

Assignments \mathcal{N}^o 6 - PART I

released: 26.01.2012 **due:** 01.02.2012, 14:15h
(solutions can be handed over at the beginning of the lecture)

Task 1: Interpreting Parameter Estimates in SAOMs 10 points

Discuss the co-evolution of friendship network and *drinking behavior* (i.e. alcohol consumption¹) in the “Teenage Friends and Lifestyle Study” data set from the lecture, based on the following parameter estimates:

	estimates	s.e.	t-score
<i>Network Dynamics</i>			
constant friendship rate (period 1)	14.67	(1.52)	
constant friendship rate (period 2)	12.42	(1.04)	
outdegree (density)	-1.57	(0.06)	-26.17
reciprocity	2.41	(0.10)	24.1
transitive triplets	0.35	(0.07)	5.00
sex ego	0.15	(0.08)	1.875
sex alter	-0.15	(0.10)	1.50
sex similarity	0.66	(0.08)	8.25
drink ego	0.09	(0.07)	1.29
drink alter	-0.01	(0.09)	0.11
drink similarity	0.14	(0.06)	2.33
<i>Behavior Dynamics</i>			
rate drinkbeh (period 1)	1.60	(0.32)	
rate drinkbeh (period 2)	2.50	(0.42)	
behavior drinkbeh linear shape	0.44	(0.17)	2.59
behavior drinkbeh quadratic shape	-0.64	(0.22)	2.91
behavior drinkbeh indegree	0.12	(0.18)	0.67
behavior drinkbeh outdegree	0.01	(0.15)	0.07
behavior drinkbeh average similarity	1.34	(0.61)	2.20

¹drinking behavior was coded as follows 1: non, 2: once or twice a year, 3: once a month, 4: once a week, 5: more than once a week