Social Network Based Approaches in North American Religion Research: a Review

Abstract

This paper analyzes the situation of social network and religion related researches in North America. The goal was to find the instances of the applications of social network analysis related theory and methods on behalf of researchers of religion. The works were selected based on their usage of the social network method, social network theory and the research of different aspects of the religious field. The findings based on the review have shown that the links between social actors are being theorized in the articles, and there are measures introduced to map these links. Most reviewed articles were building on empirical methods, different survey researches concerning different characteristics of the social networks.

Keywords  social network, sociology of religion, social capital, SNA

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In this study I plan to present the application of social network theory and social network analysis in the sociology of religion in North America through published works. I already conducted a similar review on Central and Eastern European articles (Nagy 2015). This paper shares methodology and theoretical background with the preceding article, but the North American works in the field of religion and social network research are explored. The research question of this paper is about the occurrence of the application of the social network theory and SNA method in religion related social scientific works by North American scholars. I am interested in the presence and in the absence of the concept and method in the works of scholars.

**Social network analysis and the sociology of religion**

The sociology of religion has much to gain from the application of the analysis of religious social networks. This approach of sociological study of religious faith and religious groups is usually based on empirical research and interpretation of the research results. The sociology of religion has a broader perspective in studying religious life, but the religious social networks usually mirror other characteristics of the studied religious entities and phenomena to make it an interesting subject of research. The network science, based on network theory is a fairly new and innovative field, and its approaches are ground-breaking in many aspects. The social scientific applications of the network analysis methods and concepts was built on the results of network science. Thus, the social network analysis of religious networks is grounded on the methodological principles and assumptions of network analysis, especially social network analysis as it has developed in recent years. The subjects of research can be members of religious communities or the communities themselves in this approach.

In the social network analysis method, the selected units of analysis, the cases are represented by nodes, and the connections between them are represented with lines. There can be many forms of connections among different nodes, so there might be different lines used to represent them. The mapping of a religious social network is supposed to be done on an empirical basis, and the results of the mapping shall be interpreted in an objective way. The graphical outcome of social network analysis – in other terms the graph – represents the place of the different actors in the network by points or nodes, and the connections between the different nodes with lines. The interpretation of the graphs is done by the researchers, with the help of the graphics and statistical measures. Conclusions can be drawn based on the viewing and statistical analyses about the characteristics of the social network. If the researcher wants to go into further detail, there are specific measures developed by network scientists to empirically test their different hypotheses about the network. This new method offers a whole range of new possibilities to do more detailed research on religious networks, but its diffusion among researchers of religion is very slow.

**Theoretical and methodological innovations in sociology of religion**

If we look at the general question of development of new theories, methods and techniques in sociology over time, we shall realize that the sociology of religion used to be a catalyst of new theories and methods in the era of the founding fathers of sociology. Although Karl Marx
did not consider elaborating a special theory on religion, and rather applied the approaches of the critical theory, others, such as Max Weber, Emile Durkheim and Ernst Troeltsch did so (Hamilton 2001). If we look at the theories of the classics, such as Max Weber’s theory about the connections between religiousness, religious values and the capitalist value system (Weber 1958), Emile Durkheim's theory on the shared functions of different religions in different societies (Durkheim 2012) and Ernst Troeltsch’s theory based on Weber's work about the church-sect typology (Troeltsch 1992), we can state that the sociology of religion used to be an innovator sub-discipline in sociology, and contributed largely to the general development of the field.

The first idea to imagine social structure in shapes and graphical structures occurred to sociologists in the 1930’s. This was in very close connection with the “formal sociology” of Georg Simmel, and other German sociologists. Lines, points and shapes were used to represent social structure for the first time, connections became important elements of the graphical display of social relations (Scott – Carrington 2011).

It was Moreno, who was interested in the field and space of social relations, and social networks. Moreno called his methodological approach ‘sociometry’ and invented the ‘sociogram’. The ‘sociogram’ used to be a visual representation of social networks with the help of points and lines. The method and its applications gained prominence in the educational science, and it was further developed in the US and Europe (Scott – Carrington 2011).

