



## Everything is connected: An Approach to Qualitative Network Research. Sociological Remarks on Perspectives, Complexities, and Difficulties

### ABSTRACT

*Social Network Analysis (SNA) is an important methodological approach but also a valuable instrument for research in social sciences and social issues, including Diversity, Social Capital, and the Trust Crisis. More precisely, a network consists of sets of nodes, ties, and sometimes attributes. Nodes refer to elements of the researcher's project and ties are based on the researcher's interests. In a network, the vital components are the connections and patterns. In the past, the scientific community merely associated social network analysis (SNA) with the quantitative methodological approach. However, this approach has begun to be revised in recent years because the quantitative approach can only solve specific cases that arise in society. On the contrary, qualitative SNA can generate and examine data on numerous social issues. The qualitative SNA is an in-depth approach focusing on the social subject and its connections with other social subjects, institutions, or organizations. This study highlights the importance of a qualitative SNA and offers a distinctive approach to qualitative SNA in the research field.*

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### I. Introduction

Managing Diversity in Education, the importance of Social Capital for the formation of contemporary social identities, and the Crisis of Trust are three of the most interdisciplinary research areas of interest nowadays. Qualitative Social Network Analysis can be an important approach to the investigation of similar social phenomena with the common feature of their continuous dynamic transformation.

In particular, the concept of social networks appears to have originated 50 years ago and has since become a common interdisciplinary place. Methods and instruments to analyze have been developed repeatedly. This has prompted discussions about the emergence of sociology of social networks, meaning that they have acquired particular importance. If the reason for that is to be explained in one sentence, it is that a clear representation of social structures can be produced, and their role redefined. Besides, through social networks, focusing on social relations and regularities, the effects, and transformations of the social subject about critical social issues can be identified.

Through social networks, complex individual networks are revealed, both within interactions between social actors and between small groups. Thus, social networks reveal professional and personal networks (Carrington et al., 2005; Wasserman & Faust, 1994).

The social subjects are connected to each other by invisible links which are woven so intricately that they could be very graphically described as a woolen sweater or fishing net. The concept of social networks provides a dynamic model of social structure. This can be used to investigate critical sociological phenomena, playing a pivotal role in data collection (Scott, 1988).

As can be understood, the instrument we have in our hands is linked to the analysis of critical social phenomena such as Diversity, Social Capital, Trust, and mental health issues. However, social

network analysis seems to be a field dominated by mathematical formalization, induction, and modelling (Mercklé, 2004). Consequently, the present paper's critical presentation of the methodological approach of Social Network Analysis aims, firstly, to highlight that SNA can be successfully implemented through a qualitative approach and even provides micro-level interpretations and inferences on crucial social issues in the light of the consequences of the permacrisis phenomenon.

Societies enclose social structures, consisting of relationships. To put it differently, they are networks of interconnecting structures. Furthermore, networks are structures that have properties that change. These changing properties often have implications for sociological issues that are being explored. Accordingly, the researcher seeks to identify these network properties and characteristics to proceed to capture and make sense of them (Crossley, 2019).

The analysis of social networks can be achieved by treating networks either as whole networks, ego nets, or two-mode networks. To begin with, by 'whole networks,' it means that the researcher should collect data from the whole social network to determine whether the structure of the social network or specific properties of the structure are relevant to the research questions posed and the purpose set by the researcher.

More specifically, researchers need to adhere to this argument, especially if they assume that nodes are influenced not only by their direct contacts, e.g. the direct relationship of friendship, but also by the friend of the friend, and in some cases by the friend of the friend of the friend, and so on. For example, John is not only influenced by George (with whom he is friends) but may also be influenced (indirectly) by Kostas, who is a friend of Georges, and is likely to be influenced by Gregory, who is a friend of Kostas, who is a friend of Georges. Furthermore, it becomes clear that only whole-network data can capture such paths.

We note that following this path in research is a demanding one as it is often quite challenging to collect data on an entire network of many nodes. At the same time, only some will be willing to answer a questionnaire with dozens or even hundreds of names. Another point is that whole network research tends to focus on links in a particular layer, which has the consequence of failing to capture cross-cycles (Simmel, 1955; Crossley, 2019).

Continuing with ego nets, we aim to record the actions of the acting subjects along concentric cycles of social relations. Another conception states that the researcher may follow this research route if the structure of the social network needs to be clarified or the indirect contacts of social subjects in the network still need to be outlined. This route's research data collection process is done through an interview or questionnaire. The researcher expects to include significant others drawn from all the social subjects' concentric circles of social relations in the data received. Through data collection tools, the researcher can also focus on questions concerning specific characteristics of the social subjects' significant others and their relationship quality. A possible difficulty that may arise from the above option can be the loss of information about the multiple layers of the social network structure and indirect ties (Crossley et al., 2015).

