

Kaiser-Meyer-Olkin Sampling Adequacy

Standalone verified Python analysis

Test: Kaiser-Meyer-Olkin Sampling Adequacy

Design: Overall and item-level common-variance adequacy based on correlations versus partial correlations.

Variables: G1, G2, G3, famrel, freetime, goout

Null hypothesis: The squared partial correlations are not smaller than the squared zero-order correlations.

Formula: $KMO = \frac{\sum r_{ij}^2}{[\sum r_{ij}^2 + \sum p_{ij}^2]}$.

Source rows: 649

Calculated metrics:

overall_kmo: 0.7319770330640147

minimum_item_kmo: 0.5672563543432276

maximum_item_kmo: 0.8496197982847344

variables: 6

n_cases: 649

Independent reference values:

overall_kmo: 0.7319770330640147

minimum_item_kmo: 0.5672563543432276

maximum_item_kmo: 0.8496197982847344

variables: 6

n_cases: 649

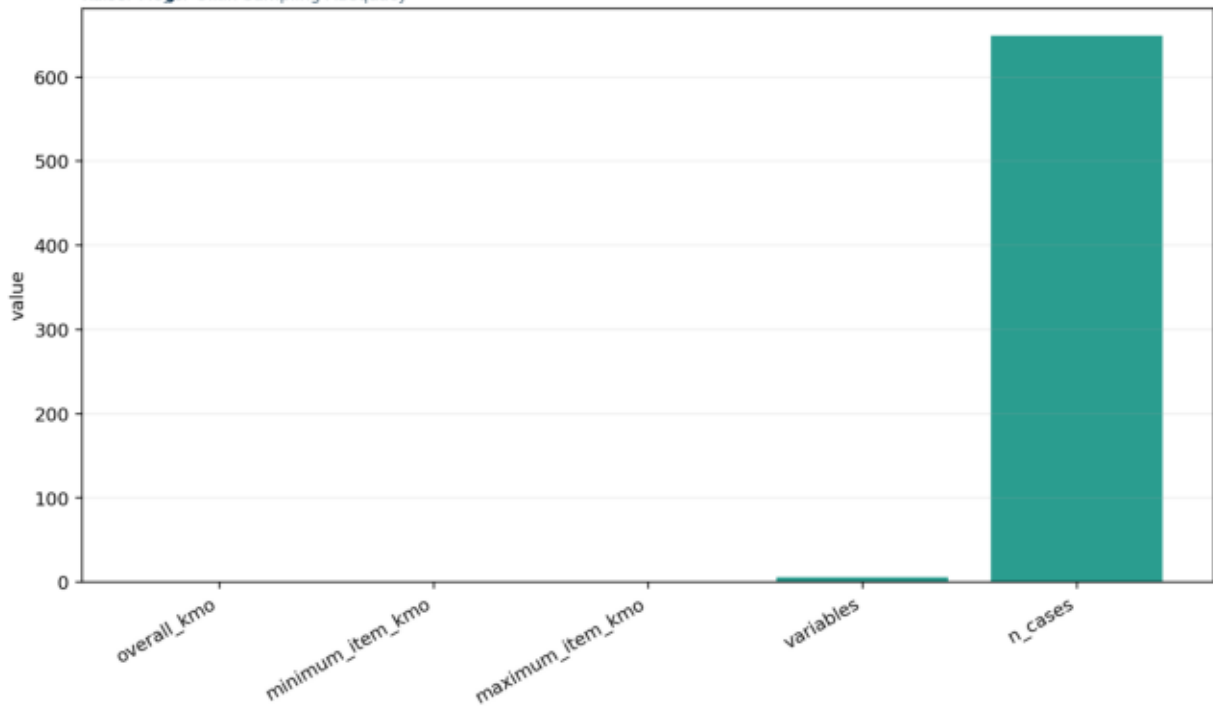
Interpretation:

KMO compares squared zero-order correlations with squared partial correlations.