The application of social network analysis as a research methodology and theoretical framework became widespread in sociology since the early sixties. The first applications date back to the psychological work of Moreno and his colleagues, and the works of Kurt Lewin in sociology. The social network research field contributed to the formation of several research centres by the seventies. The developments took place in the US and Europe as well, and the development of the method was a shared enterprise of the scientists of both regions. Methodological innovations are continuous in the field even today (Freeman 2004).

The first instance of using social network analysis in a religious setting can be traced back to the work of Sampson, who performed the network analysis of eighteen trainee monks in a monastery (Sampson, 1969; cited by Herman 1984). There were other sociologists applying the traditional sociometric approach to religious groups in the sixties and seventies, for example for clique detection and clustering of individuals. The patterns of the social networks were not examined in the works of this era. (Herman 1984).

Another very important boost was given to the SNA method, when social scientists realized that the social network parameters of local congregations can be crucial in group development. The social relations developed in the local religious group – congregation settings were vital for the longevity of the group itself. Hoge and Roozen (1979) even realized in their research, that social factors such as relationships in a religious group can well be more important in normal cases than the theological disposition. Such result contributed to the widespread diffusion of the social network approach and the SNA method in the American sociology of religion.

I am following the concept of Freeman (2004) to identify works that can be categorized based on the usage of SNA methods. He states that the works can be distributed into four categories, based on the depth and methodological instances of SNA’s application. The four categories are: the scientific work either or fully “(1) involves the intuition that links among social actors are important. (2) It is based on the collection and analysis of data that record social relations that link actors. (3) It draws heavily on graphic imagery to reveal and display the patterning of those links. And (4) it develops mathematical and computational models to describe and explain those pat-
terns” (Freeman 2004). The four categories are usually combined in contemporary SNA articles.

In this paper I did a review of the works of American sociologists of religion to see the extent of SNA usage in their articles. The review is not a complete review; it is based on a thorough search of academic journals and books, to find articles dealing with social network analysis and religion, articles about social network effects of religion or religious groups. There might be some important academic works left out, but I was trying to map the field accurately. In the case of North American sociology of religion, I tried to stick to articles with a strong social network orientation, to exclude articles about social capital and religion. I regard social capital as a very important theory, and social networks as the building blocks of social capital, but I had to select articles concentrating on the networks themselves, and not social capital. I present my findings based on Freeman’s category system in a table.

Social network analysis in the North American sociology of religion

Social network analysis became popular in North America, as human relations and networks of human relations and interactions came into the centre of sociological attention and inquiry. The methods developed, and from network theories new methods of visualizing these relations were created, and complex network measurement methods were introduced. We can review many articles using social network related methods of religion research. I have divided the different articles into subsections based on their topics.

Social Network Analysis of a Congregation

The social network analysis of an Anglican congregation by Nancy J. Herman (1984) is a good example of an application of the method. Herman conducted her exploratory study in a 40 member Anglican congregation in Canada, using the methodology developed by White – Breiger (1975; cited by Herman 1984). 25 members were interviewed and filled the survey about social ties, the researcher was the member of the congregation. The congregation had 250 members prior to 1975, the arrival of a new pastor. The new pastor tried to modernize the congregation, which resulted in a huge decrease of membership: 40 members remained in the congregation. The clustering method identified four groups inside the congregation: (1) the reforms, (2) the conservatives, (3) the followers and (4) the isolate individual members. The reforms were a strong group, whose members had a high esteem for each other, who disliked the conservatives. The group included the minister. Conservatives were also a strong block, but the mingled a bit with the followers block in case of esteem. The conservatives are lower in status than the reformers. The followers are the weakest group, they have strong ties inside the group, but many unreciprocated ties towards the reformers and some towards the conservatives. The paper applied the social network analysis method, specifically the block model analysis for understanding the organization and the social behaviour of the religious group. The identified blocks were not only based on shared beliefs according to the findings, but also age, kinship occupation and length of time as congregation member. The block model analytic approach, which is a vintage approach in social network analysis, proved to be an excellent research tool (Herman 1984).
Studies