The third category of social network analysis, namely two-mode networks, involves two different types of nodes and a link that crosses these types. Nevertheless, how is such a network analyzed? The most common analysis is to split the two-mode network into two whole networks and then perform the analysis. For example, a. a network of social subjects connected as they participated in one or more matching events and b. a network of events connected as they shared one or more social subjects that participated. Therefore, two-way networks are often used implicitly to find an entire network's data (in reverse) (Borgatti, 2009).

It is necessary for the researcher to define the way in which the social network is to be studied, i.e., as a. a whole or b. as sub-groups, or c. as nodes. More specifically, as the whole means that the researcher regards the network as a whole, focusing on its specific structural characteristics. As sub-groups, the focus is on the various properties that can be detected while being comparable. Furthermore, as nodes, the researcher emphasizes the nodes and the relational properties that occur because of the pattern of their connections within the network - and clearly, one node differs from another because of the properties (Knoke & Yang, 2020).

Compared to the quantitative approach, the qualitative approach is more beneficial for research that does not lend itself to a quantitative approach, given that the subject matter of such research is sensitive or complex. Indeed, the sample may include people from different social backgrounds, and this has the consequence that they may perceive the questions asked of them differently, making it complicated for the researcher to analyze the answers. The use of specific questions (closed-ended in many cases) is probably not sufficient to collect reliable and accurate data. There is a possibility that the researcher may need to go through these trajectories to seek answers from the participants again.

In conclusion, the qualitative approach can be helpful to the researcher, if the academic community does not adequately define the phenomenon under investigation through previous research. Furthermore, as is understood, it would be impractical to ask specific questions (which are essential in the quantitative approach) (Schepis, 2011).

### **The Next Stage: Qualitative Methodological Approach**

Qualitative Social Network Analysis (QSNA) has started to be used by researchers in the last decade on a large scale, as previously, the focus was exclusively on social network analysis based on the quantitative approach. However, Social Network Analysis through the qualitative approach can provide the researcher with data concerning the importance that the social subject - the actor - attaches to the social bonds they have and their social network as a whole (Ahrens, 2018).

The qualitative approach ensures the successful management of social networks' complex and dynamic nature. Consequently, it is possible to analyze in depth the links that exist and the information that flows observed in the everyday life of social subjects. Indeed, it is pointed out that the investigation of bonds and information flows can also be a source of innovative research topics, regarding the relationships between subjects, organizations, and institutions. (Easton, 1995; Jack, 2005)

Applying a qualitative approach to the field of social networks offers the possibility of focusing on the micro, as opposed to the quantitative approach, which focuses on the macro. Through the qualitative approach, it is possible to capture friendships, family relationships, or migratory ties. Furthermore, the qualitative approach visualizes which network and in which context it exists in the everyday social reality of the social subject. It is even possible to determine whether this network is stable or changing. (Curran et al., 1993)

Focusing on the qualitative approach, the tools used for social network analysis (QNA) include interviews, observation, document analysis, and archival material. The interview tool has been widely used recently, with QNA as a reference point. By focusing on the interview, the interviewee develops an individual narrative, and this allows the researcher to trace values, logic, norms, and rules that characterize either the social subject giving the interview or perhaps the institution in which he or she works, thus capturing the context that exists (Ahrens, 2018).

Another essential tool of QNA is network maps. More specifically, for the last tool mentioned, one of the procedures followed is the following: the participant is given a piece of paper, and on it, he develops his perspective on a specific question posed to him, for example, to sketch the interaction between social subjects. The other procedure involves structured social network maps - a method known as the 'concentric circle method' by Kahn and Antonucci (1980). In this procedure, participants are given a piece of paper with a limited number of concentric circles, and this procedure can be standardized or non-standardized. The standardized version includes specific circles, for example, family, work, and friends.

Consequently, the social network maps of different social subjects through this process are comparable. The non-standard version, on the other hand, does not define each circle; thus, the social subject is self-referencing, but the researcher cannot compare the social network maps with each other. As shown in the above argumentation, the social network maps instrument can also be applied during the interviews, either as a means of communication between the interviewee and the interviewer or as an outline of the interview's outcome.

Extended social media maps can even include nodes, relationships, and flows and reflect the interview's content based on the interviewee's specific questions. Therefore, the map focuses on the

categories just mentioned, and the interpretation of the maps is based on the research questions of a study as well as the theoretical construct adopted. Finally, we note that through social network maps, it is possible (through the introduction of additional symbols) to investigate the scope, shape, and strength of the social network of the social subject (Oancea, Petour & Atkinson, 2017).

Social network pictures (or network pictures) are a method almost identical to social network maps. However, in social network pictures, the participant has complete freedom to draw the social network as he or she has it in mind on a large piece of paper. He can draw his social network or the social network he observes exists in the organization he works (of which he is a part). As documented in previous studies this method is necessary since each social subject perceives a social network differently - even if it consists of the same social subjects. Similarly, to the case of social network maps, social network images can be used in parallel with the interviewing process, essentially acting as an aid to the researcher.

