

## END NOTE

### Glee's *McKinley High*: Following Middle America's sexual taboos

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Writers for popular media frequently draw on insights known about social networks in developing their plotlines and character biographies (whether in books, television, movies, etc.). Perhaps most known to network analysts in this respect, Freeman (2000) presents a collection of network concepts represented in comic strips. These depictions often are consistent with the patterns network analysts observe in real-world empirical examples. For example, the long-running sitcom *Friends* exhibited strong homophily (McPherson et al., 2001) or assortative mixing on race and socioeconomic status among the main characters. Other times the violation of these typical patterns can serve to generate dramatic tension or a source of comedy. For example transitivity—or the tendency of one's friends to also become friends (Holland & Leinhardt, 1972)—is absent in the movie *Hush* where Jessica Lange's character plots to kill the daughter-in-law she does not like. P-O-X social balance (Heider, 1948) describes the tendency for friends to share common interests, which was violated to comedic effect in the *Seinfeld* episode where Jerry's character simply cannot accept his date's refusal to try a taste of the pie he finds delicious, bothering him for days and ultimately leading to his ending the relationship.

Perhaps one of the most prominent empirical findings from the National Longitudinal Study of Adolescent Health data on romantic and sexual partnerships is adolescents' tendency not to date their former partners' current partners' ex partners—what the authors term an avoidance of “four cycles” (Bearman et al., 2004). Bearman et al. additionally note that while this taboo is virtually universally followed (only two 4-cycles appear in the entire school), it is done so with almost no teens likely able to verbalize that behavioral norm.

Figure 1 plots the (on screen or discussed) romantic and “hook-up” relationships among characters through the first two seasons of Fox's internationally renowned sitcom/musical *Glee*.<sup>1</sup> In this relatively small subsample of the school's student population, it can be seen that four cycles are much more common than in Add Health, both in count (10 4-cycles) and as a percentage of the observed romantic relationships ( $15/36 = 42\%$  of observed relationships in the *Glee* network were part

<sup>1</sup> I limited the observed window for the *Glee* network to only two seasons to approximate the 18-month reporting window for romantic relationships in the Add Health study.

