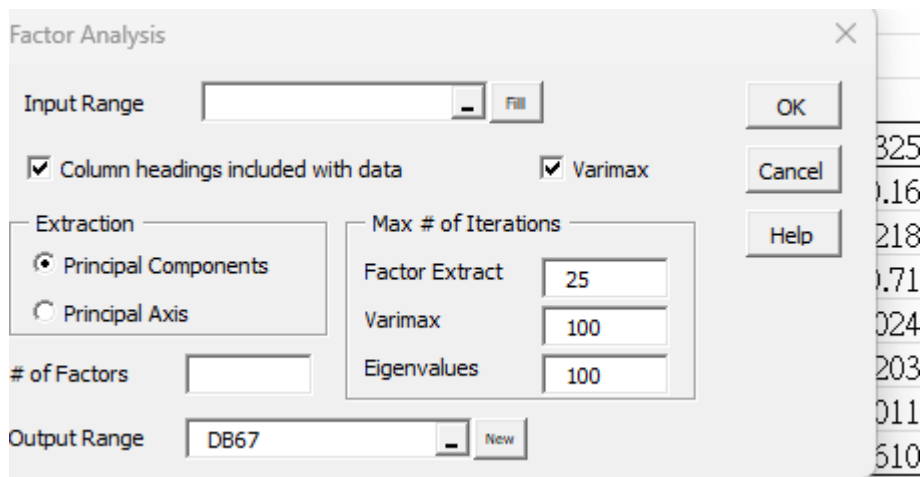
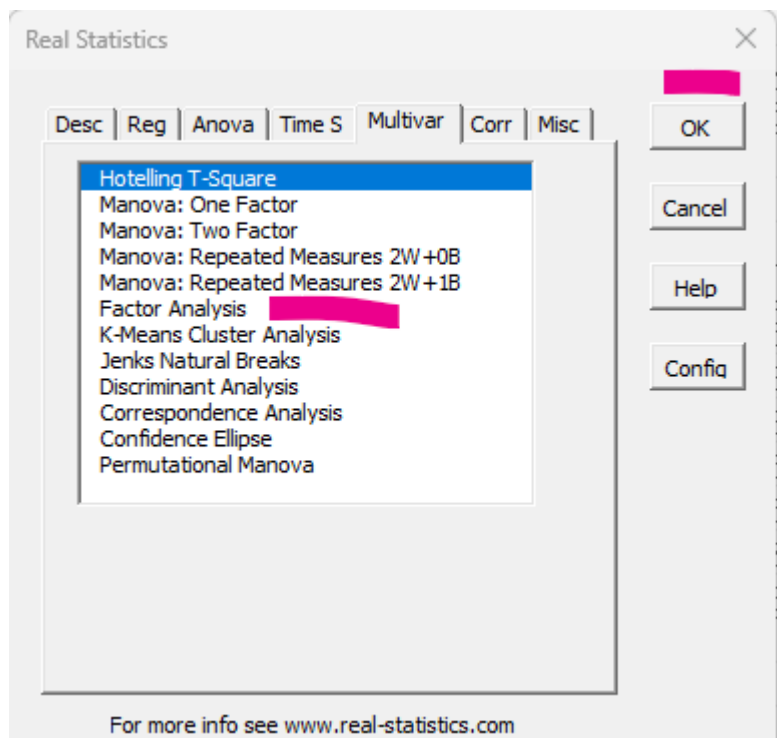


How to conduct this study



| | 1 | 2 | Commun | Specific |
|-----------------------------------|----------|----------|----------|----------|
| CS_Artificial Intelligence | -0.70113 | -0.63164 | 0.890559 | 0.109441 |
| CS_Science, Cybernetics | -0.41659 | -0.58288 | 0.513301 | 0.486699 |
| CS_Hardware & Architecture | -0.86963 | 0.211944 | 0.801179 | 0.198821 |
| CS_Information Systems | -0.95653 | 0.009055 | 0.915038 | 0.084962 |
| CS_Interdisciplinary Applications | -0.62433 | -0.50195 | 0.641734 | 0.358266 |
| CS_Software Engineering | -0.67592 | 0.66848 | 0.903734 | 0.096266 |
| CS_Theory & Methods | -0.79705 | 0.444459 | 0.832831 | 0.167169 |
| | 3.818288 | 1.680089 | 5.498377 | 1.501623 |

