

Friendship Network - A Case Study

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Introduction

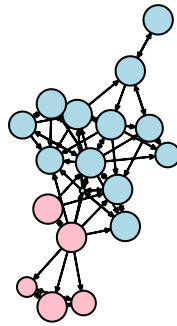
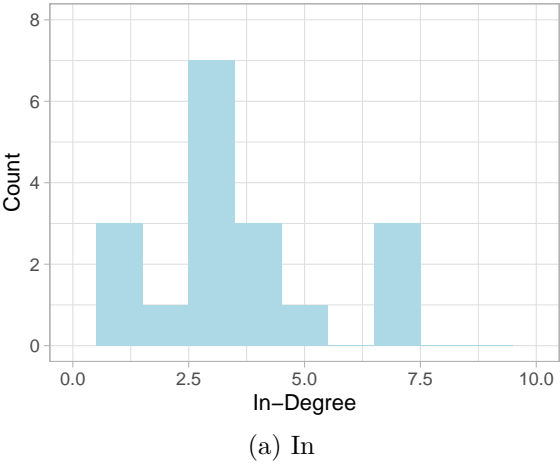
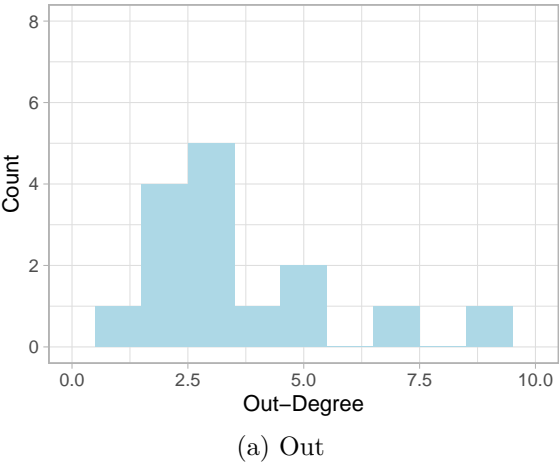


Figure 1. Visualization of Friendship Network by Gender

Model Specification

Simulation

Transitivity in this network is 0.21



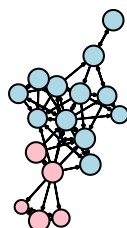
Distribution of Degrees

Table 1. Results from ERGM Models

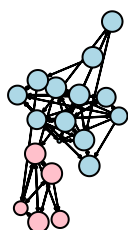
	(1)	(2)	(3)	(4)
edges	0.07*** (0.04)	0.04*** (0.02)	0.10*** (0.04)	0.05*** (0.02)
mutual	2.46 (1.17)	5.25*** (2.58)	3.27** (1.42)	5.35*** (2.55)
homophily*	2.13** (0.54)	5.17*** (2.18)	2.19*** (0.51)	5.55*** (2.06)
closure tend.*	3.60*** (0.75)		3.36*** (0.70)	
two path	0.73*** (0.05)		0.72*** (0.05)	
preferential tend*	3.04 (3.04)	1.60 (1.59)		
Num.Obs.	306	306	306	306
AIC	233.1	271.4	231.9	269.6
BIC	255.4	286.3	250.5	280.8

* p < 0.05, ** p < 0.01, *** p < 0.001

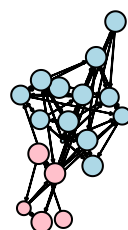
closure tend* = closure tendency



(a) Empirical Network



(a) Simulations from Full Model



(a) Simulations without Closure



(a) Simulations without Matthew Effect



(a) Simulations from Null Model