# Abstract Reasoning Test (ART)

# Reliability: South Africans, Sesotho Speakers, 2017

## Composition of the Sample

Compiled from raw data on 105 respondents collected by Psytech SA and collaborators, via GeneSys for Windows and GeneSys Online, in the period between March 2012 and May 2017.

## Biographical Composition of the Abstract Reasoning Test

| Category | Frequency table: Sex | | | |
|---|---|---|---|---|
| | Count | Cumulative Count | Percent | Cumulative Percent |
| F | 45 | 45 | 42,85714 | 42,8571 |
| M | 56 | 101 | 53,33333 | 96,1905 |
| U | 4 | 105 | 3,80952 | 100,0000 |
| Missing | 0 | 105 | 0,00000 | 100,0000 |

| Category | Frequency table: Education | | | |
|---|---|---|---|---|
| | Count | Cumulative Count | Percent | Cumulative Percent |
| Tertiary | 6 | 6 | 5,71429 | 5,7143 |
| Grade 12 | 91 | 97 | 86,66667 | 92,3810 |
| Post Graduate | 5 | 102 | 4,76190 | 97,1429 |
| < Matric | 2 | 104 | 1,90476 | 99,0476 |
| Missing | 1 | 105 | 0,95238 | 100,0000 |

| Category | Frequency table: Race | | | |
|---|---|---|---|---|
| | Count | Cumulative Count | Percent | Cumulative Percent |
| African | 105 | 105 | 100,0000 | 100,0000 |
| Missing | 0 | 105 | 0,0000 | 100,0000 |

| Category | Frequency table: Language | | | |
|---|---|---|---|---|
| | Count | Cumulative Count | Percent | Cumulative Percent |
| Sesotho | 105 | 105 | 100,0000 | 100,0000 |
| Missing | 0 | 105 | 0,0000 | 100,0000 |

| Category | Frequency table: Language Group | | | |
|---|---|---|---|---|
| | Count | Cumulative Count | Percent | Cumulative Percent |
| Indigenous | 105 | 105 | 100,0000 | 100,0000 |
| Missing | 0 | 105 | 0,0000 | 100,0000 |

| Variable | Descriptive Statistics: Age | | | | | |
|---|---|---|---|---|---|---|
| | Mean | Std.Dev | Minimum | Maximum | N | No.cases Missing |
| Age | 20,74747 | 4,456922 | 18,00000 | 41,00000 | 99 | 6 |



Histogram: Age: =dtyear(CreationDate)-dtyear(DOB)
Include condition: LanguageRecoded='Sesotho' and ART_ART>0
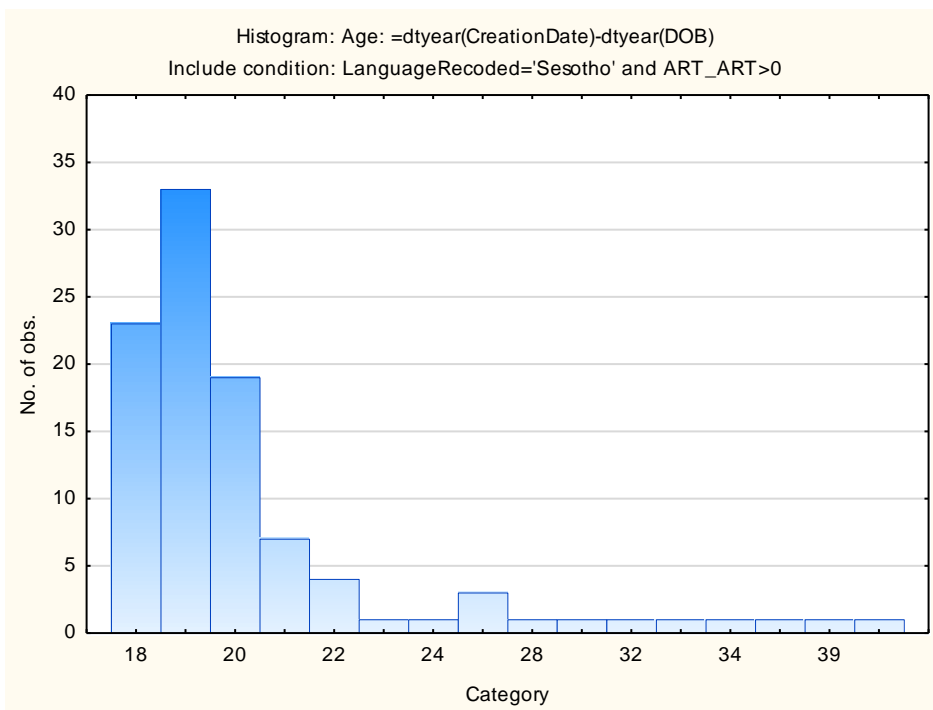
# Cronbach Coefficient Alpha and Standardised Alpha for Abstract Reasoning Test

| Subtest | Cronbach Coefficient Alpha | Standardised Alpha |
|---|---|---|
| Abstract Reasoning Test | 0,80 | 0,80 |

# Split-half Reliability

| Subtest | Corr. 1st & 2nd half | Attenuation corrected |
|---|---|---|
| Abstract Reasoning Test | 0,74 | --- |

| Subtest | Split-half reliability | Guttman split-half |
|---|---|---|
| Abstract Reasoning Test | 0,85 | 0,85 |

The items were split into odd and even numbers.

There are various ways of calculating reliability. We have reported on the calculations we did.

# Standard Error of Measurement

| Subtest | SEM | SD | Reliability |
|---|---|---|---|
| Abstract Reasoning Test | 2,23250234 | 4,992027 | 0,80 |