

row	effectName	shortName	endow?	inter1	inter2	parm	interactionType
nonSymmetricRate							
63	basic rate parameter xxxxxx	Rate	FALSE			0	
64	constant xxxxxx rate (period nnnnnn)	Rate	FALSE			0	
65	outdegree effect on rate xxxxxx	outRate	FALSE			0	
66	indegree effect on rate xxxxxx	inRate	FALSE			0	
67	reciprocity effect on rate xxxxxx	recipRate	FALSE			0	
68	effect 1/outdegree on rate xxxxxx	outRateInv	FALSE			0	
covarNonSymmetricRate							
191	effect xxxxxx on rate	RateX	FALSE	xxxxxxx		0	
symmetricRate							
73	basic rate parameter xxxxxx	Rate	FALSE			0	
74	constant xxxxxx rate (period nnnnnn)	Rate	FALSE			0	
75	degree effect on rate xxxxxx	outRate	FALSE			0	
76	effect 1/degree on rate xxxxxx	outRateInv	FALSE			0	
covarSymmetricRate							
190	effect xxxxxx on rate	RateX	FALSE	xxxxxxx		0	
bipartiteRate							
69	basic rate parameter xxxxxx	Rate	FALSE			0	
70	constant xxxxxx rate (period nnnnnn)	Rate	FALSE			0	
71	outdegree effect on rate xxxxxx	outRate	FALSE			0	
72	effect 1/outdegree on rate xxxxxx	outRateInv	FALSE			0	
covarBipartiteRate							
192	effect xxxxxx on rate	RateX	FALSE	xxxxxxx		0	
behaviorRate							
48	rate xxxxxx period 1	Rate	FALSE			0	
49	rate xxxxxx (period nnnnnn)	Rate	FALSE			0	
behaviorOneModeRate							
50	outdegree effect on rate xxxxxx	outRate	FALSE	yyyyyy		0	
51	indegree effect on rate xxxxxx	inRate	FALSE	yyyyyy		0	
52	reciprocated effect on rate xxxxxx	recipRate	FALSE	yyyyyy		0	
53	average exposure effect on rate xxxxxx	avExposure	FALSE	yyyyyy		0	
54	susceptibility to av. exp. by indegree effect on rate xxxxxx	susceptAvIn	FALSE	yyyyyy		0	
55	total exposure effect on rate xxxxxx	totExposure	FALSE	yyyyyy		0	
56	infection by indegree effect on rate xxxxxx	infectIn	FALSE	yyyyyy		0	

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57	infection by outdegree effect on rate xxxxxx	infectOut	FALSE	yyyyyy		0	
behaviorSymmetricRate							
58	degree effect on rate xxxxxx	outRate	FALSE	yyyyyy		0	
covarBehaviorOneModeRate							
59	susceptibility to av. exp. by zzzzzz effect on rate xxxxxx	susceptAvCovar	FALSE	yyyyyy	zzzzzz	0	
60	infection by zzzzzz effect on rate xxxxxx	infectCovar	FALSE	yyyyyy	zzzzzz	0	
behaviorBipartiteRate							
61	outdegree effect on rate xxxxxx	outRate	FALSE	yyyyyy		0	
62	reciprocated effect on rate xxxxxx	recipRate	FALSE	yyyyyy		0	
covarBehaviorRate							
121	effect yyyyyy on rate xxxxxx	RateX	FALSE	yyyyyy		0	
nonSymmetricObjective							
136	outdegree (density)	density	TRUE			0	dyadic
137	reciprocity	recip	TRUE			0	dyadic
138	transitive triplets	transTrip	TRUE			0	
139	transitive mediated triplets	transMedTrip	TRUE			0	
140	transitive reciprocated triplets	transRecTrip	TRUE			0	
