

CATSS15 - The Child and Adolescent Twin Study in Sweden (15 years)

SND-ID: 2024-474.

Is part of collection at SND: [The Swedish Twin Registry](#)

Associated documentation

CATSS15 parents survey.pdf (918.23 KB)

CATSS15 twins survey.pdf (711.1 KB)

Creator/Principal investigator(s)

[Paul Lichtenstein](#) - Karolinska Institutet, Department of Medical Epidemiology and Biostatistics

[Patrik Magnusson](#) - Karolinska Institutet, Department of Medical Epidemiology and Biostatistics

Research principal

[Karolinska Institutet](#) - Department of Medical Epidemiology and Biostatistics

Description

CATSS overview:

The Child and Adolescent Twin Study in Sweden (CATSS) is an ongoing longitudinal twin study targeting all twins born in Sweden since July 1, 1992. Since 2004, parents of twins are interviewed regarding the children's somatic and mental health and social environment in connection with their 9th birthday (CATSS-9). At age 15 (CATSS15) and 18 (CATSS18), twins and parents complete questionnaires that, in addition to assessments of somatic and mental health, include measures of personality development and psychosocial adaptation. At the age of 24 (CATSS24) only twins participate in a web survey that mainly focuses on mental health.

CATSS15:

CATSS15 started in 2010. The study includes all 15-year-old twins and their parents, regardless of whether they participated in CATSS9 or not. The response rate for the parent survey is 53% and for the twin survey it is 49%. The sample consists of both identical (monozygotic) and fraternal (dizygotic) twins, including same-sex and opposite-sex pairs. The total number of participating twins (through parent and/or twin participation) in CATSS15 is currently 23,100 out of 39,300 invited (December 2024). The combined response rate is currently 58%. Participants who have not already provided a DNA sample via saliva are requested to do so again. The saliva sample is used for zygosity determination and genotyping. The number of genotyped twins in CATSS15 is currently 14,800 (December 2024).

The question areas in the CATSS15 surveys are listed below. For detailed information about variables, visit [strdata.se](#)

Question areas in parent survey:

Administrative Information

AUDIT - Alcohol Use Disorders Identification Test
CMRS - Child Mania Rating Scale
CMO - Child Monitoring
DUDIT - Drug Use Disorders Identification Test
LSC-R - Life Stressor Checklist- Revised
PCR - Parent Child Relationship
PPCP - Parents' Perception of Child's Peers
PLE - Psychotic-like Experiences
Somatic diseases
Spare time activities
SDQ - Strength and Difficulties Questionnaire

Question areas in twin survey:

CMRS - Child Mania Rating Scale
DCQ - Dysmorphic Concerns Questionnaire
EDI-2 - Eating Disorder Inventory - 2
HRS-I - Hoarding Rating Scale-Interview
Physical activity
PMS
PLE - Psychotic-like Experiences
Quality of Friendship
RPQ - Reactive and Proactive Aggression Questionnaire
OBVQ - Revised Olweus Bully/Victim Questionnaire
SRD - Self-Reported Delinquency
Self-Reported Alcohol and Drug Use
Sexuality
Somatic diseases
SDQ - Strength and Difficulties Questionnaire
TCI - Temperament and Character Inventory
Tics
Weight and height

Data contains personal data

Yes

Sensitive personal data

Yes

Type of personal data

Pseudonymised, health data, social security number, lifestyle, exposures, names, addresses, survey responses

Code key exists

Yes

Language

[English](#)

[Swedish](#)

Unit of analysis

[Individual/Patient](#)

Population

15-year old twins born in Sweden on or after 1st January, 1994

Time Method

[Cross-section](#)

[Longitudinal: Cohort/Event-based](#)

Study design

Cohort study

Description of study design

Data collection was conducted through a paper questionnaire during the first two years. After that the collection was conducted online through a web survey. Until 2020 participants still had the possibility to choose a paper survey if they wished. Participation in the study is based on informed consent.

Sampling procedure

[Total universe/Complete enumeration](#)

All 15-year-old twins born in Sweden on or after 1994, according to the Medical Birth Registry (the National Board of Health and Welfare) and living in Sweden at the time of study invitation. Twins who have declined further participation in the twin registry, have protected identity, have emigrated, or died are excluded. Only complete twin pairs are invited to participate. Data from whole twin pairs and single twins are collected.

Time period(s) investigated

2010 - Ongoing

Biobank is connected to the study

The study has collected samples/material which are stored in a scientific collection or biobank

Scientific collection or biobank name: KI Biobank

Type(s) of sample: DNA from saliva

Number of individuals/objects

23100

Response rate/participation rate

58%

The total number of participating twins (through the participation of twin and/or parent) is 23,100 out of 39,300 invited (December 2024), resulting in a response rate of 58%.

Data format / data structure

[Numeric](#)