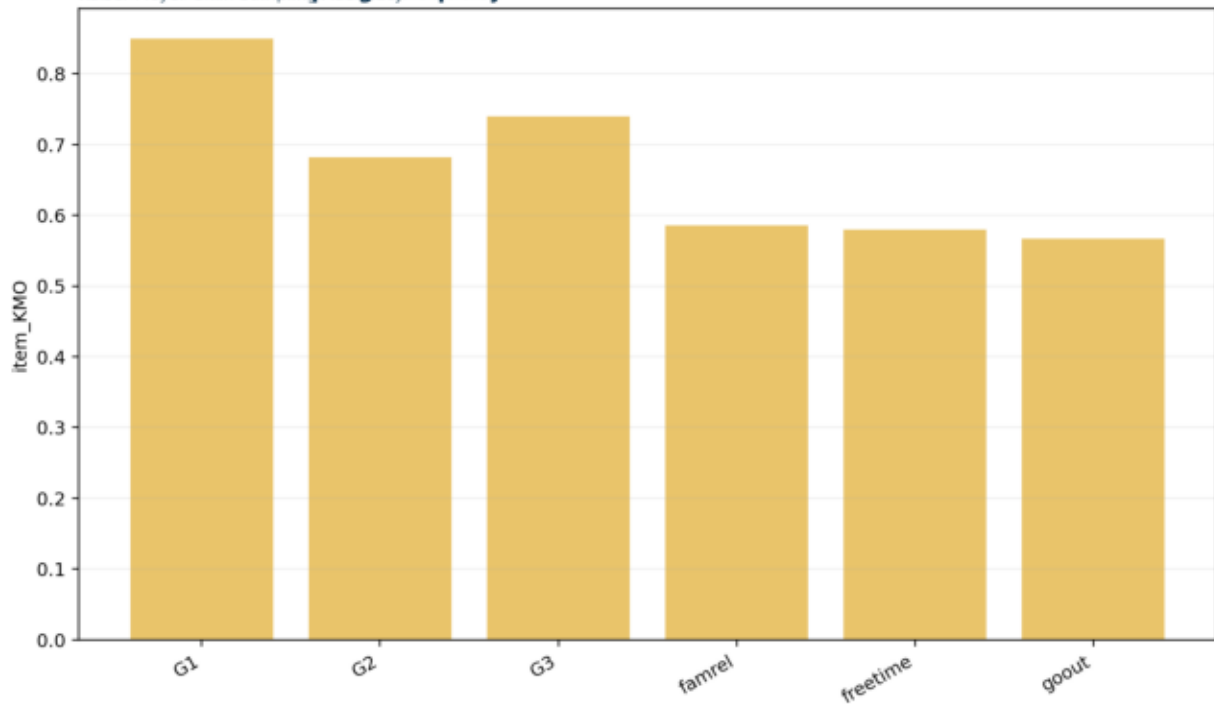
Overall KMO=0.731977.

