

Abstract Reasoning Test (ART)

Reliability: South Africans, Aggregate Population, 2017

Composition of the Sample

Compiled from raw data on 2191 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	999	999	45,59562	45,5956
M	1122	2121	51,20949	96,8051
U	66	2187	3,01232	99,8174
Missing	4	2191	0,18257	100,0000

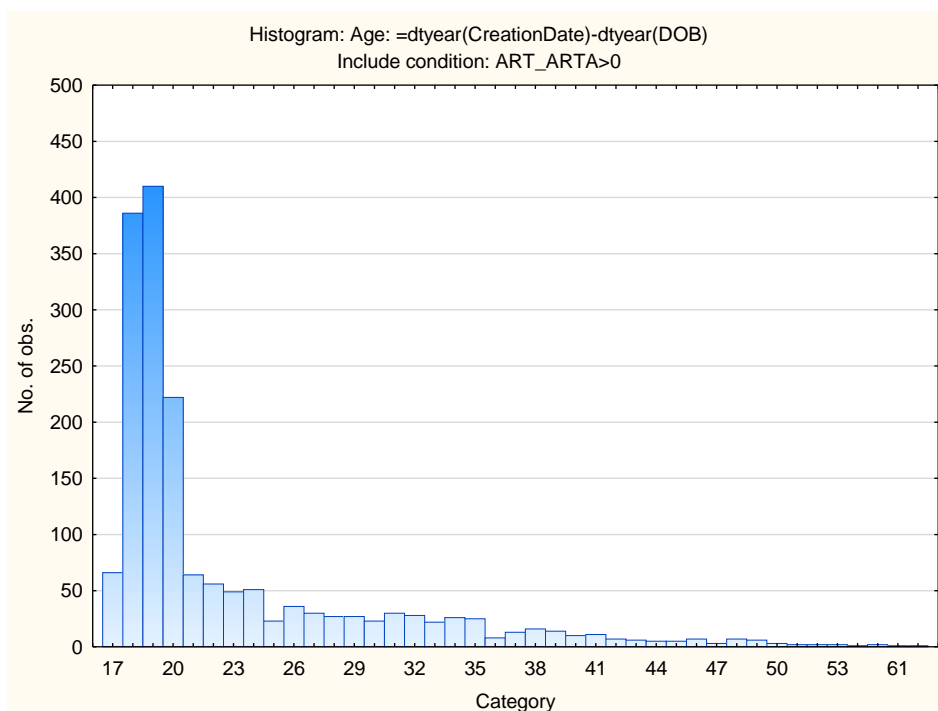
Category	Frequency table: Education			
	Count	Cumulative Count	Percent	Cumulative Percent
Tertiary	417	417	19,03241	19,0324
Grade 12	1272	1689	58,05568	77,0881
Post Graduate	303	1992	13,82930	90,9174
< Matric	39	2031	1,78001	92,6974
Missing	160	2191	7,30260	100,0000

Category	Frequency table: Race			
	Count	Cumulative Count	Percent	Cumulative Percent
African	1130	1130	51,57462	51,5746
Coloured	86	1216	3,92515	55,4998
Indian	43	1259	1,96257	57,4623
European	509	1768	23,23140	80,6937
Asian	161	1929	7,34824	88,0420
Missing	262	2191	11,95801	100,0000

Category	Frequency table: Language			
	Count	Cumulative Count	Percent	Cumulative Percent
English	861	861	39,29712	39,2971
Sepedi	188	1049	8,58056	47,8777
siSwati	60	1109	2,73848	50,6162
Afrikaans	154	1263	7,02875	57,6449
Setswana	115	1378	5,24874	62,8937
Xitsonga	66	1444	3,01232	65,9060
isiZulu	248	1692	11,31903	77,2250
isiXhosa	89	1781	4,06207	81,2871
Sesotho	105	1886	4,79233	86,0794
Tshivenda	85	1971	3,87951	89,9589
isiNdebele	12	1983	0,54770	90,5066
Missing	208	2191	9,49338	100,0000

Category	Frequency table: Language Group			
	Count	Cumulative Count	Percent	Cumulative Percent
English	861	861	39,29712	39,2971
Indigenous	968	1829	44,18074	83,4779
Afrikaans	154	1983	7,02875	90,5066
Missing	208	2191	9,49338	100,0000

Variable	Descriptive Statistics: Age					
	Mean	Std.Dev	Minimum	Maximum	N	No. cases Missing
Age	22,91056	7,292516	17,00000	63,00000	1733	458



Cronbach Coefficient Alpha and Standardised Alpha for Abstract Reasoning Test

Subtest	Cronbach Coefficient Alpha	Standardised Alpha
Abstract Reasoning Test	0,84	0,84

Split-half Reliability

Subtest	Corr. 1st & 2nd half	Attenuation corrected
Abstract Reasoning Test	0,75	---

Subtest	Split-half reliability	Guttman split-half
Abstract Reasoning Test	0,86	0,86

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	2,30736	5,768400	0,84