Figure Supp3

Figure Supp 3 - Kmean_CovM

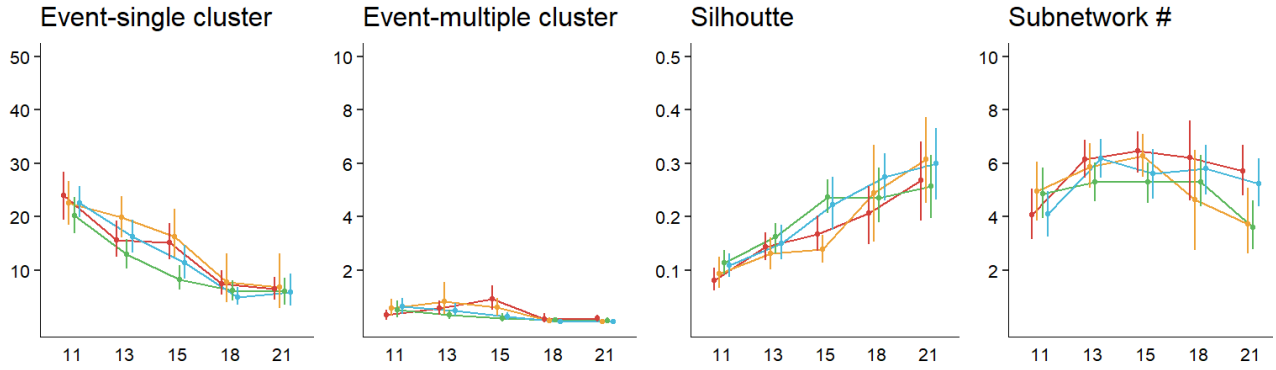

Figure Supp 3 - Kmean_CovM -Silhouette

Table: ANOVA table before bootstrapping

	F	Df	Df.res	Pr(>F)
(Intercept)	26.995	1	93.297	0.000
f.age	12.500	4	383.152	0.000
sex	0.174	1	69.332	0.678
f.layer	0.024	1	360.501	0.877
f.age:sex	3.429	4	393.426	0.009
f.age:f.layer	2.544	4	364.394	0.039

Table: Main effect after bootstrapping

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13	-0.044	-0.044	0.95	-0.065	-0.026	1.000	0.000
f.age11 - f.age15	-0.093	-0.094	0.95	-0.122	-0.072	1.000	0.000
f.age11 - f.age18	-0.150	-0.150	0.95	-0.188	-0.114	1.000	0.000
f.age11 - f.age21	-0.199	-0.201	0.95	-0.262	-0.152	1.000	0.000
f.age13 - f.age15	-0.050	-0.050	0.95	-0.074	-0.028	1.000	0.000
f.age13 - f.age18	-0.106	-0.106	0.95	-0.143	-0.069	1.000	0.000
f.age13 - f.age21	-0.155	-0.156	0.95	-0.214	-0.109	1.000	0.000
f.age15 - f.age18	-0.056	-0.056	0.95	-0.094	-0.022	1.000	0.000
f.age15 - f.age21	-0.104	-0.106	0.95	-0.169	-0.060	1.000	0.000
f.age18 - f.age21	-0.048	-0.050	0.95	-0.100	-0.011	0.994	0.012

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
F - M	-0.015	-0.015	0.95	-0.054	0.027	0.768	0.463

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.layer2 - f.layer4	-0.01	-0.01	0.95	-0.029	0.009	0.839	0.323

Table: Post-hoc comparison with bootstrapping output

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13, F, 2	-0.050	-0.051	-0.051	0.95	-0.082	-0.021	0.999	0.002
f.age11 - f.age15, F, 2	-0.073	-0.073	-0.073	0.95	-0.115	-0.039	1.000	0.000
f.age11 - f.age18, F, 2	-0.128	-0.129	-0.129	0.95	-0.170	-0.094	1.000	0.000
f.age11 - f.age21, F, 2	-0.190	-0.195	-0.195	0.95	-0.303	-0.113	1.000	0.000
f.age13 - f.age15, F, 2	-0.022	-0.023	-0.023	0.95	-0.063	0.013	0.892	0.216
f.age13 - f.age18, F, 2	-0.078	-0.079	-0.079	0.95	-0.119	-0.041	1.000	0.000
f.age13 - f.age21, F, 2	-0.140	-0.144	-0.144	0.95	-0.240	-0.070	1.000	0.000
f.age15 - f.age18, F, 2	-0.054	-0.056	-0.056	0.95	-0.106	-0.017	0.998	0.003
f.age15 - f.age21, F, 2	-0.115	-0.121	-0.121	0.95	-0.231	-0.050	1.000	0.000
f.age18 - f.age21, F, 2	-0.064	-0.065	-0.065	0.95	-0.155	0.020	0.936	0.127
f.age11 - f.age13, M, 2	-0.052	-0.052	-0.052	0.95	-0.081	-0.026	1.000	0.000
f.age11 - f.age15, M, 2	-0.140	-0.142	-0.142	0.95	-0.180	-0.110	1.000	0.000
f.age11 - f.age18, M, 2	-0.123	-0.123	-0.123	0.95	-0.193	-0.051	1.000	0.000
f.age11 - f.age21, M, 2	-0.176	-0.178	-0.178	0.95	-0.265	-0.101	1.000	0.000
f.age13 - f.age15, M, 2	-0.089	-0.089	-0.089	0.95	-0.129	-0.053	1.000	0.000
f.age13 - f.age18, M, 2	-0.071	-0.070	-0.070	0.95	-0.138	0.000	0.974	0.052
f.age13 - f.age21, M, 2	-0.124	-0.125	-0.125	0.95	-0.207	-0.049	1.000	0.000
f.age15 - f.age18, M, 2	0.018	0.019	0.019	0.95	-0.048	0.088	0.705	0.589
f.age15 - f.age21, M, 2	-0.035	-0.036	-0.036	0.95	-0.125	0.047	0.794	0.412
f.age18 - f.age21, M, 2	-0.053	-0.055	-0.055	0.95	-0.126	0.010	0.950	0.100
f.age11 - f.age13, F, 4	-0.036	-0.036	-0.036	0.95	-0.067	-0.010	0.996	0.007
f.age11 - f.age15, F, 4	-0.046	-0.047	-0.047	0.95	-0.083	-0.018	0.999	0.001
f.age11 - f.age18, F, 4	-0.177	-0.178	-0.178	0.95	-0.234	-0.124	1.000	0.000
f.age11 - f.age21, F, 4	-0.220	-0.224	-0.224	0.95	-0.321	-0.149	1.000	0.000
f.age13 - f.age15, F, 4	-0.011	-0.011	-0.011	0.95	-0.042	0.021	0.756	0.487
f.age13 - f.age18, F, 4	-0.141	-0.142	-0.142	0.95	-0.199	-0.087	1.000	0.000
f.age13 - f.age21, F, 4	-0.184	-0.187	-0.187	0.95	-0.277	-0.118	1.000	0.000
f.age15 - f.age18, F, 4	-0.130	-0.131	-0.131	0.95	-0.191	-0.077	1.000	0.000
f.age15 - f.age21, F, 4	-0.172	-0.176	-0.176	0.95	-0.273	-0.106	1.000	0.000
f.age18 - f.age21, F, 4	-0.044	-0.045	-0.045	0.95	-0.117	0.017	0.934	0.131
f.age11 - f.age13, M, 4	-0.037	-0.038	-0.038	0.95	-0.080	-0.002	0.980	0.040
f.age11 - f.age15, M, 4	-0.113	-0.115	-0.115	0.95	-0.173	-0.067	1.000	0.000
f.age11 - f.age18, M, 4	-0.171	-0.171	-0.171	0.95	-0.234	-0.109	1.000	0.000
f.age11 - f.age21, M, 4	-0.205	-0.207	-0.207	0.95	-0.281	-0.141	1.000	0.000
f.age13 - f.age15, M, 4	-0.077	-0.077	-0.077	0.95	-0.125	-0.032	1.000	0.001
f.age13 - f.age18, M, 4	-0.134	-0.134	-0.134	0.95	-0.201	-0.064	1.000	0.000
f.age13 - f.age21, M, 4	-0.168	-0.169	-0.169	0.95	-0.242	-0.097	1.000	0.000
f.age15 - f.age18, M, 4	-0.055	-0.056	-0.056	0.95	-0.128	0.011	0.946	0.107
f.age15 - f.age21, M, 4	-0.089	-0.091	-0.091	0.95	-0.173	-0.026	0.997	0.005
f.age18 - f.age21, M, 4	-0.031	-0.035	-0.035	0.95	-0.115	0.022	0.853	0.295

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
M - F, 2, 11	0.006	0.006	0.006	0.95	-0.032	0.041	0.631	0.738
M - F, 4, 11	0.006	0.006	0.006	0.95	-0.032	0.041	0.631	0.738
M - F, 2, 13	0.007	0.007	0.007	0.95	-0.032	0.045	0.644	0.712
M - F, 4, 13	0.007	0.007	0.007	0.95	-0.032	0.045	0.644	0.712
M - F, 2, 15	0.074	0.074	0.074	0.95	0.022	0.123	0.997	0.006
M - F, 4, 15	0.074	0.074	0.074	0.95	0.022	0.123	0.997	0.006
M - F, 2, 18	0.000	-0.001	-0.001	0.95	-0.075	0.069	0.502	0.997
M - F, 4, 18	0.000	-0.001	-0.001	0.95	-0.075	0.069	0.502	0.997
M - F, 2, 21	-0.009	-0.011	-0.011	0.95	-0.124	0.086	0.576	0.847
M - F, 4, 21	-0.009	-0.011	-0.011	0.95	-0.124	0.086	0.576	0.847

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.layer4 - f.layer2, F, 11	0.002	0.002	0.002	0.95	-0.016	0.019	0.611	0.778
f.layer4 - f.layer2, M, 11	0.002	0.002	0.002	0.95	-0.016	0.019	0.611	0.778
f.layer4 - f.layer2, F, 13	-0.013	-0.012	-0.012	0.95	-0.035	0.014	0.831	0.339

f.layer4 - f.layer2, M, 13	-0.013	-0.012	-0.012	0.95	-0.035	0.014	0.831	0.339
f.layer4 - f.layer2, F, 15	-0.024	-0.024	-0.024	0.95	-0.054	0.006	0.940	0.120
f.layer4 - f.layer2, M, 15	-0.024	-0.024	-0.024	0.95	-0.054	0.006	0.940	0.120
f.layer4 - f.layer2, F, 18	0.051	0.051	0.051	0.95	-0.003	0.104	0.967	0.065
f.layer4 - f.layer2, M, 18	0.051	0.051	0.051	0.95	-0.003	0.104	0.967	0.065
f.layer4 - f.layer2, F, 21	0.031	0.031	0.031	0.95	-0.032	0.093	0.841	0.318
f.layer4 - f.layer2, M, 21	0.031	0.031	0.031	0.95	-0.032	0.093	0.841	0.318

Figure Supp 3 - Kmean_CovM - subntwork

Table: ANOVA table before bootstrapping

	F	Df	Df.res	Pr(>F)
(Intercept)	238.602	1	92.229	0.000
f.age	5.925	4	412.941	0.000
sex	1.179	1	26.615	0.287
f.layer	0.853	1	376.292	0.356

Table: Main effect after bootstrapping

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13	-0.945	-0.940	0.95	-1.623	-0.217	0.994	0.012
f.age11 - f.age15	-1.068	-1.047	0.95	-1.967	-0.042	0.980	0.041
f.age11 - f.age18	-0.562	-0.563	0.95	-1.417	0.267	0.908	0.184
f.age11 - f.age21	0.580	0.603	0.95	-0.459	1.780	0.857	0.285
f.age13 - f.age15	-0.115	-0.108	0.95	-0.749	0.571	0.637	0.726
f.age13 - f.age18	0.394	0.377	0.95	-0.378	1.032	0.859	0.283
f.age13 - f.age21	1.525	1.542	0.95	0.759	2.409	1.000	0.000
f.age15 - f.age18	0.488	0.484	0.95	-0.280	1.262	0.891	0.219
f.age15 - f.age21	1.641	1.650	0.95	0.767	2.565	1.000	0.000
f.age18 - f.age21	1.151	1.166	0.95	0.560	1.864	1.000	0.000

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
F - M	0.305	0.304	0.95	-0.209	0.816	0.878	0.244

