|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Raw Scoreon Test | LogitMeasure | StandardError | Minimum measure for next level(must be less than Logit Measure to start the next level) | StatisticalLevel |
| 01…567…101112…1617…2223…27…30 | **-8.03**-6.68-4.18**-3.74**-3.29-1.77**-1.22**-0.71**0.85**1.17**2.71**3.03**4.55**7.23 | 1.881.100.670.660.670.750.730.690.570.560.560.570.701.86 | **-8.03**-8.03 + 2√(1.88²+1.10²) = -3.67   (> -6.68)-8.03 + 2√(1.88²+0.67²) = -4.04   (> -4.18)-8.03 + 2√(1.88²+0.67²) = **-4.05**   (< -3.74)-3.74 + 2√(0.66²+0.67²) = -1.86   (> -3.29)-3.74 + 2√(0.66²+0.75²) = -1.74   (> -1.77)-3.74 + 2√(0.66²+0.73²) = **-1.77**   (**<** -1.22)-1.22 + 2√(0.73²+0.69²) = 0.79   (> -0.71) -1.22 + 2√(0.73²+0.57²) = **0.63**   (< 0.85) 0.85 + 2√(0.57²+0.56²) = 2.45   (**>** 1.17)  0.85 + 2√(0.57²+0.56²) = **2.45**   (< 2.71) 2.71 + 2√(0.56²+0.57²) = 4.31   (> 3.03)2.71 + 2√(0.56²+0.70²) = **4.50**   (< 4.55)4.55 + 2√(0.70²+1.86²) = 8.52   (> 7.23)*Range-based precision = 62 / 1+62****= 0.97*** | 11112222333444555666 |

**Supplementary Figure 1.** Calculation of range-based precision for the Reading and Accessing Information subscale of the Chinese IVI, modeled on the description by Wright (2001).[1] Red font indicates the point on the test where the statistical level changes. For brevity, not all levels are provided and ‘…’ depicts the missing levels.

1. Wright, B., *Separation, Reliability and Skewed Distributions: Statistically Different Levels of Performance.* Rasch Measurment Transactions, 2001. **14**(4): p. 786.