141	3-cycles	cycle3	TRUE			0	
142	transitive ties	transTies	TRUE			0	
143	betweenness	between	FALSE			0	
144	balance	balance	TRUE			0	
145	number of actors at distance 2	nbrDist2	FALSE			0	
146	number pairs at doubly achieved distance 2	nbrDist2twice	FALSE			0	
147	dense triads	denseTriads	FALSE			5	
148	GWESP I -> K -> J (#)	gwapFF	FALSE			69	
149	GWESP I <- K <- J (#)	gwapBB	FALSE			69	
150	GWESP I <- K -> J (#)	gwapFB	FALSE			69	
151	GWESP I -> K <- J (#)	gwapBF	FALSE			69	
152	GWESP I <> K <> J (#)	gwapRR	FALSE			69	
153	indegree - popularity	inPop	TRUE			0	
154	indegree - popularity (sqrt)	inPopSqrt	TRUE			0	
155	outdegree - popularity	outPop	TRUE			0	dyadic
156	outdegree - popularity (sqrt)	outPopSqrt	FALSE			0	dyadic
157	indegree - activity	inAct	FALSE			0	ego
158	indegree - activity (sqrt)	inActSqrt	FALSE			0	ego

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159	outdegree - activity	outAct	FALSE			0	
160	outdegree - activity (sqrt)	outActSqrt	FALSE			0	
161	outdegree-trunc(#)	outTrunc	FALSE			5	
162	1/(outdegree + #)	outInv	FALSE			1	
163	1/(outdegree+#)(outdegree+1+#)	outSqInv	FALSE			1	
164	in-isolate Outdegree	inIsDegree	FALSE			0	ego
165	network-isolate	isolateNet	FALSE			0	ego
166	anti isolates	antiIso	TRUE			0	ego
167	anti in-isolates	antiInIso	TRUE			0	ego
168	anti in-near-isolates	antiInIso2	TRUE			0	ego
169	isolate - popularity	isolatePop	TRUE			0	ego
170	out-out degree^(1/#) assortativity	outOutAss	TRUE			2	
171	out-in degree^(1/#) assortativity	outInAss	TRUE			2	
172	in-out degree^(1/#) assortativity	inOutAss	TRUE			2	
173	in-in degree^(1/#) assortativity	inInAss	TRUE			2	
174	in-struct equivalence	inStructEq	FALSE			0	
dyadObjective							
77	xxxxxxx	X	TRUE	xxxxxxx		0	dyadic
78	xxxxxxx x reciprocity	XRecip	TRUE	xxxxxxx		0	dyadic
79	WW=>X closure of xxxxxx	WWX	TRUE	xxxxxxx		0	dyadic
80	WW=>X cyclic closure of xxxxxx	cyWWX	TRUE	xxxxxxx		0	dyadic
81	WW=>X shared incoming xxxxxx	InWWX	TRUE	xxxxxxx		0	dyadic
82	WW=>X shared outgoing xxxxxx	OutWWX	TRUE	xxxxxxx		0	dyadic
83	WX=>X closure of xxxxxx	WXX	TRUE	xxxxxxx		0	dyadic
84	XW=>X closure of xxxxxx	XWX	TRUE	xxxxxxx		0	
covarNonSymmetricObjective							
102	xxxxxxx alter	altX	TRUE	xxxxxxx		0	dyadic
103	xxxxxxx squared alter	altSqX	TRUE	xxxxxxx		0	dyadic
104	xxxxxxx ego	egoX	TRUE	xxxxxxx		0	ego
105	xxxxxxx similarity	simX	TRUE	xxxxxxx		0	dyadic
106	xxxxxxx similarity x reciprocity	simRecipX	TRUE	xxxxxxx		0	dyadic
107	transitive triplets xxxxxx similarity	simXTransTrip	TRUE	xxxxxxx		0	dyadic
108	same xxxxxx	sameX	TRUE	xxxxxxx		0	dyadic
109	same xxxxxx x reciprocity	sameXRecip	TRUE	xxxxxxx		0	dyadic
110	transitive triplets same xxxxxx	sameXTransTrip	TRUE	xxxxxxx		0	