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.layer2 - f.layer4	-0.217	-0.21	0.95	-0.576	0.203	0.856	0.289

Table: Post-hoc comparison with bootstrapping output

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13, F, 2	-0.945	-0.940	-0.940	0.95	-1.623	-0.217	0.994	0.012
f.age11 - f.age15, F, 2	-1.068	-1.047	-1.047	0.95	-1.967	-0.042	0.980	0.041
f.age11 - f.age18, F, 2	-0.562	-0.563	-0.563	0.95	-1.417	0.267	0.908	0.184
f.age11 - f.age21, F, 2	0.580	0.603	0.603	0.95	-0.459	1.780	0.857	0.285
f.age13 - f.age15, F, 2	-0.115	-0.108	-0.108	0.95	-0.749	0.571	0.637	0.726
f.age13 - f.age18, F, 2	0.394	0.377	0.377	0.95	-0.378	1.032	0.859	0.283
f.age13 - f.age21, F, 2	1.525	1.542	1.542	0.95	0.759	2.409	1.000	0.000
f.age15 - f.age18, F, 2	0.488	0.484	0.484	0.95	-0.280	1.262	0.891	0.219
f.age15 - f.age21, F, 2	1.641	1.650	1.650	0.95	0.767	2.565	1.000	0.000
f.age18 - f.age21, F, 2	1.151	1.166	1.166	0.95	0.560	1.864	1.000	0.000
f.age11 - f.age13, M, 2	-0.945	-0.940	-0.940	0.95	-1.623	-0.217	0.994	0.012
f.age11 - f.age15, M, 2	-1.068	-1.047	-1.047	0.95	-1.967	-0.042	0.980	0.041
f.age11 - f.age18, M, 2	-0.562	-0.563	-0.563	0.95	-1.417	0.267	0.908	0.184
f.age11 - f.age21, M, 2	0.580	0.603	0.603	0.95	-0.459	1.780	0.857	0.285
f.age13 - f.age15, M, 2	-0.115	-0.108	-0.108	0.95	-0.749	0.571	0.637	0.726
f.age13 - f.age18, M, 2	0.394	0.377	0.377	0.95	-0.378	1.032	0.859	0.283
f.age13 - f.age21, M, 2	1.525	1.542	1.542	0.95	0.759	2.409	1.000	0.000
f.age15 - f.age18, M, 2	0.488	0.484	0.484	0.95	-0.280	1.262	0.891	0.219
f.age15 - f.age21, M, 2	1.641	1.650	1.650	0.95	0.767	2.565	1.000	0.000
f.age18 - f.age21, M, 2	1.151	1.166	1.166	0.95	0.560	1.864	1.000	0.000
f.age11 - f.age13, F, 4	-0.945	-0.940	-0.940	0.95	-1.623	-0.217	0.994	0.012
f.age11 - f.age15, F, 4	-1.068	-1.047	-1.047	0.95	-1.967	-0.042	0.980	0.041
f.age11 - f.age18, F, 4	-0.562	-0.563	-0.563	0.95	-1.417	0.267	0.908	0.184
f.age11 - f.age21, F, 4	0.580	0.603	0.603	0.95	-0.459	1.780	0.857	0.285
f.age13 - f.age15, F, 4	-0.115	-0.108	-0.108	0.95	-0.749	0.571	0.637	0.726
f.age13 - f.age18, F, 4	0.394	0.377	0.377	0.95	-0.378	1.032	0.859	0.283
f.age13 - f.age21, F, 4	1.525	1.542	1.542	0.95	0.759	2.409	1.000	0.000
f.age15 - f.age18, F, 4	0.488	0.484	0.484	0.95	-0.280	1.262	0.891	0.219
f.age15 - f.age21, F, 4	1.641	1.650	1.650	0.95	0.767	2.565	1.000	0.000
f.age18 - f.age21, F, 4	1.151	1.166	1.166	0.95	0.560	1.864	1.000	0.000
f.age11 - f.age13, M, 4	-0.945	-0.940	-0.940	0.95	-1.623	-0.217	0.994	0.012
f.age11 - f.age15, M, 4	-1.068	-1.047	-1.047	0.95	-1.967	-0.042	0.980	0.041
f.age11 - f.age18, M, 4	-0.562	-0.563	-0.563	0.95	-1.417	0.267	0.908	0.184
f.age11 - f.age21, M, 4	0.580	0.603	0.603	0.95	-0.459	1.780	0.857	0.285
f.age13 - f.age15, M, 4	-0.115	-0.108	-0.108	0.95	-0.749	0.571	0.637	0.726
f.age13 - f.age18, M, 4	0.394	0.377	0.377	0.95	-0.378	1.032	0.859	0.283
f.age13 - f.age21, M, 4	1.525	1.542	1.542	0.95	0.759	2.409	1.000	0.000
f.age15 - f.age18, M, 4	0.488	0.484	0.484	0.95	-0.280	1.262	0.891	0.219
f.age15 - f.age21, M, 4	1.641	1.650	1.650	0.95	0.767	2.565	1.000	0.000
f.age18 - f.age21, M, 4	1.151	1.166	1.166	0.95	0.560	1.864	1.000	0.000

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
M - F, 2, 11	-0.305	-0.304	-0.304	0.95	-0.816	0.209	0.878	0.244
M - F, 4, 11	-0.305	-0.304	-0.304	0.95	-0.816	0.209	0.878	0.244
M - F, 2, 13	-0.305	-0.304	-0.304	0.95	-0.816	0.209	0.878	0.244
M - F, 4, 13	-0.305	-0.304	-0.304	0.95	-0.816	0.209	0.878	0.244
M - F, 2, 15	-0.305	-0.304	-0.304	0.95	-0.816	0.209	0.878	0.244
M - F, 4, 15	-0.305	-0.304	-0.304	0.95	-0.816	0.209	0.878	0.244
M - F, 2, 18	-0.305	-0.304	-0.304	0.95	-0.816	0.209	0.878	0.244
M - F, 4, 18	-0.305	-0.304	-0.304	0.95	-0.816	0.209	0.878	0.244
M - F, 2, 21	-0.305	-0.304	-0.304	0.95	-0.816	0.209	0.878	0.244
M - F, 4, 21	-0.305	-0.304	-0.304	0.95	-0.816	0.209	0.878	0.244

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.layer4 - f.layer2, F, 11	0.217	0.21	0.21	0.95	-0.203	0.576	0.856	0.289
f.layer4 - f.layer2, M, 11	0.217	0.21	0.21	0.95	-0.203	0.576	0.856	0.289
f.layer4 - f.layer2, F, 13	0.217	0.21	0.21	0.95	-0.203	0.576	0.856	0.289

f.layer4 - f.layer2, M, 13	0.217	0.21	0.21	0.95	-0.203	0.576	0.856	0.289
f.layer4 - f.layer2, F, 15	0.217	0.21	0.21	0.95	-0.203	0.576	0.856	0.289
f.layer4 - f.layer2, M, 15	0.217	0.21	0.21	0.95	-0.203	0.576	0.856	0.289
f.layer4 - f.layer2, F, 18	0.217	0.21	0.21	0.95	-0.203	0.576	0.856	0.289
f.layer4 - f.layer2, M, 18	0.217	0.21	0.21	0.95	-0.203	0.576	0.856	0.289
f.layer4 - f.layer2, F, 21	0.217	0.21	0.21	0.95	-0.203	0.576	0.856	0.289
f.layer4 - f.layer2, M, 21	0.217	0.21	0.21	0.95	-0.203	0.576	0.856	0.289

Figure Supp 3 - Kmean_Cosine

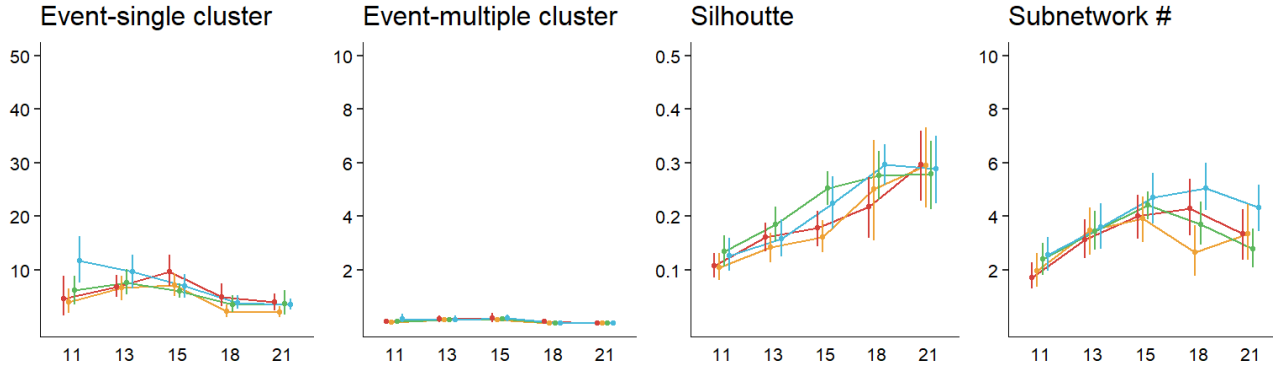

Figure Supp 3 - Kmean_Cosine - Silhouette

Table: ANOVA table before bootstrapping

	F	Df	Df.res	Pr(>F)
(Intercept)	40.489	1	65.734	0.000
f.age	18.587	4	391.193	0.000
sex	0.022	1	61.477	0.882
f.layer	0.678	1	363.416	0.411
f.age:sex	3.268	4	393.487	0.012

Table: Main effect after bootstrapping

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13	-0.043	-0.043	0.95	-0.068	-0.021	1.000	0.000
f.age11 - f.age15	-0.093	-0.094	0.95	-0.126	-0.067	1.000	0.000
f.age11 - f.age18	-0.153	-0.154	0.95	-0.199	-0.115	1.000	0.000
f.age11 - f.age21	-0.191	-0.193	0.95	-0.245	-0.151	1.000	0.000
f.age13 - f.age15	-0.051	-0.051	0.95	-0.075	-0.028	1.000	0.000
f.age13 - f.age18	-0.110	-0.111	0.95	-0.158	-0.073	1.000	0.000
f.age13 - f.age21	-0.149	-0.150	0.95	-0.199	-0.108	1.000	0.000
f.age15 - f.age18	-0.058	-0.060	0.95	-0.110	-0.023	1.000	0.000
f.age15 - f.age21	-0.096	-0.099	0.95	-0.152	-0.058	1.000	0.000
f.age18 - f.age21	-0.039	-0.039	0.95	-0.074	-0.004	0.982	0.035

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
F - M	-0.017	-0.017	0.95	-0.063	0.031	0.761	0.477

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.layer2 - f.layer4	0.007	0.007	0.95	-0.01	0.023	0.792	0.416

