

GUIL38

GUILFORD JP/LACEY JI (EDS) - PRINTED CLASSIFICATION TESTS
WASHINGTON: GPO 1947 (AAF AVIAT PSYCHOL REPORTS #5)
TABLE 13.20 P.334 PEARSON R'S: 'MECHANICAL BATTERY'
UNCLASSIFIED AVIATION TRAINEES

N=153

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

V#	1	2	3	4	5	6	H^2
FACTOR 1: O2;F1 GEN'L COGNITIVE ABILITY ..2G; ORDER 2							
FACTOR 2: O1;F4 MECHANICAL KNOWLEDGE .....MK; ORDER 1							
1 +#2 MECH. MOVEMENTS/CI904A .....	.66	.434	.395	-.07	.07	-.04	.79
2 +10 MECHANICAL COMPREHENSION/AC10B .....	.57	.37	.02	.25	.14	.05	.54
3 +#1 MECH. PRINCIPLES/CI903A .....	.61	.35	.13	.11	.28	.05	.61
4 +14 SAM COMPLEX COORDINATOR .....	.39	.27	.07	-.01	.04	.18	.26
FACTOR 3: O1;F5 VISUALIZATION .....VZ; ORDER 1							
5 +13 SPATIAL ORIENTATION/CP501A ...	.39	.00	.55	.06	-.01	-.01	.46
6 +16 SHORTEST PATH/CP608B .....	.40	.04	.42	-.00	-.05	.26	.40
7 +#6 PATTERN COMPREHENSION/CI803A .	.41	.12	.28	.20	-.08	.10	.32
FACTOR 4: O1;F2 VERBAL ABILITY .....V; ORDER 1							
8 +#9 READING COMPREHENSION/AC10D ..	.36	.02	.08	.69	-.05	-.02	.61
9 +#8 PHYSICS/CI801A .....	.46	.05	.15	.55	.10	.03	.55
10 +11 MECHANICAL COMPREHENSION/AC10D	.51	.24	.06	.31	.19	.03	.46
FACTOR 5: O1;F1 TECHNICAL KNOWLEDGE .....MK; ORDER 1							
11 +#4 TOOL FUNCTION/CI906A .....	.42	.04	.10	-.02	.70	.08	.69
12 +#3 MECH. INFORMATION/CI905A .....	.43	.20	-.07	.01	.62	.06	.62
13 +#5 MECH. FUNCTIONS/CI907A .....	.40	-.02	.24	.23	.34	.04	.38
FACTOR 6: O1;F3 LENGTH ESTIMATION .....LE; ORDER 1							
14 +15 NEAREST POINT/CP607B .....	.33	.16	-.06	-.07	-.03	.69	.63
15 +17 SHORTER LINE/CP606B .....	.23	-.06	.08	.03	.10	.49	.31
16 +#7 PATTERN ASSEMBLY/CP804A .....	.26	-.09	.28	-.05	.05	.45	.36
17 +12 ARITHMETIC REASONING/CI206B ..	.38	.14	.08	.29	-.19	.33	.40

SMSQ: 3.26 .69 .94 1.14 1.20 1.16 8.39

GUILFORD JP/LACEY JI (EDS) - PRINTED CLASSIFICATION TESTS
 WASHINGTON: GPO 1947 (AAF AVIAT PSYCHOL REPORTS #5)
 TABLE 13.20 P.334 PEARSON R'S: 'MECHANICAL BATTERY'
 UNCLASSIFIED AVIATION TRAINEES

N=153

(CONTINUED)

*** HIERARCHICAL FACTOR MATRIX, ORDER 2 ***

HF #	1ST-ORD FACTOR	1	H ²
	FACTOR 1: O2;F1 GEN'L COGNITIVE ABILITY ..2G; ORDER 2		
HF 2	O1;F4 MECHANICAL KNOWLEDGE .....MK	.70	.49
HF 3	O1;F5 VISUALIZATION .....VZ	.55	.31
HF 4	O1;F2 VERBAL ABILITY .....V	.42	.18
HF 5	O1;F1 TECHNICAL KNOWLEDGE .....MK	.38	.14
HF 6	O1;F3 LENGTH ESTIMATION .....LE	.35	.12
	SMSQ:	1.24	1.24