Intraclass Correlation Coefficient (ICC)

Rating / measurement columns: G1, G2, G3
Complete subjects used: 649
Number of ratings/measurements: 3
Grand mean: 11.6251

ANOVA components:

source	sum_of_squares	df	mean_square	f_value	p_value
Subjects / targets	15606.296867	648	24.083791	20.245973	0.000000e+00
Raters / measurements	86.330765	2	43.165383	36.286860	4.637136e-16
Residual / interaction	1541.669235	1296	1.189560	NaN	NaN
Total	17234.296867	1946	NaN	NaN	NaN

ICC model results:

icc_type	model	definition	icc_value	recommended_use	interpretation	bootstrap_ci95_lower	bootstrap_ci95_upper	bootstrap_replicates
ICC(1,1)	One-way random effects	Single rating, absolute agreement	0.858504	Use when each subject is rated by a random subset or raters are exchangeable.	Good reliability	0.833435	0.882062	1000
ICC(1,k)	One-way random effects	Average of 3 ratings, absolute agreement	0.947922	Use for reliability of the mean of all available repeated scores under one-way random assumptions.	Excellent reliability	0.937543	0.957333	1000
ICC(2,1)	Two-way random effects	Single rating, absolute agreement	0.858847	Use when both subjects and raters/measurements are random and absolute agreement matters.	Good reliability	0.833928	0.882389	1000
ICC(2,k)	Two-way random effects	Average of 3 ratings, absolute agreement	0.948061	Use for reliability of the average score when raters/measurements generalize to a wider population.	Excellent reliability	0.937751	0.957461	1000
ICC(3,1)	Two-way mixed effects	Single rating, consistency	0.865144	Use when the same fixed raters/measurements are used and systematic mean differences are not treated as error.	Good reliability	0.840781	0.890617	1000
ICC(3,k)	Two-way mixed effects	Average of 3 ratings, consistency	0.950607	Use for reliability of the average fixed-measure score; common for G1, G2, G3 consistency.	Excellent reliability	0.940624	0.960671	1000

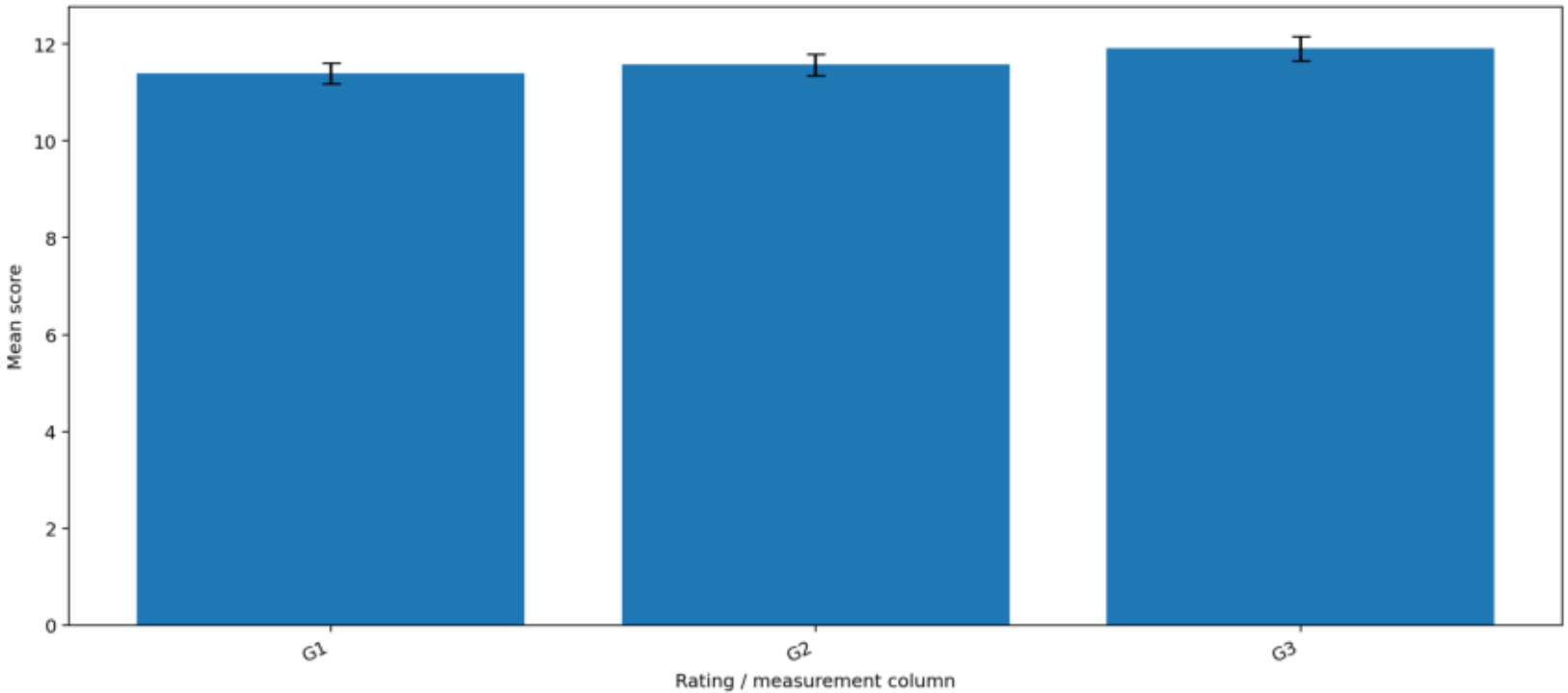
Bootstrap 95% confidence intervals:

icc_type	bootstrap_ci95_lower	bootstrap_ci95_upper	bootstrap_replicates
ICC(1,1)	0.833435	0.882062	1000
ICC(1,k)	0.937543	0.957333	1000
ICC(2,1)	0.833928	0.882389	1000
ICC(2,k)	0.937751	0.957461	1000
ICC(3,1)	0.840781	0.890617	1000
ICC(3,k)	0.940624	0.960671	1000

Interpretation guide: < .50 poor, .50-.75 moderate, .75-.90 good, >= .90 excellent.

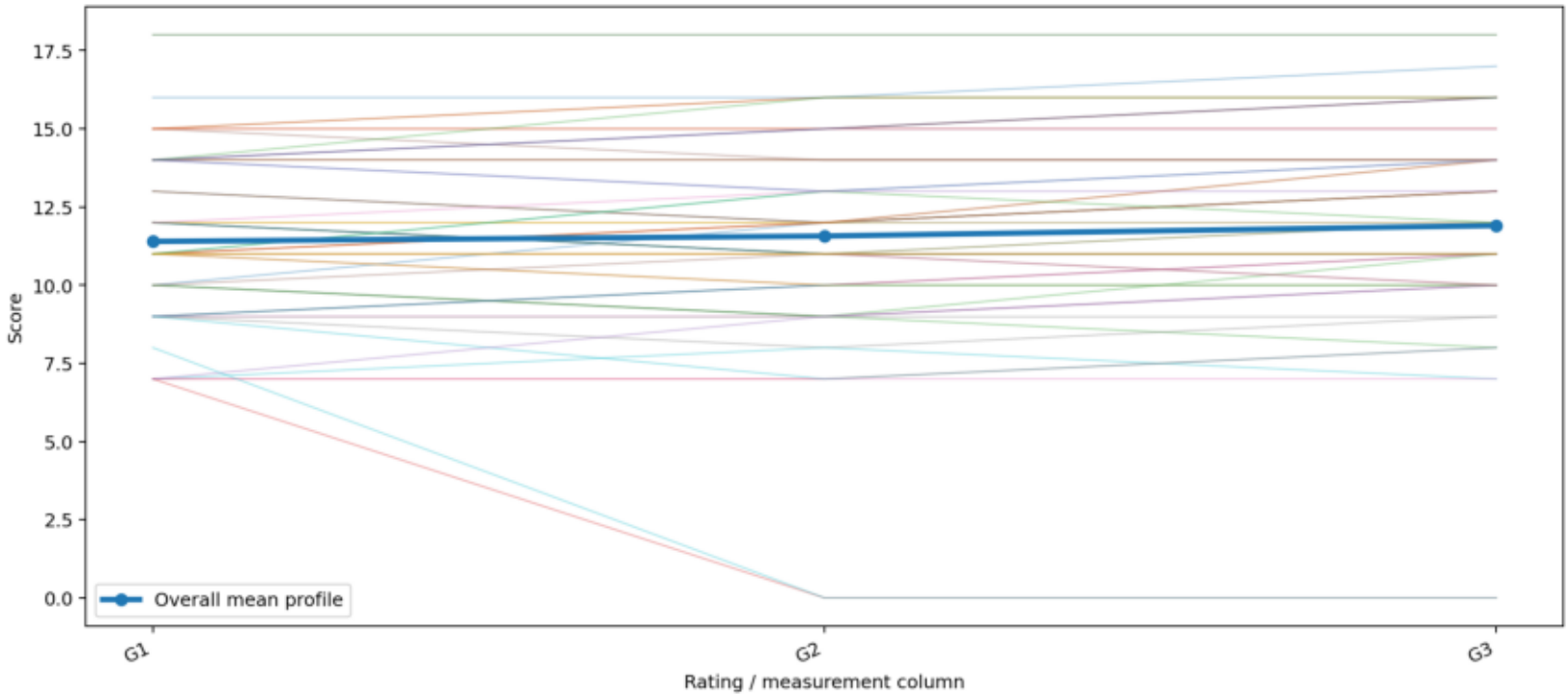
Intraclass Correlation Coefficient: Rating Means