Table: Post-hoc comparison with bootstrapping output

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13, F, 2	-0.037	-0.037	-0.037	0.95	-0.064	-0.012	0.998	0.004
f.age11 - f.age15, F, 2	-0.055	-0.057	-0.057	0.95	-0.099	-0.023	1.000	0.001
f.age11 - f.age18, F, 2	-0.144	-0.147	-0.147	0.95	-0.227	-0.092	1.000	0.000
f.age11 - f.age21, F, 2	-0.194	-0.198	-0.198	0.95	-0.284	-0.134	1.000	0.000
f.age13 - f.age15, F, 2	-0.020	-0.020	-0.020	0.95	-0.052	0.012	0.896	0.208
f.age13 - f.age18, F, 2	-0.107	-0.110	-0.110	0.95	-0.193	-0.056	1.000	0.000
f.age13 - f.age21, F, 2	-0.158	-0.161	-0.161	0.95	-0.241	-0.104	1.000	0.000
f.age15 - f.age18, F, 2	-0.084	-0.090	-0.090	0.95	-0.187	-0.042	1.000	0.000
f.age15 - f.age21, F, 2	-0.135	-0.141	-0.141	0.95	-0.231	-0.090	1.000	0.000
f.age18 - f.age21, F, 2	-0.053	-0.051	-0.051	0.95	-0.099	0.006	0.968	0.064
f.age11 - f.age13, M, 2	-0.048	-0.049	-0.049	0.95	-0.089	-0.013	0.997	0.006
f.age11 - f.age15, M, 2	-0.130	-0.131	-0.131	0.95	-0.179	-0.092	1.000	0.000
f.age11 - f.age18, M, 2	-0.161	-0.161	-0.161	0.95	-0.212	-0.106	1.000	0.000
f.age11 - f.age21, M, 2	-0.186	-0.188	-0.188	0.95	-0.252	-0.135	1.000	0.000
f.age13 - f.age15, M, 2	-0.082	-0.082	-0.082	0.95	-0.118	-0.050	1.000	0.000
f.age13 - f.age18, M, 2	-0.112	-0.112	-0.112	0.95	-0.163	-0.060	1.000	0.000
f.age13 - f.age21, M, 2	-0.138	-0.139	-0.139	0.95	-0.203	-0.081	1.000	0.000
f.age15 - f.age18, M, 2	-0.030	-0.030	-0.030	0.95	-0.080	0.023	0.875	0.249
f.age15 - f.age21, M, 2	-0.055	-0.056	-0.056	0.95	-0.124	0.003	0.969	0.062
f.age18 - f.age21, M, 2	-0.024	-0.027	-0.027	0.95	-0.081	0.015	0.877	0.245
f.age11 - f.age13, F, 4	-0.037	-0.037	-0.037	0.95	-0.064	-0.012	0.998	0.004
f.age11 - f.age15, F, 4	-0.055	-0.057	-0.057	0.95	-0.099	-0.023	1.000	0.001
f.age11 - f.age18, F, 4	-0.144	-0.147	-0.147	0.95	-0.227	-0.092	1.000	0.000
f.age11 - f.age21, F, 4	-0.194	-0.198	-0.198	0.95	-0.284	-0.134	1.000	0.000
f.age13 - f.age15, F, 4	-0.020	-0.020	-0.020	0.95	-0.052	0.012	0.896	0.208
f.age13 - f.age18, F, 4	-0.107	-0.110	-0.110	0.95	-0.193	-0.056	1.000	0.000
f.age13 - f.age21, F, 4	-0.158	-0.161	-0.161	0.95	-0.241	-0.104	1.000	0.000
f.age15 - f.age18, F, 4	-0.084	-0.090	-0.090	0.95	-0.187	-0.042	1.000	0.000
f.age15 - f.age21, F, 4	-0.135	-0.141	-0.141	0.95	-0.231	-0.090	1.000	0.000
f.age18 - f.age21, F, 4	-0.053	-0.051	-0.051	0.95	-0.099	0.006	0.968	0.064
f.age11 - f.age13, M, 4	-0.048	-0.049	-0.049	0.95	-0.089	-0.013	0.997	0.006
f.age11 - f.age15, M, 4	-0.130	-0.131	-0.131	0.95	-0.179	-0.092	1.000	0.000
f.age11 - f.age18, M, 4	-0.161	-0.161	-0.161	0.95	-0.212	-0.106	1.000	0.000
f.age11 - f.age21, M, 4	-0.186	-0.188	-0.188	0.95	-0.252	-0.135	1.000	0.000
f.age13 - f.age15, M, 4	-0.082	-0.082	-0.082	0.95	-0.118	-0.050	1.000	0.000
f.age13 - f.age18, M, 4	-0.112	-0.112	-0.112	0.95	-0.163	-0.060	1.000	0.000
f.age13 - f.age21, M, 4	-0.138	-0.139	-0.139	0.95	-0.203	-0.081	1.000	0.000
f.age15 - f.age18, M, 4	-0.030	-0.030	-0.030	0.95	-0.080	0.023	0.875	0.249
f.age15 - f.age21, M, 4	-0.055	-0.056	-0.056	0.95	-0.124	0.003	0.969	0.062
f.age18 - f.age21, M, 4	-0.024	-0.027	-0.027	0.95	-0.081	0.015	0.877	0.245

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
M - F, 2, 11	-0.001	-0.001	-0.001	0.95	-0.043	0.041	0.516	0.967
M - F, 4, 11	-0.001	-0.001	-0.001	0.95	-0.043	0.041	0.516	0.967
M - F, 2, 13	0.011	0.011	0.011	0.95	-0.033	0.055	0.683	0.634
M - F, 4, 13	0.011	0.011	0.011	0.95	-0.033	0.055	0.683	0.634
M - F, 2, 15	0.073	0.073	0.073	0.95	0.017	0.130	0.994	0.012
M - F, 4, 15	0.073	0.073	0.073	0.95	0.017	0.130	0.994	0.012
M - F, 2, 18	0.016	0.013	0.013	0.95	-0.083	0.091	0.651	0.699
M - F, 4, 18	0.016	0.013	0.013	0.95	-0.083	0.091	0.651	0.699
M - F, 2, 21	-0.010	-0.012	-0.012	0.95	-0.112	0.079	0.590	0.820
M - F, 4, 21	-0.010	-0.012	-0.012	0.95	-0.112	0.079	0.590	0.820

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.layer4 - f.layer2, F, 11	-0.007	-0.007	-0.007	0.95	-0.023	0.01	0.792	0.416
f.layer4 - f.layer2, M, 11	-0.007	-0.007	-0.007	0.95	-0.023	0.01	0.792	0.416
f.layer4 - f.layer2, F, 13	-0.007	-0.007	-0.007	0.95	-0.023	0.01	0.792	0.416

f.layer4 - f.layer2, M, 13	-0.007	-0.007	-0.007	0.95	-0.023	0.01	0.792	0.416
f.layer4 - f.layer2, F, 15	-0.007	-0.007	-0.007	0.95	-0.023	0.01	0.792	0.416
f.layer4 - f.layer2, M, 15	-0.007	-0.007	-0.007	0.95	-0.023	0.01	0.792	0.416
f.layer4 - f.layer2, F, 18	-0.007	-0.007	-0.007	0.95	-0.023	0.01	0.792	0.416
f.layer4 - f.layer2, M, 18	-0.007	-0.007	-0.007	0.95	-0.023	0.01	0.792	0.416
f.layer4 - f.layer2, F, 21	-0.007	-0.007	-0.007	0.95	-0.023	0.01	0.792	0.416
f.layer4 - f.layer2, M, 21	-0.007	-0.007	-0.007	0.95	-0.023	0.01	0.792	0.416

Figure Supp 3 - Kmean_Cosine - subntwork

Table: ANOVA table before bootstrapping

	F	Df	Df.res	Pr(>F)
(Intercept)	37.560	1	54.753	0.000
f.age	15.482	4	406.122	0.000
sex	0.982	1	30.740	0.329
f.layer	3.051	1	369.236	0.082

Table: Main effect after bootstrapping

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13	-1.153	-1.158	0.95	-1.644	-0.694	1.000	0.000
f.age11 - f.age15	-1.879	-1.873	0.95	-2.426	-1.308	1.000	0.000
f.age11 - f.age18	-1.362	-1.356	0.95	-1.917	-0.764	1.000	0.000
f.age11 - f.age21	-1.063	-1.062	0.95	-1.619	-0.496	1.000	0.000
f.age13 - f.age15	-0.725	-0.715	0.95	-1.221	-0.147	0.994	0.013
f.age13 - f.age18	-0.203	-0.198	0.95	-0.836	0.486	0.737	0.527
f.age13 - f.age21	0.095	0.096	0.95	-0.435	0.620	0.646	0.708
f.age15 - f.age18	0.523	0.517	0.95	-0.142	1.143	0.940	0.120
f.age15 - f.age21	0.807	0.811	0.95	0.251	1.361	0.997	0.005
f.age18 - f.age21	0.301	0.294	0.95	-0.338	0.870	0.833	0.334

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
F - M	-0.361	-0.355	0.95	-0.921	0.243	0.883	0.234

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.layer2 - f.layer4	-0.294	-0.29	0.95	-0.63	0.07	0.941	0.118

Table: Post-hoc comparison with bootstrapping output

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13, F, 2	-1.153	-1.158	-1.158	0.95	-1.644	-0.694	1.000	0.000
f.age11 - f.age15, F, 2	-1.879	-1.873	-1.873	0.95	-2.426	-1.308	1.000	0.000
f.age11 - f.age18, F, 2	-1.362	-1.356	-1.356	0.95	-1.917	-0.764	1.000	0.000
f.age11 - f.age21, F, 2	-1.063	-1.062	-1.062	0.95	-1.619	-0.496	1.000	0.000
f.age13 - f.age15, F, 2	-0.725	-0.715	-0.715	0.95	-1.221	-0.147	0.994	0.013
f.age13 - f.age18, F, 2	-0.203	-0.198	-0.198	0.95	-0.836	0.486	0.737	0.527
f.age13 - f.age21, F, 2	0.095	0.096	0.096	0.95	-0.435	0.620	0.646	0.708
f.age15 - f.age18, F, 2	0.523	0.517	0.517	0.95	-0.142	1.143	0.940	0.120
f.age15 - f.age21, F, 2	0.807	0.811	0.811	0.95	0.251	1.361	0.997	0.005
f.age18 - f.age21, F, 2	0.301	0.294	0.294	0.95	-0.338	0.870	0.833	0.334
f.age11 - f.age13, M, 2	-1.153	-1.158	-1.158	0.95	-1.644	-0.694	1.000	0.000
f.age11 - f.age15, M, 2	-1.879	-1.873	-1.873	0.95	-2.426	-1.308	1.000	0.000
f.age11 - f.age18, M, 2	-1.362	-1.356	-1.356	0.95	-1.917	-0.764	1.000	0.000
f.age11 - f.age21, M, 2	-1.063	-1.062	-1.062	0.95	-1.619	-0.496	1.000	0.000
f.age13 - f.age15, M, 2	-0.725	-0.715	-0.715	0.95	-1.221	-0.147	0.994	0.013
f.age13 - f.age18, M, 2	-0.203	-0.198	-0.198	0.95	-0.836	0.486	0.737	0.527
f.age13 - f.age21, M, 2	0.095	0.096	0.096	0.95	-0.435	0.620	0.646	0.708
f.age15 - f.age18, M, 2	0.523	0.517	0.517	0.95	-0.142	1.143	0.940	0.120
f.age15 - f.age21, M, 2	0.807	0.811	0.811	0.95	0.251	1.361	0.997	0.005
f.age18 - f.age21, M, 2	0.301	0.294	0.294	0.95	-0.338	0.870	0.833	0.334
f.age11 - f.age13, F, 4	-1.153	-1.158	-1.158	0.95	-1.644	-0.694	1.000	0.000
f.age11 - f.age15, F, 4	-1.879	-1.873	-1.873	0.95	-2.426	-1.308	1.000	0.000
f.age11 - f.age18, F, 4	-1.362	-1.356	-1.356	0.95	-1.917	-0.764	1.000	0.000
f.age11 - f.age21, F, 4	-1.063	-1.062	-1.062	0.95	-1.619	-0.496	1.000	0.000
f.age13 - f.age15, F, 4	-0.725	-0.715	-0.715	0.95	-1.221	-0.147	0.994	0.013
f.age13 - f.age18, F, 4	-0.203	-0.198	-0.198	0.95	-0.836	0.486	0.737	0.527
f.age13 - f.age21, F, 4	0.095	0.096	0.096	0.95	-0.435	0.620	0.646	0.708
f.age15 - f.age18, F, 4	0.523	0.517	0.517	0.95	-0.142	1.143	0.940	0.120
f.age15 - f.age21, F, 4	0.807	0.811	0.811	0.95	0.251	1.361	0.997	0.005
f.age18 - f.age21, F, 4	0.301	0.294	0.294	0.95	-0.338	0.870	0.833	0.334
f.age11 - f.age13, M, 4	-1.153	-1.158	-1.158	0.95	-1.644	-0.694	1.000	0.000
f.age11 - f.age15, M, 4	-1.879	-1.873	-1.873	0.95	-2.426	-1.308	1.000	0.000
f.age11 - f.age18, M, 4	-1.362	-1.356	-1.356	0.95	-1.917	-0.764	1.000	0.000
f.age11 - f.age21, M, 4	-1.063	-1.062	-1.062	0.95	-1.619	-0.496	1.000	0.000
f.age13 - f.age15, M, 4	-0.725	-0.715	-0.715	0.95	-1.221	-0.147	0.994	0.013
f.age13 - f.age18, M, 4	-0.203	-0.198	-0.198	0.95	-0.836	0.486	0.737	0.527
f.age13 - f.age21, M, 4	0.095	0.096	0.096	0.95	-0.435	0.620	0.646	0.708
f.age15 - f.age18, M, 4	0.523	0.517	0.517	0.95	-0.142	1.143	0.940	0.120
f.age15 - f.age21, M, 4	0.807	0.811	0.811	0.95	0.251	1.361	0.997	0.005
f.age18 - f.age21, M, 4	0.301	0.294	0.294	0.95	-0.338	0.870	0.833	0.334

