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//
// WINMIRA 2001 1.45
// (c) 2000,2001 by Matthias von Davier
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//
// date of analysis: 03.11.2009 time : 22:39:29
//
```

Filenames:

```
data: C:\Program Files\Winmira 2001\data\Kft.dat
output: C:\Program Files\Winmira 2001\data\Kft.OU8
patterns: C:\Program Files\Winmira 2001\data\Kft.PAT
```

```
number of persons      :    300
number of items       :      5
number of classes      :      2
max. number of iterations :    250
accuracy criterion     : 0.0005
random start value     :   4321
```

item labels and sample frequencies:

no.	label	n of cats	categories		N
			0	1	
1	VAR1	2	105	195	300
2	VAR2	2	125	175	300
3	VAR3	2	157	143	300
4	VAR4	2	187	113	300
5	VAR5	2	206	94	300

```
saturated likelihood      :    -830.3929
number of different patterns :      30
number of possible patterns :      32
```

Number of iterations needed: 37

fitted model: (LCA) Latent Class Analysis: class-independent thresholds:

according to the ordinal (partial credit) model in 2 latent classes.

Classes are sorted by class size!

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Final estimates in CLASS 1 of 2 with size 0.53791
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expected category frequencies and item scores:

Item label	Item's		relative category frequencies	
	Score	Stdev	0	1
VAR1	0.90	0.30	0.102	0.898
VAR2	0.93	0.25	0.067	0.933
VAR3	0.74	0.44	0.256	0.744
VAR4	0.66	0.47	0.336	0.664
VAR5	0.48	0.50	0.518	0.482

```
Sum: | 3.72
```

threshold parameters: ordinal (partial credit) model

item label	item location	threshold parameters

VAR1		-2.18001
VAR2		-2.63564
VAR3		-1.06849
VAR4		-0.68340
VAR5		0.07036

Final estimates in CLASS 2 of 2 with size 0.46209
=====

expected category frequencies and item scores:

Item label	Item`s		relative category	
	Score	Stdev	frequencies	
			0	1
VAR1	0.36	0.48	0.639	0.361
VAR2	0.18	0.38	0.824	0.176
VAR3	0.17	0.37	0.835	0.165
VAR4	0.04	0.20	0.958	0.042
VAR5	0.12	0.32	0.883	0.117
Sum:	0.86			

threshold parameters: ordinal (partial credit) model

item label	item location	threshold parameters
VAR1	0.57192	
VAR2	1.54264	
VAR3	1.62070	
VAR4	3.13697	
VAR5	2.02595	

class independent item parameters (LACORD models 1-4)
threshold parameters: ordinal (partial credit) model

item label	threshold parameters
	1
VAR1	-2.180
VAR2	-2.636
VAR3	-1.068
VAR4	-0.683
VAR5	0.070

person fit index descriptives:

mean	:	-0.0918055
std.dev.	:	1.0228835
skewness	:	-0.6616839
kurtosis	:	-0.5615556

statistics of expected class membership:

class	exp. size	mean prob.	1	2
1	0.500	0.966	0.966	0.034
2	0.500	0.890	0.110	0.890

Goodness of fit statistics:

	estimated model	saturated model
Log-Likelihood	-850.55	-830.39
Number of parameters	11	31
geom. mean likelihood	0.56720616	0.57487927

Information Criteria:

AIC-Index	:	1723.10	1722.79
BIC-Index	:	1763.84	1837.60
CAIC-Index	:	1774.84	1868.60

Power Divergence GoF statistics:

		emp. value	chi-square p-value
Cressie Read	:	38.63	p= 0.0074
Pearson Chisquare	:	38.71	p= 0.0072

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Likelihood ratio	:	40.31	p= 0.0046
Freeman-Tukey Chi^2	:	45.60	p= 0.0009
Degrees of freedom	:	20	

WARNING: Number of cells is larger than number of different patterns!!!

obs.patterns/cells = 0.937500000000000000
number of zero cells = 2

The data might be very sparse, please do not use the
chi square p-value approximation for the Power Divergence
Goodness of Fit Statistics.
Consider to use the parametric bootstrap procedure instead.
In addition, several start values should be used
(see defaults menu) in order to examine the occurrence
of local likelihood maxima.