	row effectName shortName	e endow? inter1	inter2 parm ego?	
nons	SymmetricRate			
41	basic rate parameter xxxxxx	Rate		0
42	constant xxxxxx rate (period nnnnnn)	Rate		0
43	outdegree effect on rate xxxxxx	outRate		0
44	indegree effect on rate xxxxxx	inRate		0
45	reciprocity effect on rate xxxxxx	recipRate		0
46	effect 1/outdegree on rate xxxxxx	outRateInv		0
cova	rNonSymmetricRate			
136	effect xxxxxx on rate	RateX	XXXXXX	0
sym	metricRate			
51	basic rate parameter xxxxxx	Rate		0
52	constant xxxxxx rate (period nnnnnn)	Rate		0
53	degree effect on rate xxxxxx	degreeRate		0
54	indegree effect on rate xxxxxx	indegRate		0
55	reciprocity effect on rate xxxxxx	recipRate		0
56	effect 1/degree on rate xxxxxx	degRateInv		0
cova	rSymmetricRate			
135	effect xxxxxx on rate	RateX	XXXXXX	0
bipa	rtiteRate			
47	basic rate parameter xxxxxx	Rate		0
48	constant xxxxxx rate (period nnnnnn)	Rate		0
49	outdegree effect on rate xxxxxx	outRate		0
50	effect 1/outdegree on rate xxxxxx	outRateInv		0
covar	BipartiteRate			
137	effect xxxxxx on rate	RateX	XXXXXX	0
behav	viorRate			
34	rate xxxxxx period 1	Rate		0
35	rate xxxxxx (period nnnnnn)	Rate		0
behav	viorOneModeRate			
36	outdegree effect on rate xxxxxx	outRate	уууууу	0
37	indegree effect on rate xxxxxx	inRate	уууууу	0
38	reciprocated effect on rate xxxxxx	recipRate	уууууу	0
behav	viorBipartiteRate			
39	outdegree effect on rate xxxxxx	outRate	уууууу	0

			row	effectNar	ne	shortNar	ne e	endow?	inter	l inter2	parm	ego?			
	40	reciproca	ated ef	ffect on ra	te x	XXXXX	re	cipRate		уу	уууу		0		
	covai	rBehavior.	Rate												
_	87	effect yy	уууу	on rate xx	XXXX	ζ	R	ateX		уу	уууу		0		
	nonS	Symmetric	Objec	tive											
	97	outdegre	e (der	nsity)			de	ensity	TF	RUE			0	dya	adic
	98	reciproci	ıty				re	cip	TF	RUE			0	dya	adic
99	${ m tr} \epsilon$	ansitive tr	iplets				t	ransTri	р	TRUE				0	
100	${ m tr} \epsilon$	ansitive m	ediate	d triplets			t	ransMe	dTrip	TRUE				0	
101	3-0	cycles					(	eycle3		TRUE				0	
102	${ m tr} \epsilon$	ansitive tie	es				t	ransTie	$\mathbf{S}$	TRUE				0	
103		tweenness						oetween		FALSE				0	
104	ba	lance					ł	palance		TRUE				0	
105	nu	mber of a	ctors &	at distance	2		1	nbrDist2	2	FALSE				0	
106	nu	mber pair	s at d	oubly achi	evec	l distance	2 r	nbrDist2	2twice	FALSE				0	
107	de	nse triads					(	lenseTri	ads	FALSE				5	
108	inc	degree - pe	opular	ity			i	nPop		TRUE				0	
109	inc	degree - pe	opular	ity (sqrt)			i	nPopSq	$\operatorname{rt}$	TRUE				0	
110		tdegree - j					(	outPop		TRUE				0	
111	ou	tdegree - j	popule	arity (sqrt)	)		(	outPopS	$\operatorname{qrt}$	FALSE				0	
