

# Origin of Variances in the Oldest-Old: Octogenarian Twins (OCTO-Twin) Wave 4

**SND-ID:** 2021-195-4.

**Is part of collection at SND:** [NEAR - National E-Infrastructure for Aging Research in Sweden](#)

## **Creator/Principal investigator(s)**

[Linda Hassing](#) - University of Gothenburg, Department of Psychology

## **Research principal**

[University of Gothenburg](#) - Department of Psychology

## **Description**

The OCTO-Twin Study aims to investigate the etiology of individual differences among twin-pairs age 80 and older, on a range of domains including health and functional capacity, cognitive functioning, psychological well-being, personality and personal control. In the study, twin pairs were withdrawn from the Swedish Twin Registry. At the first wave, the twins had to be born 1913 or earlier and both partners in the pair had to accept participation. At baseline in 1991-94, 351 twin pairs (149 monozygotic and 202 like-sex dizygotic pairs) were investigated (mean age: 83.6 years and 67% were female). The two-year longitudinal follow-ups were conducted on all twins who were alive and agreed to participate. Data have been collected at five waves over a total of eight years.

In wave 4, 84 twin pairs participated, with a total of 315 individuals.

Refer to the description of wave 1/the base line and the individual datasets in the NEAR portal for more details on variable groups and individual variables.

## **Data contains personal data**

Yes

## **Sensitive personal data**

Yes

## **Type of personal data**

Pseudonymised data related to mental and physical health, as well as socio-demographics and social relationships

## **Code key exists**

Yes

## **Language**

[English](#)

[Swedish](#)

## **Unit of analysis**

[Individual/Patient](#)

## Population

Twin pairs from the Swedish Twin Registry who were born 1913 or earlier and were at the age of 80 years at baseline.

## Time Method

[Longitudinal: Trend/Repeated cross-section](#)

[Longitudinal](#)

## Study design

Observational study

Cohort study

Cohort study: Prospective

## Description of study design

Longitudinal study

## Time period(s) investigated

1991 - 2002

## Variables

998

## Number of individuals/objects

315

## Data format / data structure

[Numeric](#)

## Data collection 1

- Mode of collection: Measurements and tests
- Description of the mode of collection: The participants were examined in their home settings by registered nurses. The participants also answered a number of self-administered surveys.
- Time period(s) for data collection: 1997-04 - 2000-05
- Data collector: University of Gothenburg
- Sample size: 315
- Source of the data: Registers/Records/Accounts: Medical/Clinical, Registers/Records/Accounts

## Geographic spread

Geographic location: [Sweden](#)

## Responsible department/unit

Department of Psychology

## Identifiers

URI: [https://neardb.near-aging.se/dataset/octo\\_wave4](https://neardb.near-aging.se/dataset/octo_wave4)

## Ethics Review

Other - Ref. S-005011-50

Approval of Assurance to Comply with 45 CFR 46. Public Health Service, National Institutes of Health, USA. Office for Protection from Research Risks. July 20, 1999. Accepted by the ethical committee of the Karolinska Institute

## Research area

[Gerontology, specialising in medical and health sciences](#) (Standard för svensk indelning av forskningsämnen 2011)

[Psychology](#) (Standard för svensk indelning av forskningsämnen 2011)

## Keywords

[Activities of daily living](#), [Aged, 80 and over](#), [Epidemiologic studies](#), [Dementia](#), [Life style](#), [Geriatrics](#), [Memory](#), [Longitudinal studies](#), [Neuropsychological tests](#), [Socioeconomic factors](#), [Body mass index](#), [Genes](#), [Cognition](#), [Environment](#), [Depression](#), [Personality](#), [Mental health](#), [Registries](#), [Diabetes mellitus, type 2](#), [Heredity](#), [Quality of life](#), [Twin study](#), [Aging](#), [Apolipoproteins e](#), [Memory disorders](#), [Nerve degeneration](#), [Wechsler scales](#), [Degenerative disease of nervous system unspecified](#), [Mental status and dementia tests](#), [Wechsler memory scale](#), [Apoe genotype](#), [Functional status](#), [Memory function](#), [Social interaction](#), [Near - national e-infrastructure for aging research](#), [Functional ability](#), [Social life](#)

## Publications

Cadar, D., Piccinin, A. M., Hofer, S. M., Johansson, B., & Muniz-Terrera, G. (2016). Education, occupational class, and cognitive decline in preclinical dementia. In *GeroPsych: The Journal of Gerontopsychology and Geriatric Psychiatry* (Vol. 29, Issue 1, pp. 5-15).