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
M - F, 2, 11	0.361	0.355	0.355	0.95	-0.243	0.921	0.883	0.234
M - F, 4, 11	0.361	0.355	0.355	0.95	-0.243	0.921	0.883	0.234
M - F, 2, 13	0.361	0.355	0.355	0.95	-0.243	0.921	0.883	0.234
M - F, 4, 13	0.361	0.355	0.355	0.95	-0.243	0.921	0.883	0.234
M - F, 2, 15	0.361	0.355	0.355	0.95	-0.243	0.921	0.883	0.234
M - F, 4, 15	0.361	0.355	0.355	0.95	-0.243	0.921	0.883	0.234
M - F, 2, 18	0.361	0.355	0.355	0.95	-0.243	0.921	0.883	0.234
M - F, 4, 18	0.361	0.355	0.355	0.95	-0.243	0.921	0.883	0.234
M - F, 2, 21	0.361	0.355	0.355	0.95	-0.243	0.921	0.883	0.234
M - F, 4, 21	0.361	0.355	0.355	0.95	-0.243	0.921	0.883	0.234

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.layer4 - f.layer2, F, 11	0.294	0.29	0.29	0.95	-0.07	0.63	0.941	0.118
f.layer4 - f.layer2, M, 11	0.294	0.29	0.29	0.95	-0.07	0.63	0.941	0.118
f.layer4 - f.layer2, F, 13	0.294	0.29	0.29	0.95	-0.07	0.63	0.941	0.118

f.layer4 - f.layer2, M, 13	0.294	0.29	0.29	0.95	-0.07	0.63	0.941	0.118
f.layer4 - f.layer2, F, 15	0.294	0.29	0.29	0.95	-0.07	0.63	0.941	0.118
f.layer4 - f.layer2, M, 15	0.294	0.29	0.29	0.95	-0.07	0.63	0.941	0.118
f.layer4 - f.layer2, F, 18	0.294	0.29	0.29	0.95	-0.07	0.63	0.941	0.118
f.layer4 - f.layer2, M, 18	0.294	0.29	0.29	0.95	-0.07	0.63	0.941	0.118
f.layer4 - f.layer2, F, 21	0.294	0.29	0.29	0.95	-0.07	0.63	0.941	0.118
f.layer4 - f.layer2, M, 21	0.294	0.29	0.29	0.95	-0.07	0.63	0.941	0.118

Figure Supp 3 - Kmean_Jaccard

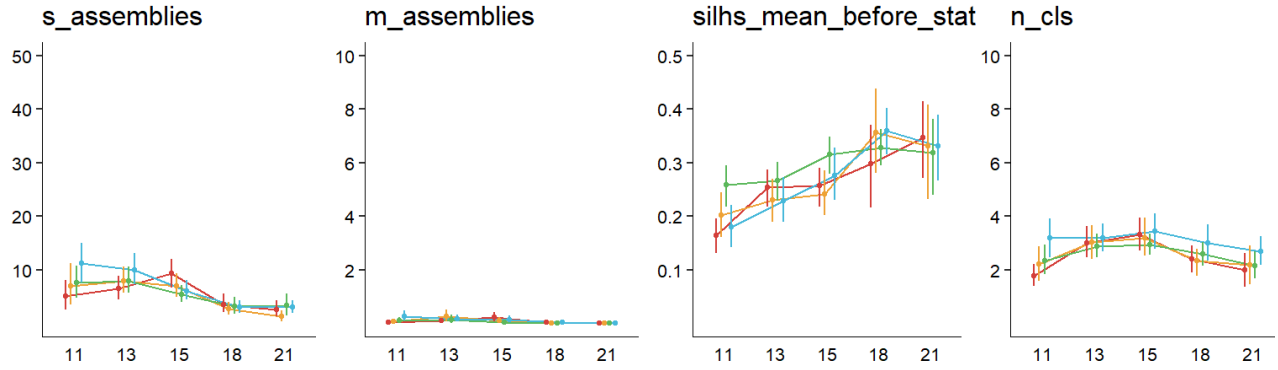

Figure Supp 3 - Kmean_Jaccard - Silhouette

Table: ANOVA table before bootstrapping

	F	Df	Df.res	Pr(>F)
(Intercept)	125.810	1	78.028	0.000
f.age	29.304	4	397.045	0.000
sex	0.369	1	40.124	0.547
f.layer	1.522	1	348.762	0.218

Table: Main effect after bootstrapping

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13	-0.030	-0.030	0.95	-0.067	0.009	0.937	0.126
f.age11 - f.age15	-0.080	-0.081	0.95	-0.113	-0.049	1.000	0.000
f.age11 - f.age18	-0.149	-0.149	0.95	-0.186	-0.114	1.000	0.000
f.age11 - f.age21	-0.173	-0.174	0.95	-0.226	-0.131	1.000	0.000
f.age13 - f.age15	-0.051	-0.051	0.95	-0.090	-0.012	0.995	0.011
f.age13 - f.age18	-0.120	-0.120	0.95	-0.158	-0.082	1.000	0.000
f.age13 - f.age21	-0.144	-0.145	0.95	-0.192	-0.103	1.000	0.000
f.age15 - f.age18	-0.068	-0.069	0.95	-0.109	-0.032	1.000	0.000
f.age15 - f.age21	-0.092	-0.094	0.95	-0.149	-0.048	1.000	0.000
f.age18 - f.age21	-0.024	-0.025	0.95	-0.062	0.006	0.941	0.118

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
F - M	-0.01	-0.01	0.95	-0.043	0.023	0.731	0.538

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.layer2 - f.layer4	0.012	0.012	0.95	-0.006	0.031	0.897	0.206

Table: Post-hoc comparison with bootstrapping output

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13, F, 2	-0.030	-0.030	-0.030	0.95	-0.067	0.009	0.937	0.126
f.age11 - f.age15, F, 2	-0.080	-0.081	-0.081	0.95	-0.113	-0.049	1.000	0.000
f.age11 - f.age18, F, 2	-0.149	-0.149	-0.149	0.95	-0.186	-0.114	1.000	0.000
f.age11 - f.age21, F, 2	-0.173	-0.174	-0.174	0.95	-0.226	-0.131	1.000	0.000
f.age13 - f.age15, F, 2	-0.051	-0.051	-0.051	0.95	-0.090	-0.012	0.995	0.011
f.age13 - f.age18, F, 2	-0.120	-0.120	-0.120	0.95	-0.158	-0.082	1.000	0.000
f.age13 - f.age21, F, 2	-0.144	-0.145	-0.145	0.95	-0.192	-0.103	1.000	0.000
f.age15 - f.age18, F, 2	-0.068	-0.069	-0.069	0.95	-0.109	-0.032	1.000	0.000
f.age15 - f.age21, F, 2	-0.092	-0.094	-0.094	0.95	-0.149	-0.048	1.000	0.000
f.age18 - f.age21, F, 2	-0.024	-0.025	-0.025	0.95	-0.062	0.006	0.941	0.118
f.age11 - f.age13, M, 2	-0.030	-0.030	-0.030	0.95	-0.067	0.009	0.937	0.126
f.age11 - f.age15, M, 2	-0.080	-0.081	-0.081	0.95	-0.113	-0.049	1.000	0.000
f.age11 - f.age18, M, 2	-0.149	-0.149	-0.149	0.95	-0.186	-0.114	1.000	0.000
f.age11 - f.age21, M, 2	-0.173	-0.174	-0.174	0.95	-0.226	-0.131	1.000	0.000
f.age13 - f.age15, M, 2	-0.051	-0.051	-0.051	0.95	-0.090	-0.012	0.995	0.011
f.age13 - f.age18, M, 2	-0.120	-0.120	-0.120	0.95	-0.158	-0.082	1.000	0.000
f.age13 - f.age21, M, 2	-0.144	-0.145	-0.145	0.95	-0.192	-0.103	1.000	0.000
f.age15 - f.age18, M, 2	-0.068	-0.069	-0.069	0.95	-0.109	-0.032	1.000	0.000
f.age15 - f.age21, M, 2	-0.092	-0.094	-0.094	0.95	-0.149	-0.048	1.000	0.000
f.age18 - f.age21, M, 2	-0.024	-0.025	-0.025	0.95	-0.062	0.006	0.941	0.118
f.age11 - f.age13, F, 4	-0.030	-0.030	-0.030	0.95	-0.067	0.009	0.937	0.126
f.age11 - f.age15, F, 4	-0.080	-0.081	-0.081	0.95	-0.113	-0.049	1.000	0.000
f.age11 - f.age18, F, 4	-0.149	-0.149	-0.149	0.95	-0.186	-0.114	1.000	0.000
f.age11 - f.age21, F, 4	-0.173	-0.174	-0.174	0.95	-0.226	-0.131	1.000	0.000
f.age13 - f.age15, F, 4	-0.051	-0.051	-0.051	0.95	-0.090	-0.012	0.995	0.011
f.age13 - f.age18, F, 4	-0.120	-0.120	-0.120	0.95	-0.158	-0.082	1.000	0.000
f.age13 - f.age21, F, 4	-0.144	-0.145	-0.145	0.95	-0.192	-0.103	1.000	0.000
f.age15 - f.age18, F, 4	-0.068	-0.069	-0.069	0.95	-0.109	-0.032	1.000	0.000
f.age15 - f.age21, F, 4	-0.092	-0.094	-0.094	0.95	-0.149	-0.048	1.000	0.000
f.age18 - f.age21, F, 4	-0.024	-0.025	-0.025	0.95	-0.062	0.006	0.941	0.118
f.age11 - f.age13, M, 4	-0.030	-0.030	-0.030	0.95	-0.067	0.009	0.937	0.126
f.age11 - f.age15, M, 4	-0.080	-0.081	-0.081	0.95	-0.113	-0.049	1.000	0.000
f.age11 - f.age18, M, 4	-0.149	-0.149	-0.149	0.95	-0.186	-0.114	1.000	0.000
f.age11 - f.age21, M, 4	-0.173	-0.174	-0.174	0.95	-0.226	-0.131	1.000	0.000
f.age13 - f.age15, M, 4	-0.051	-0.051	-0.051	0.95	-0.090	-0.012	0.995	0.011
f.age13 - f.age18, M, 4	-0.120	-0.120	-0.120	0.95	-0.158	-0.082	1.000	0.000
f.age13 - f.age21, M, 4	-0.144	-0.145	-0.145	0.95	-0.192	-0.103	1.000	0.000
f.age15 - f.age18, M, 4	-0.068	-0.069	-0.069	0.95	-0.109	-0.032	1.000	0.000
f.age15 - f.age21, M, 4	-0.092	-0.094	-0.094	0.95	-0.149	-0.048	1.000	0.000
f.age18 - f.age21, M, 4	-0.024	-0.025	-0.025	0.95	-0.062	0.006	0.941	0.118

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
M - F, 2, 11	0.01	0.01	0.01	0.95	-0.023	0.043	0.731	0.538
M - F, 4, 11	0.01	0.01	0.01	0.95	-0.023	0.043	0.731	0.538
M - F, 2, 13	0.01	0.01	0.01	0.95	-0.023	0.043	0.731	0.538
M - F, 4, 13	0.01	0.01	0.01	0.95	-0.023	0.043	0.731	0.538
M - F, 2, 15	0.01	0.01	0.01	0.95	-0.023	0.043	0.731	0.538
M - F, 4, 15	0.01	0.01	0.01	0.95	-0.023	0.043	0.731	0.538
M - F, 2, 18	0.01	0.01	0.01	0.95	-0.023	0.043	0.731	0.538
M - F, 4, 18	0.01	0.01	0.01	0.95	-0.023	0.043	0.731	0.538
M - F, 2, 21	0.01	0.01	0.01	0.95	-0.023	0.043	0.731	0.538
M - F, 4, 21	0.01	0.01	0.01	0.95	-0.023	0.043	0.731	0.538

