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ADKINS DC/LYERLY SB  
FACTOR ANALYSIS OF REASONING TESTS

CHAPEL HILL- UNC PRESS 1952

PEARSON R'S P.115

MALES- AGE 18-23 (75% 18-19) ARMY ENLISTED MEN

N=200

\*\*\* HIERARCHICAL FACTOR MATRIX, ORDER 1 \*\*\*

V#	1	2	3	4	5	6	7	8	9	10	H^2
FACTOR 1: O2;F1 FLUID INTELLIGENCE .....2F; ORDER 2											
FACTOR 2: O1;F1 INDUCTIVE REASONING .....I; ORDER 1											
1 +47 PROGRESSIVE MATRICES D.....	.62	.29	-.20	-.03	-.11	-.06	-.13	-.07	-.06	.10	.57
2 +46 PROGRESSIVE MATRICES C.....	.62	.27	-.19	-.03	-.03	.01	-.06	.02	-.16	.01	.52
3 +14 FIG. CLASS.IIB.....	.68	.24	-.00	-.06	-.02	-.24	-.05	.05	.21	-.15	.65
4 +45 PROGRESSIVE MATRICES B.....	.59	.22	-.11	.02	-.09	-.01	-.08	-.04	-.10	.05	.44
5 +11 FIGURE ANALOGIES.....	.72	.19	.02	.05	-.02	-.01	.01	-.03	.09	-.15	.59
6 +15 FIGURE SERIES.....	.67	.19	.02	-.03	.05	.02	.07	-.01	.11	.25	.57
7 +53 SERIES.....	.66	.19	-.03	.05	.01	-.02	-.01	-.01	-.07	-.13	.50
8 +59 VERBAL ANALOGIES.....	.72	.18	-.16	.24	.03	.00	.18	-.02	-.06	-.07	.68
9 +32 NUMBER SERIES.....	.64	.18	-.05	.02	.24	-.08	.05	-.02	-.08	.01	.51
10 +48 PROGRESSIVE MATRICES E.....	.67	.17	.06	-.06	.04	.06	.00	.04	-.09	.11	.51

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11	+21	INCOMPLETE OUTLINES.....	.74	.17	-.09	.17	.10	.07	.26	.00	.13	.01	.71
12	+12	FIG. CLASS.I.....	.56	.16	-.02	-.01	.05	-.02	.04	.03	.04	-.06	.35
13	+39	PICTURE ANALOGIES.....	.54	.16	-.09	.03	.18	.05	.07	-.06	-.01	.00	.37
14	+28	MIXED SERIES.....	.75	.15	.02	.09	.09	.13	.19	.03	.09	-.02	.67
15	+#8	DECODING.....	.68	.15	.01	.15	-.04	-.02	.13	-.02	.15	.02	.55
16	+10	FALSE PREMISES.....	.40	.15	-.16	.12	.01	-.09	-.01	-.05	-.12	-.07	.25
17	+36	OVERLAPPING CIRCLES.....	.54	.15	.05	-.00	.00	-.08	-.00	-.01	.06	.12	.34
18	+66	EDUCATION.....	.48	.15	-.17	.00	.20	.134	.305	.18	.11	-.11	.48
19	+25	MATRICES VI.....	.76	.14	.12	.03	.02	.12	.10	.05	-.08	.17	.68
20	+#6	CIRCLES.....	.58	.14	.06	.04	.10	-.19	.07	.03	.09	.09	.43
21	+13	FIG. CLASS. IIA.....	.64	.13	.18	.02	-.02	-.21	-.02	-.01	.23	-.09	.57
22	+65	WORD SQUARES.....	.70	.12	.04	.17	.02	-.05	.25	.07	.17	.10	.65
23	+#7	CONCLUSIONS.....	.33	.11	-.15	.08	.00	.05	.14	.08	-.01	-.09	.19
24	+22	LETTER SERIES.....	.64	.10	.04	.16	.12	-.02	.20	.01	-.02	.17	.53
25	+18	FORMS.....	.42	.06	.07	.07	.04	.02	.16	.09	.01	.07	.23

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FACTOR 3: O1;F2 VISUALIZATION .....VZ; ORDER 1

26	+#5	CARDS.....	.59	-.02	.45	.03	.03	.04	-.10	-.04	-.22	-.04	.61
27	+56	SURFACE DEVELOPMENT.....	.60	.06	.39	-.15	.02	.15	-.12	-.02	-.04	.03	.58
28	+26	MECHANICAL INFORMATION.....	.34	-.08	.37	.16	-.08	-.09	-.05	-.05	-.004	-.305	.40
29	+#3	BLOCK COUNTING.....	.59	.03	.36	-.04	.07	-.06	.01	.05	-.02	.20	.53
30	+43	PLANNING A CIRCUIT.....	.47	.01	.36	-.02	-.01	.04	-.11	-.07	-.00	-.09	.38
31	+#9	DESIGNS.....	.53	-.00	.32	.03	.03	.17	.03	-.06	.06	-.06	.43
32	+16	FIGURES.....	.56	.03	.32	.01	-.04	.06	-.08	.01	-.22	.03	.47
33	+38	PAPER FOLDING.....	.67	.09	.27	-.02	.05	.07	-.10	-.10	-.06	-.04	.56