row	effectName	shortName	endow?	inter1	inter2	parm	interactionType
111	transitive triplets jumping xxxxxx	jumpXTransTrip	TRUE	xxxxxxx		0	
112	xxxxxxx ego x xxxxxx alter	egoXaltX	TRUE	xxxxxxx		0	dyadic
113	xxxxxxx ego x xxxxxx alter x recipr.	egoXaltXRecip	TRUE	xxxxxxx		0	dyadic
114	higher xxxxxx	higher	TRUE	xxxxxxx		0	dyadic
115	xxxxxxx of indirect ties	IndTies	FALSE	xxxxxxx		0	dyadic
116	xxxxxxx alter at distance 2 (#)	altDist2	TRUE	xxxxxxx		1	dyadic
117	xxxxxxx similarity at distance 2	simDist2	TRUE	xxxxxxx		0	dyadic
unspecifiedNetInteraction							
193	unspecified interaction effect	unspInt	TRUE			0	
nonSymmetricNonSymmetricObjective							
204	xxxxxxx	crprod	TRUE	xxxxxxx		0	dyadic
205	reciprocity with xxxxxx	crprodRecip	TRUE	xxxxxxx		0	dyadic
206	mutuality with xxxxxx	crprodMutual	TRUE	xxxxxxx		0	dyadic
207	indegree^(1/#) xxxxxx popularity	inPopIntn	TRUE	xxxxxxx		2	dyadic
208	indegree^(1/#) xxxxxx activity	inActIntn	TRUE	xxxxxxx		2	ego
209	outdegree^(1/#) xxxxxx popularity	outPopIntn	TRUE	xxxxxxx		2	dyadic
210	outdegree^(1/#) xxxxxx activity	outActIntn	TRUE	xxxxxxx		2	dyadic
211	both indegrees^(1/#) xxxxxx	both	TRUE	xxxxxxx		2	dyadic
212	betweenness^(1/#) xxxxxx popularity	betweenPop	TRUE	xxxxxxx		2	dyadic
213	from xxxxxx agreement	from	TRUE	xxxxxxx		0	dyadic
214	from xxxxxx mutual agr.	fromMutual	TRUE	xxxxxxx		0	dyadic
215	xxxxxxx to agreement	to	TRUE	xxxxxxx		0	dyadic
216	closure of xxxxxx	closure	TRUE	xxxxxxx		0	dyadic
217	cyclic closure of xxxxxx	cyClosure	TRUE	xxxxxxx		0	dyadic
218	shared incoming xxxxxx	sharedIn	TRUE	xxxxxxx		0	dyadic
nonSymmetricSymmetricObjective							
195	xxxxxxx	crprod	TRUE	xxxxxxx		0	dyadic
196	degree^(1/#) xxxxxx popularity	inPopIntn	TRUE	xxxxxxx		2	dyadic
197	indegree^(1/#) xxxxxx activity	inActIntn	TRUE	xxxxxxx		2	ego
198	outdegree^(1/#) xxxxxx popularity	outPopIntn	TRUE	xxxxxxx		2	dyadic
199	degree^(1/#) xxxxxx activity	inActIntn	TRUE	xxxxxxx		2	ego
200	both degrees^(1/#) xxxxxx	both	TRUE	xxxxxxx		2	dyadic
201	from xxxxxx agreement	from	TRUE	xxxxxxx		0	dyadic
202	xxxxxxx to agreement	to	TRUE	xxxxxxx		0	dyadic

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203	closure of xxxxxx	closure	TRUE	xxxxxxx		0	dyadic
nonSymmetricBipartiteObjective							
223	outdegree^(1/#) xxxxxx popularity	outPopIntn	TRUE	xxxxxxx		2	dyadic
224	outdegree^(1/#) xxxxxx activity	outActIntn	TRUE	xxxxxxx		2	dyadic
225	from xxxxxx agreement	from	TRUE	xxxxxxx		0	dyadic
covarNetNetObjective							
229	from xxxxxx agr. x same yyyyyy	covNetNet	TRUE	xxxxxxx	yyyyyy	0	dyadic
230	xxxxxxx closure jumping yyyyyy	jumpWWClosure	TRUE	xxxxxxx	yyyyyy	0	dyadic
231	mixed xxxxxx closure jumping yyyyyy	jumpWXClosure	TRUE	xxxxxxx	yyyyyy	0	dyadic
