# Abstract Reasoning Test (ART)

# Reliability: South Africans, Setswana Speakers, 2017

#### Composition of the Sample

Compiled from raw data on 115 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 t	able: Sex		
	Count	Cumulative	Percent	Cumulative
		Count		Percent
F	59	59	51,30435	51,3043
Μ	56	115	48,69565	100,0000
Missing	0	115	0,00000	100,0000

Category	Frequency table: Education					
	Count	Cumulative	Percent	Cumulative		
		Count		Percent		
Tertiary	2	2	1,73913	1,7391		
Grade 12	108	110	93,91304	95,6522		
< Matric	3	113	2,60870	98,2609		
Missing	2	115	1,73913	100,0000		

Category	Frequency t	able: Race		
	Count	Cumulative	Percent	Cumulative
		Count		Percent
African	113	113	98,26087	98,2609
Asian	1	114	0,86957	99,1304
Missing	1	115	0,86957	100,0000

Category	Frequency table: Language				
	Count	Cumulative	Percent	Cumulative	
		Count		Percent	
Setswana	115	115	100,0000	100,0000	
Missing	0	115	0,0000	100,0000	

Category	Frequency table: Language Group				
	Count	Cumulative Count	Percent	Cumulative Percent	
Indigenous	115	115	100,0000	100,0000	
Missing	0	115	0,0000	100,0000	

Variable	Descriptive Statistics: Age					
	Mean	Std.Dev	Minimum	Maximum	N	No.cases Missing
Age	19,10435	1,353189	17,00000	24,00000	115	0



# Cronbach Coefficient Alpha and Standardised Alpha for Abstract Reasoning Test

Subtest	Cronbach Coefficient Alpha	Standardised Alpha	
Abstract Reasoning Test	0,72	0,70	

Results of lower than 0.75 are possibly related to respondents guessing the answers to items which they may not know. Results should therefore be interpreted with caution. Do not rely on these tests in isolation, but to consider the results as part of a holistic assessment, which incorporates additional sources of information.

# Split-half Reliability

Subtest	Corr. 1st & 2nd half	Attenuation corrected
Abstract Reasoning Test	0,61	

Subtest	Split-half reliability	Guttman split-half
Abstract Reasoning Test	0,76	0,75

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	2,25194763	4,255781	0,72