

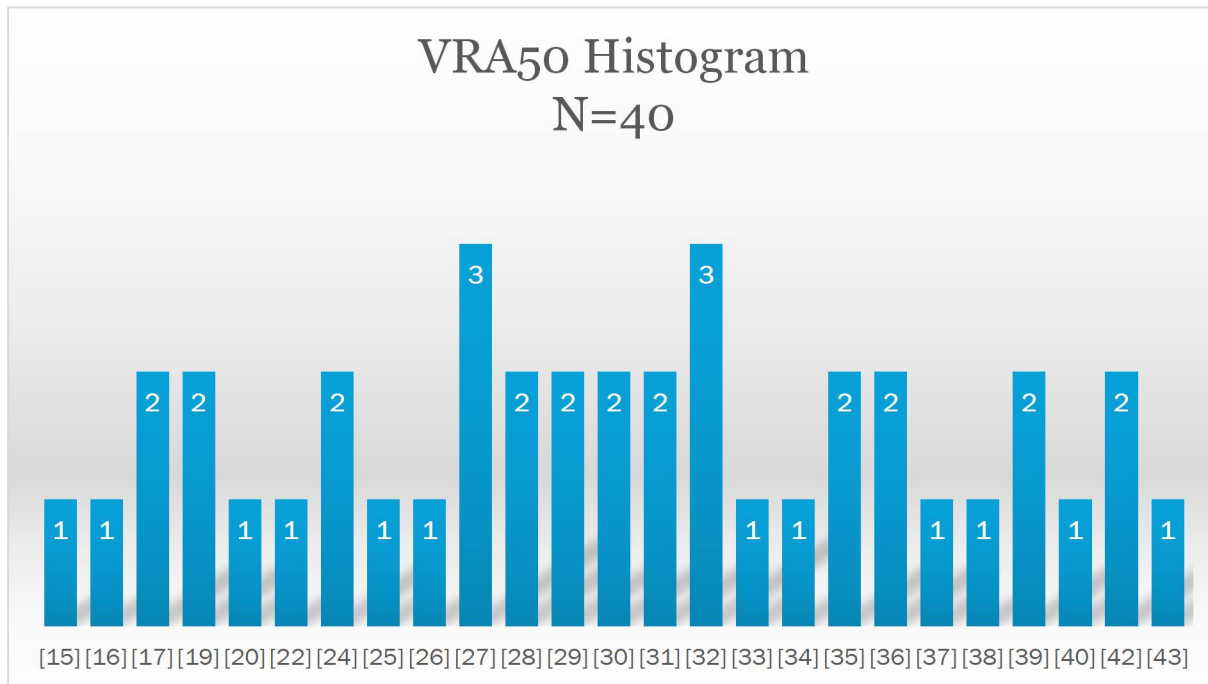
VRA50 Statistics Report

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1-Fundamental Descriptive Statistic.



Mean	29.65
Median	30
St. deviation	7.68
Variance	59.05
SEM (raw)	1.22
Skewness	-0.19
Kurtosis	-0.75

As expected, after Contest's end, mean raw score has decreased by almost 0.5 raw score point (30.125 to 29.65, N=32 to N=40) as sample grew. (Contest effect, as will be described later).

2-Native vs non-native English speakers' performance

Language sp.	N	Mean raw
Native	11	28.55
Non-native	29	30.07

Through observations on previous tests (CPE-V, CPE-A, former VRA series), items that showed neutral correlation to English-speaking level were chosen; that is, excellence on English language is of no importance when it comes to solving this test. Means described above prove this; of course, the higher mean raw score of non-native speakers is probably false (difference between two means tends to shorten). As sample grows, two means are expected to receive almost the same value.

3-Reliability.

Cronbach's α	0.95
Split-half	0.96

Excellent reliability measures.

4-Correlations with standard supervised psychometric batteries & tests by Dr. Jouve

At this point, it has to be mentioned that tests of Dr. X. Jouve were chosen due to the fact that they have been normed using quite large testing samples (most of them on $N > 300$, consisting mainly of high achieving individuals with mean score > 131 , $M = 100$, $SD = 15$ on standard psychometric batteries).

In addition, one may notice that both r (Pearson correlation coefficient) and ρ (Spearman's rho, Spearman's rank correlation coefficient) are presented. Although there are certain indications that high-range tests' candidates do "form" a normal distribution (according to their scores on standard psychometric batteries), a non-parametric measure as the Spearman's Rho (ρ) will be more reliable until then.

Test	Pairs (IQ range)	r	ρ	MIQ	MTest	P-Value
Total	49 (111 - 164)	0.54	0.58	141.39	29.67	<0.001
Total*	40 (111 - 164)	0.7	0.78	142.3	28.75	<0.001
Supervised	27 (111 - 164)	0.49	0.55	138.48	29.63	0.0029
Supervised*	18 (111 - 164)	0.84	0.86	139.06	27.56	<0.001
Dr. Jouve	22 (133 - 161)	0.77	0.76	144.95	29.73	<0.001
RAPM	4 (111 - 147)	0.8	0.8	134	29.25	-
WAIS	4 (131 - 164)	0.97	1	143.5	29	-
JCTI	6 (135 - 147)	0.66	0.46	141.83	29.83	-
C-09	5 (133 - 149)	0.96	1	142.2	29.6	-
JCCES	5 (140 - 154)	0.93	0.76	146.4	27.2	-

Standard tests used : RAPM (4), WAIS (4), Unknown Mensa Entrance Tests (5), IST2000R (2), IST70 (1), IBF-S (1), CFT20-R(1), CCFIT (1), FRT-B (1), OLSAT (1), RAIT (1), SPM (1), SPM-Plus (1), WPT (1), SBIS (1), ACT (1).