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Interpersonal connections and social network’s role in religious group life

Stark – Bainbridge (1980) found out in their work that interpersonal connections between cult members and possible new recruits proved essential in the success rate of gaining new members for the American Moonies. When such interpersonal bonds did not exist or failed to develop during the recruitment process, the entire effort to draw in the new member was usually unsuccessful. The authors found examples that some people became Moonie cult members because they had strong personal connections to a person who was already a member. The full membership in the cult came with the day-to-day interaction of the members and the potential recruits, and it was largely dependent on the interpersonal connections between them. They conclude that membership in the cult did not come because the new members were attracted to the ideology, but rather because they have accepted the ideology because of persons they were tied to.

It is also interesting to note, that the first members of the cult in the US came from the immediate social network of the first converts. In conclusion it can be stated that social relations and social network have an essential role in recruiting new members to cults and sects. (Stark – Bainbridge 1980. 1379.)

Samuel Stroope (2011a) found that social networks are either directly or indirectly influencing the individual’s style of religious participation in a Hindu setting. The attractiveness of a congregation-style worship model can be based on the social network advantages it might provide for its members.

Social networks and religiosity

Cavendish – Welch – Leege (1998) wrote about social network data as predictor of religiosity among black Catholics in the United States. They tried to identify differences in devotional life and spirituality of black and white Catholics based on research results. Based on a general understanding of the social network theory, they state that gratifying social relationships inside a social network can be perceived as strong predictors of religiosity.

McIntosh – Sykes – Kubena (2002) researched the social network of the elderly. The authors concluded that the most important characteristic of the elderly’s social network is its religious likeness. Religiosity is a more prominent factor than ethnicity, friendship, shared membership in other voluntary associations, physical proximity of living arrangements or shared work experiences. The article also concluded that the stronger ties to kin and friends increase the likelihood of church attendance, but ethnically homogenous ties, neighbourhood network relationships do not. The greater role diversity in the network also increases the probability of frequent religious participation. Networks based on neighbourhood do not have these positive effects on religious attendance and participation among the elderly.

Personal health and life satisfaction

Krause – Wulff (2005) researched the relationship between church based social support and satisfaction with personal health. They emphasized that social ties are generally perceived by sociologists to have a major role in having an effective and meaningful life. They examined
social support systems formed in the church environments, and its effects on health. They used the US Congregational Life Survey data for their empirical analyses. Their data has shown that those people, who are long-time members of the congregation continue to attend the services regularly with a higher chance. Those who attend regularly has a higher chance of getting emotional support from other church members. Those who are getting emotional support from the congregation setting feel more attached to the congregation, they have a stronger sense of belonging. And finally, those who feel to belong stronger tend to feel more satisfied with their health. The higher sense of belonging tends to promote better health, but there may be alternative explanations (Krause – Wulff 2005).

Brashears (2010) conducted a test of the Durkheim/Berger theory that people who are connected in the same religious group are protected from the effects of anomia because of a ‘sacred canopy’. Their integrated social world is perceived as a sacred canopy, and as long as it is intact, it provides stability to the social structure. The research was trying to identify the element that provided the protection from anomia: the sacred canopy itself or the social network behind it. The data used were the 1985 and 2004 GSS waves, and the findings supported the basic ideas of Durkheim and Berger. The religious adherents were in fact protected by a sacred canopy from higher levels of anomia and forms of deviance. The strength of the sacred canopy’s protection lied in one’s degree of religious belief, and his or her interactions with fellow believers of the same religious ideas and beliefs, but did not rely on the frequency of participation in religious services. It seems that the protection is provided by the immediate social network of the individual, consisting of people who share the same religious beliefs and notions. Those believers, who are members of strong, religion-based social networks are protected against anomia, demonstrated lower levels of unhappiness and deviance (Brashears 2010).