232	yyyyyy alter at distance 2 on xxxxxx (#)	altDist2W	TRUE	xxxxxxx	yyyyyy	1	
233	yyyyyy similarity at distance 2 on xxxxxx	simDist2W	TRUE	xxxxxxx	yyyyyy	0	
symmetricObjective							
175	degree (density)	density	TRUE			0	ego
176	transitive triads	transTriads	TRUE			0	
177	transitive ties	transTies	TRUE			0	
178	betweenness	between	FALSE			0	
179	balance	balance	TRUE			0	
180	number of actor pairs at distance 2	nbrDist2	FALSE			0	
181	number pairs at doubly achieved distance 2	nbrDist2twice	FALSE			0	
182	degree of alter	inPop	TRUE			0	
183	sqrt degree of alter	inPopSqrt	TRUE			0	
184	degree^(1.5)	outActSqrt	FALSE			0	
185	outdegree-trunc(#)	outTrunc	FALSE			5	
186	1/(degree + #)	outInv	FALSE			1	
187	1/(degree+#)(degree+1+#)	outSqInv	FALSE			1	
188	network-isolate	isolateNet	FALSE			0	ego
189	degree^(1/#) assortativity	outOutAss	TRUE			2	
dyadObjective							
77	xxxxxxx	X	TRUE	xxxxxxx		0	dyadic
78	xxxxxxx x reciprocity	XRecip	TRUE	xxxxxxx		0	dyadic
79	WW=>X closure of xxxxxx	WWX	TRUE	xxxxxxx		0	dyadic
80	WW=>X cyclic closure of xxxxxx	cyWWX	TRUE	xxxxxxx		0	dyadic
81	WW=>X shared incoming xxxxxx	InWWX	TRUE	xxxxxxx		0	dyadic
82	WW=>X shared outgoing xxxxxx	OutWWX	TRUE	xxxxxxx		0	dyadic
83	WX=>X closure of xxxxxx	WXX	TRUE	xxxxxxx		0	dyadic

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84	XW=>X closure of xxxxxx	XWX	TRUE	xxxxxxx		0	
covarSymmetricObjective							
89	xxxxxxx	altX	TRUE	xxxxxxx		0	dyadic
90	xxxxxxx squared	altSqX	TRUE	xxxxxxx		0	dyadic
91	xxxxxxx similarity	simX	TRUE	xxxxxxx		0	dyadic
92	same xxxxxx	sameX	TRUE	xxxxxxx		0	dyadic
93	xxxxxxx ego x xxxxxx alter	egoXaltX	TRUE	xxxxxxx		0	dyadic
94	xxxxxxx of indirect ties	IndTies	FALSE	xxxxxxx		0	dyadic
95	xxxxxxx alter at distance 2 (#)	altDist2	TRUE	xxxxxxx		1	dyadic
96	xxxxxxx similarity at distance 2	simDist2	TRUE	xxxxxxx		0	dyadic
unspecifiedNetInteraction							
193	unspecified interaction effect	unspInt	TRUE			0	
bipartiteObjective							
122	outdegree (density)	density	TRUE			0	dyadic
123	4-cycles	cycle4	TRUE			1	
124	indegree - popularity	inPop	TRUE			0	
125	indegree - popularity (sqrt)	inPopSqrt	TRUE			0	
126	outdegree - activity	outAct	FALSE			0	
127	outdegree - activity (sqrt)	outActSqrt	FALSE			0	
128	outdegree-trunc(#)	outTrunc	FALSE			5	
129	1/(outdegree + #)	outInv	FALSE			1	
130	1/(outdegree+#)(outdegree+1+#)	outSqInv	FALSE			1	
131	anti in-isolates	antiInIso	TRUE			0	ego
132	anti in-near-isolates	antiInIso2	TRUE			0	ego
133	1/(outdegree + #)	outInv	FALSE			1	
134	1/(outdegree+#)(outdegree+1+#)	outSqInv	FALSE			1	
135	out-in degree^(1/2) assortativity	outInAss	TRUE			2	
dyadObjective							
77	xxxxxxx	X	TRUE	xxxxxxx		0	dyadic
