

Technical Test Battery (TTB2)

Reliability: South Africans, English Speakers, Updated 2016

Sample Composition

The sample consisted of respondents who had completed any of the subtests of the Technical Test Battery (TTB2) battery in the period up to June 2015, via GeneSys for Windows. Since not all the respondents completed all the subtests, biographical information is reported separately for the three tests.

Mechanical Reasoning Test: Biographical Composition

Category	Frequency table: Sex			
	Count	Cumulative Count	Percent	Cumulative Percent
M	237	237	62,36842	62,3684
F	142	379	37,36842	99,7368
U	1	380	0,26316	100,0000
Missing	0	380	0,00000	100,0000

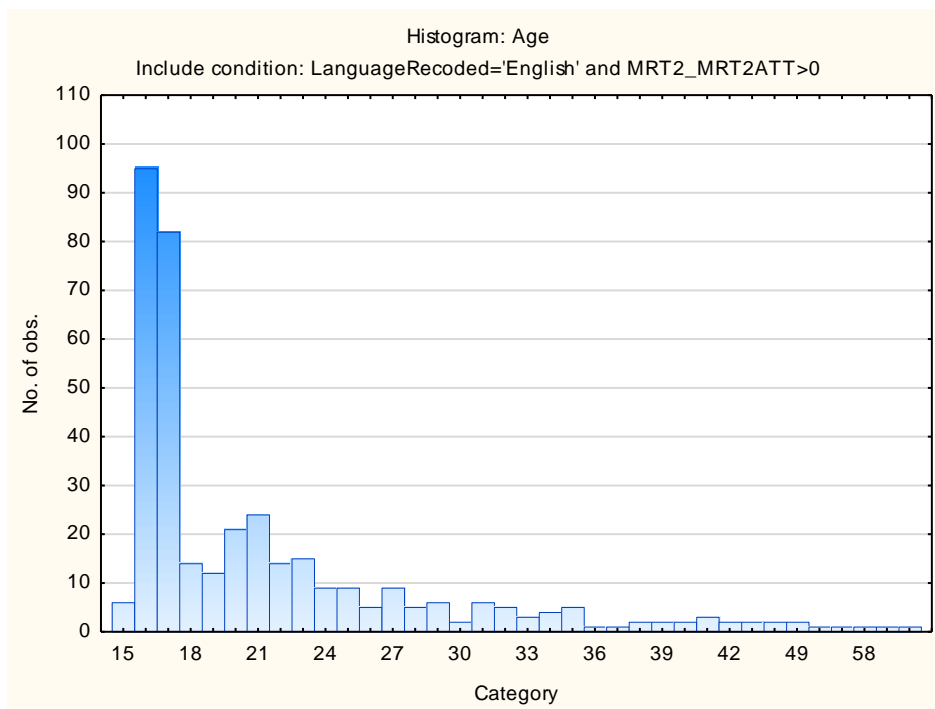
Category	Frequency table: Education			
	Count	Cumulative Count	Percent	Cumulative Percent
Tertiary	51	51	13,42105	13,4211
< Matric	195	246	51,31579	64,7368
Grade 12	118	364	31,05263	95,7895
Post Graduate	1	365	0,26316	96,0526
Missing	15	380	3,94737	100,0000

It should be noted that the largest number of respondents had not completed matric.

Category	Frequency table: Language			
	Count	Cumulative Count	Percent	Cumulative Percent
English	380	380	100,0000	100,0000
Missing	0	380	0,0000	100,0000

Category	Frequency table: Race			
	Count	Cumulative Count	Percent	Cumulative Percent
African	53	53	13,94737	13,9474
European	82	135	21,57895	35,5263
Coloured	110	245	28,94737	64,4737
Asian	119	364	31,31579	95,7895
Missing	16	380	4,21053	100,0000

Variable	Descriptive Statistics: Age					
	Mean	Std.Dev	Minimum	Maximum	N	No. cases Missing
Age	21,53600	7,914865	15,00000	63,00000	375	5



Spatial Reasoning Test: Biographical Composition

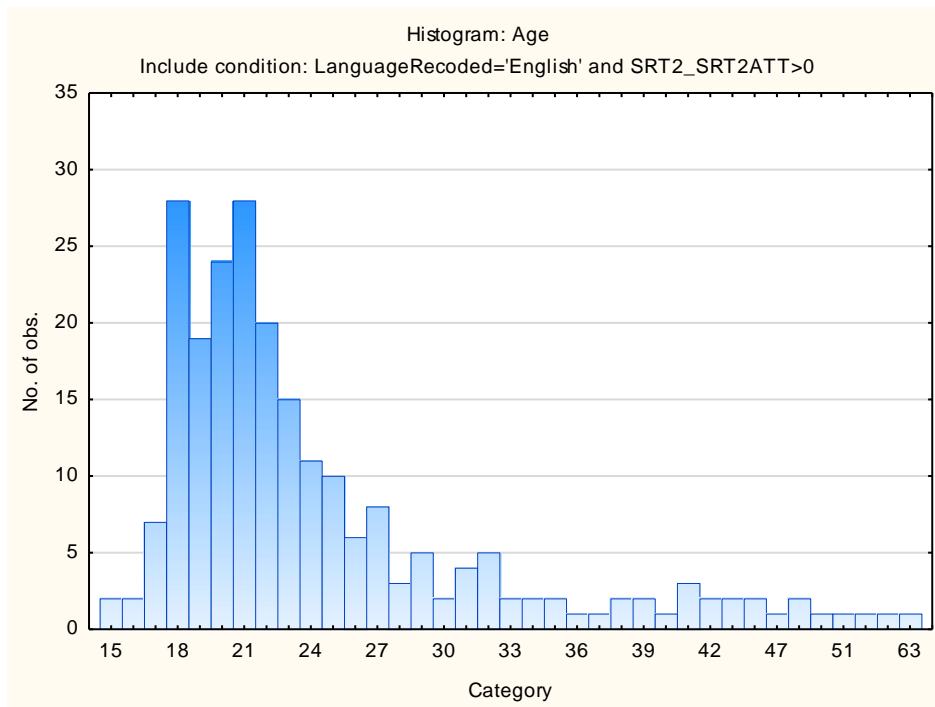
Category	Frequency table: Sex			
	Count	Cumulative Count	Percent	Cumulative Percent
M	206	206	89,56522	89,5652
F	24	230	10,43478	100,0000
Missing	0	230	0,00000	100,0000