Dr. Jouve tests used : JCTI (6), C-09 (5), JCCES (5), C-10 (2), NVCPE-R (2), TLAP-R (2).

Total* : Ceiling scores excluded.

Supervised* : Ceiling scores excluded.

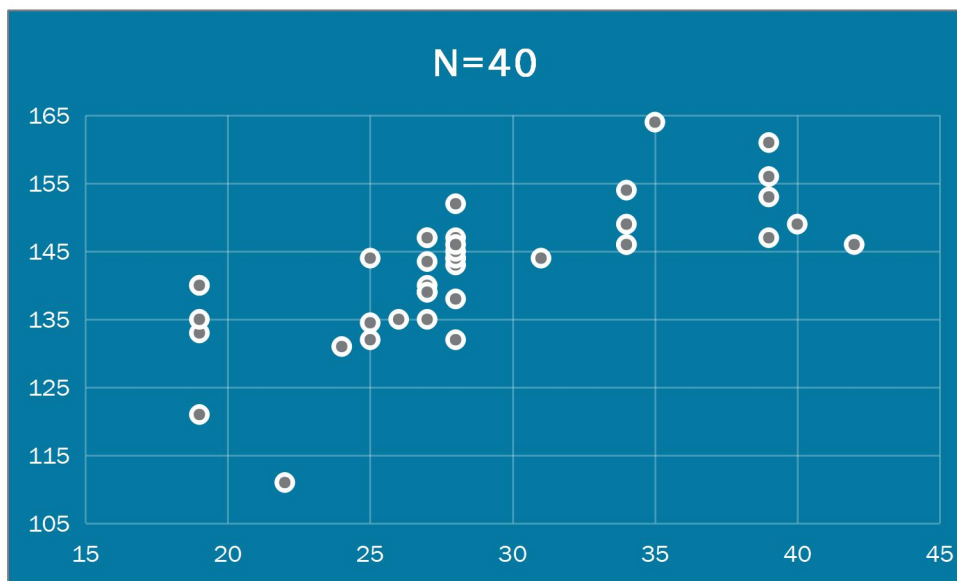
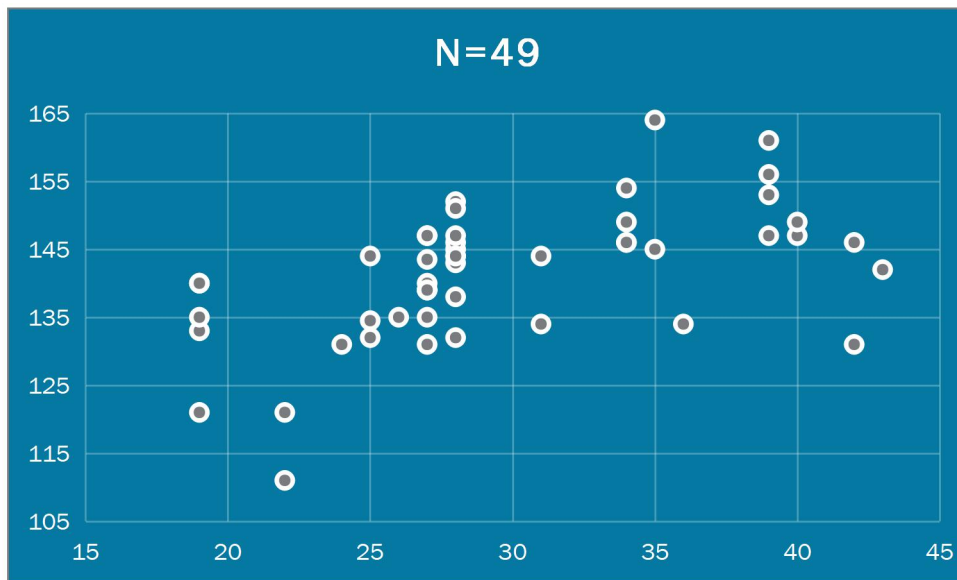
MIQ : Mean IQ ($M = 100$, $SD = 15$).

Mtest : Mean raw score on VRA50.

(-) as P-Value : Few observations - inaccurate values.

5-Scatterplots

Scatterplots on total (N=49) & total* (N=40) number of score pairs follow.



6-Norm

VRA50 seems to function quite well, as shown by excellent reliability and high positive correlation with standard psychometric batteries & tests by Dr. Jouve.

A well designed assessment tool has to be thorough (absence of large score gaps) and balanced (approachable by people trying such a test for the first time, giving them space to figure out how such a questionnaire functions as a whole and, at the same time, quite tricky for people more experienced in such tests). In this way, training effect diminishes as much as it can. VRA50 seems to fulfil these requirements.

As this test began to function as a Contest, next norm (N=60) will be of interest; it has been noticed that samples of Contests' participants <60 tend to differentiate slightly from average high-range

test takers' sample (usually extremely high performing individuals appear in higher frequency, something that I would call "Contest effect", as mentioned above).

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

Raw Score	IQ	Raw Score	IQ
15	<=115	33	147
16	117	34	148
17	120	35	151
18	122	36	153
19	124	37	155
20	126	38	156
21	128	39	158
22	129	40	161
23	131	41	163
24	132	42	165
25	133	43	168
26	135	44	172
27	137	45	<i>176</i>
28	140	46	<i>180</i>
29	141	47	<i>183</i>
30	143	48	<i>187</i>
31	144	49	<i>190</i>
32	145	50	<i>194</i>

Theoretical IQ values on raw scores >44 are currently rough approximations (obtained through extrapolation).