|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |
|  | **Comprehension/Knowledge (Gc)** |  |
|  | Oral Vocabulary vs General Information |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation | .54 | .65 | .71 | .74 | .77 | .78 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 | 10 | 9 | 8 | 7 | 7 | 7 | 25 |
| 25 | 17 | 14 | 13 | 12 | 12 | 11 | 12.5 |
| 20 | 18 | 16 | 15 | 14 | 13 | 13 | 10 |
| 10 | 24 | 21 | 19 | 18 | 17 | 16 | 5 |
| 5 | 28 | 25 | 22 | 21 | 20 | 20 | 2.5 |
| 2 | 34 | 29 | 27 | 25 | 24 | 23 | 1 |
| 1 | 37 | 32 | 29 | 28 | 26 | 26 | .5 |
| .1 | 47 | 41 | 38 | 36 | 34 | 33 | .05 |
|  |  |  |  |  |  |  |  |
|  | **Fluid Reasoning (Gf)** |  |
|  | Number Series vs Concept Formation |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation |  | .46 | .42 | .50 | .48 | .51 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 |  | 11 | 11 | 10 | 11 | 10 | 25 |
| 25 |  | 18 | 19 | 17 | 18 | 17 | 12.5 |
| 20 |  | 20 | 21 | 19 | 20 | 19 | 10 |
| 10 |  | 26 | 27 | 25 | 25 | 25 | 5 |
| 5 |  | 31 | 32 | 29 | 30 | 29 | 2.5 |
| 2 |  | 36 | 38 | 35 | 36 | 35 | 1 |
| 1 |  | 40 | 42 | 39 | 39 | 38 | .5 |
| .1 |  | 51 | 53 | 50 | 50 | 49 | .05 |
|  |  |  |  |  |  |  |  |
|  | **Short-term Working Memory (Gwm)** |  |
|  |  Verbal Attention vs Numbers Revered |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation | .48 | .46 | .43 | .49 | .52 | .56 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 | 11 | 11 | 11 | 10 | 10 | 10 | 25 |
| 25 | 18 | 18 | 18 | 17 | 17 | 16 | 12.5 |
| 20 | 20 | 20 | 20 | 19 | 19 | 18 | 10 |
| 10 | 25 | 26 | 26 | 25 | 24 | 23 | 5 |
| 5 | 30 | 31 | 31 | 30 | 29 | 28 | 2.5 |
| 2 | 36 | 36 | 37 | 35 | 34 | 33 | 1 |
| 1 | 39 | 40 | 41 | 39 | 38 | 36 | .5 |
| .1 | 50 | 51 | 53 | 50 | 48 | 46 | .05 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |
|  | **Cognitive Processing Speed (Gs)** |  |
|  | Letter-Pattern Matching vs Pair Cancellation |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation |  | .58 | .59 | .58 | .56 | .60 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 |  | 9 | 9 | 9 | 10 | 9 | 25 |
| 25 |  | 16 | 16 | 16 | 16 | 15 | 12.5 |
| 20 |  | 18 | 17 | 18 | 18 | 17 | 10 |
| 10 |  | 23 | 22 | 23 | 23 | 22 | 5 |
| 5 |  | 27 | 27 | 27 | 28 | 26 | 2.5 |
| 2 |  | 32 | 32 | 32 | 33 | 31 | 1 |
| 1 |  | 35 | 35 | 35 | 36 | 35 | .5 |
| .1 |  | 45 | 45 | 45 | 46 | 44 | .05 |
|  |  |  |  |  |  |  |  |
|  | **Auditory Processing (Ga)** |  |
|  | Phonological Processing vs Nonword Repetition |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation | .34 | .43 | .34 | .36 | .37 | .43 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 | 12 | 11 | 12 | 12 | 12 | 11 | 25 |
| 25 | 20 | 18 | 20 | 20 | 19 | 18 | 12.5 |
| 20 | 22 | 20 | 22 | 22 | 22 | 20 | 10 |
| 10 | 28 | 26 | 28 | 28 | 28 | 26 | 5 |
| 5 | 34 | 31 | 34 | 33 | 33 | 31 | 2.5 |
| 2 | 40 | 37 | 40 | 40 | 39 | 37 | 1 |
| 1 | 44 | 41 | 44 | 44 | 43 | 41 | .5 |
| .1 | 57 | 53 | 57 | 56 | 56 | 53 | .05 |
