Results

Principal Component Analysis

Component Loadings

	Component						
	1	2	3	4	5	6	Uniqueness
avg-age-months	-0.469				0.513	0.328	0.24664
avg2-degree-coupling	-0.371				0.412	-0.348	0.51277
avg2-strength-communication			-0.321	-0.412			0.48899
avg2-author-revs-effort		0.652				0.529	0.17766
avg2-total-revs-effort		0.992					0.00861
avg2-ownership-added	0.890						0.06601
avg2-ownership-deleted	0.926						0.03569
avg-author-churn-added				0.918			0.04146
avg-author-churn-deleted	0.456			0.786			0.03429
avg-author-churn-commits				0.981			0.06192
avg-entity-churn-added	0.905						0.17018
avg-entity-churn-deleted	0.948						0.07777
avg-entity-churn-commits		0.992					0.00861
avg-fragmentation-fractal-value		0.443				-0.760	0.11869
avg-fragmentation-total-revs		0.992					0.00861
avg-main-dev-ownership	0.496		-0.340		0.535		0.22968
avg-refactoring-main-dev-ownership	0.737				0.493		0.11595
avg-revisions		0.992					0.00861
avg-soc	0.766		0.394				0.27071
number-of-commits			0.890				0.13274
number-of-entities			0.909				0.12566
number-of-entities-changed			0.985				0.04350
number-of-authors			0.829				0.21074
max-age-months		0.361	0.349	0.399	0.447		0.27239

Note. 'oblimin' rotation was used

[3]

Component Statistics

Summary

Component	SS Loadings	% of Variance	Cumulative %
1	5.54	23.09	23.1
2	5.13	21.37	44.5
3	3.95	16.46	60.9
4	3.16	13.16	74.1
5	1.43	5.96	80.0
6	1.32	5.51	85.6

Assumption Checks

Bartlett's Test of Sphericity

χ²	df	p
Inf	276	< .001

KMO Measure of Sampling Adequacy

	MSA
Overall	0.500
avg-age-months	0.500
avg2-degree-coupling	0.500
avg2-strength-communication	0.500
avg2-author-revs-effort	0.500
avg2-total-revs-effort	0.500
avg2-ownership-added	0.500
avg2-ownership-deleted	0.500
avg-author-churn-added	0.500
avg-author-churn-deleted	0.500
avg-author-churn-commits	0.500
avg-entity-churn-added	0.500
avg-entity-churn-deleted	0.500
avg-entity-churn-commits	0.500
avg-fragmentation-fractal-value	0.500
avg-fragmentation-total-revs	0.500
avg-main-dev-ownership	0.500
avg-refactoring-main-dev-ownership	0.500
avg-revisions	0.500
avg-soc	0.500
number-of-commits	0.500
number-of-entities	0.500
number-of-entities-changed	0.500
number-of-authors	0.500
max-age-months	0.500

References

[1] The jamovi project (2022). *jamovi*. (Version 2.3) [Computer Software]. Retrieved from https://www.jamovi.org.

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