Lim–Putnam (2010) researched the connection between religion and life satisfaction using the social network approach. They used the survey data of “Faith Matters” study from 2006 and 2007, which was examining the connections between religion and social capital in America. They found that the relationship between life satisfaction and the number of friends from the congregation is remarkably strong. They concluded that friendship networks inside the congregation mediated the positive effects of attendance on the individual’s life satisfaction. They argue that congregational friendships have significance because they are embedded in a special social situation. Networks of congregants may be effective channels of social support because congregational friends might offer more valuable support than friends from other networks. The study states that the social network’s effect on the individual cannot be traced back only to the number of ties and their strength, but also to the identities shared in the networks and the contexts they are forged in. The authors find it difficult to think about a non-religion based social network with the same effects on the individual’s life satisfaction in a US context (Lim–Putnam 2010).

Religious social networks and solidarity

McPherson – Smith-Lovin – Cook (2001) stated that ties between members of the same religious setting are more likely to be close ties. These close ties might lead to giving emergency help, loaning money or giving trusted advice or even personal counselling to other group members, more likely than the ties between the members of a hobby or work social group.

Stroope (2011b) investigated the effects of personal congregational involvement and the
individual's social network on religiosity. The connections between congregants, their social embeddedness is studied based on the proportion of the individual’s friends drawn from the congregation, based on Baylor Religion survey wave 2, conducted in 2007. The findings of the study underline that social embeddedness has a strong effect on the measure of the person's religious activity. The highest proportion of the individual’s friends come from the religious setting the more active he or she will be. It was also found that congregational embeddedness has a less strong but still significant effect on the person’s religiosity.

**Religious social networks and civic engagement**

**Lewis – MacGregor – Putnam** (2013) studied the background of the positive relation of religiosity to civic engagement. They hypothesized that social networks are in the background of this phenomena. They proposed that extensive social networks usually contribute to higher rates of participation, and that religious Americans are civically and socially more engaged than their less religious peers. They examined different aspects of religiosity, such as the effects of personal religiosity. They presented different views on the background of how personal religiosity shaped individual action: some authors concentrate on the message of the religious teachings and its effects on the individual. Others speak about a mechanism of cognitive framing, through which religiosity might raise the sympathy of the person for others, and make him or her act in a more civic way.

In the view of **Lewis–MacGregor–Putnam** (2013) religious life is happening in the congregation setting, and religious people can learn and practice their civic skills in them. Some explanations might be gained by focusing on the role and actions of the clergy, and the civic engagement level of the different religious groups. Participation is higher in the religious setting because through it, people can make new connections and grow their social networks. By making new friends people become more involved in the civic activities of the religious group, they will feel responsibility for other members of the group (**Lewis – MacGregor – Putnam** 2013).

The authors claim that religious networks have enhanced social support and more social resources, thus it might contribute more to civic engagement than any other social network. The religious networks also usually promote norms of social support and help, which make members more active. These social networks may also serve as recruitment networks for volunteering work, because people find it more appropriate to ask friends from such networks than from other networks, such as the network of a work place. And as a final argument, in religious groups there are a lot socially and politically involved people, who might inspire or draw others with them on different issues. These can be specialties of different kinds of social networks, such as trade union or Rotary Club members, the reasons behind the operation of the network do not necessarily come because of religious homogeneity, but because of the specificities of it. (**Lewis–MacGregor–Putnam** 2013. 333–335.)

If we want to summarize the research results, we can say “Strong religious social networks are a powerful predictor of civic outcomes and neighbourly activities” (**Lewis – MacGregor – Putnam** 2013. 344.), and based on the research results, we can conclude that the social network is more important than the belief system type, or the attendance rate inside the community.
The North American Articles

If we apply the fourfold categorization system of Freeman (2004) on the above reviewed works, we can conclude that most of them applied the social network theory, but only one of them applied the graphical SNA method itself. Herman did a bloc model analysis of an Anglican congregation, which can be categorized into the third category of Freeman.