Primary Metrics

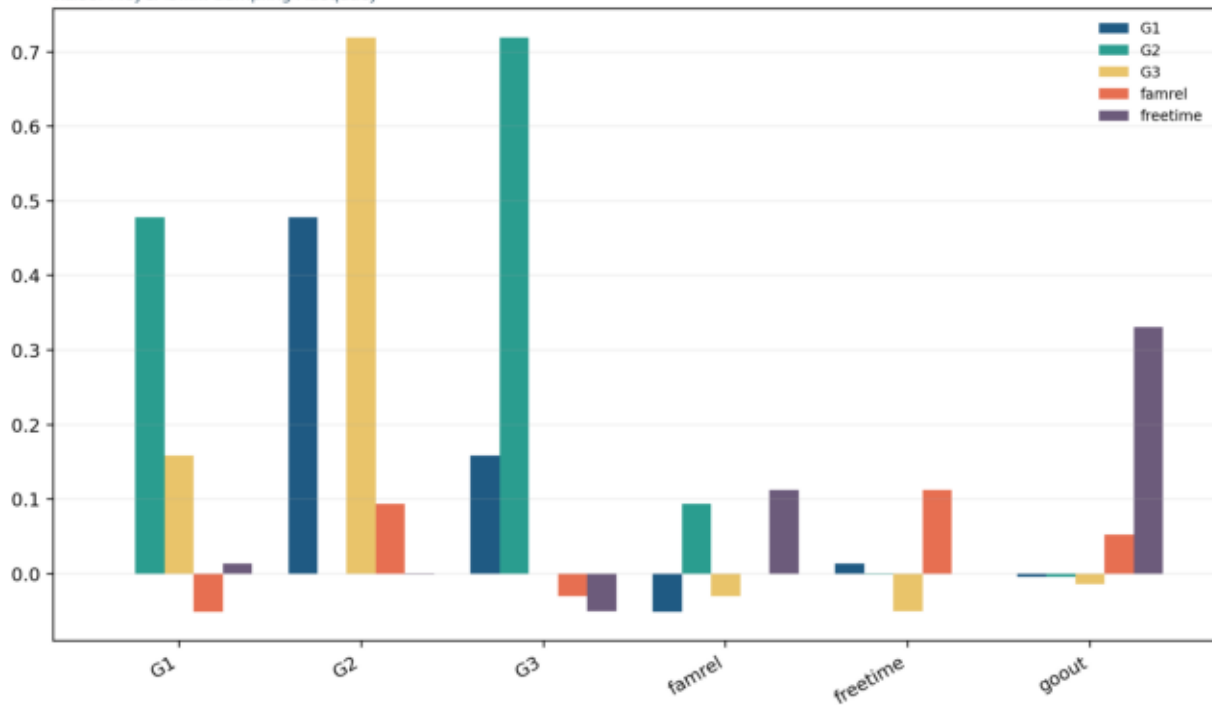
Case Number Over Sampling Adequacy



Item Measure Sampling Adequacy

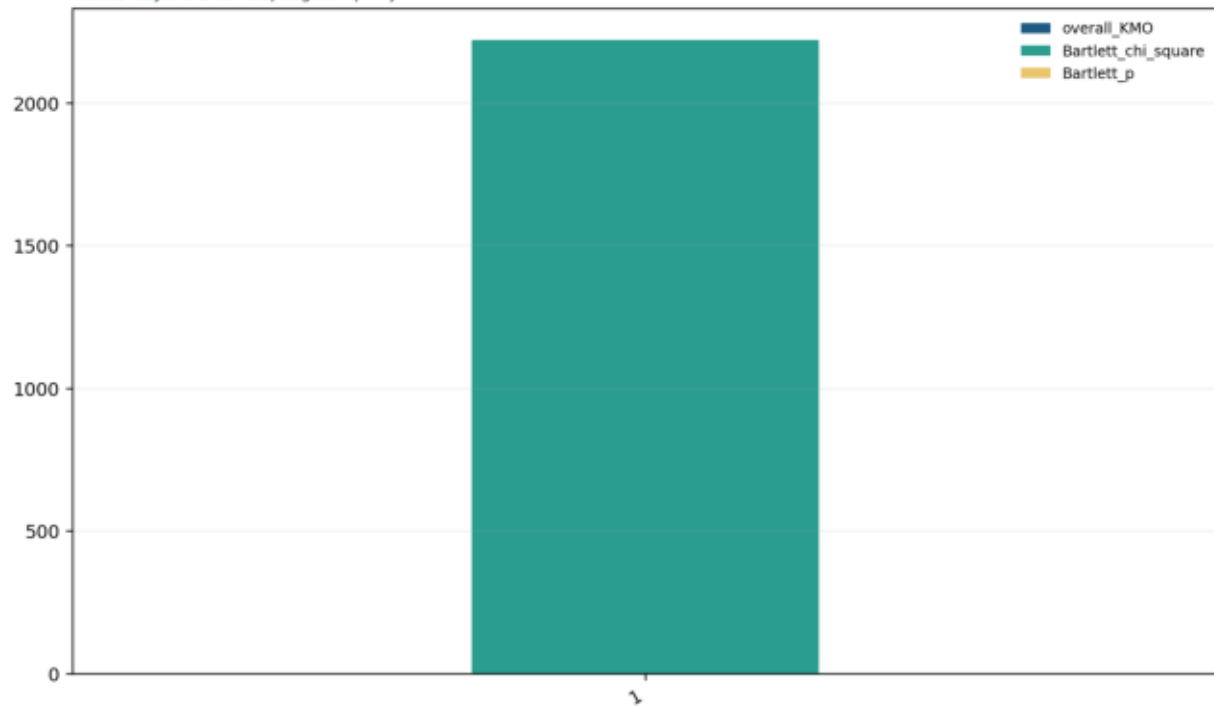


Partial Correlation Matrix

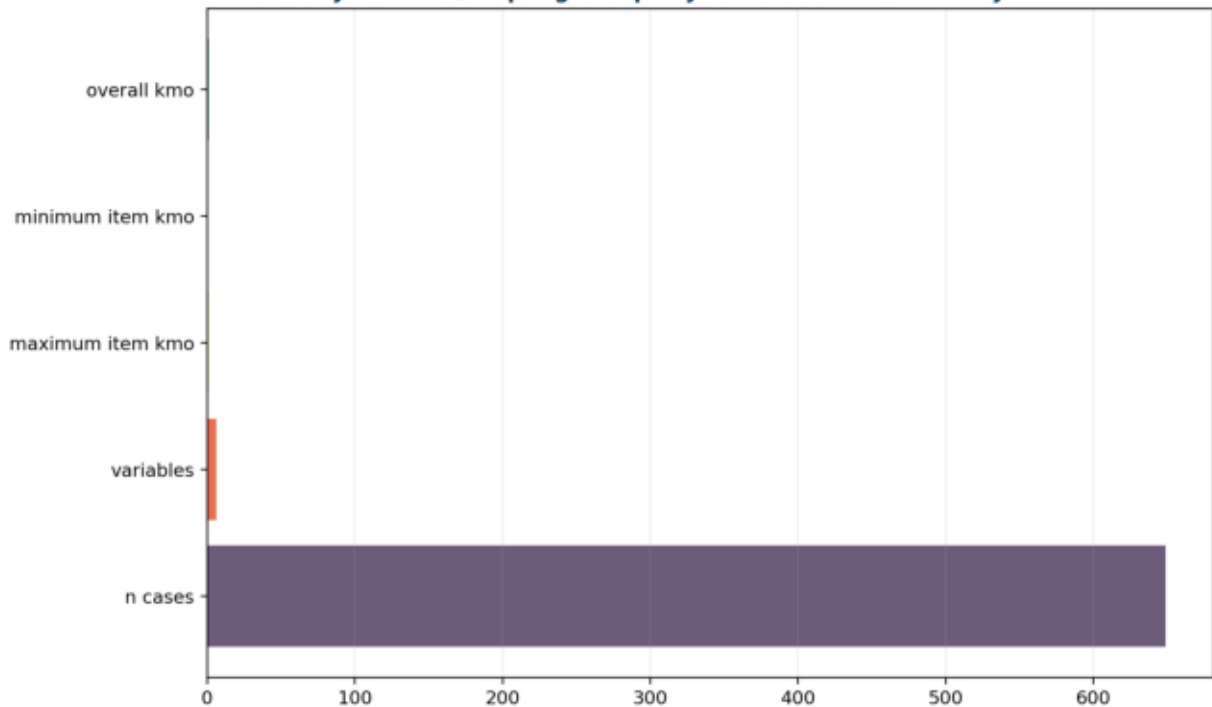


Kmo Bartlett's Context

equacy



Kaiser-Meyer-Olkin Sampling Adequacy verified result summary



Primary Metrics

metric	value
overall_kmo	0.731977
minimum_item_kmo	0.567256
maximum_item_kmo	0.84962
variables	6
n_cases	649

Item Measure Sampling Adequacy

item	item_KMO
G1	0.84962
G2	0.681881
G3	0.73975
famrel	0.585515
freetime	0.579298
goout	0.567256

Partial Correlation Matrix

item	G1	G2	G3	famrel	freetime	goout
G1	0	0.477758	0.158681	-0.0513881	0.0135254	-0.00436476
G2	0.477758	0	0.719509	0.093375	-0.000787235	-0.00397011
G3	0.158681	0.719509	0	-0.030204	-0.0502355	-0.0137921
famrel	-0.0513881	0.093375	-0.030204	0	0.112662	0.0525414
freetime	0.0135254	-0.000787235	-0.0502355	0.112662	0	0.33095
goout	-0.00436476	-0.00397011	-0.0137921	0.0525414	0.33095	0

Kmo Bartlett Context

overall_KMO	Bartlett_chi_square	Bartlett_p
0.731977	2220.63	0