Regression Results: Main

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1 Base model

Table 1

	Dependent variable:	
	homogamy	
	step-wise	genetic algorithm
Constant	0.388** (0.181)	−0.907*** (0.137)
$(d > 1)$	0.361*** (0.020)	0.368*** (0.025)
d	−0.002 (0.007)	−0.007 (0.007)
d^2	−0.004 (0.002)	
d^3	0.001** (0.0003)	
d^4		0.00003*** (0.00001)
homophily	−6.062*** (1.054)	4.039*** (0.315)
homophily^2	24.286*** (2.488)	
homophily^3	−31.153*** (2.557)	−6.676*** (0.487)
homophily^4	13.510*** (0.951)	4.691*** (0.301)
density	−1.170*** (0.217)	−1.623*** (0.189)
density^2	1.287*** (0.430)	
density^3	−2.377*** (0.599)	
density^4	1.186*** (0.328)	
clustering	0.460** (0.195)	1.397*** (0.189)
clustering^4		−0.139*** (0.050)
diameter		
diameter^4		−0.000*** (0.000)
median shortest path	−0.000*** (0.000)	
median shortest path^4		−0.000*** (0.000)
connected	0.107*** (0.036)	
n	−0.0004** (0.0001)	−0.0003** (0.0002)
n^4		−0.000 (0.000)
μ	−0.507*** (0.047)	1.279*** (0.010)
μ^2	6.660*** (0.187)	−1.279*** (0.009)
μ^3	−12.354*** (0.279)	
μ^4	6.213*** (0.139)	
λ	−0.520*** (0.062)	−0.579*** (0.062)
λ^3	−1.372*** (0.076)	−1.265*** (0.075)
λ^4	1.412*** (0.064)	1.347*** (0.064)
$(d > 1)$×connected		−0.044*** (0.007)
$(d > 1)$×homophily	−0.535*** (0.019)	−0.502*** (0.025)
$(d > 1)$×density	−0.212*** (0.031)	−0.221*** (0.031)
$(d > 1)$×clustering	0.457*** (0.032)	0.487*** (0.031)
$(d > 1)$×diameter	0.000*** (0.000)	
$(d > 1)$×median shortest path	0.000*** (0.000)	0.000*** (0.000)
$(d > 1)$×n	0.0005*** (0.00004)	0.0005*** (0.00004)
$(d > 1)$×λ	−0.076*** (0.007)	−0.076*** (0.007)
d×homophily		−0.014** (0.007)
d×clustering	0.008*** (0.003)	
d×diameter	−0.000*** (0.000)	
d×median shortest path	0.000*** (0.000)	0.000*** (0.000)
d×n	0.00004*** (0.00001)	0.00004*** (0.00001)
d×λ	−0.005** (0.002)	−0.005** (0.002)
homophily×density	1.162*** (0.193)	1.905*** (0.188)
homophily×clustering	−1.270*** (0.191)	−1.812*** (0.190)
homophily×diameter	0.000*** (0.000)	
homophily×median shortest path		0.000 (0.000)
density×clustering	0.563*** (0.128)	0.408*** (0.075)
diameter×density	−0.000*** (0.000)	−0.000*** (0.000)
diameter×clustering	0.000*** (0.000)	
diameter×median shortest path		
median shortest path×density		0.000 (0.000)
median shortest path×clustering	0.000*** (0.000)	0.000*** (0.000)
connected×d		0.014*** (0.002)
connected×homophily		−0.223*** (0.038)
connected×diameter	−0.007*** (0.001)	−0.005*** (0.001)
connected×median shortest path	0.013*** (0.003)	0.015*** (0.003)
connected×density		
connected×clustering		−0.308*** (0.053)
n×λ	−0.0003*** (0.00004)	−0.0003*** (0.00004)
n×homophily	−0.0002 (0.0001)	−0.0002 (0.0001)
n×diameter	−0.000*** (0.000)	−0.000*** (0.000)
n×median shortest path	0.000** (0.000)	0.000 (0.000)
n×density	0.002*** (0.0003)	0.002*** (0.0003)
n×clustering	−0.001*** (0.0003)	−0.002*** (0.0003)
λ×homophily	0.517*** (0.050)	0.531*** (0.051)
λ×diameter	0.000*** (0.000)	0.000*** (0.000)
λ×median shortest path	0.000*** (0.000)	0.000*** (0.000)
λ×density	0.494*** (0.061)	0.525*** (0.062)
λ×clustering	−0.520*** (0.059)	−0.549*** (0.059)
μ×clustering		0.012 (0.009)
Observations	96,526	96,526
R^2	0.475	0.463
Adjusted R^2	0.474	0.463
Residual Std. Error	0.190 (df = 96470)	0.192 (df = 96472)
F Statistic	1,585.532*** (df = 55; 96470)	1,569.263*** (df = 53; 96472)
Note:		*p<0.1; **p<0.05; ***p<0.01

