

ภาคผนวก ค

ตัวอย่างผลการวิเคราะห์การทำหน้าที่ต่างกันของข้อสอบด้วยวิธีปเตสท์

**SIBTEST OUTPUT**

number of items on test = 40  
 name of file for Ref. grp. scores = g:\40\FM500.txt  
 name of file for Focal grp. scores = g:\40\M500.txt  
 minimum no. of examinees per matching score cell = 2  
 number of runs for this data set = 40  
 number of examinees in Reference Group = 500  
 number of examinees in Focal group = 500

**Examinee Test Score Summary Statistics**

Reference Group: Mean = 20.77

Standard deviation = 8.21

Focal Group: Mean = 20.51

Standard deviation = 7.64

Standardized Score Difference = 0.03

**Item Statistics**

# = item number

p = proportion right on item (Classical Test Theory p-value)

r = point biserial (item score-test score correlation)

#: 1 2 3 4 5 6 7 8 9 10

p: 0.553 0.683 0.680 0.474 0.514 0.445 0.309 0.640 0.623 0.496

r: 0.337 0.411 0.445 0.356 0.427 0.440 0.420 0.434 0.497 0.438

#: 11 12 13 14 15 16 17 18 19 20

p: 0.537 0.578 0.516 0.464 0.577 0.578 0.527 0.465 0.557 0.429

r: 0.545 0.370 0.488 0.430 0.370 0.447 0.325 0.458 0.464 0.291

#: 21 22 23 24 25 26 27 28 29 30

p: 0.519 0.353 0.427 0.334 0.308 0.624 0.554 0.463 0.343 0.354

r: 0.473 0.300 0.328 0.370 0.408 0.380 0.407 0.483 0.309 0.290

#: 31 32 33 34 35 36 37 38 39 40

p: 0.699 0.547 0.613 0.421 0.570 0.692 0.661 0.554 0.567 0.392

r: 0.372 0.331 0.423 0.404 0.362 0.478 0.490 0.493 0.365 0.400

#### SUMMARY OF THE RUNS

p-value notation:

R denotes p-value for test of DIF/DBF against Ref. group

F denotes p-value for test of DIF/DBF against Foc. group

E denotes p-value for test of DIF/DBF against either the

Ref. or Foc. group.

#### NOTES:

MS/SSD = Matching Subtest Standardized Score Difference.

Standardized difference in mean observed scores  
between Reference group and Focal group on the  
matching subtest.

p-elim = proportion of Reference (R) and Focal (F) groups  
eliminated (not used) in SIBTEST calculations.

Positive Beta estimate indicates DIF/DBF favoring Ref. grp.

Negative Beta estimate indicates DIF/DBF favoring Foc. grp.

FLAG = error flag indicator. FLAG=0 indicates a normal  
successful completion of a SIBTEST run. All other values  
of FLAG come with short error messages.

## SIBTEST-pooled weighting

F

L

Run no.	Suspect Item Numbers	Subtest	Beta estimate	standard error	p-value	p-elim R	F	MS SSD	A	G
1	1		-0.027	0.031	0.373 E	.01	.01	0.03	0	0
2	2		0.046	0.028	0.101 E	.01	.01	0.03	0	0
3	3		0.002	0.028	0.938 E	.01	.01	0.03	0	0
4	4		-0.026	0.030	0.392 E	.01	.01	0.03	0	0
5	5		-0.010	0.030	0.740 E	.01	.01	0.03	0	0
6	6		-0.047	0.030	0.110 E	.01	.01	0.04	0	0
7	7		0.000	0.028	0.993 E	.01	.01	0.03	0	0
8	8		-0.019	0.028	0.502 E	.01	.01	0.04	0	0
9	9		0.041	0.027	0.130 E	.02	.01	0.03	0	0
10	10		-0.084	0.030	0.005 E	.01	.01	0.04	0	0
11	11		-0.038	0.028	0.177 E	.01	.01	0.04	0	0
12	12		0.003	0.030	0.931 E	.02	.01	0.03	0	0
13	13		0.093	0.029	0.001 E	.01	.01	0.02	0	0
14	14		0.014	0.029	0.642 E	.01	.01	0.03	0	0
15	15		-0.049	0.030	0.108 E	.01	.01	0.04	0	0
16	16		-0.088	0.029	0.003 E	.01	.01	0.04	0	0
17	17		-0.021	0.031	0.499 E	.01	.01	0.04	0	0
18	18		0.023	0.030	0.435 E	.01	.01	0.03	0	0
19	19		0.029	0.029	0.317 E	.01	.00	0.03	0	0
20	20		-0.011	0.031	0.729 E	.02	.01	0.03	0	0
21	21		-0.069	0.029	0.019 E	.01	.01	0.04	0	0
22	22		-0.046	0.030	0.126 E	.01	.01	0.04	0	0
23	23		-0.036	0.031	0.240 E	.01	.01	0.04	0	0
24	24		-0.052	0.029	0.072 E	.02	.01	0.04	0	0
25	25		-0.002	0.029	0.950 E	.00	.00	0.03	0	0
26	26		-0.009	0.030	0.761 E	.02	.01	0.03	0	0
27	27		0.067	0.030	0.028 E	.01	.01	0.02	0	0
28	28		0.093	0.029	0.001 E	.02	.01	0.02	0	0
29	29		0.054	0.030	0.068 E	.01	.01	0.03	0	0

30	30	-0.021	0.030	0.485 E .01 .01	0.03	0
31	31	0.034	0.028	0.219 E .01 .01	0.03	0
32	32	0.070	0.031	0.024 E .01 .01	0.02	0
33	33	0.005	0.029	0.872 E .02 .01	0.03	0
34	34	0.062	0.030	0.036 E .01 .01	0.02	0
35	35	0.059	0.030	0.049 E .00 .00	0.03	0
36	36	0.062	0.026	0.019 E .01 .01	0.03	0
37	37	-0.001	0.027	0.977 E .02 .01	0.03	0
38	38	0.060	0.028	0.034 E .01 .01	0.03	0
39	39	-0.099	0.030	0.001 E .01 .01	0.02	0
40	40	-0.073	0.029	0.011 E .01 .01	0.04	0

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