78	xxxxxxx x reciprocity	XRecip	TRUE	xxxxxxx		0	dyadic
79	WW=>X closure of xxxxxx	WWX	TRUE	xxxxxxx		0	dyadic
80	WW=>X cyclic closure of xxxxxx	cyWWX	TRUE	xxxxxxx		0	dyadic
81	WW=>X shared incoming xxxxxx	InWWX	TRUE	xxxxxxx		0	dyadic
82	WW=>X shared outgoing xxxxxx	OutWWX	TRUE	xxxxxxx		0	dyadic
83	WX=>X closure of xxxxxx	WXX	TRUE	xxxxxxx		0	dyadic

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84	XW=>X closure of xxxxxx	XWX	TRUE	xxxxxxx		0	
covarBipartiteObjective							
97	xxxxxxx alter	altX	TRUE	xxxxxxx		0	dyadic
98	xxxxxxx squared alter	altSqX	TRUE	xxxxxxx		0	dyadic
99	xxxxxxx ego	egoX	TRUE	xxxxxxx		0	ego
100	xxxxxxx alter at distance 2	altDist2	TRUE	xxxxxxx		1	dyadic
101	xxxxxxx similarity at distance 2	simDist2	TRUE	xxxxxxx		0	dyadic
unspecifiedNetInteraction							
193	unspecified interaction effect	unspInt	TRUE			0	
bipartiteNonSymmetricObjective							
219	outdegree^(1/#) xxxxxx activity	outActIntn	TRUE	xxxxxxx		2	dyadic
220	xxxxxxx to agreement	to	TRUE	xxxxxxx		0	dyadic
bipartiteSymmetricObjective							
221	degree^(1/#) xxxxxx activity	outActIntn	TRUE	xxxxxxx		2	dyadic
222	xxxxxxx to agreement	to	TRUE	xxxxxxx		0	dyadic
bipartiteBipartiteObjective							
226	xxxxxxx	crprod	TRUE	xxxxxxx		0	dyadic
227	indegree^(1/#) xxxxxx popularity	inPopIntn	TRUE	xxxxxxx		2	dyadic
228	outdegree^(1/#) xxxxxx activity	outActIntn	TRUE	xxxxxxx		2	dyadic
covarNetNetObjective							
229	from xxxxxx agr. x same yyyyyy	covNetNet	TRUE	xxxxxxx	yyyyyy	0	dyadic
230	xxxxxxx closure jumping yyyyyy	jumpWWClosure	TRUE	xxxxxxx	yyyyyy	0	dyadic
231	mixed xxxxxx closure jumping yyyyyy	jumpWXClosure	TRUE	xxxxxxx	yyyyyy	0	dyadic
232	yyyyyy alter at distance 2 on xxxxxx (#)	altDist2W	TRUE	xxxxxxx	yyyyyy	1	
233	yyyyyy similarity at distance 2 on xxxxxx	simDist2W	TRUE	xxxxxxx	yyyyyy	0	
behaviorObjective							
46	behavior xxxxxx linear shape	linear	TRUE			0	OK
47	behavior xxxxxx quadratic shape	quad	TRUE			0	
behaviorOneModeObjective							
1	behavior xxxxxx average similarity	avSim	TRUE	yyyyyy		0	
2	behavior xxxxxx total similarity	totSim	TRUE	yyyyyy		0	
3	behavior xxxxxx indegree	indeg	TRUE	yyyyyy		0	OK
4	behavior xxxxxx outdegree	outdeg	TRUE	yyyyyy		0	OK
5	behavior xxxxxx isolate	isolate	FALSE	yyyyyy		0	OK

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6	behavior xxxxxx ave. sim. x reciprocity	avSimRecip	FALSE	yyyyyy		0	
7	behavior xxxxxx tot. sim. x reciprocity	totSimRecip	FALSE	yyyyyy		0	
8	behavior xxxxxx ave. sim. x popularity alter	avSimPopAlt	FALSE	yyyyyy		0	
9	behavior xxxxxx tot. sim. x popularity alter	totSimPopAlt	FALSE	yyyyyy		0	
10	behavior xxxxxx x popularity alter	popAlt	FALSE	yyyyyy		0	OK