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<th>Author(s) and year</th>
<th>Category 1 (realize that links between social actors are important)</th>
<th>Category 2 (collects data about links among social actors)</th>
<th>Category 3 (uses graphic imagery to find patterns)</th>
<th>Category 4 (uses heavy statistics to analyze patterns)</th>
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Source: Own editing based on Freeman 2004

All other works remained at the stage that they realized the importance of social networks in religious groups, and gathered empirical data about them, but did not use graphic imagery to present them, and SNA related statistics to analyse them. This finding is suggesting that the social network analysis approach is present in the works of North American sociologists, but they do not use the social network analysis method to graphically display the ties between the subjects of research. They rather used the social capital concept elaborated by Robert D. Putnam. Putnam has built his social capital model largely on religious participation, and has devoted an entire volume together with Campbell to study the effects of religiosity on the individual’s social life and social capital in America (Putnam – Campbell 2012).
Social capital revisited: the cement of social network norms

From the theoretical point of view, social network theory and the theory of social capital are closely interrelated. Both had started out from the same social scientific understanding of society, and their development used to be parallel to a great extent. The apparent bonds between the methods tie them closely together, as social capital is the cement and building block of social networks. The main difference is not in the theoretical part, but the methodological part: social network analysis has a strong applied facet. Social capital theory can remain only at the theoretical level, and may not present at the applied level.

If we would like to understand religious social networks, we should realize that these are complex systems of norms and values related to the basic religious group’s norm and value system. The networks’ operation is based on the creed and religious belief of the distinct religious community, combined with the value system of it, creating a set of norms recommended to follow by all members of the group. These norms and values govern connections among the group members, and the member’s connections to the general society itself. The concept of social capital seems to be the most useful theoretical approach for the analysis of this complex intertwining of norms, values and networking. In the United States, the institution of religion generates more social capital than any other American institution. In the opinion of JA Coleman, religious communities in America often and clearly foster participation in civil society. Religious organizations provide information for their members about how they can serve both within and outside the organization. They also provide the necessary network, meeting point and organizational skills for this, thus practically everything that is necessary to turn good intention into action (JA Coleman 2003).

Robert Wuthnow writes that the role of religion and religious networks in the mobilization for participation in public life can be interpreted in several ways. Based on the above-quotes empirical evidence, which are based on the survey of Gallup, Wuthnow also notes that those who practice their religion regularly are more likely to give their money or time to support volunteer organizations, than people who do not practice religion regularly. This statement is true even if the supported organization is not connected to their church or denomination in any way (Wuthnow, 1999).

The social territory of a community underlies its social capital. Organizational characteristics, standards, the existing network and the institutionalized trust create the fundaments of civil life. According to the interpretation of Nancy Ammerman, social capital is partly trust and partly mutual responsibility – on the one hand, in the form of information in connection with the community, and on the other hand, in the form of standards, which foster communal behaviour and confine antisocial behaviour. People, meaning and relations are the three things within a community, which create social capital. This social product strengthens the community, makes it possible to “stay human among wolves”, and create the possibility of social interactions (Ammermann, cited by Eiesland–Warner 1998).

Conclusions

This paper analysed the situation of social network and religion related researches in North America. The goal was to find the instances of the applications of social network analysis related
theory and methods on behalf of researchers of religion. The articles found were presented in Table 1, and the concept elaborated by Freeman (2004) was used to categorize the reviewed works.

The works were selected based on their usage of the social network method, social network theory and the research of different aspects of the religious field. We tried to exclude the topic of social capital and religion, and concentrate on those articles which had a clear social network related topic. We tried to clarify the connections between social capital and social networks to justify the selection of reviewed articles from the overlapping pool. The findings based on the review have shown that the links between social actors are being theorized in the articles, and there are measures introduced to map these links. Most reviewed articles were building on empirical methods, different surveys researches concerning different characteristics of the social networks.

There was only one article by Herman (1984) which actually used a predecessor of the present day social network analysis method, the block model analysis. Otherwise, graphical presentations of social networks were missing from the reviewed articles. The statistics related to social network analysis graphs and patterns were entirely missing, conventional regression statistics were mostly being used to analyze the social network related variables in the different articles.

BIBLIOGRAPHY