Mean differences among rating columns help decide agreement versus consistency interpretation.



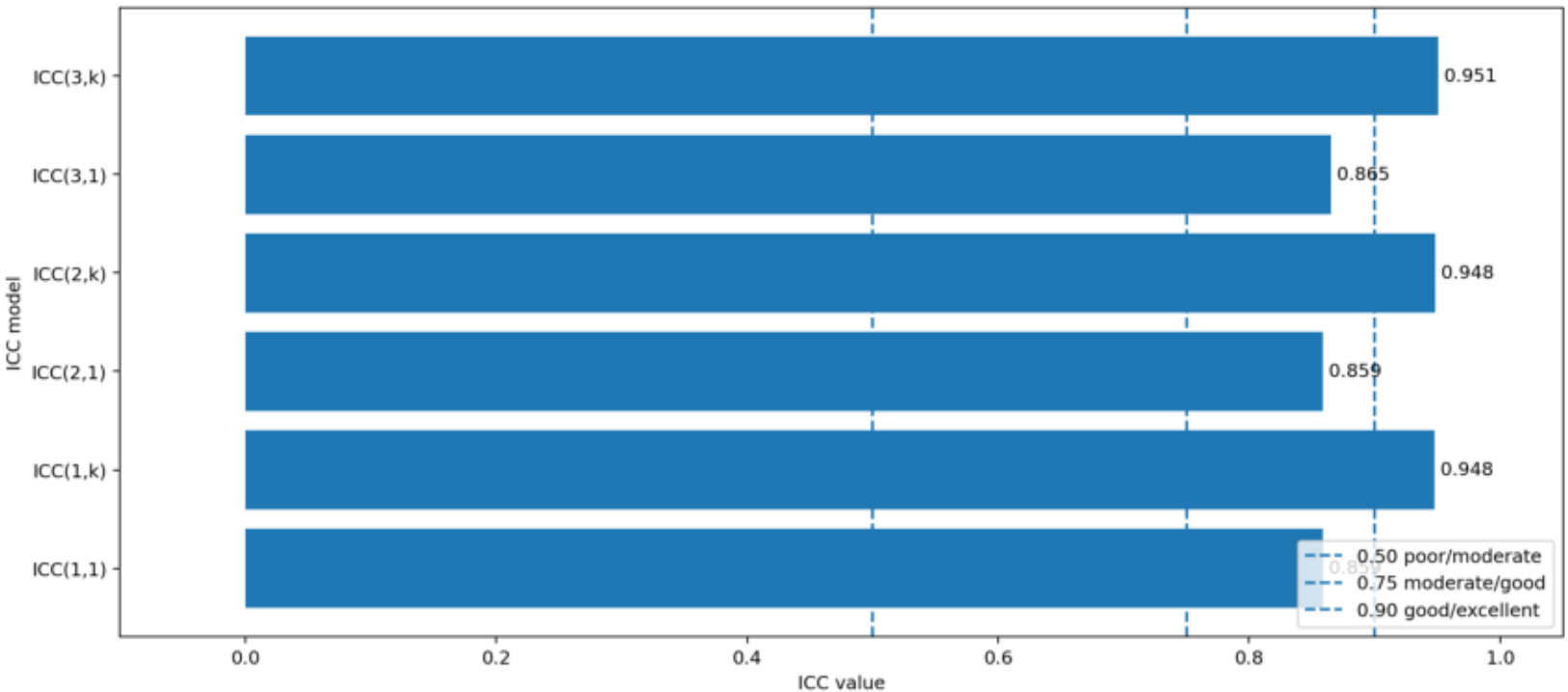
Intraclass Correlation Coefficient: Subject Rating Profiles