11	behavior xxxxxx ave. sim. x rec. x pop. (alter)	avSimRecPop	FALSE	yyyyyy		0	
12	behavior xxxxxx tot. sim. x rec. x pop. (alter)	totSimRecPop	FALSE	yyyyyy		0	
13	behavior xxxxxx average alter	avAlt	TRUE	yyyyyy		0	OK
14	behavior xxxxxx average rec. alters	avRecAlt	FALSE	yyyyyy		0	OK
15	behavior xxxxxx dense triads	behDenseTriads	FALSE	yyyyyy		5	OK
16	behavior xxxxxx similarity in dense triads	simDenseTriads	FALSE	yyyyyy		5	OK
17	behavior xxxxxx reciprocated degree	recipDeg	FALSE	yyyyyy		0	OK
18	behavior xxxxxx ave. sim. x popularity ego	avSimPopEgo	TRUE	yyyyyy		0	
behaviorSymmetricObjective							
19	behavior xxxxxx average similarity	avSim	TRUE	yyyyyy		0	
20	behavior xxxxxx total similarity	totSim	TRUE	yyyyyy		0	
21	behavior xxxxxx degree	outdeg	TRUE	yyyyyy		0	OK
22	behavior xxxxxx isolate	isolate	FALSE	yyyyyy		0	OK
23	behavior xxxxxx ave. sim. x reciprocity	avSimRecip	FALSE	yyyyyy		0	
24	behavior xxxxxx tot. sim. x reciprocity	totSimRecip	FALSE	yyyyyy		0	
25	behavior xxxxxx ave. sim. x popularity alter	avSimPopAlt	FALSE	yyyyyy		0	
26	behavior xxxxxx tot. sim. x popularity alter	totSimPopAlt	FALSE	yyyyyy		0	
27	behavior xxxxxx x popularity alter	popAlt	FALSE	yyyyyy		0	OK
28	behavior xxxxxx ave. sim. x rec. x pop. (alter)	avSimRecPop	FALSE	yyyyyy		0	
29	behavior xxxxxx tot. sim. x rec. x pop. (alter)	totSimRecPop	FALSE	yyyyyy		0	
30	behavior xxxxxx average alter	avAlt	TRUE	yyyyyy		0	OK
31	behavior xxxxxx average rec. alters	avRecAlt	FALSE	yyyyyy		0	OK
32	behavior xxxxxx dense triads	behDenseTriads	FALSE	yyyyyy		5	OK
33	behavior xxxxxx similarity in dense triads	simDenseTriads	FALSE	yyyyyy		5	OK
34	behavior xxxxxx ave. sim. x popularity ego	avSimPopEgo	TRUE	yyyyyy		0	
behaviorBipartiteObjective							
35	behavior xxxxxx average similarity	avSim	TRUE	yyyyyy		0	
36	behavior xxxxxx total similarity	totSim	TRUE	yyyyyy		0	
37	behavior xxxxxx outdegree	outdeg	TRUE	yyyyyy		0	OK
38	behavior xxxxxx isolate	isolate	FALSE	yyyyyy		0	OK



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39	behavior xxxxxx ave. sim. x popularity alter	avSimPopAlt	FALSE	yyyyyy		0	
40	behavior xxxxxx tot. sim. x popularity alter	totSimPopAlt	FALSE	yyyyyy		0	
41	behavior xxxxxx x popularity alter	popAlt	FALSE	yyyyyy		0	OK
42	behavior xxxxxx average alter	avAlt	TRUE	yyyyyy		0	OK
43	behavior xxxxxx dense triads	behDenseTriads	FALSE	yyyyyy		0	OK
44	behavior xxxxxx similarity in dense triads	simDenseTriads	FALSE	yyyyyy		0	OK
45	behavior xxxxxx ave. sim. x popularity ego	avSimPopEgo	TRUE	yyyyyy		0	
covarBehaviorObjective							
86	behavior xxxxxx: effect from yyyyyy	effFrom	TRUE	yyyyyy		0	OK
unspecifiedBehaviorInteraction							
194	behavior xxxxxx: unspecified interaction	behUnspInt	TRUE			0	