**DOI:** <https://doi.org/10.1024/1662-9647/a000138>

Berg, A. I. (2008). Life satisfaction in late life: Markers and predictors of level and change among 80+ year olds [Doctoral thesis]. Department of Psychology, University of Gothenburg.

**Handle:** <https://hdl.handle.net/2077/17873>

**ISBN:** 9789162876012

Wikby, A., Ferguson, G. F., Forsey, R., Thompson, J., Strindhall, J., Löfgren, S., Nilsson, B.-O., Ernerudh, J., Pawelec, G., & Johansson, B. (2005). An immune risk phenotype, cognitive impairment and survival in very late life: The impact of alostatic load in Swedish Octo- and Nongenarian humans. In *The Journals of Gerontology: Series A*, Volume 60, Issue 5 (pp. 556-565).

**DOI:** <https://doi.org/10.1093/gerona/60.5.556>

McClearn, G. E., Johansson, B., Berg, S., Pedersen, N. L., Ahern, F., Pettrill, S. A., et al. (1997). Substantial genetic influence on cognitive abilities in twins 80 or more years old. *Science*, 276, 1560-1563.

**DOI:** <https://doi.org/10.1126/science.276.5318.1560>

Hassing, L. (2020). Gender Differences in the Association Between Leisure Activity in Adulthood and Cognitive Function in Old Age: A Prospective Longitudinal Population-Based Study. In *The journals of gerontology. Series B, Psychological sciences and social sciences* (Vol. 75, Issue 1, pp. 11-20).

**DOI:** <https://doi.org/10.1093/geronb/gbx170>

Johansson, B., Johansson, B., McClearn, G., & Pedersen, N. (2003). Health, biobehavioral functioning, and personality in the oldest-old: The Swedish OCTO-Twin Study. Presented at the 56th Annual

Scientific Meeting of the Gerontological Society of America, San Diego. In GERONTOLOGIST (Vol. 43, Special Issue 1, p. 507).

Yoneda, T., Rush, J., Berg, A. I., Johansson, B., & Piccinin, A. (2017). Trajectories of Personality Traits Preceding Dementia Diagnosis. In The journals of gerontology. Series B, Psychological sciences and social sciences (Vol. 72, Issue 6, pp. 922-931).

**DOI:** <https://doi.org/10.1093/geronb/gbw006>

Hofer, S. M., Johansson, B., Berg, S., Pedersen, N. L., & McClearn, G. E. (2001). Changes in Cognitive Functioning in the Oldest-Old Twins : The Octo-Twin Study. Presented at the 54th Annual Scientific Meeting of the Gerontological Society of America, Chicago. In GERONTOLOGIST (Vol. 41, Special Issue 1, p. ?).

Nilsson, B.-O., Ernerudh, J., Johansson, B., Evring, P.-E., Löfgren, S., Ferguson, F. G., & Wikby, A. (2003). Morbidity does not influence the T-cell immune risk phenotype in the elderly : Findings in the Swedish NONA Immune Study using sample selection protocols. In Mechanisms of Ageing and Development (Vol. 124, Issue 4, pp. 469-476). [https://doi.org/10.1016/S0047-6374\(03\)00024-1](https://doi.org/10.1016/S0047-6374(03)00024-1)

**DOI:** [https://doi.org/10.1016/S0047-6374\(03\)00024-1](https://doi.org/10.1016/S0047-6374(03)00024-1)

**URN:** <urn:nbn:se:liu:diva-26438>

### **Link to publication list:**

[Publications and Dissertations from The OCTO-Twin Study](#)

If you have published anything based on these data, [please notify us](#) with a reference to your publication(s). If you are responsible for the catalogue entry, you can update the metadata/data description in DORIS.

### **Accessibility level**

Access to data through an external actor  
Access to data is restricted

### **Homepage**

[NEAR platform - OCTO Twin](#)

[Apply for NEAR data](#)

### **Contact for questions about the data**

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### **Related research data in SND's catalogue**

[Origin of Variances in the Oldest-Old: Octogenarian Twins \(OCTO-Twin\) Wave 1](#)

[Origin of Variances in the Oldest-Old: Octogenarian Twins \(OCTO-Twin\) Wave 2](#)

[Origin of Variances in the Oldest-Old: Octogenarian Twins \(OCTO-Twin\) Wave 3](#)

[Origin of Variances in the Oldest-Old: Octogenarian Twins \(OCTO-Twin\) Wave 5](#)

### **Is part of collection at SND**

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