

Childhood Cognition

Cognitive function in childhood and adolescence

Cognitive function was first tested at age 8 years in a school setting, and again in this setting at ages 11 and 15 years.

COG8H, **COG11H** and **COG15H** are summary measures of test scores, standardised to the whole population on each component test. If using a sub-sample of the data these scores must be re-standardised to the population being analysed.

VOC8R, VOC11R

Purpose : Score from a 50-item vocabulary test **at 8, 11 years**
Year : 1954, 1957

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 40

99 Missing data

2. Specification

Raw variable - no derivation syntax

VOC8N, VOC11N

Purpose : Normalised score from a 50-item vocabulary test **at 8, 11 years**
Year : 1954, 1957

1. Definition

Variables **voc8r**, **voc11r** normalised to a mean of 100 and SD 15

999 Missing data

2. Specification

Raw variable - no derivation syntax

SC8R

Purpose : Score from a 35-item verbal comprehension (sentence completion) test in **1954 (at 8 years)**
Year : 1954

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 40

99 Missing data

2. Specification

Raw variable - no derivation syntax

SC8N

Purpose : Normalised score from a 35-item verbal comprehension (sentence completion) test in **1954 (at 8 years)**
Year : 1954

1. Definition

Variable sc8r normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable - no derivation syntax

R8R, R11R

Purpose : Score from a mechanical reading (pronunciation) test **at 8, 11 years**

Year : 1954, 1957

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 50

99 Missing data

2. Specification

Raw variable - no derivation

R8N, R11N

Purpose : Normalised score from a mechanical reading (pronunciation) test **at 8, 11 years**

Year : 1954, 1957

1. Definition

Variable R8/11R normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable - no derivation

PI8R

Purpose : Score from a 60-item non-verbal ability (picture intelligence) test in **1954 (at 8 years)**

Year : 1954

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 60

99 Missing data

2. Specification

Raw variable - no derivation

PI8N

Purpose : Normalised score from a 60-item non-verbal ability (picture intelligence) test in **1954 (at 8 years)**

Year : 1954

1. Definition

Variable PI8R normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable - no derivation

COG8H

Purpose : Standardised summary cognitive score in 1954 (at 8 years)
Year : 1954

1. Definition

Summary variable of all standardised scores of variables VOC8R, SC8R, R8R, PI8R

Min -2.61
Max 2.68

2. Specification

COMPUTE COG8H=(VOC8H+SC8H+R8H+PI8H)/4

Where VOC8H, SC8H, R8H, PI8H are the test scores standardised to the whole population available on each test in the variables VOC8R, SC8R, R8R, PI8R.

COMPUTE VOC8H=(VOC8R-16.28)/5.99 *Xh=(Xr-mean)/SD

GA11R

Purpose : Score from a 80-item verbal and non-verbal ability test in 1957 (at 11 years)
Year : 1957

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 80

99 Missing data

2. Specification

Raw variable - no derivation

GA11N

Purpose : Normalised score of the 80-item verbal and non-verbal ability test in 1957 (at 11 years)
Year : 1957

1. Definition

Variable GA11R normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable- no derivation

V11R

Purpose : Score from a 40 verbal items test in 1957 (at 11 years)
Year : 1957

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 80

99 Missing data

2. Specification

Raw variable - no derivation

V11N

Purpose : Normalised score of the 40 verbal items in test v11r in 1957 (at 11 years)
Year : 1957

1. Definition

Variable V11R normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable- no derivation

NV11R

Purpose : Score from a 40 non-verbal items test in 1957 (at 11 years)
Year : 1957

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 80

99 Missing data

2. Specification

Raw variable - no derivation

NV11N

Purpose : Normalised score of the 40 non-verbal items in test v11r in 1957 (at 11 years)
Year : 1957

1. Definition

Variable NV11R normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable- no derivation

A11R

Purpose : Score from a 50-item arithmetic test in 1957 (at 11 years)
Year : 1957

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 80

99 Missing data

2. Specification

Raw variable - no derivation

A11N

Purpose : Normalised score of the 50-item arithmetic test a11r in 1957 (at 11 years)
Year : 1957

1. Definition

Variable A11R normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable- no derivation

COG11H

Purpose : Standardised summary cognitive score in 1957 (at 11 years)
Year : 1957

1. Definition

Summary variable of all standardised scores of variables VOC8R, SC8R, R8R, PI8R

Min -3.01

Max 1.96

2. Specification

COMPUTE COG11H=(R11H+VOC11H+GA11H+A11H)/4

Where R11H, VOC11H, GA11H, A11H are the test scores standardised to the whole population available on each test from the variables R11R, VOC11R, GA11R, A11R.

COMPUTE R11H=(R11R-36.43)/10.51 *Xh=(Xr-mean)/SD

GA15R

Purpose : Score from the Heim AH4 Group Ability Test [a 130-item verbal and non-verbal ability test] in 1961 (at 15 years)
Year : 1961

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 130

99 Missing data

2. Specification

Raw variable - no derivation

GA15N

Purpose : Normalised score of the Heim AH4 Group Ability Test [a 130-item verbal and non-verbal ability test] in **1961 (at 15 years)**

Year : 1961

1. Definition

Variable GA15R normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable - no derivation

V15R

Purpose : Score from the 65 verbal items of the Heim AH4 Group Ability Test in **1961 (at 15 years)**

Year : 1961

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 65

99 Missing data

2. Specification

Raw variable - no derivation

V15N

Purpose : Normalised score of the 65 verbal items of the Heim AH4 Group Ability Test in **1961 (at 15 years)**

Year : 1961

1. Definition

Variable V15R normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable - no derivation

NV15R

Purpose : Score from the 65 non-verbal items of the Heim AH4 Group Ability Test in **1961 (at 15 years)**

Year : 1961

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 65

99 Missing data

2. Specification

Raw variable - no derivation

NV15N

Purpose : Normalised score of the 65 non-verbal items of the Heim AH4 Group Ability Test in 1961 (**at 15 years**)
Year : 1961

1. Definition

Variable NV15R normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable - no derivation

R15R

Purpose : Score from the Watts Vernon Reading Test [a 35-item verbal comprehension (sentence completion) test] in 1961 (**at 15 years**)

Year : 1961

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 35

99 Missing data

2. Specification

Raw variable - no derivation

R15N

Purpose : Normalised score of the Watts Vernon Reading Test [a 35-item verbal comprehension (sentence completion) test] in 1961 (**at 15 years**)

Year : 1961

1. Definition

Variable GA15R normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable - no derivation

M15R

Purpose : Score from a 47-item mathematics test in 1961 (**at 15 years**)

Year : 1961

1. Definition

This variable is coded as a continuous variable with score values coded from 0 to 47

99 Missing data

2. Specification

Raw variable - no derivation

M15N

Purpose : Normalised score of the 47-item mathematics test in 1961 (**at 15 years**)

Year : 1961

1. Definition

Variable NV15R normalised to a mean of 100 and SD of 15

999 Missing data

2. Specification

Raw variable - no derivation

COG15H

Purpose : Standardised summary cognitive score in 1961 (at 15 years)

Year : 1961

1. Definition

Summary variable of all standardised scores of variables VOC8R, SC8R, R8R, PI8R

Min -2.93

Max 2.17

2. Specification

COMPUTE COG15H=(R15H+ GA15H+M15H)/3

Where R15H, GA15H, M15H are the test scores standardised to the whole population available on each test from the variables R15R, GA15R, M15R.

COMPUTE R11H=(R15R-24.47)/6.64 *Xh=(Xr-mean)/SD