112	inc	degree - ac	ctivity				i	nAct		FALSE				0	
113	inc	degree - ac	ctivity	(sqrt)			i	nActSqn	rt	FALSE				0	
114	ou	tdegree - a	activit	У			(	$\mathrm{out}\mathrm{Act}$		FALSE				0	
115	ou	tdegree - a	activit	y (sqrt)			(	outActS	$\operatorname{qrt}$	FALSE				0	
116	1/	(outdegree	e + #	)			(	$\mathrm{outInv}$		FALSE				1	
117	1/	(outdegree	e+#)(	outdegree-	+1+	·#)	(	${ m outSqInv}$	V	FALSE				1	
118	ou	t-out degr	ree^(1,	/#) assort	ativ	ity	(	outOut <i>A</i>	ASS	TRUE				2	
119	out	:-in degree	e^(1/#	<sup>½</sup> ) assortat	ivity	7	О	utInAss		TRUE				2	
120	in-c	out degree	e^(1/#	<sup>½</sup> ) assortat	ivity	7	iı	OutAss	5	TRUE				2	
121	in-i	in degree^	(1/#)	assortativ	rity		iı	nInAss		TRUE				2	
dyad	Obje	ective													
57	XXX	XXXX					Х			TRUE	XXXXXX			0	dyadic
58		xxxx x rec	-	*				Recip		TRUE	XXXXXX			0	dyadic
59		W=>X clo						VWX		TRUE	XXXXXX			0	
60	W	X=>X clo	sure o	f xxxxxx			V	VXX		TRUE	XXXXXX			0	

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
73 xxxxxx alter altX TRUE xxxxxx 0 74 xxxxxx squared alter altSqX TRUE xxxxxx 0 75 xxxxxx ego egoX TRUE xxxxxx 0 76 xxxxxx similarity simX TRUE xxxxxx 0 77 xxxxxx similarity x reciprocity simRecipX TRUE xxxxxx 0 78 same xxxxxx same xxxxx 0 79 same xxxxxx x reciprocity sameXRecip TRUE xxxxxx 0 80 xxxxxx ego x xxxxxx alter egoXaltX TRUE xxxxxx 0 81 xxxxxx ego x xxxxxx alter x recipr. egoXaltXRecip TRUE xxxxxx 0
74 xxxxxx squared alter altSqX TRUE xxxxxx 0 75 xxxxxx ego egoX TRUE xxxxxx 0 egoX TRUE xxxxxx 0 76 xxxxxx similarity simX TRUE xxxxxx 0 77 xxxxxx similarity x reciprocity simRecipX TRUE xxxxxx 0 78 same xxxxxx same xxxxxx 0 79 same xxxxxx x reciprocity sameXRecip TRUE xxxxxx 0 80 xxxxxx ego x xxxxxx alter egoXaltX TRUE xxxxxx 0 81 xxxxxx ego x xxxxxx alter x recipr. egoXaltXRecip TRUE xxxxxx 0
75 xxxxxx ego egoX TRUE xxxxxx 0 egoX TRUE xxxxxx 0 for xxxxxx similarity simX TRUE xxxxxx 0 for xxxxxx similarity x reciprocity simRecipX TRUE xxxxxx 0 for xxxxxx same xxxxxx for xxxxx for xxxxxx and xxxxxx for xxxxxx f
76xxxxxx similaritysimXTRUExxxxxx077xxxxxx similarity x reciprocitysimRecipXTRUExxxxxx078same xxxxxxsameXTRUExxxxxx079same xxxxxx x reciprocitysameXRecipTRUExxxxxx080xxxxxx ego x xxxxxx alteregoXaltXTRUExxxxxx081xxxxxxx ego x xxxxxxx alter x recipr.egoXaltXRecipTRUExxxxxx0
77 xxxxxx similarity x reciprocity simRecipX TRUE xxxxxx 0 78 same xxxxxx sameX TRUE xxxxxx 0 79 same xxxxxx x reciprocity sameXRecip TRUE xxxxxx 0 80 xxxxxx ego x xxxxxx alter egoXaltX TRUE xxxxxx 0 81 xxxxxx ego x xxxxxx alter x recipr. egoXaltXRecip TRUE xxxxxx 0