Category	Frequency table: Education			
	Count	Cumulative Count	Percent	Cumulative Percent
Tertiary	50	50	21,73913	21,7391
< Matric	23	73	10,00000	31,7391
Grade 12	143	216	62,17391	93,9130
Post Graduate	1	217	0,43478	94,3478
Missing	13	230	5,65217	100,0000

Category	Frequency table: Language			
	Count	Cumulative Count	Percent	Cumulative Percent
English	230	230	100,0000	100,0000
Missing	0	230	0,0000	100,0000

Category	Frequency table: Race			
	Count	Cumulative Count	Percent	Cumulative Percent
African	21	21	9,13043	9,1304
European	64	85	27,82609	36,9565
Coloured	76	161	33,04348	70,0000
Asian	63	224	27,39130	97,3913
Missing	6	230	2,60870	100,0000

Variable	Descriptive Statistics: Age					
	Mean	Std.Dev	Minimum	Maximum	N	No.cases Missing
Age	24,62009	8,322435	15,00000	63,00000	229	1



Visual Acuity Test: Biographical Composition

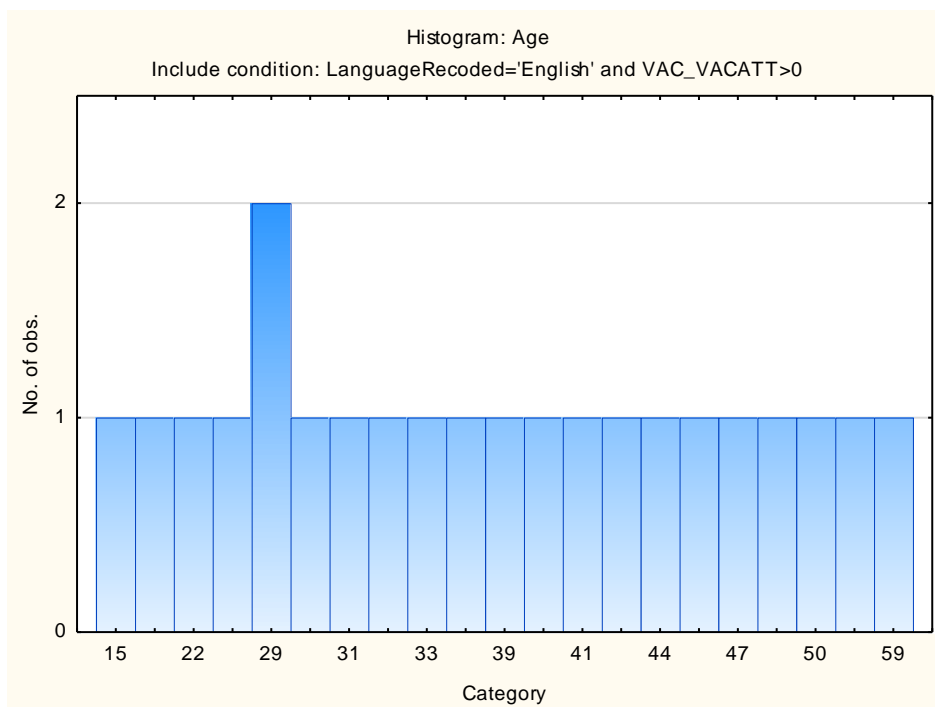
Category	Frequency table: Sex			
	Count	Cumulative Count	Percent	Cumulative Percent
M	21	21	95,45455	95,4545
F	1	22	4,54545	100,0000
Missing	0	22	0,00000	100,0000

Category	Frequency table: Education			
	Count	Cumulative Count	Percent	Cumulative Percent
Tertiary	10	10	45,45455	45,4545
< Matric	3	13	13,63636	59,0909
Grade 12	8	21	36,36364	95,4545
Post Graduate	1	22	4,54545	100,0000
Missing	0	22	0,00000	100,0000

Category	Frequency table: Language			
	Count	Cumulative Count	Percent	Cumulative Percent
English	22	22	100,0000	100,0000
Missing	0	22	0,0000	100,0000

Category	Frequency table: Race			
	Count	Cumulative Count	Percent	Cumulative Percent
African	1	1	4,54545	4,5455
European	17	18	77,27273	81,8182
Coloured	3	21	13,63636	95,4545
Asian	1	22	4,54545	100,0000
Missing	0	22	0,00000	100,0000

Variable	Descriptive Statistics: Age					
	Mean	Std.Dev	Minimum	Maximum	N	No.cases Missing
Age	36,63636	11,58219	15,00000	59,00000	22	0



Cronbach Coefficient Alpha for Technical Test Battery Subtests:

Subtest	Cronbach Coefficient Alpha
Mechanical Reasoning Test	0,75
Spatial Reasoning Test	0,81

There was insufficient data to report on reliability for the VAC.

Standard Error of Measurement

Subtest	SEM	SD	Reliability
Mechanical Reasoning Test	2,822474	5,644948	0,75
Spatial Reasoning Test	2,27758485	5,225138	0,81