

Abstract Reasoning Test (ART)

Reliability: South Africans, English Speakers, 2017

Composition of the Sample

Compiled from raw data on 861 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	433	433	50,29036	50,2904
M	404	837	46,92218	97,2125
U	24	861	2,78746	100,0000
Missing	0	861	0,00000	100,0000

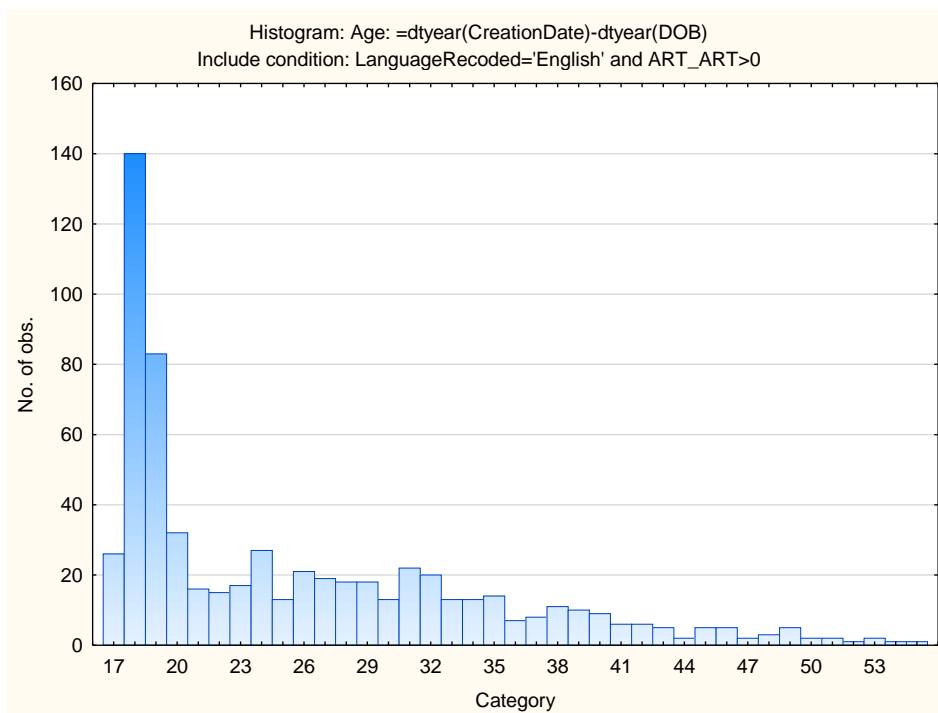
Category	Frequency table: Education			
	Count	Cumulative Count	Percent	Cumulative Percent
Tertiary	277	277	32,17189	32,1719
Grade 12	350	627	40,65041	72,8223
Post Graduate	194	821	22,53194	95,3542
< Matric	22	843	2,55517	97,9094
Missing	18	861	2,09059	100,0000

Category	Frequency table: Race			
	Count	Cumulative Count	Percent	Cumulative Percent
African	125	125	14,51800	14,5180
Coloured	77	202	8,94309	23,4611
Indian	42	244	4,87805	28,3391
European	353	597	40,99884	69,3380
Asian	153	750	17,77003	87,1080
Missing	111	861	12,89199	100,0000

Category	Frequency table: Language			
	Count	Cumulative Count	Percent	Cumulative Percent
English	861	861	100,0000	100,0000
Missing	0	861	0,0000	100,0000

Category	Frequency table: Language Group			
	Count	Cumulative Count	Percent	Cumulative Percent
English	861	861	100,0000	100,0000
Missing	0	861	0,0000	100,0000

Variable	Descriptive Statistics: Age					
	Mean	Std.Dev	Minimum	Maximum	N	No.cases Missing
Age	25,75197	8,784341	17,00000	63,00000	633	228



Cronbach Coefficient Alpha and Standardised Alpha for Abstract Reasoning Test

Subtest	Cronbach Coefficient Alpha	Standardised Alpha
Abstract Reasoning Test	0,85	0,85

Split-half Reliability

Subtest	Corr. 1st & 2nd half	Attenuation corrected
Abstract Reasoning Test	0,77	---

Subtest	Split-half reliability	Guttman split-half
Abstract Reasoning Test	0,87	0,87

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	2,25744077	5,828687	0,85