2 Extension: Homophily w.r.t. sex

Table 2

	Dependent variable:	
	homogamy	
	step-wise	genetic algorithm
Constant	1,496.903*** (276.958)	−99.442*** (24.712)
$(d > 1)$	−0.018 (0.054)	−0.020 (0.057)
d	−0.092* (0.052)	−0.010 (0.016)
d^3		−0.001 (0.002)
d^4		0.0002 (0.0003)
homophily	−7,070.820*** (1,235.373)	307.263*** (72.192)
homophily^2	12,014.660*** (2,065.898)	−254.346*** (59.146)
homophily^3	−9,053.554*** (1,532.392)	
homophily^4	2,554.368*** (425.472)	52.197*** (11.735)
homophily_sex	277.677*** (69.867)	−0.974 (2.778)
homophily_sex^2	−516.078*** (127.634)	2.442*** (0.736)
homophily_sex^3	420.219*** (103.264)	
homophily_sex^4	−126.616*** (31.182)	
density	−7.337 (6.045)	3.286 (3.003)
density^2	34.313** (16.375)	
density^3	−58.896*** (21.358)	−3.627* (2.070)
density^4	33.596*** (10.239)	3.906** (1.767)
clustering	56.648*** (8.697)	−16.266*** (3.618)
clustering^2	−179.945*** (24.155)	8.329*** (2.571)
clustering^3	242.254*** (30.658)	
clustering^4	−119.890*** (14.255)	−5.993*** (1.438)
diameter	0.000** (0.000)	
diameter^3		−0.000*** (0.000)
diameter^4		
median shortest path		
median shortest path^3		−0.000 (0.000)
median shortest path^4		
n	0.002 (0.001)	−0.0003 (0.0004)
n^2	−0.00004* (0.00002)	
n^3	0.00000* (0.00000)	−0.000 (0.00000)
n^4	−0.000 (0.000)	0.000 (0.000)
μ	−0.032** (0.016)	−0.022 (0.021)
μ^4		−0.008 (0.016)
λ		−1.347*** (0.499)
λ^3		0.021 (0.019)
$(d > 1)\times$n	−0.0003** (0.0001)	−0.0003** (0.0001)
$(d > 1)\times\mu$	0.037** (0.018)	0.036* (0.018)
$(d > 1)\times$homophily_sex	0.274** (0.107)	0.110* (0.066)
$(d > 1)\times$clustering	−0.330** (0.148)	
$(d > 1)\times$density		−0.148* (0.080)
$d\times$n	0.0001* (0.00004)	0.0001* (0.00004)
$d\times$homophily	0.091* (0.055)	
$d\times$median shortest path		0.000 (0.000)
$d\times$density		0.030 (0.021)
homophily$\times$homophily_sex		−6.404** (2.648)
homophily$\times$diameter	−0.000*** (0.000)	
homophily$\times$clustering		10.083*** (2.990)
homophily$\times$density	−6.164** (2.644)	−3.953 (3.148)
homophily$\times$median shortest path		
homophily_sex$\times$diameter		0.000** (0.000)
homophily_sex$\times$clustering	−2.717** (1.333)	1.616 (1.403)
homophily_sex$\times$median shortest path		0.000 (0.000)
homophily_sex$\times$density	1.598* (0.841)	2.120** (0.824)
density$\times$clustering	7.894*** (1.411)	
diameter$\times$clustering	0.000*** (0.000)	0.000*** (0.000)
median shortest path$\times$density		
n$\times$clustering	0.002** (0.001)	0.002*** (0.001)
n$\times$homophily_sex	−0.001* (0.001)	−0.001* (0.001)
$\lambda\times$homophily		1.420*** (0.529)
$\lambda\times$homophily_sex		0.243* (0.126)
$\lambda\times$median shortest path		0.000 (0.000)
$\lambda\times$density		−0.478** (0.194)
$\mu\times$diameter	0.000* (0.000)	
Observations	9,666	9,666
R^2	0.349	0.340
Adjusted R^2	0.347	0.337
Residual Std. Error	0.207 (df = 9626)	0.208 (df = 9620)
F Statistic	132.472*** (df = 39; 9626)	110.189*** (df = 45; 9620)
Note:		*p<0.1; **p<0.05; ***p<0.01