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.layer4 - f.layer2, F, 11	-0.012	-0.012	-0.012	0.95	-0.031	0.006	0.897	0.206
f.layer4 - f.layer2, M, 11	-0.012	-0.012	-0.012	0.95	-0.031	0.006	0.897	0.206
f.layer4 - f.layer2, F, 13	-0.012	-0.012	-0.012	0.95	-0.031	0.006	0.897	0.206

f.layer4 - f.layer2, M, 13	-0.012	-0.012	-0.012	0.95	-0.031	0.006	0.897	0.206
f.layer4 - f.layer2, F, 15	-0.012	-0.012	-0.012	0.95	-0.031	0.006	0.897	0.206
f.layer4 - f.layer2, M, 15	-0.012	-0.012	-0.012	0.95	-0.031	0.006	0.897	0.206
f.layer4 - f.layer2, F, 18	-0.012	-0.012	-0.012	0.95	-0.031	0.006	0.897	0.206
f.layer4 - f.layer2, M, 18	-0.012	-0.012	-0.012	0.95	-0.031	0.006	0.897	0.206
f.layer4 - f.layer2, F, 21	-0.012	-0.012	-0.012	0.95	-0.031	0.006	0.897	0.206
f.layer4 - f.layer2, M, 21	-0.012	-0.012	-0.012	0.95	-0.031	0.006	0.897	0.206

Figure Supp 3 - Kmean_Jaccard - subntwork

Table: ANOVA table before bootstrapping

	F	Df	Df.res	Pr(>F)
(Intercept)	133.505	1	147.119	0.000
f.age	6.006	4	372.817	0.000
sex	3.192	1	28.494	0.085
f.layer	5.689	1	412.377	0.018

Table: Main effect after bootstrapping

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13	-0.552	-0.553	0.95	-0.933	-0.169	0.997	0.006
f.age11 - f.age15	-0.779	-0.768	0.95	-1.246	-0.252	0.998	0.004
f.age11 - f.age18	-0.112	-0.105	0.95	-0.559	0.366	0.678	0.643
f.age11 - f.age21	0.158	0.167	0.95	-0.305	0.666	0.749	0.503
f.age13 - f.age15	-0.219	-0.216	0.95	-0.553	0.146	0.885	0.229
f.age13 - f.age18	0.445	0.448	0.95	0.032	0.886	0.983	0.034
f.age13 - f.age21	0.715	0.719	0.95	0.342	1.132	1.000	0.000
f.age15 - f.age18	0.661	0.664	0.95	0.230	1.115	1.000	0.001
f.age15 - f.age21	0.931	0.935	0.95	0.592	1.292	1.000	0.000
f.age18 - f.age21	0.278	0.271	0.95	-0.170	0.660	0.896	0.209

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
F - M	-0.238	-0.237	0.95	-0.501	0.031	0.959	0.081

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.layer2 - f.layer4	-0.343	-0.344	0.95	-0.617	-0.072	0.993	0.013

Table: Post-hoc comparison with bootstrapping output

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13, F, 2	-0.552	-0.553	-0.553	0.95	-0.933	-0.169	0.997	0.006
f.age11 - f.age15, F, 2	-0.779	-0.768	-0.768	0.95	-1.246	-0.252	0.998	0.004
f.age11 - f.age18, F, 2	-0.112	-0.105	-0.105	0.95	-0.559	0.366	0.678	0.643
f.age11 - f.age21, F, 2	0.158	0.167	0.167	0.95	-0.305	0.666	0.749	0.503
f.age13 - f.age15, F, 2	-0.219	-0.216	-0.216	0.95	-0.553	0.146	0.885	0.229
f.age13 - f.age18, F, 2	0.445	0.448	0.448	0.95	0.032	0.886	0.983	0.034
f.age13 - f.age21, F, 2	0.715	0.719	0.719	0.95	0.342	1.132	1.000	0.000
f.age15 - f.age18, F, 2	0.661	0.664	0.664	0.95	0.230	1.115	1.000	0.001
f.age15 - f.age21, F, 2	0.931	0.935	0.935	0.95	0.592	1.292	1.000	0.000
f.age18 - f.age21, F, 2	0.278	0.271	0.271	0.95	-0.170	0.660	0.896	0.209
f.age11 - f.age13, M, 2	-0.552	-0.553	-0.553	0.95	-0.933	-0.169	0.997	0.006
f.age11 - f.age15, M, 2	-0.779	-0.768	-0.768	0.95	-1.246	-0.252	0.998	0.004
f.age11 - f.age18, M, 2	-0.112	-0.105	-0.105	0.95	-0.559	0.366	0.678	0.643
f.age11 - f.age21, M, 2	0.158	0.167	0.167	0.95	-0.305	0.666	0.749	0.503
f.age13 - f.age15, M, 2	-0.219	-0.216	-0.216	0.95	-0.553	0.146	0.885	0.229
f.age13 - f.age18, M, 2	0.445	0.448	0.448	0.95	0.032	0.886	0.983	0.034
f.age13 - f.age21, M, 2	0.715	0.719	0.719	0.95	0.342	1.132	1.000	0.000
f.age15 - f.age18, M, 2	0.661	0.664	0.664	0.95	0.230	1.115	1.000	0.001
f.age15 - f.age21, M, 2	0.931	0.935	0.935	0.95	0.592	1.292	1.000	0.000
f.age18 - f.age21, M, 2	0.278	0.271	0.271	0.95	-0.170	0.660	0.896	0.209
f.age11 - f.age13, F, 4	-0.552	-0.553	-0.553	0.95	-0.933	-0.169	0.997	0.006
f.age11 - f.age15, F, 4	-0.779	-0.768	-0.768	0.95	-1.246	-0.252	0.998	0.004
f.age11 - f.age18, F, 4	-0.112	-0.105	-0.105	0.95	-0.559	0.366	0.678	0.643
f.age11 - f.age21, F, 4	0.158	0.167	0.167	0.95	-0.305	0.666	0.749	0.503
f.age13 - f.age15, F, 4	-0.219	-0.216	-0.216	0.95	-0.553	0.146	0.885	0.229
f.age13 - f.age18, F, 4	0.445	0.448	0.448	0.95	0.032	0.886	0.983	0.034
f.age13 - f.age21, F, 4	0.715	0.719	0.719	0.95	0.342	1.132	1.000	0.000
f.age15 - f.age18, F, 4	0.661	0.664	0.664	0.95	0.230	1.115	1.000	0.001
f.age15 - f.age21, F, 4	0.931	0.935	0.935	0.95	0.592	1.292	1.000	0.000
f.age18 - f.age21, F, 4	0.278	0.271	0.271	0.95	-0.170	0.660	0.896	0.209
f.age11 - f.age13, M, 4	-0.552	-0.553	-0.553	0.95	-0.933	-0.169	0.997	0.006
f.age11 - f.age15, M, 4	-0.779	-0.768	-0.768	0.95	-1.246	-0.252	0.998	0.004
f.age11 - f.age18, M, 4	-0.112	-0.105	-0.105	0.95	-0.559	0.366	0.678	0.643
f.age11 - f.age21, M, 4	0.158	0.167	0.167	0.95	-0.305	0.666	0.749	0.503
f.age13 - f.age15, M, 4	-0.219	-0.216	-0.216	0.95	-0.553	0.146	0.885	0.229
f.age13 - f.age18, M, 4	0.445	0.448	0.448	0.95	0.032	0.886	0.983	0.034
f.age13 - f.age21, M, 4	0.715	0.719	0.719	0.95	0.342	1.132	1.000	0.000
f.age15 - f.age18, M, 4	0.661	0.664	0.664	0.95	0.230	1.115	1.000	0.001
f.age15 - f.age21, M, 4	0.931	0.935	0.935	0.95	0.592	1.292	1.000	0.000
f.age18 - f.age21, M, 4	0.278	0.271	0.271	0.95	-0.170	0.660	0.896	0.209

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
M - F, 2, 11	0.238	0.237	0.237	0.95	-0.031	0.501	0.959	0.081
M - F, 4, 11	0.238	0.237	0.237	0.95	-0.031	0.501	0.959	0.081
M - F, 2, 13	0.238	0.237	0.237	0.95	-0.031	0.501	0.959	0.081
M - F, 4, 13	0.238	0.237	0.237	0.95	-0.031	0.501	0.959	0.081
M - F, 2, 15	0.238	0.237	0.237	0.95	-0.031	0.501	0.959	0.081
M - F, 4, 15	0.238	0.237	0.237	0.95	-0.031	0.501	0.959	0.081
M - F, 2, 18	0.238	0.237	0.237	0.95	-0.031	0.501	0.959	0.081
M - F, 4, 18	0.238	0.237	0.237	0.95	-0.031	0.501	0.959	0.081
M - F, 2, 21	0.238	0.237	0.237	0.95	-0.031	0.501	0.959	0.081
M - F, 4, 21	0.238	0.237	0.237	0.95	-0.031	0.501	0.959	0.081

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.layer4 - f.layer2, F, 11	0.343	0.344	0.344	0.95	0.072	0.617	0.993	0.013
f.layer4 - f.layer2, M, 11	0.343	0.344	0.344	0.95	0.072	0.617	0.993	0.013
f.layer4 - f.layer2, F, 13	0.343	0.344	0.344	0.95	0.072	0.617	0.993	0.013

f.layer4 - f.layer2, M, 13	0.343	0.344	0.344	0.95	0.072	0.617	0.993	0.013
f.layer4 - f.layer2, F, 15	0.343	0.344	0.344	0.95	0.072	0.617	0.993	0.013
f.layer4 - f.layer2, M, 15	0.343	0.344	0.344	0.95	0.072	0.617	0.993	0.013
f.layer4 - f.layer2, F, 18	0.343	0.344	0.344	0.95	0.072	0.617	0.993	0.013
f.layer4 - f.layer2, M, 18	0.343	0.344	0.344	0.95	0.072	0.617	0.993	0.013
f.layer4 - f.layer2, F, 21	0.343	0.344	0.344	0.95	0.072	0.617	0.993	0.013
f.layer4 - f.layer2, M, 21	0.343	0.344	0.344	0.95	0.072	0.617	0.993	0.013

Figure Supp 3 - Community detection-uniform_CovM

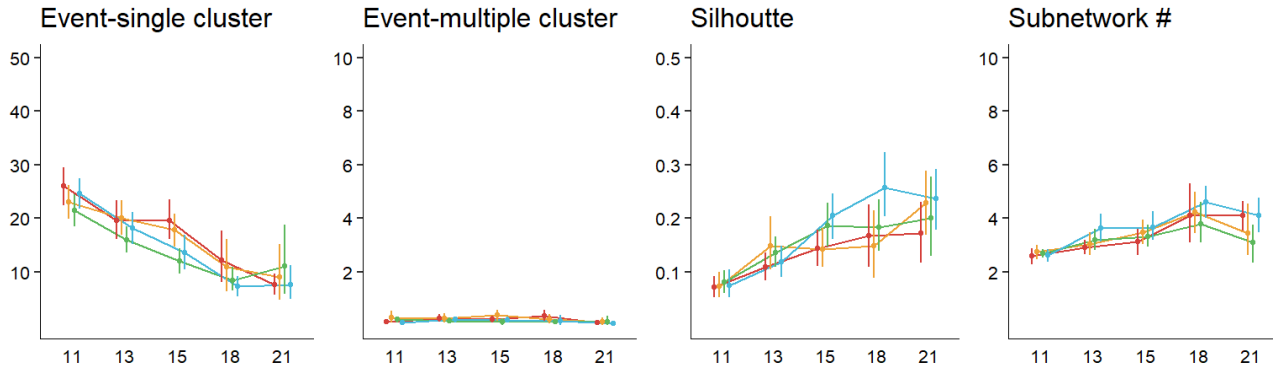

Figure Supp 3 - Community detection-uniform_CovM - Silhouette

Table: ANOVA table before bootstrapping

	F	Df	Df.res	Pr(>F)
(Intercept)	16.349	1	51.466	0.000
f.age	29.886	4	415.932	0.000
sex	0.026	1	31.966	0.874
f.layer	2.568	1	375.991	0.110

Table: Main effect after bootstrapping

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13	-0.055	-0.055	0.95	-0.074	-0.037	1.000	0.000
f.age11 - f.age15	-0.095	-0.096	0.95	-0.118	-0.075	1.000	0.000
f.age11 - f.age18	-0.128	-0.128	0.95	-0.168	-0.092	1.000	0.000
f.age11 - f.age21	-0.175	-0.177	0.95	-0.230	-0.131	1.000	0.000
f.age13 - f.age15	-0.040	-0.041	0.95	-0.070	-0.013	0.998	0.003
f.age13 - f.age18	-0.073	-0.073	0.95	-0.112	-0.036	1.000	0.000
f.age13 - f.age21	-0.120	-0.121	0.95	-0.179	-0.071	1.000	0.000
f.age15 - f.age18	-0.032	-0.032	0.95	-0.073	0.003	0.960	0.081
f.age15 - f.age21	-0.080	-0.081	0.95	-0.130	-0.038	1.000	0.000
f.age18 - f.age21	-0.047	-0.048	0.95	-0.106	0.004	0.964	0.071