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34	+27	MECHANICAL MOVEMENTS.....	.42	.02	.26	.03	-.12	.02	-.07	.01	.03	-.28	.35
35	+19	GEOMETRICAL PUZZLES.....	.60	.08	.24	.00	-.02	-.04	.02	.07	.03	-.02	.43
36	+#4	CAMOUFLAGED OUTLINES.....	.54	.08	.21	.02	-.17	.07	.03	.00	.22	.05	.43
37	+24	MAP PLANNING.....	.56	.08	.20	.01	-.10	-.03	.09	.12	.10	.12	.42
38	+35	NUMERICAL PUZZLES.....	.27	-.05	.15	.14	.09	-.01	.17	.10	-.08	-.13	.19

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V#	1	2	3	4	5	6	7	8	9	10	H^2
FACTOR 4: O1;F3 SEQUENTIAL REASONING .....RG; ORDER 1											
39 +#1 ABSURDITIES.....	.41	-.11	.09	.51	.02	.074	.415	-.04	-.03	.08	.63
40 +52 SENTENCE ORDER.....	.45	-.03	-.04	.47	-.01	.084	.475	-.01	.09	.20	.69
41 +49 READING.....	.53	-.01	-.02	.44	-.02	.174	.425	-.01	.06	.01	.69
42 +50 READING II.....	.52	.02	-.03	.42	-.01	-.044	.365	-.02	.08	.05	.59
43 +23 LOGICAL PUZZLES.....	.55	.01	.03	.38	.02	-.04	.28	.02	-.17	.08	.56
44 +62 VOCABULARY.....	.60	.03	-.03	.37	-.00	.214	.395	.04	.01	-.11	.71
45 +64 WORD SELECTION.....	.64	.06	.03	.32	-.02	.02	.18	-.01	-.18	-.08	.59
46 +60 VERBAL CLASS. I.....	.68	.09	.03	.28	.02	-.004	.305	-.03	.25	.08	.71
47 +61 VERBAL CLASS. II.....	.72	.13	.01	.23	-.05	-.01	.26	.02	.25	-.02	.71
48 +63 WORD-GROUP NAMING.....	.59	.04	.01	.22	.11	.104	.455	.22	.03	-.01	.66
49 +44 PRACTICAL SITUATIONS.....	.44	.08	-.03	.20	-.17	.05	.10	.03	-.04	-.14	.30
50 +37 PAINTED BLOCKS.....	.47	-.01	.15	.19	.19	-.10	.23	.09	-.08	-.03	.39

51 +#2 ARITHMETIC..... .61 .07 .06 .18 .19 -.10 .14 .01 -.17 -.04 .51

FACTOR 5: O1;F5 NUMERICAL FACILITY .....N; ORDER 1

52 +33 NUMERICAL OPERATIONS I..... .45 .02 -.00 .06 .56 .094 .365 .05 -.02 .04 .66

53 +34 NUMERICAL OPERATIONS II..... .61 .08 .04 .02 .52 .024 .305 .03 .08 .09 .75

54 +31 NIM..... .31 .03 .09 .01 .18 -.05 .03 -.01 -.05 -.02 .14

FACTOR 6: O1;F6 CLOSURE SPEED .....CS; ORDER 1

55 +54 ST. GESTALT COMPLETION..... .27 .01 .05 .00 -.17 .58 .22 .09 .05 .08 .50

56 +30 MUTILATED WORDS..... .23 -.07 .18 .03 .04 .46 .19 .01 .02 -.06 .34

57 +42 PICTURE-GROUP NAMING..... .40 -.01 .04 .17 -.10 .334 .365 .22 -.09 .04 .49

58 +29 MUTILATED PICTURES..... .36 .01 .15 .01 -.06 .33 .15 -.01 .044 .335 .40

FACTOR 7: O2;F2 CRYSTALLIZED INTELL. ....2C; ORDER 2

FACTOR 8: O1;F4 IDEATIONAL FLUENCY .....FI; ORDER 1

59 +58 TOPICS..... .17 -.01 -.02 .02 -.02 .01 .38 .594 -.355 .05 .64

60 +51 REASONS..... .16 .01 -.04 -.00 -.03 -.05 .45 .58 -.02 .02 .57

61 +57 THINGS ROUND..... .22 -.00 -.02 .06 .04 .04 .44 .42 .07 -.03 .43

62 +55 SUFFIXES.....4 .315 .00 .05 -.04 .084 .305 .31 .37 -.054 -.425 .60

63 +17 FIRST AND LAST LETTERS.....4 .355 .03 .04 .04 .06 .01 .25 .32 -.044 -.335 .40

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V#	1	2	3	4	5	6	7	8	9	10	H^2
FACTOR 9: O1;F8 UNINTERP'D (NO SALIENTS) .S&; ORDER 1											
FACTOR 10: O1;F7 PERCEPTUAL SPEED .....P; ORDER 1											
64 +40 PICTURE ARRANGEMENT.....4	.515	.04	.00	.28	.03	.23	.19	-.20	-.10	.44	.68
65 +41 PICTURE CLASSIFICATION.....4	.315	-.08	.21	.24	-.03	-.03	.22	.05	-.08	.31	.36
66 +20 IDENTICAL FORMS.....4	.435	.00	.22	.03	.04	.20	.25	.03	.25	.30	.49
SMSQ:19.43 .87 1.75 1.99 1.08 1.39 3.24 1.39 .95 1.46 33.56											

