## General Reasoning Test (GRT2)

## Reliability: South Africans, Setswana Speaking, Updated 2016

## Sample Composition

The sample consisted of Setswana speaking South Africans who were tested by Psytech South Africa and collaborators during the period up to June 2015, via GeneSys for Windows. Since not all respondents completed all the subtests of the General Reasoning Test battery (GRT2), the biographical characteristics are reported separately for the three tests.

## Sample Composition: General Abstract Reasoning Test

| Category | Frequency table: Sex |  |  |  |
| :--- | ---: | :---: | ---: | ---: |
|  | Count |  | Cumulative <br> Count |  |
|  | 378 | 378 | 47,48744 | Cumulative <br> Percent |
| M | 415 | 793 | 52,13568 | 47,4874 |
| U | 3 | 796 | 0,37688 | 99,6231 |
| Missing | 0 | 796 | 0,00000 | 100,0000 |


| Category | Frequency table: Education |  |  |  |
| :--- | ---: | :---: | ---: | ---: |
|  | Count |  | Cumulative <br> Count |  |
| Prade 12 | 265 | 265 | Cumulative <br> Percent |  |
| Gost Graduate | 50 | 315 | 63,29146 | 39,2915 |
| Unknown | 3 | 318 | 0,37688 | 39,5729 |
| Tertiary | 275 | 593 | 34,54774 | 39,9497 |
| < Matric | 115 | 708 | 14,44724 | 74,4975 |
| Missing | 88 | 796 | 11,05528 | 88,9447 |


| Category | Frequency table: Language |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Count | Cumulative <br> Count | Percent | Cumulative <br> Percent |  |
| Setswana | 796 |  | 796 | 100,0000 | 100,0000 |
| Missing | 0 |  | 796 | 0,0000 | 100,0000 |


| Category | Frequency table: Language Group |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | Count | Cumulative <br> Count | Percent | Cumulative <br> Percent |  |
| Indigenous | 7996 | 796 | 100,0000 | 100,0000 |  |
| Missing | 0 |  | 796 | 0,0000 |  |


| Category | Frequency table: Race |  |  |  |  |
| :--- | ---: | :---: | ---: | ---: | :---: |
|  | Count <br> Count | Percent | Cumulative <br> Percent |  |  |
| African | 786 | 786 | 98,74372 | 98,7437 |  |
| Asian | 3 | 789 | 0,37688 | 9,1206 |  |
| Coloured | 2 | 791 | 0,25126 | 99,3719 |  |
| European | 2 | 793 | 0,25126 | 99,6231 |  |
| Missing | 3 | 796 | 0,37688 | 100,0000 |  |


| Variable | Descriptive Statistics: Age |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: |
|  | Mean | Std.Dev | Minimum | Maximum | N | No.cases <br> Missing |  |  |
| Age | 29,35195 | 11,14765 | 15,00000 | 64,00000 | 770 | 26 |  |  |

Histogram: Age


## Sample Composition: General Numerical Reasoning Test

| Category | Frequency table: Sex |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Count | Cumulative Count | Percent | Cumulative Percent |
| M | 357 | 357 | 46,66667 | 46,6667 |
| F | 406 | 763 | 53,07190 | 99,7386 |
| U | 2 | 765 | 0,26144 | 100,0000 |
| Missing | 0 | 765 | 0,00000 | 100,0000 |


| Category | Frequency table: Education |  |  |  |
| :--- | ---: | :---: | ---: | ---: |
|  | Count |  | Cumulative <br> Count |  |
| Grade 12 | 254 | 254 | 33,20261 | Cumulative <br> Percent |
| Post Graduate | 48 | 302 | 6,27451 | 3,2026 |
| Unknown | 3 | 305 | 0,39216 | 39,4771 |
| Tertiary | 255 | 560 | 33,33333 | 39,8693 |
| < Matric | 115 | 675 | 15,03268 | 73,2026 |
| Missing | 90 | 765 | 11,76471 | 88,2353 |


| Category | Frequency table: Language |  |  |  |
| :--- | ---: | :---: | ---: | ---: |
|  | Count | Cumulative <br> Count | Percent | Cumulative <br> Percent |
| Setswana | 765 |  | 765 | 100,0000 |


| Category | Frequency table: Language Group |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Count | Cumulative Count | Percent | Cumulative Percent |
| Indigenous | 765 | 765 | 100,0000 | 100,0000 |
| Missing | 0 | 765 | 0,0000 | 100,0000 |


| Category | Frequency table: Race |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Count | Cumulative Count | Percent | Cumulative Percent |
| African | 755 | 755 | 98,69281 | 98,6928 |
| Asian | 3 | 758 | 0,39216 | 99,0850 |
| Coloured | 2 | 760 | 0,26144 | 99,3464 |
| European | 2 | 762 | 0,26144 | 99,6078 |
| Missing | 3 | 765 | 0,39216 | 100,0000 |


| Variable | Descriptive Statistics: Age |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Mean | Std.Dev | Minimum | Maximum | N | No.cases <br> Missing |  |
| Age | 29,24730 | 11,28987 | 15,00000 | 64,00000 | 740 | 25 |  |

Histogram: Age


## Sample Composition: General Verbal Reasoning Test

| Category | Frequency table: Sex |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Count | Cumulative Count | Percent | Cumulative Percent |
| M | 351 | 351 | 46,18421 | 46,1842 |
| F | 406 | 757 | 53,42105 | 99,6053 |
| U | 3 | 760 | 0,39474 | 100,0000 |
| Missing | 0 | 760 | 0,00000 | 100,0000 |


| Category | Frequency table: Education |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Count <br> Count | Percent | Cumulative <br> Percent |  |
| Grade 12 | 251 | 251 | 33,02632 | 33,0263 |
| Post Graduate | 48 | 299 | 6,31579 | 3,3421 |
| Unknown | 3 | 302 | 0,39474 | 39,7368 |
| Tertiary | 253 | 555 | 33,28947 | 73,0263 |
| $<$ Matric | 115 | 670 | 15,13158 | 88,1579 |
| Missing | 90 | 760 | 11,84211 | 100,0000 |


| Category | Frequency table: Language |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Count | Cumulative Count | Percent | Cumulative Percent |
| Setswana | 760 | 760 | 100,0000 | 100,0000 |
| Missing | 0 | 760 | 0,0000 | 100,0000 |


| Category | Frequency table: Language Group |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Count | Cumulative Count | Percent | Cumulative Percent |
| Indigenous | 760 | 760 | 100,0000 | 100,0000 |
| Missing | 0 | 760 | 0,0000 | 100,0000 |


| Category | Frequency table: Race |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Count | Cumulative Count | Percent | Cumulative Percent |
| African | 750 | 750 | 98,68421 | 98,6842 |
| Asian | 3 | 753 | 0,39474 | 99,0789 |
| Coloured | 2 | 755 | 0,26316 | 99,3421 |
| European | 2 | 757 | 0,26316 | 99,6053 |
| Missing | 3 | 760 | 0,39474 | 100,0000 |


| Variable | Descriptive Statistics: Age |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  | Mean | Std.Dev | Minimum | Maximum | N | No.cases <br> Missing |  |  |
| Age | 29,23401 | 11,30454 | 15,00000 | 64,00000 | 735 | 25 |  |  |



## Internal Consistency Reliabilities for General Reasoning Test Battery Subtests

| Subtest | Cronbach Coefficient Alpha |  |
| :--- | :--- | :--- |
| General Abstract Reasoning Test |  | .78 |
| General Numerical Reasoning Test | .74 |  |
| General Verbal Reasoning Test |  | .74 |

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.