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
F - M	0	0	0.95	-0.041	0.042	0.506	0.988

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.layer2 - f.layer4	-0.015	-0.015	0.95	-0.032	0.004	0.945	0.111

Table: Post-hoc comparison with bootstrapping output

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13, F, 2	-0.055	-0.055	-0.055	0.95	-0.074	-0.037	1.000	0.000
f.age11 - f.age15, F, 2	-0.095	-0.096	-0.096	0.95	-0.118	-0.075	1.000	0.000
f.age11 - f.age18, F, 2	-0.128	-0.128	-0.128	0.95	-0.168	-0.092	1.000	0.000
f.age11 - f.age21, F, 2	-0.175	-0.177	-0.177	0.95	-0.230	-0.131	1.000	0.000
f.age13 - f.age15, F, 2	-0.040	-0.041	-0.041	0.95	-0.070	-0.013	0.998	0.003
f.age13 - f.age18, F, 2	-0.073	-0.073	-0.073	0.95	-0.112	-0.036	1.000	0.000
f.age13 - f.age21, F, 2	-0.120	-0.121	-0.121	0.95	-0.179	-0.071	1.000	0.000
f.age15 - f.age18, F, 2	-0.032	-0.032	-0.032	0.95	-0.073	0.003	0.960	0.081
f.age15 - f.age21, F, 2	-0.080	-0.081	-0.081	0.95	-0.130	-0.038	1.000	0.000
f.age18 - f.age21, F, 2	-0.047	-0.048	-0.048	0.95	-0.106	0.004	0.964	0.071
f.age11 - f.age13, M, 2	-0.055	-0.055	-0.055	0.95	-0.074	-0.037	1.000	0.000
f.age11 - f.age15, M, 2	-0.095	-0.096	-0.096	0.95	-0.118	-0.075	1.000	0.000
f.age11 - f.age18, M, 2	-0.128	-0.128	-0.128	0.95	-0.168	-0.092	1.000	0.000
f.age11 - f.age21, M, 2	-0.175	-0.177	-0.177	0.95	-0.230	-0.131	1.000	0.000
f.age13 - f.age15, M, 2	-0.040	-0.041	-0.041	0.95	-0.070	-0.013	0.998	0.003
f.age13 - f.age18, M, 2	-0.073	-0.073	-0.073	0.95	-0.112	-0.036	1.000	0.000
f.age13 - f.age21, M, 2	-0.120	-0.121	-0.121	0.95	-0.179	-0.071	1.000	0.000
f.age15 - f.age18, M, 2	-0.032	-0.032	-0.032	0.95	-0.073	0.003	0.960	0.081
f.age15 - f.age21, M, 2	-0.080	-0.081	-0.081	0.95	-0.130	-0.038	1.000	0.000
f.age18 - f.age21, M, 2	-0.047	-0.048	-0.048	0.95	-0.106	0.004	0.964	0.071
f.age11 - f.age13, F, 4	-0.055	-0.055	-0.055	0.95	-0.074	-0.037	1.000	0.000
f.age11 - f.age15, F, 4	-0.095	-0.096	-0.096	0.95	-0.118	-0.075	1.000	0.000
f.age11 - f.age18, F, 4	-0.128	-0.128	-0.128	0.95	-0.168	-0.092	1.000	0.000
f.age11 - f.age21, F, 4	-0.175	-0.177	-0.177	0.95	-0.230	-0.131	1.000	0.000
f.age13 - f.age15, F, 4	-0.040	-0.041	-0.041	0.95	-0.070	-0.013	0.998	0.003
f.age13 - f.age18, F, 4	-0.073	-0.073	-0.073	0.95	-0.112	-0.036	1.000	0.000
f.age13 - f.age21, F, 4	-0.120	-0.121	-0.121	0.95	-0.179	-0.071	1.000	0.000
f.age15 - f.age18, F, 4	-0.032	-0.032	-0.032	0.95	-0.073	0.003	0.960	0.081
f.age15 - f.age21, F, 4	-0.080	-0.081	-0.081	0.95	-0.130	-0.038	1.000	0.000
f.age18 - f.age21, F, 4	-0.047	-0.048	-0.048	0.95	-0.106	0.004	0.964	0.071
f.age11 - f.age13, M, 4	-0.055	-0.055	-0.055	0.95	-0.074	-0.037	1.000	0.000
f.age11 - f.age15, M, 4	-0.095	-0.096	-0.096	0.95	-0.118	-0.075	1.000	0.000
f.age11 - f.age18, M, 4	-0.128	-0.128	-0.128	0.95	-0.168	-0.092	1.000	0.000
f.age11 - f.age21, M, 4	-0.175	-0.177	-0.177	0.95	-0.230	-0.131	1.000	0.000
f.age13 - f.age15, M, 4	-0.040	-0.041	-0.041	0.95	-0.070	-0.013	0.998	0.003
f.age13 - f.age18, M, 4	-0.073	-0.073	-0.073	0.95	-0.112	-0.036	1.000	0.000
f.age13 - f.age21, M, 4	-0.120	-0.121	-0.121	0.95	-0.179	-0.071	1.000	0.000
f.age15 - f.age18, M, 4	-0.032	-0.032	-0.032	0.95	-0.073	0.003	0.960	0.081
f.age15 - f.age21, M, 4	-0.080	-0.081	-0.081	0.95	-0.130	-0.038	1.000	0.000
f.age18 - f.age21, M, 4	-0.047	-0.048	-0.048	0.95	-0.106	0.004	0.964	0.071

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
M - F, 2, 11	0	0	0	0.95	-0.042	0.041	0.506	0.988
M - F, 4, 11	0	0	0	0.95	-0.042	0.041	0.506	0.988
M - F, 2, 13	0	0	0	0.95	-0.042	0.041	0.506	0.988
M - F, 4, 13	0	0	0	0.95	-0.042	0.041	0.506	0.988
M - F, 2, 15	0	0	0	0.95	-0.042	0.041	0.506	0.988
M - F, 4, 15	0	0	0	0.95	-0.042	0.041	0.506	0.988
M - F, 2, 18	0	0	0	0.95	-0.042	0.041	0.506	0.988
M - F, 4, 18	0	0	0	0.95	-0.042	0.041	0.506	0.988
M - F, 2, 21	0	0	0	0.95	-0.042	0.041	0.506	0.988
M - F, 4, 21	0	0	0	0.95	-0.042	0.041	0.506	0.988

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.layer4 - f.layer2, F, 11	0.015	0.015	0.015	0.95	-0.004	0.032	0.945	0.111
f.layer4 - f.layer2, M, 11	0.015	0.015	0.015	0.95	-0.004	0.032	0.945	0.111
f.layer4 - f.layer2, F, 13	0.015	0.015	0.015	0.95	-0.004	0.032	0.945	0.111

f.layer4 - f.layer2, M, 13	0.015	0.015	0.015	0.95	-0.004	0.032	0.945	0.111
f.layer4 - f.layer2, F, 15	0.015	0.015	0.015	0.95	-0.004	0.032	0.945	0.111
f.layer4 - f.layer2, M, 15	0.015	0.015	0.015	0.95	-0.004	0.032	0.945	0.111
f.layer4 - f.layer2, F, 18	0.015	0.015	0.015	0.95	-0.004	0.032	0.945	0.111
f.layer4 - f.layer2, M, 18	0.015	0.015	0.015	0.95	-0.004	0.032	0.945	0.111
f.layer4 - f.layer2, F, 21	0.015	0.015	0.015	0.95	-0.004	0.032	0.945	0.111
f.layer4 - f.layer2, M, 21	0.015	0.015	0.015	0.95	-0.004	0.032	0.945	0.111

Figure Supp 3 - Community detection-uniform_CovM - subnetwork

Table: ANOVA table before bootstrapping

	F	Df	Df.res	Pr(>F)
(Intercept)	179.610	1	68.491	0.000
f.age	14.220	4	435.005	0.000
sex	1.950	1	30.403	0.173
f.layer	6.952	1	414.211	0.009

Table: Main effect after bootstrapping

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13	-0.527	-0.536	0.95	-0.856	-0.271	1.000	0.000
f.age11 - f.age15	-0.738	-0.744	0.95	-1.070	-0.464	1.000	0.000
f.age11 - f.age18	-1.345	-1.348	0.95	-1.721	-0.985	1.000	0.000
f.age11 - f.age21	-0.949	-0.956	0.95	-1.456	-0.486	1.000	0.000
f.age13 - f.age15	-0.211	-0.208	0.95	-0.445	0.044	0.944	0.111
f.age13 - f.age18	-0.823	-0.812	0.95	-1.211	-0.364	1.000	0.001
f.age13 - f.age21	-0.416	-0.420	0.95	-0.931	0.080	0.950	0.099
f.age15 - f.age18	-0.607	-0.603	0.95	-0.970	-0.224	0.998	0.004
f.age15 - f.age21	-0.201	-0.212	0.95	-0.748	0.253	0.798	0.405
f.age18 - f.age21	0.411	0.391	0.95	-0.268	0.939	0.898	0.203

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
F - M	-0.3	-0.296	0.95	-0.58	-0.006	0.977	0.046

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.layer2 - f.layer4	-0.282	-0.285	0.95	-0.522	-0.061	0.995	0.011

Table: Post-hoc comparison with bootstrapping output

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13, F, 2	-0.527	-0.536	-0.536	0.95	-0.856	-0.271	1.000	0.000
f.age11 - f.age15, F, 2	-0.738	-0.744	-0.744	0.95	-1.070	-0.464	1.000	0.000
f.age11 - f.age18, F, 2	-1.345	-1.348	-1.348	0.95	-1.721	-0.985	1.000	0.000
f.age11 - f.age21, F, 2	-0.949	-0.956	-0.956	0.95	-1.456	-0.486	1.000	0.000
f.age13 - f.age15, F, 2	-0.211	-0.208	-0.208	0.95	-0.445	0.044	0.944	0.111
f.age13 - f.age18, F, 2	-0.823	-0.812	-0.812	0.95	-1.211	-0.364	1.000	0.001
f.age13 - f.age21, F, 2	-0.416	-0.420	-0.420	0.95	-0.931	0.080	0.950	0.099
f.age15 - f.age18, F, 2	-0.607	-0.603	-0.603	0.95	-0.970	-0.224	0.998	0.004
f.age15 - f.age21, F, 2	-0.201	-0.212	-0.212	0.95	-0.748	0.253	0.798	0.405
f.age18 - f.age21, F, 2	0.411	0.391	0.391	0.95	-0.268	0.939	0.898	0.203
f.age11 - f.age13, M, 2	-0.527	-0.536	-0.536	0.95	-0.856	-0.271	1.000	0.000
f.age11 - f.age15, M, 2	-0.738	-0.744	-0.744	0.95	-1.070	-0.464	1.000	0.000
f.age11 - f.age18, M, 2	-1.345	-1.348	-1.348	0.95	-1.721	-0.985	1.000	0.000
f.age11 - f.age21, M, 2	-0.949	-0.956	-0.956	0.95	-1.456	-0.486	1.000	0.000
f.age13 - f.age15, M, 2	-0.211	-0.208	-0.208	0.95	-0.445	0.044	0.944	0.111
f.age13 - f.age18, M, 2	-0.823	-0.812	-0.812	0.95	-1.211	-0.364	1.000	0.001
f.age13 - f.age21, M, 2	-0.416	-0.420	-0.420	0.95	-0.931	0.080	0.950	0.099
f.age15 - f.age18, M, 2	-0.607	-0.603	-0.603	0.95	-0.970	-0.224	0.998	0.004
f.age15 - f.age21, M, 2	-0.201	-0.212	-0.212	0.95	-0.748	0.253	0.798	0.405
f.age18 - f.age21, M, 2	0.411	0.391	0.391	0.95	-0.268	0.939	0.898	0.203
f.age11 - f.age13, F, 4	-0.527	-0.536	-0.536	0.95	-0.856	-0.271	1.000	0.000
f.age11 - f.age15, F, 4	-0.738	-0.744	-0.744	0.95	-1.070	-0.464	1.000	0.000
f.age11 - f.age18, F, 4	-1.345	-1.348	-1.348	0.95	-1.721	-0.985	1.000	0.000
f.age11 - f.age21, F, 4	-0.949	-0.956	-0.956	0.95	-1.456	-0.486	1.000	0.000
f.age13 - f.age15, F, 4	-0.211	-0.208	-0.208	0.95	-0.445	0.044	0.944	0.111
f.age13 - f.age18, F, 4	-0.823	-0.812	-0.812	0.95	-1.211	-0.364	1.000	0.001
f.age13 - f.age21, F, 4	-0.416	-0.420	-0.420	0.95	-0.931	0.080	0.950	0.099
f.age15 - f.age18, F, 4	-0.607	-0.603	-0.603	0.95	-0.970	-0.224	0.998	0.004
f.age15 - f.age21, F, 4	-0.201	-0.212	-0.212	0.95	-0.748	0.253	0.798	0.405
f.age18 - f.age21, F, 4	0.411	0.391	0.391	0.95	-0.268	0.939	0.898	0.203
f.age11 - f.age13, M, 4	-0.527	-0.536	-0.536	0.95	-0.856	-0.271	1.000	0.000
f.age11 - f.age15, M, 4	-0.738	-0.744	-0.744	0.95	-1.070	-0.464	1.000	0.000
f.age11 - f.age18, M, 4	-1.345	-1.348	-1.348	0.95	-1.721	-0.985	1.000	0.000
f.age11 - f.age21, M, 4	-0.949	-0.956	-0.956	0.95	-1.456	-0.486	1.000	0.000
f.age13 - f.age15, M, 4	-0.211	-0.208	-0.208	0.95	-0.445	0.044	0.944	0.111
f.age13 - f.age18, M, 4	-0.823	-0.812	-0.812	0.95	-1.211	-0.364	1.000	0.001
f.age13 - f.age21, M, 4	-0.416	-0.420	-0.420	0.95	-0.931	0.080	0.950	0.099
f.age15 - f.age18, M, 4	-0.607	-0.603	-0.603	0.95	-0.970	-0.224	0.998	0.004
f.age15 - f.age21, M, 4	-0.201	-0.212	-0.212	0.95	-0.748	0.253	0.798	0.405
f.age18 - f.age21, M, 4	0.411	0.391	0.391	0.95	-0.268	0.939	0.898	0.203