|  |  |  |  |  |  |  |  |
|  | **Long-term Retrieval (Glr)** |  |
|  | Story Recall vs Visual-Auditory Learning |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation | .35 | .36 | .32 | .34 | .42 | .42 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 | 12 | 12 | 12 | 12 | 11 | 11 | 25 |
| 25 | 20 | 20 | 20 | 20 | 19 | 19 | 12.5 |
| 20 | 22 | 22 | 22 | 22 | 21 | 21 | 10 |
| 10 | 28 | 28 | 29 | 28 | 27 | 27 | 5 |
| 5 | 34 | 33 | 34 | 34 | 32 | 32 | 2.5 |
| 2 | 40 | 40 | 41 | 40 | 38 | 38 | 1 |
| 1 | 44 | 44 | 45 | 44 | 42 | 42 | .5 |
| .1 | 56 | 56 | 58 | 57 | 53 | 53 | .05 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |
|  | **Visual Processing (Gv)** |  |
|  | Visualization vs Picture Recognition |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation | .46 | .50 | .43 | .39 | .42 | .46 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 | 11 | 10 | 11 | 11 | 11 | 11 | 25 |
| 25 | 18 | 17 | 18 | 19 | 19 | 18 | 12.5 |
| 20 | 20 | 19 | 20 | 21 | 21 | 20 | 10 |
| 10 | 26 | 25 | 26 | 27 | 27 | 26 | 5 |
| 5 | 31 | 29 | 31 | 32 | 32 | 31 | 2.5 |
| 2 | 36 | 35 | 37 | 39 | 38 | 36 | 1 |
| 1 | 40 | 39 | 41 | 43 | 42 | 40 | .5 |
| .1 | 51 | 50 | 53 | 55 | 53 | 51 | .05 |
|  |  |  |  |  |  |  |  |
|  | **Quantitative Reasoning** |  |
|  | Number Series vs Analysis-Synthesis |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation |  | .43 | .43 | .46 | .46 | .50 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 |  | 11 | 11 | 11 | 11 | 10 | 25 |
| 25 |  | 18 | 18 | 18 | 18 | 17 | 12.5 |
| 20 |  | 20 | 20 | 20 | 20 | 19 | 10 |
| 10 |  | 26 | 26 | 26 | 26 | 25 | 5 |
| 5 |  | 31 | 31 | 31 | 31 | 29 | 2.5 |
| 2 |  | 37 | 37 | 36 | 36 | 35 | 1 |
| 1 |  | 41 | 41 | 40 | 40 | 39 | .5 |
| .1 |  | 53 | 53 | 51 | 51 | 50 | .05 |
|  |  |  |  |  |  |  |  |
|  | **Auditory Memory Span** |  |
|  | Memory for Words vs Sentence Repetition |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation | .45 | .46 | .48 | .49 | .48 | .54 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 | 11 | 11 | 11 | 10 | 11 | 10 | 25 |
| 25 | 18 | 18 | 18 | 17 | 18 | 17 | 12.5 |
| 20 | 20 | 20 | 20 | 19 | 20 | 18 | 10 |
| 10 | 26 | 26 | 25 | 25 | 25 | 24 | 5 |
| 5 | 31 | 31 | 30 | 30 | 30 | 28 | 2.5 |
| 2 | 37 | 36 | 36 | 35 | 36 | 34 | 1 |
| 1 | 41 | 40 | 39 | 39 | 39 | 37 | .5 |
| .1 | 52 | 51 | 50 | 50 | 50 | 47 | .05 |
|  |  |  |  |  |  |  |  |
|  | **Number Facility** |  |
|  | Numbers Reversed vs Number-Pattern Matching |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation | .42 | .38 | .31 | .36 | .35 | .42 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 | 11 | 12 | 12 | 12 | 12 | 11 | 25 |
| 25 | 19 | 19 | 20 | 20 | 20 | 19 | 12.5 |
| 20 | 21 | 21 | 23 | 22 | 22 | 21 | 10 |
| 10 | 27 | 28 | 29 | 28 | 28 | 27 | 5 |
| 5 | 32 | 33 | 35 | 33 | 34 | 32 | 2.5 |
| 2 | 38 | 39 | 41 | 40 | 40 | 38 | 1 |
| 1 | 42 | 43 | 45 | 44 | 44 | 42 | .5 |
| .1 | 53 | 55 | 58 | 56 | 56 | 53 | .05 |