The process in this method is completed when the researcher collects several images and representations of social networks from different social subjects in different locations within the organization to observe how the networks are captured and focus on the similarities and differences between the networks as represented by social subjects. After completing this step, the researcher will also have a more crystal-clear picture of the social networks having drawn data from the different perspectives of the social subjects (Mason & Leek, 2010).

Another method often used to understand a social network is the name-generator process. Through the name generator, questions are asked to the respondent, giving them names of social subjects, organizations, institutions, or other entities that the respondent has a relationship with. For example, questions such as "who are your best friend?" or "Whom would you ask for advice on a subject being studied at school?". Of course, it is necessary that the questions are different, that they are not repeated, and that every effort is made to ensure that the respondent feels energized and engaged. This method is used in the context of qualitative and quantitative approaches. What differs is how the questions are posed to the respondent and whether there is a sequence of questions for further understanding. Previous research suggests that this process may involve difficulties, as respondents may find it difficult to recall names accurately in their memory and social contacts when asked (Marsden, 2005; Schepis, 2011).

If we focus on sociology, we will find that high social network density (i.e., the number of ties that exist in a network) is associated with high levels of trust, norms of cooperation and mutual support, and high levels of social capital. In other words, high density is a fertile ground for cultivating and stimulating social capital, for example, through trust (Coleman, 1990; Putnam, 2000).

### **Social Issues and Qualitative Network Analysis: Diversity, Social Capital, and Trust Crisis**

In this study, there have been three issues that highlight the importance of Social Network Analysis selected through a qualitative approach. These issues are Diversity, Social Capital, and the Crisis of Trust. Let us briefly present the meaning of each issue. In the light of sociological theories, diversity has a direct correlation with inequality. Issues of Diversity management are everyday moments for contemporary Western societies. An illustrative case of what we have mentioned above concerns the school unit and the management of Diversity issues by the principal. This research perspective raises a number of questions such as: Does the principal's approach to diversity emerge from his or her social network? Are the principal's decisions on diversity issues legitimized by his or her social network? These two fundamental questions cannot be answered, for example, by social network analysis using a quantitative approach.

These two fundamental questions, for example, cannot be answered through social network analysis using a quantitative approach. Another characteristic area of research using the SQNA instrument can be the study of Social Capital. The study of Social Capital, as the set of social relations that a social subject has with other social subjects, is a very important area in the sociological tradition. The question here concerns whether, through a questionnaire, we can outline the relationships of the social subject and thus enumerate the social relationships that a social subject has, but at the same time, the quality of these social relationships.



As far as the Crisis of Trust is concerned, the issue exists, and the entire research community agrees. A Crisis of Trust exists both between citizens and between citizens and institutions. What determines the Trust that one social subject has in another social subject? Are there essential nodes in its network through which a particular perspective is diffused? Why is one node more important than another? Does the social subject decide for itself which institution to trust?

A qualitative social network analysis approach can answer all the above questions. This process can be achieved by focusing on the micro level. Each subject can quickly analyze and capture whether and to what extent their social network influences their daily decisions, whether they are concerned with their relationships or professional relationships.

In addition, another important point in our study is that by using the QSNA approach, the researcher can identify the quality of the relationship between one subject and another through the qualitative approach. For example, whether it is exclusively friendly, exclusively professional, or possibly combines both. This conclusion is vital to the analysis the researcher can undertake and outline the pattern of relationships. The final point is that through the qualitative approach, it can become apparent whether important nodes shape the perspectives of other actors within the social network on values, current social issues, as well as potential inclination or not to stimulate Social Capital.

### **Not a Conclusion: Is Sociology on the Verge of Something New?**

The analysis of networks in the sociological field diversifies the content of the relations considered, the types of connected entities, and open perspectives to escape from the cumulative tendencies of individual characteristics and should be translated into various research fields.

In this study, an attempt was made to capture approaches, methods, and instruments crucial to implementing a Social Network Analysis. As stated in the title of this article, everything is connected; it only remains to find the methodology to follow to observe what is connected to what, why it is connected, and what the offspring of this path is. The methodology proposed is a qualitative approach, avoiding mathematizing everything but at the same time fully recognizing the foundations laid by the quantitative approach in the grave importance that social networks carry today as a separate subject, linked to many other concepts. Through the qualitative approach, the possibility of an in-depth understanding of the network allows the researcher to understand a social phenomenon at a micro level and to identify the perspectives of the social subject and those of his or her social network.

In conclusion, in the context of this study, we have attempted to present a critical view of both the methodological approach and the relevant tools for its implementation. Therefore, the purpose of this study is to critically present and analyze important remarks on the perspectives, complexities, and difficulties of using QSNA. More specifically, the qualitative approach to social networks can work independently, but also in conjunction with the quantitative approach, to comprehensively capture the social phenomenon at both micro and macro levels.

From our point of view, it is not maximalist to say that after this long journey, the Sociology of Social Networks field has been established, with the possibility of application for further analysis of various social phenomena and issues.

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