Data collection 1

- Mode of collection: Self-administered questionnaire
- Description of the mode of collection: Paper or web questionnaire
- Time period(s) for data collection: 2010-03-ongoing
- Data collector: Karolinska Institutet
- Instrument: SDQ (Structured questionnaire)
Strengths and Difficulties Questionnaire (SDQ) is an assessment method used to measure the mental health of children and young people. The form is based on experiences from two other established and internationally widespread instruments ,the Rutter questionnaire and the Child Behavior Checklist (CBCL).
DOI: 10.1111/j.1469-7610.1997.tb01545.x
- Instrument: RPQ (Structured questionnaire)
The Reactive-Proactive Aggression Scale (RPQ) is a self-report measure of two main forms of aggression – proactive and reactive
DOI:10.1002/ab.20115.
- Instrument: DCQ (Structured questionnaire)
Dysmorphic Concerns Questionnaire (DCQ) is a self-report measure with seven items which ask about cognitive and behavioural aspects of dysmorphic concern. It has been validated as a screening tool for body dysmorphic disorder.
DOI: 10.3109/00048679809062719
DOI: 10.1046/j.1440-1614.2001.00860.x
DOI: 10.3109/00048671003596055
- Instrument: EDI-2 (Structured questionnaire)
The Eating Disorder Inventory (EDI) is a self-report questionnaire used to assess the presence of eating disorders.
DOI:10.1002/1098-108X(198321)2:23.0.CO;2-6
DOI: 10.1080/08039480500504537
- Instrument: LSC-R (Structured questionnaire)
The Life Stressor Checklist-Revised (LSC-R) is a self-report measure that assesses traumatic or stressful life events.
DOI: 10.1017/S0033291711003060
- Instrument: PLE (Structured questionnaire)
Psychotic like experiences (PLE) - Five items adapted from the Diagnostic Interview Schedule for Children (DIS-C) to screen for psychotic-like experiences in children.
DOI:10.1016/j.schres.2006.11.006
- Instrument: TCI (Structured questionnaire)
The Temperament and Character Inventory (TCI) is a self-report personality questionnaire based on Cloninger's psychobiological model of personality
DOI: 10.1001/archpsyc.1993.01820240059008
DOI: 10.1016/0959-4388(94)90083-3
DOI:10.1027/1015-5759.24.1.14
DOI: 10.1016/s0010-440x(98)90070-0
- Instrument: OBVQ (Structured questionnaire)
Revised Olweus Bully/Victim Questionnaire (Perpetrator + Victim, OBVQ-R) is a self-report questionnaire with 42 items, which has been used in different countries, and has adequate psychometric properties to assess the prevalence of victimization and aggression and various forms of bullying worldwide. This version uses 24 of the items.

DOI:10.1007/BF02195509

DOI:10.1348/000709905X53499

- Instrument: HRSI (Structured questionnaire)
Hoarding Rating Scale-Interview (HRS-I) is a five-item semi-structured interview that assesses the features of compulsive hoarding (clutter, difficulty discarding, acquisition, distress and impairment).
DOI: 10.1016/j.psychres.2009.05.001
- Instrument: AUDIT (Structured questionnaire)
Alcohol Use Disorders Identification Test (AUDIT) is an instrument used to identify risky and harmful alcohol consumption. The instrument was originally developed by the World Health Organization (WHO). The questions are asked in the parent survey and addresses the parent's own drug consumption.
DOI: 10.15288/jsa.1995.56.423
DOI: 10.1093/alcalc/37.3.245
DOI:10.1111/j.1530-0277.1997.tb03811.x
DOI: 10.1111/j.1360-0443.1993.tb02093.x
- Instrument: DUDIT (Structured questionnaire)
Drug Use Disorders Identification Test (DUDIT) is an 11-item self-administered screening instrument for drug-related problems, giving information on the level of drug intake and selected criteria for substance abuse/harmful use and dependence according to the ICD-10 and DSM-4 diagnostic systems. The questions are asked in the parent survey and addresses the parent's drug consumption.
DOI: 10.1159/000081413
- Source of the data: Registers/Records/Accounts: Medical/Clinical, Registers/Records/Accounts

Geographic spread

Geographic location: [Sweden](#)

Geographic description: Nationwide

Responsible department/unit

Department of Medical Epidemiology and Biostatistics

Funding 1

- Funding agency: Karolinska Institutet
- Funding information: Government grants

Funding 2

- Funding agency: The Swedish Research Council
- Funding information: Grant numbers: 2017-00641, 2023-00180

Ethics Review

Stockholm - Ref. 2009/739-31/5

Ethics application approved on 28th of May 2009

Research area

[Education](#) (CESSDA Topic Classification)

[Other](#) (CESSDA Topic Classification)

[Drug abuse, alcohol and smoking](#) (CESSDA Topic Classification)

[Children](#) (CESSDA Topic Classification)

[Youth](#) (CESSDA Topic Classification)

[Medical and health sciences](#) (Standard för svensk indelning av forskningsämnen 2011)

[Public health, global health, social medicine and epidemiology](#) (Standard för svensk indelning av forskningsämnen 2011)

[Reproductive health](#) (CESSDA Topic Classification)

[Health](#) (CESSDA Topic Classification)

[General health and well-being](#) (CESSDA Topic Classification)

[Medication and treatment](#) (CESSDA Topic Classification)

[Physical fitness and exercise](#) (CESSDA Topic Classification)

[Diet and nutrition](#) (CESSDA Topic Classification)

[Specific diseases, disorders and medical conditions](#) (CESSDA Topic Classification)

[Social behaviour and attitudes](#) (CESSDA Topic Classification)

[Social conditions and indicators](#) (CESSDA Topic Classification)

[Psychology](#) (CESSDA Topic Classification)

Keywords

[Phenotype](#), [Genetics](#), [Twins](#), [Twins, dizygotic](#), [Twins, monozygotic](#), [Zygosity](#), [Health](#), [Environmental effects](#)

Publications

Anckarsäter H, Lundström S, Kollberg L, Kerekes N, Palm C, Carlström E, Långström N, Magnusson PK, Halldner L, Bölte S, Gillberg C, Gumpert C, Råstam M, Lichtenstein P. The Child and Adolescent Twin Study in Sweden (CATSS).

Twin Res Hum Genet. 2011 Dec;14(6):495-508.

DOI: <https://doi.org/10.1375/twin.14.6.495>

Accessibility level

Access to data through an external actor

Access to data is restricted

License

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Homepage

[The Swedish Twin Registry](#)

strdata.se

Contact for questions about the data

str-research@meb.ki.se

Is part of collection at SND

[The Swedish Twin Registry](#)

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[DDI 2.5](#)

[DDI 3.3](#)

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