Parallel profiles suggest stronger consistency across repeated measurements.



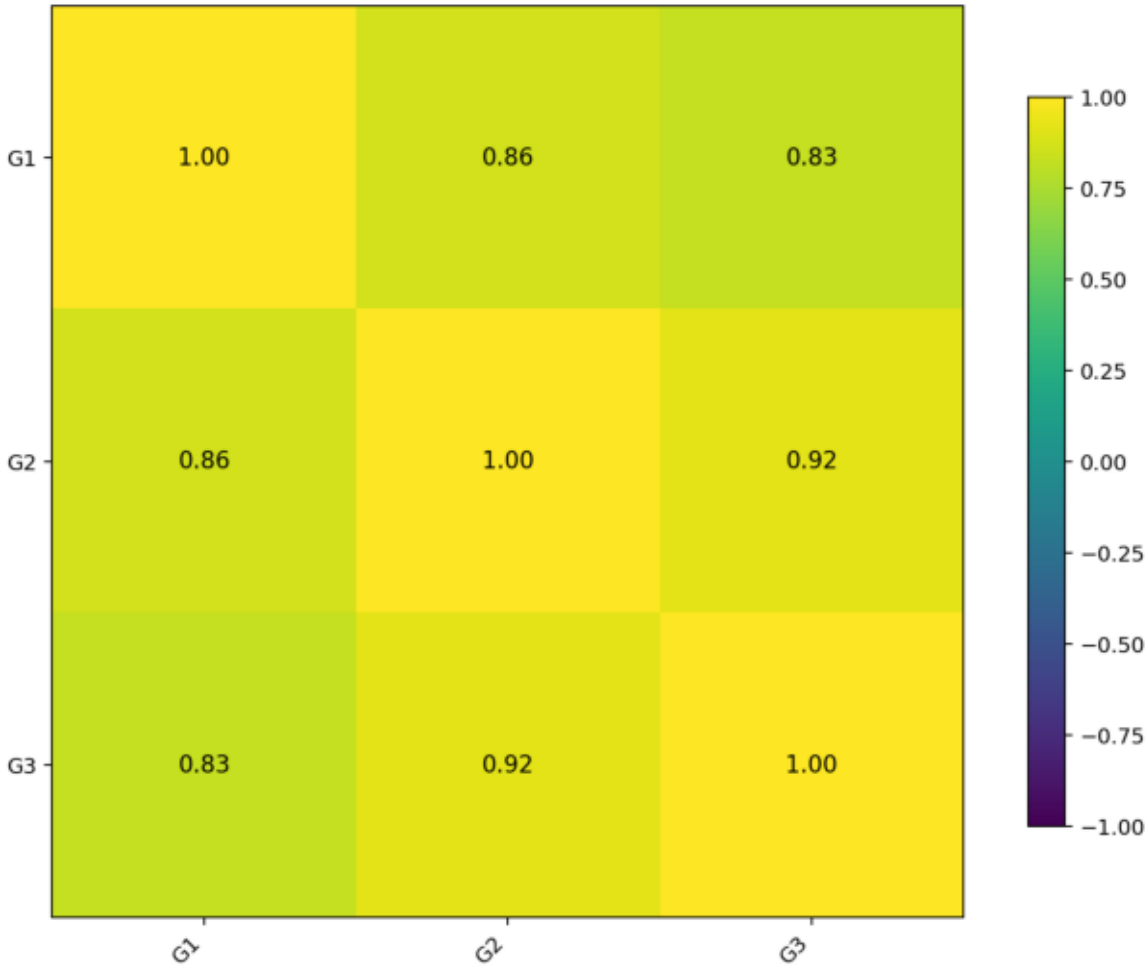
Intraclass Correlation Coefficient: ICC Model Comparison

