

# Social network analysis in organizations: Ethical considerations and measures

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Social network analysis (SNA) is a methodological approach based on the network paradigm, focusing on the opportunities and constraints inherent in the interconnections between individuals or social units, rather than solely on their attributes. SNA has emerged as an increasingly common way of approaching social phenomena during the last few decades, utilized extensively both within academic studies and in practitioner domains such as management consulting. However, it may be as Kadushin (2005) suggests, that the social network field have developed further in its ability to arrive at incisive analyses than in terms of comprehending the conditions for responsible uses of such analyses. In addition to the general ethical considerations one must take into account when performing social research, the very nature of SNA introduces special ethical problems which must be recognized and dealt with. This essay will discuss the most pertinent of these problems in regards to the author's current research project.

## **The use of SNA in the present study**

This research project takes the form of a comparative case study of the interrelation between the use of information and communication technologies (ICTs) and the development, maintenance and utilization of social capital in distributed, professional environments. As the social patterns of interaction of individual employees not only shape, but are also shaped by the available means of communication (Licoppe and Smoreda 2005), and the forms and functions of ICT usage may be dependent on characteristics of the social network ties between communicators (Haythornthwaite 2002), a social network approach seems advantageous in this investigation. In practice, the data collection effort is based on interviews and survey instruments, in which employees of the case organizations are queried about what relations are most important to them in their present work, certain attributes of these relations (e.g. closeness) and the other person (e.g. org. belonging), as well as how they communicate with these persons using different media. Additionally the instruments cover some more common themes believed to be of relevance to the research questions, such as demographical attributes, the informants views about certain social,

organizational and technological aspects of their work environment, and their general media and social capital strategies.

The comprehensive set of concepts and methods developed within SNA allows for in-depth insight into the structure and contents of networks of relations. For instance one might identify differences in media strategies or perceptions of group level social capital between certain subgroups or network configurations, or between persons who are located in different positions such as central or peripheral in a given network. Advanced software tools also allow for detailed visualizations of such network structures and social phenomena, which may be of great use both during analysis of the data and for presentation of the results. Yet this greater explanatory power should also be accompanied by a greater concern for the wellbeing of those involved in the study.

### **Ethical considerations in the application of SNA in the present study**

Research ethics concerns the values, norms and institutional arrangements that seek to regulate scientific activity based on general scientific morality (NESH 2006). Perhaps the most fundamental ethical concern in any scientific endeavor, is to minimize harm to participants and others who may be affected by the research. In the social sciences, there exists a whole range of guidelines and regulations that deal with such ethical concerns more explicitly, and common practices have emerged to act in accordance with these. Usually informants are protected by measures such as anonymity and confidentiality, which allows them to provide information in a truthful manner without fear of negative consequences.

Anonymous data gathering is relatively easy to implement without compromising the quality of the research when surveying populations of some size, because it is the attributes of respondents which is of interest and not the individuals themselves. While matching these data up to the actual identities may be possible by comparing different combinations of attributes to a set of possible respondents, this will usually be exceedingly difficult. In the organizational context, however, the set of possible respondents is usually smaller, with a higher chance of interested parties being able to identify respondents based on a fewer attributes – especially if demographical information of each person is available through a database. Thus, when surveying within defined social units of smaller size, as well as when conducting interviews, some sort of anonymization is necessary to protect informants. Typically, this is done by replacing the names

of informants with pseudonyms, and hiding or altering other identifying data. When conducting SNA in such contexts, however, several factors makes this approach to minimizing harm to informants more difficult.

Unlike conventional studies, the identities of respondents and the people they indicate having ties to are usually central to social network studies, in order for the researcher to be able to construct meaningful networks. Thus, anonymity during data gathering and analysis is usually not an option. Furthermore, even if only pseudonyms or attributes are used for presentation of results, displaying maps of relational structures may undermine anonymization measures. Respondents may be able to deduce who is who in different ways, based on their own responses and knowledge of demographics and relational structures within the case. For instance, a respondent may use her knowledge of having named exactly six persons with certain relevant attributes (such as organizational belonging) to identify herself in the map, and then unravel the next layer of ties based on which persons these are likely to have named and so on. Even if the informant is clearly informed about what the data will be used for, most people do not yet have the same experience with social network studies as they do general social surveys, and may as such not be sufficiently aware of the potential consequences of disclosing network information. It may, for instance, be an unpleasant experience to learn the unattractiveness of one's network position so explicitly. As such, special care must be taken when choosing the level of detail with which results are presented, in order to avoid such processes being possible.

