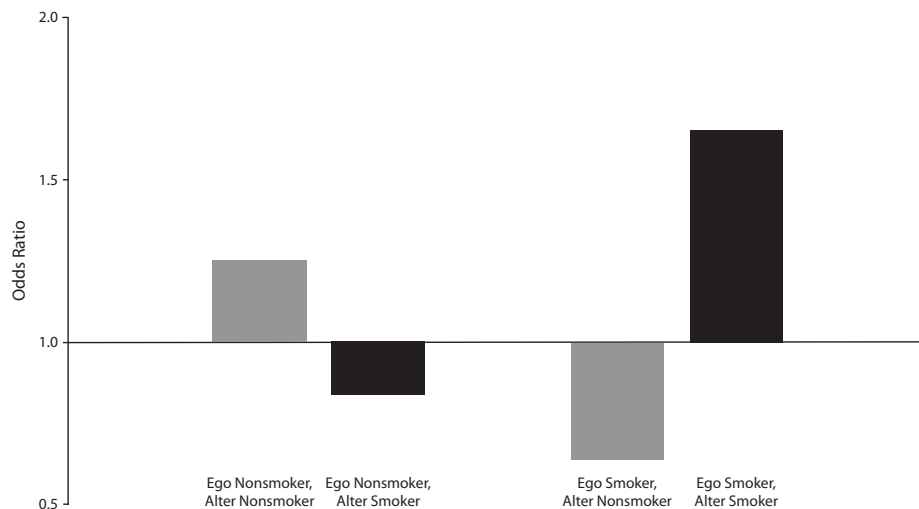


A Few Examples



Note. Nonsmoker defined as no smoking in past 30 days; smoker defined as smoking ≥ 12 of the past 30 days. We calculated odds ratios relative to the odds of ego (i.e., respondent) selecting an alter (i.e., peer) with intermittent smoking (1–11 of the past 30 days). All other effects are held constant.

FIGURE 2—Odds ratios of friend selection on the basis of smoking frequency of ego and alter: National Longitudinal Study of Adolescent Health, 1994–1996.

Schaefer DR, Haas SA, Bishop NJ.
A Dynamic Model of US Adolescents' Smoking and Friendship Networks.
American Journal of Public Health 2012;102(6):e12-e18.

TABLE 2—Estimates From Stochastic Actor-Based Model Testing Smoking and Friendship Coevolution With Add Health Sample: National Longitudinal Study of Adolescent Health, 1994–1996

Effect	b (SE)
Smoking behavior function	
Rate	2.065*** (0.270)
Linear shape	–0.107 (0.265)
Quadratic shape	1.162*** (0.186)
Female	0.155 (0.189)
Age	–0.005 (0.092)
Parent smoking	0.016 (0.218)
Delinquency	0.432* (0.183)
Alcohol	–0.102 (0.138)
GPA	–0.089 (0.132)
Average similarity	2.883*** (0.855)
In-degree	–0.041 (0.139)
In-degree squared	0.002 (0.012)

Friend selection function

Rate	10.241*** (0.505)
Rate: truncated roster	–1.178** (0.452)
Out-degree	–3.935*** (0.170)
Reciprocity	1.916*** (0.085)
Transitive triplets	0.515*** (0.035)
Popularity (square root of In-degree)	0.290*** (0.037)
Extracurricular activity overlap	0.275*** (0.060)
Female	
Similarity	0.237*** (0.045)
Alter	–0.111* (0.046)
Ego	–0.039 (0.053)
Age	
Similarity	1.004*** (0.125)
Alter	–0.009 (0.029)
Ego	–0.037 (0.031)
Delinquency	
Similarity	0.147 (0.080)
Alter	–0.039 (0.040)
Ego	0.019 (0.043)
Alcohol	
Similarity	0.269** (0.101)
Alter	–0.028 (0.035)
Ego	–0.029 (0.039)
GPA	
Similarity	0.706*** (0.133)
Alter	–0.054 (0.035)
Ego	–0.019 (0.040)
Smoking	
Similarity	0.683*** (0.126)
Alter	0.130* (0.062)
Alter squared	0.023 (0.171)
Ego	–0.039 (0.055)

Note. GPA = grade point average.

* $P < .05$; ** $P < .01$; *** $P < .001$ (2-tailed tests).