

Tables comparing observed network statistics at different time points with 95% intervals for bootstrap/jackknife differences and 95% intervals estimating the statistic using sampling by degree sequence

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Friendship Network

Time points 1 and 2

Statistic	T1	T2	T2 - T1	95% difference interval
Transitivity	0.508 DSE: [0.185, 0.323]	0.561 DSE: [0.321, 0.417]	0.053	boot: [-0.01, 0.163] jack: [0.009, 0.084]
Mean Degree	4.846	6.538	1.692	boot: [2.462, 3.077] jack: [1.16, 2.1]
Edge Density	0.194	0.262	0.068	boot: [0.098, 0.123] jack: [0.048, 0.088]
Coreness, $k > 1$	25 DSE: [24, 25]	25 DSE: [24, 25]	0	boot: [2, 4] jack: [-1.375, 2]

Table 1: Note: *DSE* indicates the 95% C.I. of the statistic as estimated by resampling the network 1000 times using its degree sequence.

Time points 2 and 3

Statistic	T2	T3	T3 - T2	95% difference interval
Transitivity	0.561 DSE: [0.321, 0.417]	0.554 DSE: [0.418, 0.497]	-0.007	boot: [0.011, 0.125] jack: [-0.036, 0.039]
Mean Degree	6.538	7.462	0.923	boot: [1.769, 2.385] jack: [0.42, 1.4]
Edge Density	0.262	0.298	0.037	boot: [0.071, 0.095] jack: [0.017, 0.058]
Coreness, $k > 1$	25 DSE: [24, 25]	23 DSE: [22, 23]	-2	boot: [-1, -1] jack: [-3, 0]

Time points 3 and 4

Statistic	T3	T4	T4 - T3	95% difference interval
Transitivity	0.554 DSE: [0.418, 0.497]	0.447 DSE: [0.32, 0.409]	-0.108	boot: [-0.196, -0.082] jack: [-0.128, -0.082]
Mean Degree	7.462	6.615	-0.846	boot: [-2.692, -2.152] jack: [-1.21, -0.32]
Edge Density	0.298	0.265	-0.034	boot: [-0.108, -0.086] jack: [-0.05, -0.013]
Coreness, $k > 1$	23 DSE: [22, 23]	25 DSE: [25, 25]	2	boot: [1, 1] jack: [1, 3]

Time points 1 and 3

Statistic	T1	T3	T3 - T1	95% difference interval
Transitivity	0.508 DSE: [0.185, 0.323]	0.554 DSE: [0.418, 0.497]	0.047	boot: [0.067, 0.224] jack: [0.015, 0.074]
Mean Degree	4.846	7.462	2.615	boot: [4.538, 5.154] jack: [1.99, 3.06]
Edge Density	0.194	0.298	0.105	boot: [0.182, 0.206] jack: [0.083, 0.127]
Coreness, $k > 1$	25 DSE: [24, 25]	23 DSE: [22, 23]	-2	boot: [1, 3] jack: [-3, 0]

Time points 2 and 4

Statistic	T2	T4	T4 - T2	95% difference interval
Transitivity	0.561 DSE: [0.321, 0.417]	0.447 DSE: [0.32, 0.409]	-0.114	boot: [-0.134, -0.005] jack: [-0.145, -0.069]
Mean Degree	6.538	6.615	0.077	boot: [-0.615, 0] jack: [-0.38, 0.67]
Edge Density	0.262	0.265	0.003	boot: [-0.025, 0] jack: [-0.016, 0.028]
Coreness, $k > 1$	25 DSE: [24, 25]	25 DSE: [25, 25]	0	boot: [0, 0] jack: [-1, 2]

Time points 1 and 4

Statistic	T1	T4	T4 - T1	95% difference interval
Transitivity	0.508 DSE: [0.185, 0.323]	0.447 DSE: [0.32, 0.409]	-0.061	boot: [-0.075, 0.095] jack: [-0.098, -0.034]
Mean Degree	4.846	6.615	1.769	boot: [2.154, 2.769] jack: [1.11, 2.15]
Edge Density	0.194	0.265	0.071	boot: [0.086, 0.111] jack: [0.046, 0.09]
Coreness, $k > 1$	25 DSE: [24, 25]	25 DSE: [25, 25]	0	boot: [2, 4] jack: [-1, 2]

Tortoise Network

1997 and 1998

Statistic	1997	1998	1998 - 1997	95% difference interval
Transitivity	0.413 DSE: [0.055, 0.112]	0.533 DSE: [0.139, 0.228]	0.12	boot: [0.073, 0.193] jack: [0.098, 0.135]
Mean Degree	3.796	2.796	-1	boot: [-1.186, -1] jack: [-1.121, -0.879]
Edge Density	0.035	0.026	-0.009	boot: [-0.011, -0.009] jack: [-0.011, -0.008]
Coreness, $k > 1$	81 DSE: [78, 86]	45 DSE: [45, 48]	-36	boot: [-33, -27] jack: [-37.325, -33]

1998 and 1999

Statistic	1998	1999	1999 - 1998	95% difference interval
Transitivity	0.533 DSE: [0.139, 0.228]	0.633 DSE: [0, 0.127]	0.099	boot: [-0.127, 0.025] jack: [0.075, 0.119]
Mean Degree	2.796	1.167	-1.63	boot: [-1.241, -1.093] jack: [-1.651, -1.477]
Edge Density	0.026	0.011	-0.015	boot: [-0.012, -0.01] jack: [-0.016, -0.014]
Coreness, $k > 1$	45 DSE: [45, 48]	27 DSE: [26, 33]	-18	boot: [-24, -19] jack: [-20, -16]

1997 and 1999

Statistic	1997	1999	1999 - 1997	95% difference interval
Transitivity	0.413 DSE: [0.055, 0.112]	0.633 DSE: [0, 0.127]	0.219	boot: [0.009, 0.159] jack: [0.193, 0.239]
Mean Degree	3.796	1.167	-2.63	boot: [-2.352, -2.185] jack: [-2.679, -2.48]
Edge Density	0.035	0.011	-0.025	boot: [-0.022, -0.02] jack: [-0.025, -0.023]
Coreness, $k > 1$	81 DSE: [78, 86]	27 DSE: [26, 33]	-54	boot: [-55, -47] jack: [-56, -50.675]