Factor Matrix (rotated Varimax)

| | 1 | 2 | Commun | Specific |
|-----------------------------------|----------|----------|----------|----------|
| CS_Artificial Intelligence | -0.18377 | -0.92563 | 0.890559 | 0.109441 |
| CS_Science, Cybernetics | 0.01502 | -0.71629 | 0.513301 | 0.486699 |
| CS_Hardware & Architecture | -0.82358 | -0.35057 | 0.801179 | 0.198821 |
| CS_Information Systems | -0.77179 | -0.56513 | 0.915038 | 0.084962 |
| CS_Interdisciplinary Applications | -0.19985 | -0.77575 | 0.641734 | 0.358266 |
| CS_Software Engineering | -0.94156 | 0.131119 | 0.903734 | 0.096266 |
| CS_Theory & Methods | -0.90456 | -0.12085 | 0.832831 | 0.167169 |
| | 3.052648 | 2.445729 | 5.498377 | 1.501623 |

Factor analysis in MS EXCEL



| Research area | Factor 1 | Factor2 | Commun | Specific |
|-----------------------------------|----------|---------|--------|----------|
| CS_Artificial Intelligence | | -0.93 | 0.89 | 0.11 |
| CS_Interdisciplinary Applications | | -0.78 | 0.64 | 0.36 |
| CS_Science, Cybernetics | | -0.72 | 0.51 | 0.49 |
| CS_Hardware & Architecture | -0.82 | | 0.80 | 0.20 |
| CS_Information Systems | -0.77 | | 0.92 | 0.08 |
| CS_Software Engineering | -0.94 | | 0.90 | 0.10 |
| CS_Theory & Methods | -0.90 | | 0.83 | 0.17 |
| Sumsquared eigenvalues | 3.05 | 2.45 | 5.50 | 1.50 |

Copy & Paste data

| Item1 | item2 | Item3 | Item4 | Item5 | Item6 | Item7 | Item8 |
|-------|--------|----------|-------|-------|-------|-------|-------|
| Item9 | Item10 | name | group | | | | |
| . | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 1 | Student1 | 1 | 1 | 1 | 1 | 0 |
| 1 | 0 | Student2 | 1 | 1 | 1 | 0 | 1 |
| 1 | 0 | Student3 | 1 | 1 | 1 | 0 | 1 |
| 0 | 0 | Student4 | 0 | 1 | 1 | 0 | 1 |
| 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 0 | 0 | Student5 | 1 | 1 | 1 | 0 | 1 |
| 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 |