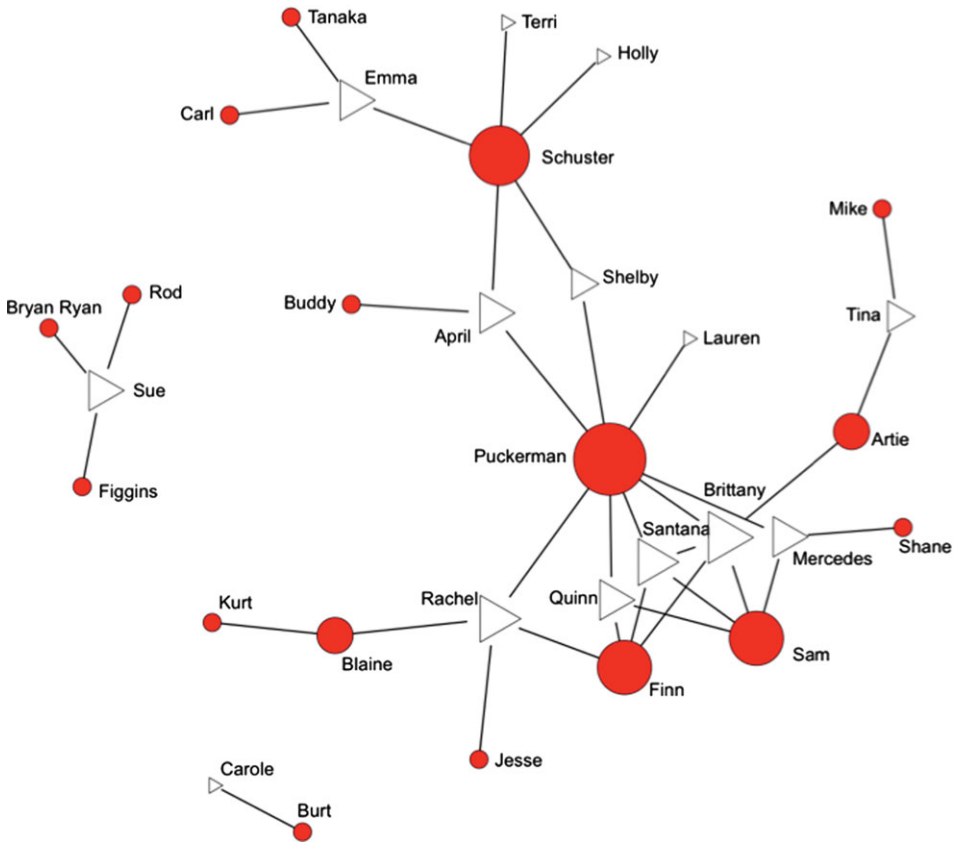


Fig. 1. Romantic and hook-up ties in seasons 1–2 of *Glee*.

Node shading/shape represents gender: male = filled/circle, female = open/triangle; node size is proportional to the natural log of degree. (color online)

of at least one 4-cycle, compared with  $6/475 = 1.2\%$  in the Add Health network).<sup>2</sup> While these descriptive patterns seemingly differ, Table 1 presents an exponential random graph model result for these data (Robins et al., 2007), comparing the same model as applied to “Jefferson High” from Add Health. This model accounts for lower-order endogenous factors on which the potential for 4-cycles depends (open 3-paths, 2-stars) and other standard controls (gender heterophily, excluding isolates). The negative geometrically-weighted non-edgewise shared partnerships term (GWNSP) in the model demonstrates that net of these other effects, in both schools, adolescents avoid 4-cycles.

In this brief analysis, numerous 4-cycles are clearly observable in *Glee*, even centering a large portion of the first season’s plot tensions precisely around the

<sup>2</sup> A few other differences between the *Glee* and Add Health networks are worth noting. The *Glee* network involves more high-degree actors than the Add Health network, and more of the people involved in any romantic relationships are part of the giant component ( $25/31 = 81\%$  compared with  $52\%$  in the Add Health network). It is possible that this stems from observing only part of the complete high school network (focal characters) and if the whole school were examined, these figures would be more comparable. Also, I include ties here that extend outside the school’s students (which were excluded in the Add Health study). If including only the student’s ties, one 4-cycle would be removed, but a higher proportion of observed ties would be involved in at least one 4-cycle.

Table 1. *ERG Model of Glee & Jefferson High Romantic Relationships/Hookups.*

	<u>Glee's "McKinley High"</u>	<u>Add Health's "Jefferson High"</u>
Edges	1.45 (1.77)	-1.05 (0.92)
Same Gender	-2.90*** (0.70)	-4.53*** (0.49)
Degree = 1	3.33* (1.57)	3.56*** (0.57)
2-Star	0.65 (1.00)	1.35*** (0.28)
3-Path	-0.03 (0.19)	-0.02 (0.03)
GWNSP	-0.40* (0.19)	-0.53*** (0.15)

Note: Presented are coefficients and (*standard errors*). \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ .

Quinn–Finn–Rachel–Puckerman cycle. Once properly modeling these 4-cycles while also accounting for other structural features of the network, 4-cycles are also treated as taboo in this setting, just as they were in Add Health. What is less clear is whether this pattern arises because this norm is so implicitly followed in real life that even the writers unknowingly fit it into their plot development. Alternatively, adolescents may be more aware of it than Bearman et al. claim, and rare violations of this norm was an accessible strategy to build plot tension. Or maybe *Glee's* show-runner Ryan Murphy is just an avid reader of the *American Journal of Sociology*.

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### References

- Bearman, P. S., Moody, J., & Stovel, K. (2004). Chains of affection: The structure of adolescent romantic and sexual networks. *American Journal of Sociology*, **110**(1), 44–91.
- Freeman, L. C. (2000). See you in the funny papers: Cartoons and social networks. *Connections*, **23**(1), 32–42.
- Heider, F. (1948). *The Psychology of Interpersonal Relations*. New York: John Wiley & Sons.
- Holland, P. W., & Leinhardt, S. (1972). Some evidence on the transitivity of positive interpersonal sentiment. *American Journal of Sociology*, **72**, 1205.
- McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, **27**, 415–444.
- Robins, G., Pattison, P., Kalish, Y., & Lusher, D. (2007). An introduction to exponential random graph ( $p^*$ ) models for social networks. *Social Networks*, **29**(2), 173–191.