

Selective Memories Favor Influentials

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Social scientists have long been interested in understanding what makes some respondents more accurate observers of their own social networking behavior than others in recalling and reporting social network's structure (Bernard et al. 1984, Freeman et al, 1987, Casciaro, 1998).

This study contributes to social network research on interpersonal perception accuracy, by focusing on the relationship between actors' centrality and their ability to report accurately their own social interactions. We used network measures like actors' betweenness centrality and degree centrality to identify the most prominent members.

This research was conducted within a graduate school of management that both educates students and undertakes research projects. Through seven web surveys, we gathered data on the frequency of interaction among members connected through telephone, chat, and face-to-face conversations. We conducted focused interviews with three senior managers to classify all network members according to three factors: trustworthiness, prestige, and contribution.

We applied an "internal measure of accuracy" by measuring the correlation between ego-perception and alter-perception. We found that actors involved on the same interaction attributed different values to the same interaction ($R_{iji} \neq R_{jij}$), which is referred to as a "non-reciprocity" type of misalignment (Krackhardt, 1987).

We found a positive correlation between actors' centrality and their centrality as assessed by senior management, and a negative correlation between actors' centrality and their accuracy in recalling interactions. These asymmetries suggest that underreporting social interactions may represent a third way of measuring the importance of members and finding the most influential ones.

References

1. Bernard H. R., Killworth P., Kronenfeld D., Sailer L., The Problem of Informant Accuracy: The Validity of Retrospective Data, *Annual Review of Anthropology*, Vol. 13, 1984: 495-517.
2. Carley K.M., Krackhardt D., Cognitive inconsistencies and non-symmetric friendship, *Social Networks* 18 (1996): 1-27.
3. Casciaro, T. Seeing Things Clearly: Social structure, Personality, and Accuracy in Social Network Perception, *Social Networks* 20 (1998): 331-51.
4. White Howard, Wellman Barry and Nazer Nancy, Does Citation Reflect Social Structure: Longitudinal Evidence from the 'GloboNet' Interdisciplinary Research Group, *Journal of the American Society for Information Science and Technology*, (2004) 55, 2: 111-26.
5. Marin, A., Are respondents more likely to list alters with certain characteristics? Implications for name generator data, *Social Networks*, (2004), 26, 4. 289-307.