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
M - F, 2, 11	0.3	0.296	0.296	0.95	0.006	0.58	0.977	0.046
M - F, 4, 11	0.3	0.296	0.296	0.95	0.006	0.58	0.977	0.046
M - F, 2, 13	0.3	0.296	0.296	0.95	0.006	0.58	0.977	0.046
M - F, 4, 13	0.3	0.296	0.296	0.95	0.006	0.58	0.977	0.046
M - F, 2, 15	0.3	0.296	0.296	0.95	0.006	0.58	0.977	0.046
M - F, 4, 15	0.3	0.296	0.296	0.95	0.006	0.58	0.977	0.046
M - F, 2, 18	0.3	0.296	0.296	0.95	0.006	0.58	0.977	0.046
M - F, 4, 18	0.3	0.296	0.296	0.95	0.006	0.58	0.977	0.046
M - F, 2, 21	0.3	0.296	0.296	0.95	0.006	0.58	0.977	0.046
M - F, 4, 21	0.3	0.296	0.296	0.95	0.006	0.58	0.977	0.046

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.layer4 - f.layer2, F, 11	0.282	0.285	0.285	0.95	0.061	0.522	0.995	0.011
f.layer4 - f.layer2, M, 11	0.282	0.285	0.285	0.95	0.061	0.522	0.995	0.011
f.layer4 - f.layer2, F, 13	0.282	0.285	0.285	0.95	0.061	0.522	0.995	0.011

f.layer4 - f.layer2, M, 13	0.282	0.285	0.285	0.95	0.061	0.522	0.995	0.011
f.layer4 - f.layer2, F, 15	0.282	0.285	0.285	0.95	0.061	0.522	0.995	0.011
f.layer4 - f.layer2, M, 15	0.282	0.285	0.285	0.95	0.061	0.522	0.995	0.011
f.layer4 - f.layer2, F, 18	0.282	0.285	0.285	0.95	0.061	0.522	0.995	0.011
f.layer4 - f.layer2, M, 18	0.282	0.285	0.285	0.95	0.061	0.522	0.995	0.011
f.layer4 - f.layer2, F, 21	0.282	0.285	0.285	0.95	0.061	0.522	0.995	0.011
f.layer4 - f.layer2, M, 21	0.282	0.285	0.285	0.95	0.061	0.522	0.995	0.011

Figure Supp 3 - Community detection-Asymmetric_CovM

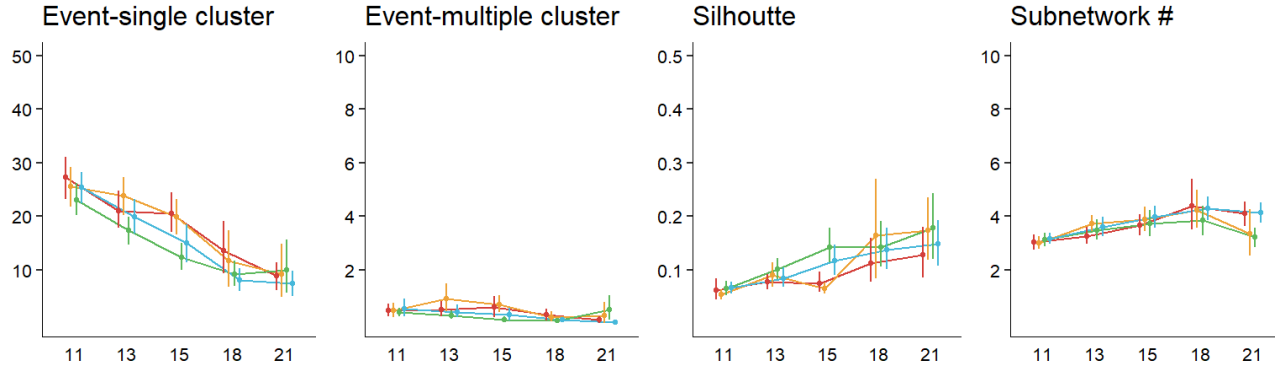

Figure Supp 3 - Community detection-Asymmetric_CovM -Silhouette

Table: ANOVA table before bootstrapping

	F	Df	Df.res	Pr(>F)
(Intercept)	23.534	1	57.370	0.000
f.age	8.409	4	401.449	0.000
sex	0.455	1	53.835	0.503
f.layer	0.957	1	371.913	0.329
f.age:sex	2.557	4	405.384	0.038

Table: Main effect after bootstrapping

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13	-0.029	-0.029	0.95	-0.042	-0.017	1.000	0.000
f.age11 - f.age15	-0.039	-0.040	0.95	-0.061	-0.022	1.000	0.000
f.age11 - f.age18	-0.079	-0.080	0.95	-0.127	-0.042	1.000	0.000
f.age11 - f.age21	-0.096	-0.097	0.95	-0.134	-0.066	1.000	0.000
f.age13 - f.age15	-0.011	-0.011	0.95	-0.028	0.004	0.927	0.146
f.age13 - f.age18	-0.050	-0.051	0.95	-0.096	-0.017	1.000	0.001
f.age13 - f.age21	-0.067	-0.068	0.95	-0.103	-0.040	1.000	0.000
f.age15 - f.age18	-0.039	-0.040	0.95	-0.086	-0.007	0.993	0.014
f.age15 - f.age21	-0.056	-0.057	0.95	-0.090	-0.031	1.000	0.000
f.age18 - f.age21	-0.018	-0.017	0.95	-0.054	0.029	0.821	0.358

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
F - M	0.008	0.005	0.95	-0.039	0.049	0.591	0.819

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.layer2 - f.layer4	0.006	0.006	0.95	-0.006	0.019	0.822	0.357

Table: Post-hoc comparison with bootstrapping output

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13, F, 2	-0.025	-0.026	-0.026	0.95	-0.044	-0.010	1.000	0.001
f.age11 - f.age15, F, 2	-0.013	-0.014	-0.014	0.95	-0.038	0.007	0.896	0.208
f.age11 - f.age18, F, 2	-0.078	-0.082	-0.082	0.95	-0.166	-0.027	1.000	0.000
f.age11 - f.age21, F, 2	-0.084	-0.087	-0.087	0.95	-0.142	-0.044	1.000	0.000
f.age13 - f.age15, F, 2	0.012	0.012	0.012	0.95	0.001	0.024	0.980	0.041
f.age13 - f.age18, F, 2	-0.052	-0.056	-0.056	0.95	-0.132	-0.012	0.993	0.014
f.age13 - f.age21, F, 2	-0.059	-0.061	-0.061	0.95	-0.109	-0.020	0.997	0.006
f.age15 - f.age18, F, 2	-0.063	-0.068	-0.068	0.95	-0.144	-0.028	1.000	0.000
f.age15 - f.age21, F, 2	-0.071	-0.073	-0.073	0.95	-0.116	-0.039	1.000	0.000
f.age18 - f.age21, F, 2	-0.009	-0.005	-0.005	0.95	-0.066	0.085	0.607	0.787
f.age11 - f.age13, M, 2	-0.032	-0.032	-0.032	0.95	-0.050	-0.014	1.000	0.001
f.age11 - f.age15, M, 2	-0.065	-0.066	-0.066	0.95	-0.102	-0.037	1.000	0.000
f.age11 - f.age18, M, 2	-0.078	-0.079	-0.079	0.95	-0.133	-0.034	1.000	0.000
f.age11 - f.age21, M, 2	-0.105	-0.108	-0.108	0.95	-0.160	-0.069	1.000	0.000
f.age13 - f.age15, M, 2	-0.034	-0.034	-0.034	0.95	-0.064	-0.007	0.992	0.016
f.age13 - f.age18, M, 2	-0.045	-0.047	-0.047	0.95	-0.105	-0.002	0.983	0.035
f.age13 - f.age21, M, 2	-0.074	-0.076	-0.076	0.95	-0.126	-0.038	1.000	0.000
f.age15 - f.age18, M, 2	-0.011	-0.013	-0.013	0.95	-0.072	0.034	0.644	0.711
f.age15 - f.age21, M, 2	-0.040	-0.042	-0.042	0.95	-0.090	-0.004	0.987	0.025
f.age18 - f.age21, M, 2	-0.028	-0.029	-0.029	0.95	-0.071	0.004	0.955	0.091
f.age11 - f.age13, F, 4	-0.025	-0.026	-0.026	0.95	-0.044	-0.010	1.000	0.001
f.age11 - f.age15, F, 4	-0.013	-0.014	-0.014	0.95	-0.038	0.007	0.896	0.208
f.age11 - f.age18, F, 4	-0.078	-0.082	-0.082	0.95	-0.166	-0.027	1.000	0.000
f.age11 - f.age21, F, 4	-0.084	-0.087	-0.087	0.95	-0.142	-0.044	1.000	0.000
f.age13 - f.age15, F, 4	0.012	0.012	0.012	0.95	0.001	0.024	0.980	0.041
f.age13 - f.age18, F, 4	-0.052	-0.056	-0.056	0.95	-0.132	-0.012	0.993	0.014
f.age13 - f.age21, F, 4	-0.059	-0.061	-0.061	0.95	-0.109	-0.020	0.997	0.006
f.age15 - f.age18, F, 4	-0.063	-0.068	-0.068	0.95	-0.144	-0.028	1.000	0.000
f.age15 - f.age21, F, 4	-0.071	-0.073	-0.073	0.95	-0.116	-0.039	1.000	0.000
f.age18 - f.age21, F, 4	-0.009	-0.005	-0.005	0.95	-0.066	0.085	0.607	0.787
f.age11 - f.age13, M, 4	-0.032	-0.032	-0.032	0.95	-0.050	-0.014	1.000	0.001
f.age11 - f.age15, M, 4	-0.065	-0.066	-0.066	0.95	-0.102	-0.037	1.000	0.000
f.age11 - f.age18, M, 4	-0.078	-0.079	-0.079	0.95	-0.133	-0.034	1.000	0.000
f.age11 - f.age21, M, 4	-0.105	-0.108	-0.108	0.95	-0.160	-0.069	1.000	0.000
f.age13 - f.age15, M, 4	-0.034	-0.034	-0.034	0.95	-0.064	-0.007	0.992	0.016
f.age13 - f.age18, M, 4	-0.045	-0.047	-0.047	0.95	-0.105	-0.002	0.983	0.035
f.age13 - f.age21, M, 4	-0.074	-0.076	-0.076	0.95	-0.126	-0.038	1.000	0.000
f.age15 - f.age18, M, 4	-0.011	-0.013	-0.013	0.95	-0.072	0.034	0.644	0.711
f.age15 - f.age21, M, 4	-0.040	-0.042	-0.042	0.95	-0.090	-0.004	0.987	0.025
f.age18 - f.age21, M, 4	-0.028	-0.029	-0.029	0.95	-0.071	0.004	0.955	0.091