ICC values near 1 indicate higher reliability; negative values indicate very poor agreement.



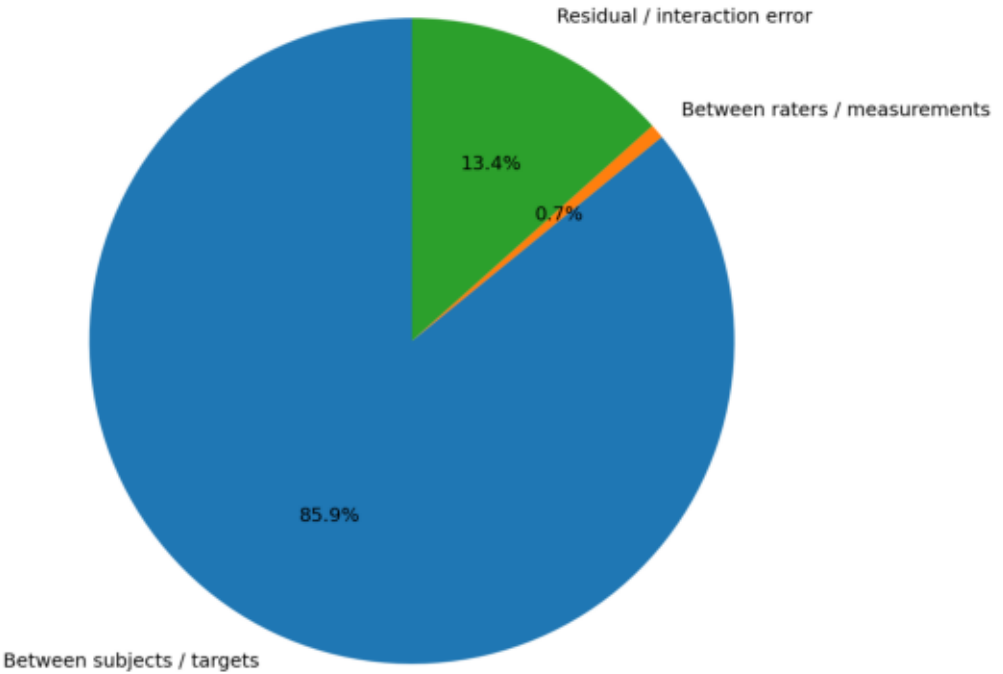
Intraclass Correlation Coefficient: Pairwise Correlation Context

Pairwise correlations support the ICC interpretation but do not replace the ICC model.



Intraclass Correlation Coefficient: Variance Components

A larger between-subject share supports stronger reliability across repeated measurements.



Intraclass Correlation Coefficient: Mean vs Within-Subject Spread

Lower within-subject spread means repeated ratings are closer for the same subject.