

Tractatus Numericus II Statistical Report

Final update : May 8th, 2023

Tractatus Numericus II is a numerical test, which can be taken under no time restriction. It consists of 35 numerical sequences, which step-by-step tend to increase in complexity and difficulty. Knowledge required is set to bare minimum (addition, subtraction, multiplication, division); advanced mathematics aren't required and won't be of any help. In addition, sometimes sequences need to be encountered in a more abstract (as if one has to deal with simple symbols)– and even more culture-fair – way. Pattern recognition ability is the one required most in this test.

1-Fundamental Descriptive Statistics.

Mean and Median were calculated at 19.37 and 21, respectively. Standard deviation was calculated at 9.01 and standard error of measurement at 1.8. Lowest score was that of 0/35 and highest that of 33/35. Shapiro-Wilk test suggests (currently) that distribution of scores does not deviate significantly from normal ($W(24) = 0.95, p = 0.266$).

2-Reliability.

Cronbach's α is calculated at 0,94. Current sample (N=24) is not yet sufficient for precise estimations, however significant differences are not to be expected.

3-Correlation with standard supervised psychometric batteries

Following figures are provided according to relevant scores reported by several candidates. As one may easily notice, there is a pool of quite capable candidates, averaging an IQ over 140 (M=100, SD=15, >99% of total population). Correlation of Tractatus Numericus II with standard psychometric batteries is encouraging towards theoretical IQ estimation, as it provides a high positive correlation at every measure. Of course, more data would allow even safer conclusions to be drawn.

Test	Pairs (IQ range)	ρ	MIQ	MTest
Supervised	19 (129 - 170)	0,70	144,1	19,1
Supervised*	12 (129 - 170)	0,86	144,2	18,0

Standard tests used : WAIS, RAPM, CCFIT III, MAT, WPT, Unknown Mensa Entrance Test.

Total* : Ceiling scores excluded.

Supervised* : Ceiling scores excluded.

ρ : Spearman's Rho.

MIQ : Mean IQ (M=100, SD=15).

Mtest : Mean raw score on Tractatus Numericus II.

(Norm follows in the next page)

4-Norm

Presentation of Theoretical IQ (TIQ, M=100, SD=15) per raw score (RS) points follows.

RS	TIQ	RS	TIQ	RS	TIQ
3	<=120	14	136	25	154
4	<=120	15	138	26	156
5	121	16	139	27	158
6	123	17	141	28	159
7	124	18	143	29	161
8	126	19	144	30	163
9	128	20	146	31	164
10	129	21	148	32	166
11	131	22	149	33	170
12	133	23	151	34	175
13	134	24	153	35	184