Clear Back Refresh

Visual displays

KIDMAP person#

Bubble Size

Fit Types

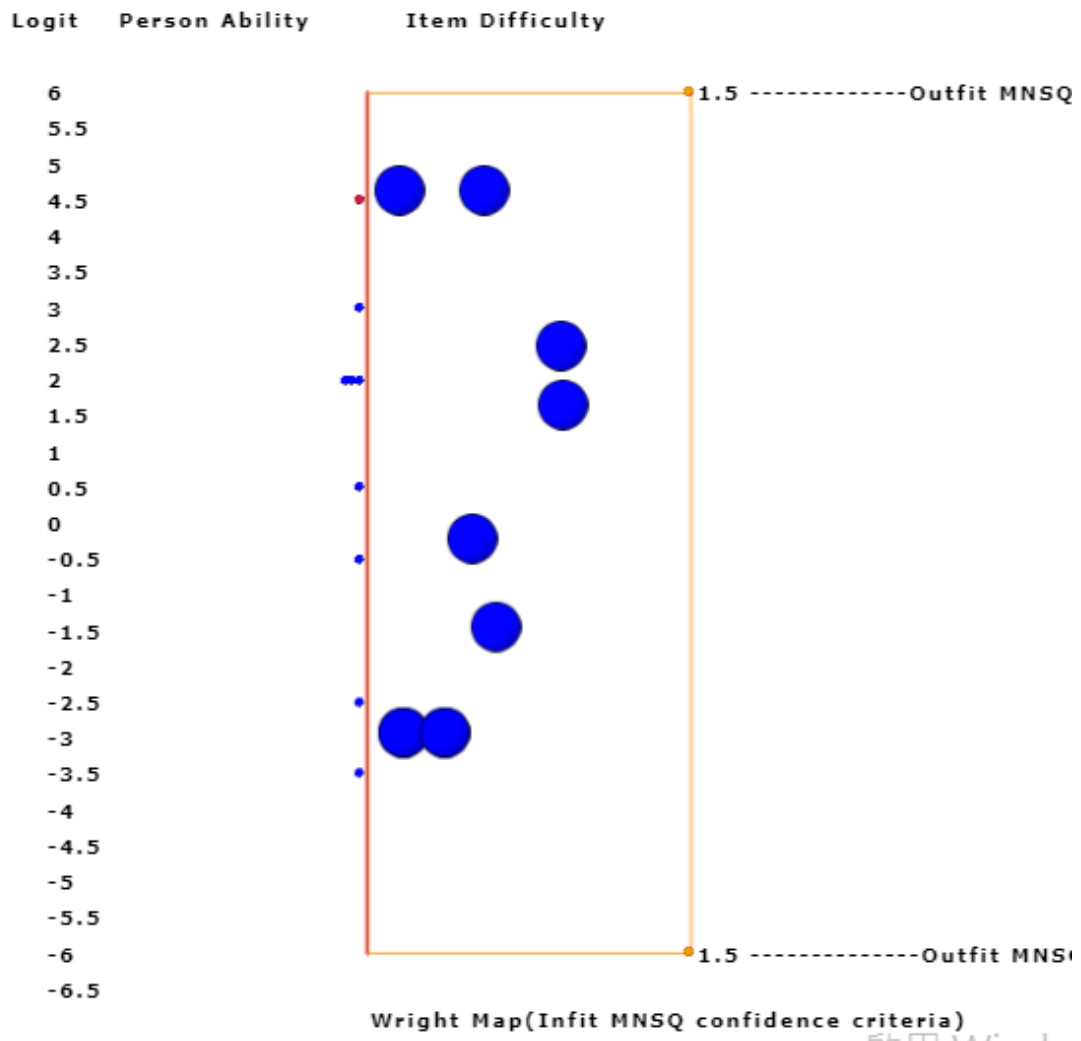
ICC Item#

Group#

Raschonline for Wrihgt Map (data from Linacre JM. All-Purpose Person Fit Statistic? Rasch Measurement Transactions 1997; 11(3): 582-3.)

| | A | B | C | D | E | F | G | H | I | J | K | L |
|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| 1 | Item1 | Item2 | Item3 | Item4 | Item5 | Item6 | Item7 | Item8 | Item9 | Item10 | Item11 | Item12 |
| 2 | | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 2 | 2 | 1 | 0 |
| 3 | | 3 | 1 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 1 |
| 4 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 |
| 5 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 0 |
| 6 | | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| 7 | | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 |
| 8 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 |
| 9 | | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| 10 | | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 1 | 2 | 1 |
| 11 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 12 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| 13 | | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 |
| 14 | | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 1 |
| 15 | | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 2 |
| 16 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 |
| 17 | | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 0 | 2 | 3 | 2 |
| 18 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 19 | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| 20 | | 0 | 3 | 2 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 1 |
| 21 | | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3 | 0 | 1 | 2 |
| 22 | | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 |
| 23 | | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 |

