The WAGER, Vol. 17(6) – Fun with Friends: The influence of social networks on gambling problems

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Researchers increasingly have become interested to investigate the environmental and social factors surrounding those with addiction. One of the tools used in this investigation is social network analysis (SNA). Fundamentally, SNA rests upon the assumption that the people a person interacts with regularly can influence that person's behaviors and attitudes. SNA has been applied extensively to alcohol use and smoking (e.g., Christakis & Fowler, 2008), but it has not been applied to gambling behavior until now. This week's *WAGER* reviews the first attempt to apply SNA to gambling behavior and related problems (Fortune, MacKillop, Miller, Campbell, Clifton & Goodie, 2012).

Methods

- Researchers used newspaper advertisements to recruit 128 participants from Athens, Georgia who reported gambling at least once a week.
- An interviewer guided participants through a questionnaire. This questionnaire included the Diagnostic Interview for Gambling Severity (DIGS; Winters, Specker & Stinchfield, 1997), which assesses DSM-IV criteria for pathological gambling.
- Participants also estimated gambling frequency and expenditure for their parents, siblings, and five of their closest friends. Researchers also asked participants to indicate their confidence in these estimates, and only used estimates in which participants indicated some confidence. (On average, participants were confident in their estimates: M=2.5 on a 1 [no confidence] to 3 [high confidence] scale.)

Results

- Researchers found a significant positive correlation between participants' DIGS scores and their estimations of friends' gambling frequency (r = .31, p < .001) and expenditure (r = .30, p < .001).
- Among biological relatives, the only significant relationship was between

DIGS scores and estimated gambling frequency for the fathers ($r = .30$, $p < .05$).

Table 1: Correlation coefficients between participants' DIGS score and gambling frequency and expenditure for different social network members.

	Gambling Frequency				Gambling Expenditure			
	Father	Mother	Siblings	Friends	Father	Mother	Siblings	Friends
DIGS Score	.30*	-.06	.06	.31**	.16	-.04	.11	.30**

*$p < .05$
** $p < .001$

Limitations

- The study is purely correlational; it cannot tell us whether people with gambling problems tend to find like-minded friends, or whether having gambling friends influenced PG symptoms.
- The study relies entirely on participant's perceptions of how others behave. It is possible that the study measures how participants' *perceptions* of their friends' gambling behavior varies as a function of participant DIGS score, not how their friends' actual behavior varies.
- The "friend" category was relatively heterogeneous, containing significant others, non-first degree biological relatives (e.g., uncles and aunts), among others. There was no measure of the strength of the relationship, or how often they interacted.

Discussion

This study provides a first investigation of the association between social networks and gambling problems. While the study found that gambling-related problems are correlated with the projected gambling behavior of friends, it is important to note that this study relies entirely on participants' projections and assumptions about their friends' behavior. This makes it impossible to isolate participants' perceptions from their friends' actual behavior. Traditionally, SNA utilizes objective data gathered directly from a participant's friends and family (Christakis & Fowler, 2008),. Further studies need to use rigorous SNA to address the major limitations and gaps in knowledge and create a more thorough

understanding of how interactions with other people might influence gambling behaviors and problems.

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What do you think? Please use the comment link below to provide feedback on this article.

References

Christakis, N.A., Fowler, J.H. (2008). The collective dynamics of smoking in a large social network. *The New England Journal of Medicine, 358*, 2249-2258.

Fortune, E.E., MacKillop, J., Miller, J.D., Campbell, W.K., Clifton, A.D., Goodie, A.S. (2012). Social density of gambling and its association with gambling problems: An initial investigation. *Journal of Gambling Studies*, Online First. DOI:10.1007/s10899-012-9303-3.

Winters, K.C., Specker, S., Stinchfield, R.D. (1997). *Diagnostic Interview for Gambling Severity (DIGS)*. Minneapolis: University of Minnesota.