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
M - F, 2, 11	-0.024	-0.020	-0.020	0.95	-0.058	0.016	0.754	0.492
M - F, 4, 11	-0.024	-0.020	-0.020	0.95	-0.058	0.016	0.754	0.492
M - F, 2, 13	-0.017	-0.014	-0.014	0.95	-0.053	0.025	0.685	0.629
M - F, 4, 13	-0.017	-0.014	-0.014	0.95	-0.053	0.025	0.685	0.629
M - F, 2, 15	0.031	0.032	0.032	0.95	-0.014	0.080	0.898	0.204
M - F, 4, 15	0.031	0.032	0.032	0.95	-0.014	0.080	0.898	0.204
M - F, 2, 18	-0.022	-0.023	-0.023	0.95	-0.118	0.059	0.699	0.602
M - F, 4, 18	-0.022	-0.023	-0.023	0.95	-0.118	0.059	0.699	0.602
M - F, 2, 21	0.000	0.001	0.001	0.95	-0.073	0.076	0.501	0.998
M - F, 4, 21	0.000	0.001	0.001	0.95	-0.073	0.076	0.501	0.998

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.layer4 - f.layer2, F, 11	-0.006	-0.006	-0.006	0.95	-0.019	0.006	0.822	0.357
f.layer4 - f.layer2, M, 11	-0.006	-0.006	-0.006	0.95	-0.019	0.006	0.822	0.357
f.layer4 - f.layer2, F, 13	-0.006	-0.006	-0.006	0.95	-0.019	0.006	0.822	0.357

f.layer4 - f.layer2, M, 13	-0.006	-0.006	-0.006	0.95	-0.019	0.006	0.822	0.357
f.layer4 - f.layer2, F, 15	-0.006	-0.006	-0.006	0.95	-0.019	0.006	0.822	0.357
f.layer4 - f.layer2, M, 15	-0.006	-0.006	-0.006	0.95	-0.019	0.006	0.822	0.357
f.layer4 - f.layer2, F, 18	-0.006	-0.006	-0.006	0.95	-0.019	0.006	0.822	0.357
f.layer4 - f.layer2, M, 18	-0.006	-0.006	-0.006	0.95	-0.019	0.006	0.822	0.357
f.layer4 - f.layer2, F, 21	-0.006	-0.006	-0.006	0.95	-0.019	0.006	0.822	0.357
f.layer4 - f.layer2, M, 21	-0.006	-0.006	-0.006	0.95	-0.019	0.006	0.822	0.357

Figure Supp 3 - Community detection-Asymmetric_CovM- subnetwork

Table: ANOVA table before bootstrapping

	F	Df	Df.res	Pr(>F)
(Intercept)	477.197	1	82.101	0.000
f.age	11.829	4	414.497	0.000
sex	0.004	1	26.822	0.950
f.layer	4.209	1	377.681	0.041

Table: Main effect after bootstrapping

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13	-0.419	-0.422	0.95	-0.666	-0.193	1.000	0.000
f.age11 - f.age15	-0.730	-0.728	0.95	-0.953	-0.489	1.000	0.000
f.age11 - f.age18	-1.000	-0.990	0.95	-1.431	-0.501	1.000	0.000
f.age11 - f.age21	-0.630	-0.631	0.95	-0.878	-0.392	1.000	0.000
f.age13 - f.age15	-0.308	-0.306	0.95	-0.555	-0.042	0.988	0.024
f.age13 - f.age18	-0.579	-0.568	0.95	-1.058	-0.035	0.982	0.036
f.age13 - f.age21	-0.210	-0.209	0.95	-0.535	0.133	0.890	0.221
f.age15 - f.age18	-0.271	-0.262	0.95	-0.731	0.262	0.849	0.301
f.age15 - f.age21	0.099	0.097	0.95	-0.232	0.426	0.724	0.552
f.age18 - f.age21	0.367	0.360	0.95	-0.082	0.761	0.947	0.105

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
F - M	0.027	0.026	0.95	-0.195	0.241	0.595	0.81

Parameter	Median	Mean	CI	CI_low	CI_high	pd	pval
f.layer2 - f.layer4	-0.186	-0.188	0.95	-0.392	0.008	0.97	0.06

Table: Post-hoc comparison with bootstrapping output

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.age11 - f.age13, F, 2	-0.419	-0.422	-0.422	0.95	-0.666	-0.193	1.000	0.000
f.age11 - f.age15, F, 2	-0.730	-0.728	-0.728	0.95	-0.953	-0.489	1.000	0.000
f.age11 - f.age18, F, 2	-1.000	-0.990	-0.990	0.95	-1.431	-0.501	1.000	0.000
f.age11 - f.age21, F, 2	-0.630	-0.631	-0.631	0.95	-0.878	-0.392	1.000	0.000
f.age13 - f.age15, F, 2	-0.308	-0.306	-0.306	0.95	-0.555	-0.042	0.988	0.024
f.age13 - f.age18, F, 2	-0.579	-0.568	-0.568	0.95	-1.058	-0.035	0.982	0.036
f.age13 - f.age21, F, 2	-0.210	-0.209	-0.209	0.95	-0.535	0.133	0.890	0.221
f.age15 - f.age18, F, 2	-0.271	-0.262	-0.262	0.95	-0.731	0.262	0.849	0.301
f.age15 - f.age21, F, 2	0.099	0.097	0.097	0.95	-0.232	0.426	0.724	0.552
f.age18 - f.age21, F, 2	0.367	0.360	0.360	0.95	-0.082	0.761	0.947	0.105
f.age11 - f.age13, M, 2	-0.419	-0.422	-0.422	0.95	-0.666	-0.193	1.000	0.000
f.age11 - f.age15, M, 2	-0.730	-0.728	-0.728	0.95	-0.953	-0.489	1.000	0.000
f.age11 - f.age18, M, 2	-1.000	-0.990	-0.990	0.95	-1.431	-0.501	1.000	0.000
f.age11 - f.age21, M, 2	-0.630	-0.631	-0.631	0.95	-0.878	-0.392	1.000	0.000
f.age13 - f.age15, M, 2	-0.308	-0.306	-0.306	0.95	-0.555	-0.042	0.988	0.024
f.age13 - f.age18, M, 2	-0.579	-0.568	-0.568	0.95	-1.058	-0.035	0.982	0.036
f.age13 - f.age21, M, 2	-0.210	-0.209	-0.209	0.95	-0.535	0.133	0.890	0.221
f.age15 - f.age18, M, 2	-0.271	-0.262	-0.262	0.95	-0.731	0.262	0.849	0.301
f.age15 - f.age21, M, 2	0.099	0.097	0.097	0.95	-0.232	0.426	0.724	0.552
f.age18 - f.age21, M, 2	0.367	0.360	0.360	0.95	-0.082	0.761	0.947	0.105
f.age11 - f.age13, F, 4	-0.419	-0.422	-0.422	0.95	-0.666	-0.193	1.000	0.000
f.age11 - f.age15, F, 4	-0.730	-0.728	-0.728	0.95	-0.953	-0.489	1.000	0.000
f.age11 - f.age18, F, 4	-1.000	-0.990	-0.990	0.95	-1.431	-0.501	1.000	0.000
f.age11 - f.age21, F, 4	-0.630	-0.631	-0.631	0.95	-0.878	-0.392	1.000	0.000
f.age13 - f.age15, F, 4	-0.308	-0.306	-0.306	0.95	-0.555	-0.042	0.988	0.024
f.age13 - f.age18, F, 4	-0.579	-0.568	-0.568	0.95	-1.058	-0.035	0.982	0.036
f.age13 - f.age21, F, 4	-0.210	-0.209	-0.209	0.95	-0.535	0.133	0.890	0.221
f.age15 - f.age18, F, 4	-0.271	-0.262	-0.262	0.95	-0.731	0.262	0.849	0.301
f.age15 - f.age21, F, 4	0.099	0.097	0.097	0.95	-0.232	0.426	0.724	0.552
f.age18 - f.age21, F, 4	0.367	0.360	0.360	0.95	-0.082	0.761	0.947	0.105
f.age11 - f.age13, M, 4	-0.419	-0.422	-0.422	0.95	-0.666	-0.193	1.000	0.000
f.age11 - f.age15, M, 4	-0.730	-0.728	-0.728	0.95	-0.953	-0.489	1.000	0.000
f.age11 - f.age18, M, 4	-1.000	-0.990	-0.990	0.95	-1.431	-0.501	1.000	0.000
f.age11 - f.age21, M, 4	-0.630	-0.631	-0.631	0.95	-0.878	-0.392	1.000	0.000
f.age13 - f.age15, M, 4	-0.308	-0.306	-0.306	0.95	-0.555	-0.042	0.988	0.024
f.age13 - f.age18, M, 4	-0.579	-0.568	-0.568	0.95	-1.058	-0.035	0.982	0.036
f.age13 - f.age21, M, 4	-0.210	-0.209	-0.209	0.95	-0.535	0.133	0.890	0.221
f.age15 - f.age18, M, 4	-0.271	-0.262	-0.262	0.95	-0.731	0.262	0.849	0.301
f.age15 - f.age21, M, 4	0.099	0.097	0.097	0.95	-0.232	0.426	0.724	0.552
f.age18 - f.age21, M, 4	0.367	0.360	0.360	0.95	-0.082	0.761	0.947	0.105

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
M - F, 2, 11	-0.027	-0.026	-0.026	0.95	-0.241	0.195	0.595	0.81
M - F, 4, 11	-0.027	-0.026	-0.026	0.95	-0.241	0.195	0.595	0.81
M - F, 2, 13	-0.027	-0.026	-0.026	0.95	-0.241	0.195	0.595	0.81
M - F, 4, 13	-0.027	-0.026	-0.026	0.95	-0.241	0.195	0.595	0.81
M - F, 2, 15	-0.027	-0.026	-0.026	0.95	-0.241	0.195	0.595	0.81
M - F, 4, 15	-0.027	-0.026	-0.026	0.95	-0.241	0.195	0.595	0.81
M - F, 2, 18	-0.027	-0.026	-0.026	0.95	-0.241	0.195	0.595	0.81
M - F, 4, 18	-0.027	-0.026	-0.026	0.95	-0.241	0.195	0.595	0.81
M - F, 2, 21	-0.027	-0.026	-0.026	0.95	-0.241	0.195	0.595	0.81
M - F, 4, 21	-0.027	-0.026	-0.026	0.95	-0.241	0.195	0.595	0.81

Parameter	Median	Mean	Mean.1	CI	CI_low	CI_high	pd	pval
f.layer4 - f.layer2, F, 11	0.186	0.188	0.188	0.95	-0.008	0.392	0.97	0.06
f.layer4 - f.layer2, M, 11	0.186	0.188	0.188	0.95	-0.008	0.392	0.97	0.06
f.layer4 - f.layer2, F, 13	0.186	0.188	0.188	0.95	-0.008	0.392	0.97	0.06

f.layer4 - f.layer2, M, 13	0.186	0.188	0.188	0.95	-0.008	0.392	0.97	0.06
f.layer4 - f.layer2, F, 15	0.186	0.188	0.188	0.95	-0.008	0.392	0.97	0.06
f.layer4 - f.layer2, M, 15	0.186	0.188	0.188	0.95	-0.008	0.392	0.97	0.06
f.layer4 - f.layer2, F, 18	0.186	0.188	0.188	0.95	-0.008	0.392	0.97	0.06
f.layer4 - f.layer2, M, 18	0.186	0.188	0.188	0.95	-0.008	0.392	0.97	0.06
f.layer4 - f.layer2, F, 21	0.186	0.188	0.188	0.95	-0.008	0.392	0.97	0.06
f.layer4 - f.layer2, M, 21	0.186	0.188	0.188	0.95	-0.008	0.392	0.97	0.06