3 Extension: Within type variation "decay"

Table 3

	Dependent variable:	
	homogamy	
	step-wise	genetic algorithm
Constant	49.906*** (9.537)	3.805*** (0.458)
$(d > 1)$	0.008 (0.037)	−0.056 (0.066)
d	−0.005 (0.030)	−0.009 (0.046)
d^2		−0.052 (0.053)
d^3	0.004*** (0.001)	0.016 (0.013)
d^4	−0.0005** (0.0002)	−0.001 (0.001)
homophily	−264.944*** (48.854)	−6.589*** (1.037)
homophily^2	523.534*** (92.473)	3.471*** (0.621)
homophily^3	−452.293*** (76.798)	
homophily^4	144.703*** (23.652)	
κ	0.333*** (0.089)	0.147** (0.074)
κ^2	−0.622*** (0.117)	−0.220*** (0.034)
κ^3	0.369*** (0.088)	0.060*** (0.011)
κ^4	−0.077*** (0.022)	
density	−0.712* (0.392)	−4.233** (1.749)
density^3		98.570** (41.608)
density^4		−276.537** (122.142)
clustering	0.198* (0.117)	0.216* (0.117)
diameter		
median shortest path	−0.000*** (0.000)	
median shortest path^2		−0.000*** (0.000)
median shortest path^3		
median shortest path^4		
connected	−0.039 (0.038)	−0.106*** (0.030)
n	−0.004*** (0.001)	0.001*** (0.0004)
n^2	0.0001*** (0.00002)	
n^3	−0.00000*** (0.00000)	−0.000 (0.000)
n^4	0.000*** (0.000)	
μ	−0.061 (0.195)	0.776*** (0.060)
μ^2	3.442*** (0.510)	−0.841*** (0.084)
μ^3	−6.486*** (0.763)	
μ^4	3.164*** (0.380)	−0.028 (0.047)
λ	−0.164 (0.398)	−1.632*** (0.139)
λ^2	−2.641*** (0.727)	
λ^3	3.420*** (1.056)	
λ^4	−1.375*** (0.519)	
$(d > 1)\times\kappa$	−0.041*** (0.010)	−0.044*** (0.010)
$(d > 1)\times d$		0.046 (0.054)
$(d > 1)\times$n	−0.0003*** (0.0001)	−0.0003** (0.0001)
$(d > 1)\times\lambda$	−0.087*** (0.020)	−0.084*** (0.020)
$(d > 1)\times$median shortest path		0.000*** (0.000)
$(d > 1)\times$density	0.713*** (0.230)	0.792*** (0.233)
connected×n	−0.0004* (0.0003)	
connected$\times\lambda$	0.043** (0.019)	
connected×diameter	−0.007** (0.004)	
connected$\times\kappa$		
connected$\times\mu$		
connected×clustering	0.495*** (0.158)	0.433*** (0.155)
$\kappa\times d$	−0.010*** (0.003)	−0.010*** (0.003)
$\kappa\times$n	−0.0001** (0.0001)	−0.0001* (0.0001)
$\kappa\times\lambda$	−0.086*** (0.010)	−0.086*** (0.010)
$\kappa\times$homophily	0.347*** (0.097)	0.355*** (0.096)
$\kappa\times$median shortest path	−0.000*** (0.000)	−0.000*** (0.000)
$\kappa\times$density	−1.008*** (0.204)	−1.023*** (0.205)
$d\times$n	0.0001*** (0.00003)	0.0001*** (0.00003)
$d\times\lambda$	−0.027*** (0.006)	−0.028*** (0.006)
$d\times\mu$	−0.008** (0.004)	−0.009** (0.004)
$d\times$homophily	−0.081** (0.038)	
$d\times$median shortest path	0.000*** (0.000)	
$d\times$density	0.252*** (0.092)	0.087 (0.065)
n$\times\lambda$	−0.0004*** (0.0001)	−0.0005*** (0.0001)
n$\times\mu$	0.0004*** (0.0001)	
n×median shortest path	0.000*** (0.000)	0.000*** (0.000)
homophily×median shortest path		0.000*** (0.000)
n×density	0.005*** (0.002)	0.005** (0.002)
n×clustering	−0.008** (0.003)	−0.009*** (0.003)
$\lambda\times$homophily	1.000*** (0.283)	1.916*** (0.149)
$\lambda\times$median shortest path	0.000 (0.000)	
$\kappa\times$diameter		−0.000 (0.000)
$\lambda\times$diameter		−0.000** (0.000)
$\mu\times$diameter		−0.000 (0.000)
$\lambda\times$clustering	−0.358* (0.184)	−0.477*** (0.183)
$\mu\times$homophily	−0.309 (0.211)	
$\mu\times$density	1.277*** (0.436)	0.712*** (0.241)
homophily×density		2.368 (2.131)
Observations	9,689	9,689
R^2	0.431	0.420
Adjusted R^2	0.427	0.417
Residual Std. Error	0.164 (df = 9630)	0.166 (df = 9637)
F Statistic	125.628*** (df = 58; 9630)	136.695*** (df = 51; 9637)
Note:		*p<0.1; **p<0.05; ***p<0.01