78 same xxxxxx same xxxxxx same x xxxxx same x xxxxxx same x xxxxx same x xxxxxx same x xxxxx same x xxxxxx same x xxxxx same x xxxxxx same x xxxxx same x xxxxxx same x xxxxxx same x xxxxxx same x xxxxxx same x x
79 same xxxxx x reciprocity sameXRecip TRUE xxxxxx 0 80 xxxxxx ego x xxxxxx alter egoXaltX TRUE xxxxxx 0 81 xxxxxx ego x xxxxxx alter x recipr. egoXaltXRecip TRUE xxxxxx 0
80 xxxxxx ego x xxxxxx alter egoXaltX TRUE xxxxxx 0 81 xxxxxx ego x xxxxxx alter x recipr. egoXaltXRecip TRUE xxxxxx 0
81 xxxxxx ego x xxxxxx alter x recipr. egoXaltXRecip TRUE xxxxxx 0
82 higher xxxxxx higher TRUE xxxxxx 0
83 xxxxxx of indirect ties IndTies FALSE xxxxxx 0
unspecifiedNetInteraction
138 unspecified interaction effect unspInt TRUE 0
nonSymmetricNonSymmetricObjective
149 xxxxxx crprod TRUE xxxxxx 0
150 reciprocity with xxxxxx crprodRecip TRUE xxxxxx 0
151 mutuality with xxxxxx crprodMutual TRUE xxxxxx 0
152 indegree $(1/\#)$ xxxxxx popularity in PopIntn TRUE xxxxxx 2
153 indegree $(1/\#)$ xxxxxx activity in ActIntn TRUE xxxxxx 2
154 outdegree $(1/\#)$ xxxxxx popularity outPopIntn TRUE xxxxxx 2
155 outdegree $(1/\#)$ xxxxxx activity outActIntn TRUE xxxxxx 2
156 both indegrees $(1/\#)$ xxxxxx both TRUE xxxxxx 2
157 betweenness $(1/\#)$ xxxxxx popularity between Pop TRUE xxxxxx 2
158 from xxxxxx agreement from TRUE xxxxxx 0
159 from xxxxxx mutual agr. fromMutual TRUE xxxxxx 0
160 xxxxxx to agreement to TRUE xxxxxx 0
161 closure of xxxxxx closure TRUE xxxxxx 0
nonSymmetricSymmetricObjective
140 xxxxxx crprod TRUE xxxxxx 0
141 degree $(1/\#)$ xxxxxx popularity in PopIntn TRUE xxxxxx 2
142 indegree (1/#) xxxxxx activity inActIntn TRUE xxxxxx 2
143 outdegree (1/#) xxxxxx popularity outPopIntn TRUE xxxxxx 2
144 degree $(1/\#)$ xxxxxx activity in ActIntn TRUE xxxxxx 2

		ame shortName				parm e	ego?		
145	both degrees $(1/\#)$ xxxxxx		oth		TRUE	XXXXXX		2	
146	from xxxxxx agreement	fr	rom		TRUE	XXXXXX		0	
147	xxxxxx to agreement	to			TRUE	XXXXXX		0	
148	closure of xxxxxx	cl	losure		TRUE	XXXXXX		0	
nonS	ymmetricBipartiteObjective								
166	outdegree $(1/\#)$ xxxxxx act	•	utActIntn		TRUE	XXXXXX		2	
167	from xxxxxx agreement	fr	rom		TRUE	XXXXXX		0	
covar	NetNetObjective								
170	from xxxxxx agr. x same yy	уууу со	ovNetNet		TRUE	XXXXXX	уууууу	0	
symn	netricObjective								
122	degree (density)	- d	ensity		TRUE			0	ego
123	transitive triads	tr	ransTriads	;	TRUE			0	
124	transitive ties	tr	ransTies		TRUE			0	
125	betweenness	b	etween		FALSE			0	
126	balance	b	alance		TRUE			0	
127	number of actor pairs at dist	sance 2 n	brDist2		FALSE			0	
128	number pairs at doubly achie	eved distance 2 n	brDist2Tv	vice	FALSE			0	