|  |  |  |  |  |  |  |  |
|  | **Perceptual Speed** |  |
|  | Letter-Pattern Matching vs Number-Pattern Matching |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation |  | .64 | .60 | .57 | .59 | .63 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 |  | 9 | 9 | 10 | 9 | 9 | 25 |
| 25 |  | 15 | 15 | 16 | 16 | 15 | 12.5 |
| 20 |  | 16 | 17 | 18 | 17 | 17 | 10 |
| 10 |  | 21 | 22 | 23 | 22 | 21 | 5 |
| 5 |  | 25 | 26 | 27 | 27 | 25 | 2.5 |
| 2 |  | 30 | 31 | 32 | 32 | 30 | 1 |
| 1 |  | 33 | 35 | 36 | 35 | 33 | .5 |
| .1 |  | 42 | 44 | 46 | 45 | 43 | .05 |
|  |  |  |  |  |  |  |  |
|  | **Vocabulary** |  |
|  | Picture Vocabulary vs Oral Vocabulary |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation | .53 | .65 | .70 | .72 | .74 | .72 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 | 10 | 9 | 8 | 8 | 7 | 8 | 25 |
| 25 | 17 | 14 | 13 | 13 | 12 | 13 | 12.5 |
| 20 | 19 | 16 | 15 | 14 | 14 | 14 | 10 |
| 10 | 24 | 21 | 19 | 19 | 18 | 19 | 5 |
| 5 | 29 | 25 | 23 | 22 | 21 | 22 | 2.5 |
| 2 | 34 | 29 | 27 | 26 | 25 | 26 | 1 |
| 1 | 38 | 32 | 30 | 29 | 28 | 29 | .5 |
| .1 | 48 | 41 | 38 | 37 | 36 | 37 | .05 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |
|  | **Cognitive Efficacy** |  |
|  | Letter-Pattern Matching vs Numbers Reversed |  |
| Age |  3-5 |  6-8 |  9-13 | 14-19 | 20-39 | 40-90+ |  |
| Correlation |  | .47 | .41 | .45 | .44 | .51 |  |
| Percentage either direction |  |  |  |  |  |  | Percentage in a specific direction |
| 50 |  | 11 | 11 | 11 | 11 | 10 | 25 |
| 25 |  | 18 | 19 | 18 | 18 | 17 | 12.5 |
| 20 |  | 20 | 21 | 20 | 20 | 19 | 10 |
| 10 |  | 25 | 27 | 26 | 26 | 25 | 5 |
| 5 |  | 30 | 32 | 31 | 31 | 29 | 2.5 |
| 2 |  | 36 | 38 | 37 | 37 | 35 | 1 |
| 1 |  | 40 | 42 | 41 | 41 | 38 | .5 |
| .1 |  | 51 | 54 | 52 | 52 | 49 | .05 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| To use this table, find the column appropriate to the examinee's age. Locate the discrepancy that is just less than the one obtained by the examinee.  The first column in that same row gives the percentage of the population obtaining discrepancies as large as or larger than the located discrepancy. |
| For example, for 7-year-old examinees, an Oral Vocabulary - General Information discrepancy of 25 points would be found in approximately 5% of the population. |
| The method used to compute the discrepancy between scales that reflect the percentage of the population obtaining the discrepancy is as follow: |
| Discrepancy = Sd z square root(2-2rxy) |
| The first term is the standard deviation of the test (15), the second is the selected z value, and the last is the correlation between the two scales. |
| For example, for a 7-year-old child the discrepancy between the WJ IV Oral Vocabulary and General Information tests that represents 5% of the population is |
| 15 (1.96) square root(2-2(.65)) = 24.60 |
| 24.60 is then rounded to 25 to obtain the whole number difference |
|  |  |  |  |  |  |  |  |