Copy & paste approaches



Copy & Paste data

| Item1 | item2 | Item3 | Item4 | Item5 | Item6 | Item7 | Item8 |
|-------|--------|----------|-------|-------|-------|-------|-------|
| Item9 | Item10 | name | group | | | | |
| . | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 1 | Student1 | | 1 | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 1 | 0 | Student2 | | 1 | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 0 | 0 | Student3 | | 1 | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 0 | 0 | Student4 | | 0 | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 0 | 0 | Student5 | | 0 | | | |
| 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 |

Visual displays

KIDMAP person#

Bubble Size

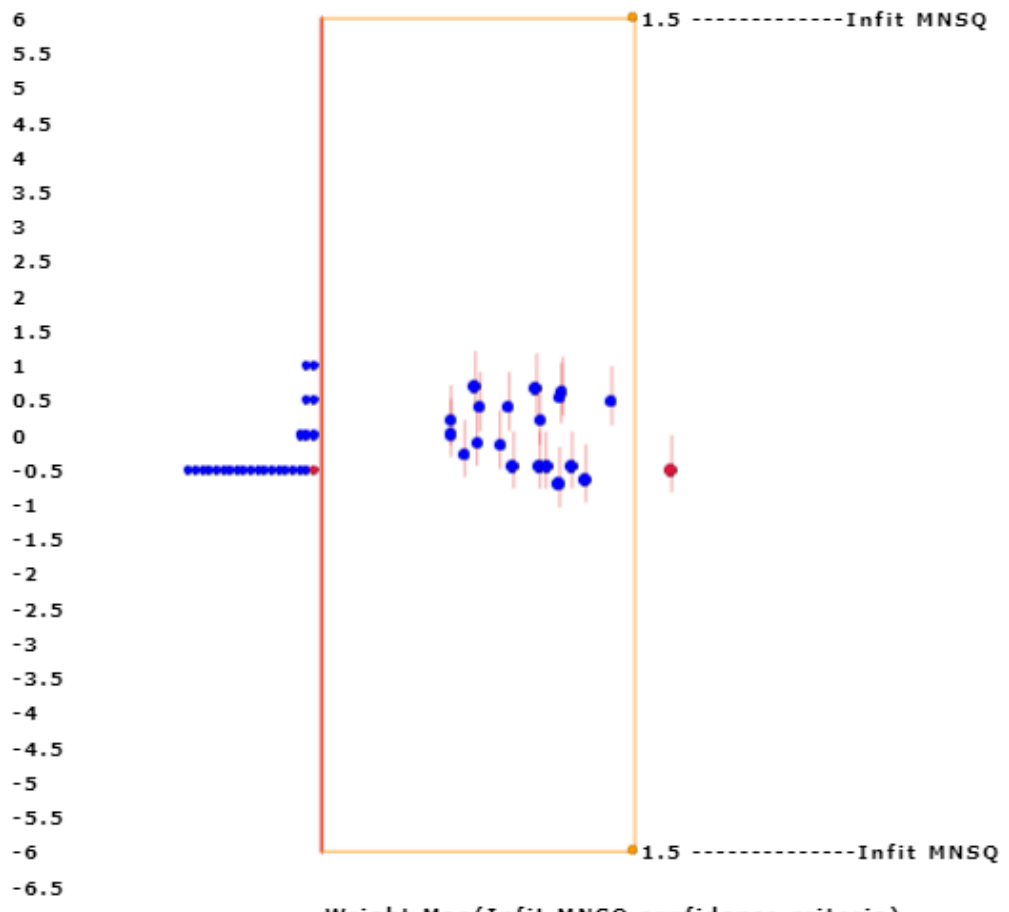
WrightMap(or ICC) dotted with dashes

adjustwright Wright move to left

Fit Types

ICC Item#

Group#



Wright Map(Infit MNSQ confidence criteria)

Kid#1Performance Ranking(#C03 at -0.19)

Person Ability Item Difficulty(bubbles sized by SE)