129	degree of alter	ir	nPop		TRUE			0	
130	sqrt degree of alter	ir	nPopSqrt		TRUE			0	
131	$degree^{(1.5)}$	$O_1$	utActSqrt	ı	FALSE			0	
132	1/(degree + #)	O	utInv		FALSE			1	
133	1/(degree+#)(degree+1+#)	O	utSqInv		FALSE			1	
134	degree $(1/\#)$ assortativity	O	utOutAss		TRUE			2	
dyad	Objective								
57	XXXXXX	X	<u>-</u>		TRUE	XXXXXX		0	dyadic
58	xxxxxx x reciprocity	X	KRecip		TRUE	XXXXXX		0	dyadic
59	WW=>X closure of xxxxxx	V	VWX		TRUE	XXXXXX		0	-
60	WX=>X closure of xxxxxx	V	VXX		TRUE	XXXXXX		0	
61	XW=>X closure of xxxxxx	X	XWX		TRUE	XXXXXX		0	
covar	SymmetricObjective								
64	XXXXXX	- $a$ .	ltX		TRUE	XXXXXX		0	
65	xxxxxx squared	$\mathbf{a}^{\scriptscriptstyle{1}}$	ltSqX		TRUE	XXXXXX		0	
66	xxxxxx similarity		$\operatorname{im} \overset{1}{\operatorname{X}}$		TRUE	XXXXXX		0	
67	same xxxxxx		ameX		TRUE	XXXXXX		0	
	xxxxxx ego x xxxxxx alter		goXAlt		TRUE	XXXXXX		0	

	row effectName sho	rtName endow? inter	1 inter2	parm ego?		
69	xxxxxx of indirect ties	IndTies	TRUE	XXXXXX	0	
unsp	ecifiedNetInteraction					
138	unspecified interaction effect	unspInt	TRUE		0	
	rtiteObjective	<u> </u>				
88	outdegree (density)	density	TRUE		0	dyadic
89	4-cycles	4-cycles	TRUE		1	, and the second
90	indegree - popularity	inPop	TRUE		0	
91	indegree - popularity (sqrt)	inPopSqrt	TRUE		0	
92	outdegree - activity	$\operatorname{outAct}$	FALSE		0	
93	outdegree - activity (sqrt)	$\operatorname{outActSqrt}$	FALSE		0	
94	1/(outdegree + #)	$\operatorname{outInv}$	FALSE		1	
95	1/(outdegree+#)(outdegree+1+#)	${ m outSqInv}$	FALSE		1	
96	out-in degree $(1/2)$ assortativity	$\operatorname{outInAss}$	TRUE		2	
dyad	Objective					
57	XXXXXX	X	TRUE	XXXXXX	0	dyadic
58	xxxxxx x reciprocity	XRecip	TRUE	XXXXXX	0	dyadic
59	WW=>X closure of xxxxxx	WWX	TRUE	XXXXXX	0	
60	WX=>X closure of xxxxxx	WXX	TRUE	XXXXXX	0	
61	XW=>X closure of xxxxxx	XWX	TRUE	XXXXXX	0	
cova	rBipartiteObjective					
70	xxxxxx alter	altX	TRUE	XXXXXX	0	
71	xxxxxx squared alter	alt Sq X	TRUE	XXXXXX	0	
72	xxxxxx ego	egoX	TRUE	XXXXXX	0	dyadic
	ecifiedNetInteraction					
138	unspecified interaction effect	unspInt	TRUE		0	
	rtiteNonSymmetricObjective					
162	outdegree $(1/\#)$ xxxxxx activity	${ m outActIntn}$	TRUE	XXXXXX	2	
163	xxxxxx to agreement	to	TRUE	XXXXXX	0	
	rtiteSymmetricObjective					
164	degree $(1/\#)$ xxxxxx activity	${ m outActIntn}$	TRUE	XXXXXX	2	
165	xxxxxx to agreement	to	TRUE	XXXXXX	0	
	rtiteBipartiteObjective					
168	outdegree $(1/\#)$ xxxxxx activity	${ m outActIntn}$	TRUE	XXXXXX	2	
169	xxxxxx to agreement	to	TRUE	XXXXXX	0	

	row effectName shortName endow? int	er1 inter2 parm	ego?		
