41:210-217.	PMID: 20044523
Fornage M, Debette S, Bis JC, et al., ...Seshadri S, Tzourio C, Breteler MM, Mosley TH, Schmidt R, Longstreth WT, DeCarli C, Launer LJ. Genome wide association studies of cerebral white matter lesion burden: the CHARGE consortium. <i>Ann Neurol</i> . 2011;69:928-939.	PMID: 21681796
Bis JC, Decarli C, Smith AV, et al., ...Launer LJ, Ikram MA, Seshadri S for the Cohorts for Heart and Aging Research in Genomic Epidemiology (CHARGE) Consortium. Common variants at 12q14 and 12q24 are associated with hippocampal volume. <i>Nat Genet</i> . 2012; 44:545-551.	PMID: 2250442
Taal HR, St Pourcain B, Thiering E, et al., ...The Cohorts for Heart and Aging Research in Genetic Epidemiology (CHARGE) Consortium, Ikram MA, Fornage M, Smith AV, Seshadri S, Schmidt R, ... Timpson NJ, Widen E, Wilson JF. Common variants at 12q15 and 12q24 are associated with infant head circumference. <i>Nat Genet</i> . 2012;44:532-538.	PMID: 23715334

Ikram MA, Fornage M, Smith AV, Seshadri S, ..et al., Launer LJ, Breteler MM, Decarli C for the CHARGE Consortium. Common variants at 6q22 and 17q21 are associated with intracranial volume. <i>Nat Genet.</i> 2012;44:539-544.	PMID: 23715335
Stein JL, Medland SE, Vasquez AA, et al., the Alzheimer's Disease Neuroimaging Initiative (ADNI); EPIGEN Consortium; IMAGEN Consortium; Saguenay Youth Study Group (SYS), Bis JC, Ikram MA, Smith AV, Gudnason V, Tzourio C, Vernooij MW, Launer LJ, Decarli C, Seshadri S; Cohorts for Heart and Aging Research in Genomic Epidemiology (CHARGE) Consortium; the Enhancing Neuro Imaging Genetics through Meta-Analysis (ENIGMA) Consortium, ... Franke B, Wright MJ, Thompson PM. Identification of common variants associated with human hippocampal and intracranial volumes. <i>Nat Genet.</i> 2012;44:552-561.	PMID: 22504417
Barral S, Fernández-Cadenas I, Bis JC, Montaner J, Ikram AM, Launer LJ, Fornage M, Schmidt H, Brickman AM, Seshadri S, Mayeux R. No association of ALOX5AP polymorphisms with risk of MRI-defined brain infarcts. <i>Neurobiol Aging.</i> 2012;33:629.e1-3.	PMID: 22074807
Maillard P, Seshadri S, Beiser A, Himali JJ, Au R, Fletcher E, Carmichael O, Wolf PA, DeCarli C. Effects of systolic blood pressure on white-matter integrity in young adults in the Framingham Heart Study: a cross-sectional study. <i>Lancet.</i> 2012 11:1039-47.	PMID: 23122892
Romero JR, Preis SR, Beiser AS, Decarli C, Lee DY, Viswanathan A, Benjamin EJ, Fontes J, Au R, Pikula A, Wang J, Kase CS, Wolf PA, Irrizarry MC, Seshadri S. Lipoprotein phospholipase A2 and cerebral microbleeds in the Framingham heart study. <i>Stroke.</i> 2012;43:3091-3094.	PMID: 22961963
Schilling S, Destefano AL, Sachdev PS, Choi SH, Mather KA, Decarli CD, Wen W, Hogh P, Raz N, Au R, Beiser A, Wolf PA, Romero JR, Zhu YC, Lunetta KL, Farrer L, Dufouil C, Kuller LH, Mazoyer B, Seshadri S, Tzourio C, Debette S: APOE genotype and MRI markers of cerebrovascular disease: Systematic review and meta-analysis. <i>Neurology</i> 2013;81:292-300.	PMID: 23858411
Ahl RE, Beiser A, Seshadri S, Auerbach S, Wolf PA, Au R: Defining MCI in the Framingham Heart Study Offspring: Education Versus WRAT-based Norms. <i>Alzheimer Dis Assoc Disord</i> 2013	PMID: 23314066
Bangen KJ, Beiser A, Delano-Wood L, Nation DA, Lamar M, Libon DJ, Bondi MW, Seshadri S, Wolf PA, Au R: APOE Genotype Modifies the Relationship between Midlife Vascular Risk Factors and Later Cognitive Decline. <i>J Stroke Cerebrovasc Dis</i> 2013.	PMID: 23601373
Weinstein G, Beiser AS, Au R, Decarli C, Wolf PA, Seshadri S: Association of parental stroke with brain injury and cognitive measures in offspring: the Framingham Heart Study. <i>Stroke</i> 2013;44:812-815.	PMID: 23362080
Tsao CW, Seshadri S, Beiser AS, Westwood AJ, Decarli C, Au R, Himali JJ, Hamburg NM, Vita JA, Levy D, Larson MG, Benjamin EJ, Wolf PA, Vasan RS, Mitchell GF: Relations of arterial stiffness and endothelial function to brain aging in the community. <i>Neurology</i> 2013.	PMID: 23935179
Pikula A, Beiser AS, Chen TC, Preis SR, Vorgias D, Decarli C, Au R, Kelly-Hayes M, Kase CS, Wolf PA, Vasan RS, Seshadri S: Serum Brain-Derived Neurotrophic Factor and Vascular Endothelial Growth Factor Levels Are Associated With Risk of Stroke and Vascular Brain Injury: Framingham Study. <i>Stroke</i> 2013;44:2768-	PMID: 23929745

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Weinstein G, Beiser AS, Decarli C, Au R, Wolf PA, Seshadri S: Brain Imaging and Cognitive Predictors of Stroke and Alzheimer Disease in the Framingham Heart Study. Stroke 2013;44:2787-2794.	PMID: 23920020
Hankee L, Preis SR, Beiser A, SA D, Liu Y, Seshadri S, Wolf PA, Au R. Qualitative Neuropsychological Measures: Normative Data on Executive Functioning Tests from the Framingham Offspring Study. Exp Aging Res 2013;39:515-535.	PMID: 24151914

Study attribution:

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