With dash on items vertically to denote the threshold difficulties

| | |
|-----------------------------|--|
| This For students | |
| Goals | |
| Read Me First | |
| Introduction & Data | |
| To that for teachers | |
| Data ready here | |
| RaschOnline | |
| Demos and Exercises | |
| MP4 for learning | |
| MP4 for learning | |
| Contents | |
| Contact | |
| Donate | |

[Back](#)
[Download data](#)

- 0.Data preparedness
- 1.Outfit/Infit MNSQ
- 2.Summary Table
- 3.Overall Fit Stat.
- 4.ANOVA
- 5.Wright Map
- 5.Wright Map(Groups)
- 7.KIDMAP
- 8.ICC_cat
- 9.Person fit plot(Outfit)
- 10.Person fit plot(Infit)
- 11.Measure/Outfit
- 12.Measure/Infit
- 13.Rawscore/Measure
- 14.Simulation data
- 15.DIF:Table
- 16.DIF:Graph
- 17.Copy & Paste

0.Data preparedness

Data Types(Dichotomous response. No missing)

<https://www.healthup.org.tw/raschonline/forstudents.htm#section-7>

Copy & Paste data

| Item1 | Item2 | Item3 | Item4 | Item5 | Item6 | Item7 | Item8 |
|-------|--------|--------|--------|----------|--------|--------|-------|
| Item9 | Item10 | Item11 | Item12 | Item13 | Item14 | Item15 | Item1 |
| 6 | Item17 | Item18 | Item19 | Item20 | name | group | |
| 3 | 3 | 3 | 3 | 3 | 1 | 3 | 2 |
| 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 1 | 1 | modelled | | 0 | |
| 3 | 1 | 3 | 3 | 2 | 3 | 3 | 2 |
| 3 | 2 | 1 | 2 | 2 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | modelled | | 0 | |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 |
| 1 | 2 | 2 | 3 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | modelled | | 0 | |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 |
| 1 | 1 | 0 | 0 | 1 | 0 | 2 | 0 |

Clear Back Refresh

Visual displays

KIDMAP person#

Bubble Size

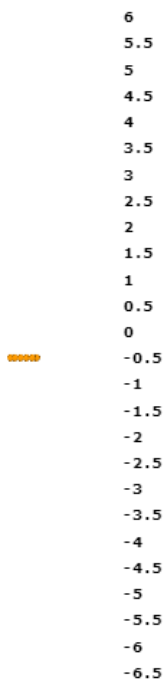
Fit Types

ICC Item#

Group#



Group0

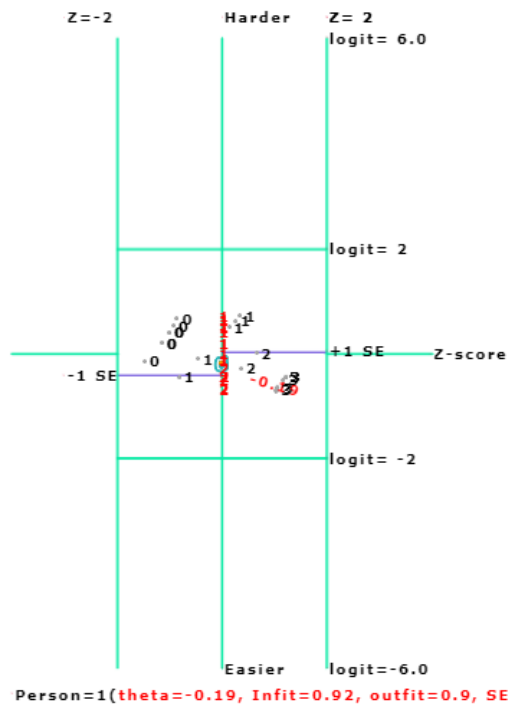


Grade of person 1:



0% US:

logit on y-axis



Item#

16 17 18 19

9 11 13 14

3 5 6 7 8 10

1 2 4

