

Abstract Reasoning Test (ART)

Reliability: South Africans, Sepedi Speakers, 2017

Composition of the Sample

Compiled from raw data on 188 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	75	75	39,89362	39,8936
M	110	185	58,51064	98,4043
U	3	188	1,59574	100,0000
Missing	0	188	0,00000	100,0000

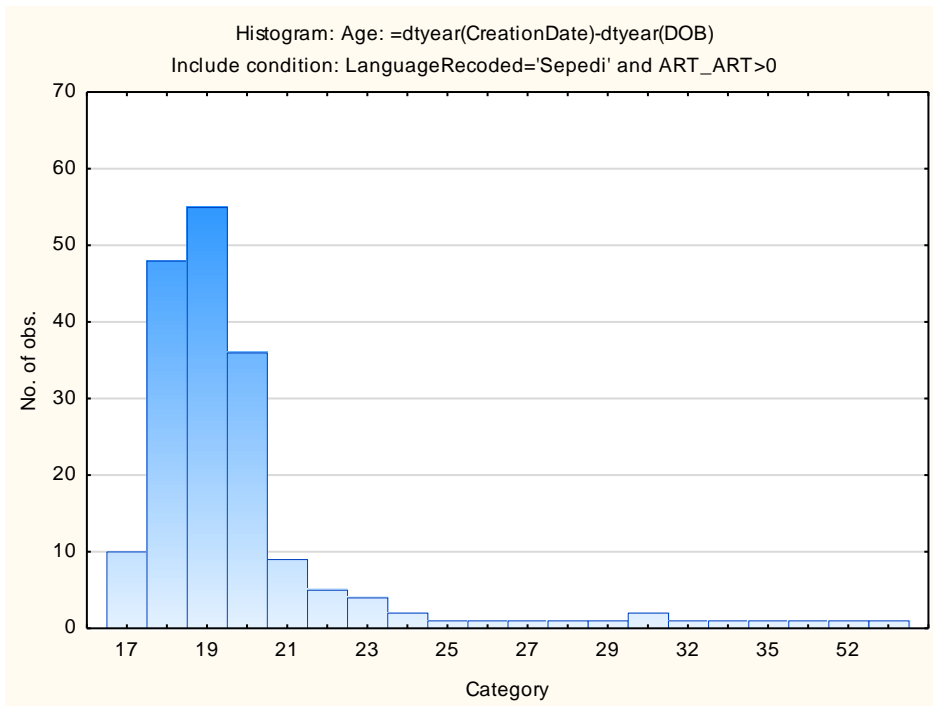
Category	Frequency table: Education			
	Count	Cumulative Count	Percent	Cumulative Percent
Tertiary	15	15	7,97872	7,9787
Grade 12	166	181	88,29787	96,2766
Post Graduate	4	185	2,12766	98,4043
< Matric	2	187	1,06383	99,4681
Missing	1	188	0,53191	100,0000

Category	Frequency table: Race			
	Count	Cumulative Count	Percent	Cumulative Percent
African	187	187	99,46809	99,4681
Missing	1	188	0,53191	100,0000

Category	Frequency table: Language			
	Count	Cumulative Count	Percent	Cumulative Percent
Sepedi	188	188	100,0000	100,0000
Missing	0	188	0,0000	100,0000

Category	Frequency table: Language Group			
	Count	Cumulative Count	Percent	Cumulative Percent
Indigenous	188	188	100,0000	100,0000
Missing	0	188	0,0000	100,0000

Variable	Descriptive Statistics: Age					
	Mean	Std.Dev	Minimum	Maximum	N	No.cases Missing
Age	20,23077	4,804641	17,00000	56,00000	182	6



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	0,63	0,93

Subtest	Split-half reliability	Guttman split-half
Abstract Reasoning Test	0,77	0,77

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	2,21173553	4,945591	0,80