This is of particular importance for studies in a corporate setting, where there may be grave consequences for the individual identified as having an unfitting network position (e.g. not being identified by colleagues as important in their work), or for teams or departments that are shown to have “wrong” network configurations. Such ethical considerations are made even more vital by the fact that research in organizations, and particularly in corporations, quite often is based on an *quid pro quo* arrangement, where researchers report findings from the study back to management, so as to compensate for the time spent by employees participating in the study rather than performing regular work. This may lead to a conflict of interest between protecting informants and satisfying the demands of “gate keepers”, as management obviously will be interested in as detailed a map of the situation as possible in order to intervene appropriately. It's at the very least

necessary, then, to come to a clearly defined agreement on what information will be made available before initiating the research.

There is another ethical issue distinctive to SNA, relating to the right not to participate in the study. Even if an employee chooses not to take part, this does not stop other participants from naming said person in their networks. These considerations are of special relevance to the present study, where respondents are asked to indicate people important to their work both inside and outside the organization studied; people, that is, who may not even be aware of the research being conducted, much less have been presented a consent form. It seems intuitive to argue, then, that all non-consenting actors should be eliminated from the analysis altogether. An opposing argument can be made, however, that the information requested is merely the respondents *perceptions* of their relations, which should be theirs to describe as they see fit (Borgatti and Molina 2005). Also, excluding such relations from the study induces another ethical issue in regards to knowingly giving an inaccurate account of the findings. All in all, including non-consenting others seems acceptable as long as the name generator, i.e. the question prompting respondents to identify others, is positively loaded (such as “who is important to you” in the present study), rather than a negatively (e.g. “who is difficult to work with”), and especially so when there are also solid anonymization measures.

One last important ethical challenge is rooted in the fact that SNA research is very much dependent on the highest possible level of participation in order to give an accurate account of social phenomena, and even more so than regular surveys. This is because even small amounts of missing data can have major implications in SNA, where network maps and measures can be highly misleading if persons in important network positions are missing (e.g. someone linking two different sub-networks together). Thus it is not unlikely that researchers may be tempted to disregard the strictest sense of ethical guidelines, dictating that participation in a study should be entirely voluntary. Examples include having management encourage participation in the study, or (consciously or unconsciously) failing to highlight potential ramifications of participating. Even without direct instructions by management, employees choosing not to participate could fear negative consequences such as being judged uncooperative, should their choice be made apparent through means such as those discussed earlier.

In order to deal with challenges such as those presented above, Borgatti and Molina (2005) suggest a series of ethical guidelines for network research in organizations, many of which have been touched upon already. Most imperative is being very clear about how information from the study will be used, both in terms of how the information may be presented, to whom, and what predictable consequences this may have for all parties involved. When a promise of no harm cannot credibly be given, one should at least ensure that participants are provided full disclosure so that they can make a fully informed decision of whether to take part. The best way to do this, it is suggested, is by distributing a “truly informed consent” form with the participation request, that is more comprehensive than what is common in ordinary social research. Beyond the usual contents of such forms, this should also include examples of network maps and how they are used, as well as a copy of the “management disclosure contract”. This last item refers to the agreement made between researcher and management, of what data (and in what form) will be made available, and how this may be used by the organization. Note that even if the researcher is not in a position to reach an ideal agreement seen from an ethical or academic point of view, its mere existence serves an important purpose in informing potential participants.

Finally, one should consider the question of who benefits from the research. Whilst doing no harm may be considered sufficient, ideally the participants themselves should in some way benefit from taking part as well. Obviously a general assumption in science is some notion of benefit to humanity. For organizational studies, however, it is mostly management and the researchers themselves who benefit, except possibly some monetary compensation or chance to win a prize for respondents. In cases where the research may create collective benefits, such as “a better place to work”, this is unproblematic, but if the primary beneficiaries are others than those participating, it would be appropriate for the researcher to reconsider the ethics of the situation (Kadushin 2005).

## References

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