cova	rNetNetObjective				
170	from xxxxxx agr. x same yyyyyy covNetNet	TRUE xxxxx	х ууууу	y 0	
beha	nviorObjective				
32	behavior xxxxxx linear shape linear	TRUE		0	
33	behavior xxxxxx quadratic shape quad	TRUE		0	
beha	aviorOneModeObjective				
1	behavior xxxxxx average similarity avSim	TRUE yyyyy	У	0	
2	behavior xxxxxx total similarity totSim	TRUE yyyyy	У	0	
3	behavior xxxxxx indegree	indeg	TRUE	уууууу	0
4	behavior xxxxxx outdegree	outdeg	TRUE	уууууу	0
5	behavior xxxxxx isolate	isolate	FALSE	уууууу	0
6	behavior xxxxxx ave. sim. x reciprocity	avSimRecip	FALSE	уууууу	0
7	behavior xxxxxx tot. sim. x reciprocity	totSimRecip	FALSE	уууууу	0
8	behavior xxxxxx ave. sim. x popularity alter	avSimPopAlt	FALSE	уууууу	0
9	behavior xxxxxx tot. sim. x popularity alter	totSimPopAlt	FALSE	уууууу	0
10	behavior xxxxxx x popularity alter	popAlt	FALSE	уууууу	0
11	behavior xxxxxx ave. sim. x rec. x pop. (alter)	avSimRecPop	FALSE	уууууу	0
12	behavior xxxxxx tot. sim. x rec. x pop. (alter)	totSimRecPop	FALSE	уууууу	0
13	behavior xxxxxx average alter	avAlt	TRUE	уууууу	0
14	behavior xxxxxx average rec. alters	avRecAlt	FALSE	уууууу	0
15	behavior xxxxxx dense triads <maybe wrong=""></maybe>	behDenseTriads	FALSE	уууууу	5
16	behavior xxxxxx similarity in dense triads <maybe wrong=""></maybe>	simDenseTriads	FALSE	уууууу	5
17	behavior xxxxxx reciprocated degree	$\operatorname{recipDeg}$	FALSE	уууууу	0
18	behavior xxxxxx ave. sim. x popularity ego	avSimPopEgo	TRUE	уууууу	0
beha	viorBipartiteObjective				
20	behavior xxxxxx average similarity	avSim	TRUE	уууууу	0
21	behavior xxxxxx total similarity	totSim	TRUE	уууууу	0
22	behavior xxxxxx outdegree	$\operatorname{outdeg}$	TRUE	уууууу	0
23	behavior xxxxxx isolate	isolate	TRUE	уууууу	0
24	behavior xxxxxx ave. sim. x popularity alter	avSimPopAlt	TRUE	уууууу	0
25	behavior xxxxxx tot. sim. x popularity alter	totSimPopAlt	TRUE	уууууу	0
26	behavior xxxxxx x popularity alter	popAlt	TRUE	уууууу	0
27	behavior xxxxxx average alter	avAlt	TRUE	уууууу	0
28	behavior xxxxxx dense triads <maybe wrong=""></maybe>	behDenseTriads	TRUE	уууууу	0
29	behavior xxxxxx similarity in dense triads <maybe wrong=""></maybe>	simDenseTriads	TRUE	уууууу	0

row effectName shortName endow?	inter1 inter2 parm	n ego?							
30 behavior xxxxxx ave. sim. x popularity ego	avSimPopEgo	TRUE	уууууу	0					
covarBehaviorObjective									
62 behavior xxxxxx: effect from yyyyyy	effFrom	TRUE	уууууу	0					
63 behavior xxxxxx: influence interaction? x yyyyyy	$\inf Int X$	TRUE	yyyyyy zzzzzz	0					
behaviorOneModeObjective2									
19 behavior xxxxxx: infl. one-sided? x xxxxxx alter	behInfl1sid	TRUE	уууууу	0					
behaviorBipartiteObjective2									
31 behavior xxxxxx: infl. one-sided? x xxxxxx alter	behInfl1sid	TRUE	уууууу	0					
unspecifiedBehaviorInteraction	unspecifiedBehaviorInteraction								
139 behavior xxxxxx: unspecified interaction	behUnspInt	TRUE		0					