A Mixed Methods Analysis of Local Facebook Groups in Helsinki

Author: Matti Autio

Abstract: *In Helsinki, the largest city of Finland, local Facebook groups have become increasingly popular. Communities in Helsinki have developed a virtual existence as a part of everyday life. More than 50 discussion groups exist that are tied to a certain residential district. The membership of local Facebook groups totals at least 130 000 in a city of little more than half a million. The content of discussion groups was studied using a mixed methods approach. The qualitative results give a typology of local Facebook groups and an insight to the reoccurring topics of posts. The quantitative study reveals significant differences in the amount of local social control exerted through the Facebook group. The discussion groups are used for social control more prominently in areas with a lot of detached housing. The social cohesion and control of local Facebook groups strengthen the community's collective efficacy.*

Keywords: urban sociology, urban studies, social media, Facebook, collective efficacy, social control, social cohesion, Helsinki**,** neighborhood

Introduction

The residents of Helsinki have joined local Facebook groups in large numbers. The total membership in discussion groups is well over 130 000 in a city of ca. 640 000. A major percentage of the adult population have joined a local Facebook group and the numbers are still rising. Local communities have made virtual existence a part of their everyday life.

The phenomenon of local Facebook discussion groups made a breakthrough in Helsinki around 2014. Soon practically all residential areas of Helsinki were covered by a Facebook group. The groups are founded by residents themselves and there is no known influence from the local authorities. The communality of these groups is purely bottom up.

A local Facebook group is defined in this study as a group on Facebook that is tied to a geographic area in the city. The location may be a neighborhood of a few thousand or it may cover a larger area of tens of thousands of residents. The discussion group is meant as a forum for residents about local issues. The total number of local Facebook groups in Helsinki is difficult to accurately map, but at the time of data collection they numbered around 50. The starting point of this study was an exploratory interest into the content of these discussion groups. The perspective for the study is influenced by the theory of collective efficacy as formulated by Sampson and colleagues (Sampson 2012; Sampson et.al. 1997).

There is a growing body of ethnographic research that uses data from social media. Kraemer (2015), Levenshus (2016), Marwick & Boyd (2014), Farina (2015) and Stock (2016) to mention a few. The relationship between social media and social capital has been examined in previous studies (e.g. Kim & Kim 2017, De Zúñiga et.al. 2017, Wohn et.al. 2013). This study contributes to research about the relationship between social media and the community's collective efficacy.

Data and methods

The data consists of posts from Facebook groups that are dedicated to a specific residential area in Helsinki. The groups in question were sought on Facebook by using names of residential areas and

with the aid of lists found on the web. 41 most active groups were analyzed for the study. The membership varies between two hundred and more than ten thousand. The average is ca. 2500.

Data collection was done manually. A sample from a group's feed, often hundreds of pages, was saved as text along with pictures. Automated methods such as harvesting bots, robots, spiders, or scrapers require prior permission from Facebook (Facebook 2018) and were not used in this study. The data consists of several thousand pages of Facebook feed and the posts are dated mostly between 2014 and 2016.

This study originates from an exploratory interest towards the content of discussion in local Facebook groups in Helsinki. Notable differences in the amount of social control of the residential area in the Facebook group were observed and research proceeded to a quantitative comparison. The study thus combines both qualitative and quantitative methods and could accurately be called mixed-methods research. More precisely the method can be described as "exploratory sequential mixed-methods approach" (Creswell 2014, 14–16 and 225–227).

The study is predominantly ethnographic in nature. Kozinets (2010, 60) uses the concept of "netnography" to describe "participant-observational research based in online fieldwork". This study positions itself in the field of netnography in the wider ethnographic context. Another frame of reference for the study is digital humanities. The study examines the digital world and the data is digital born. The data was created in the virtual realm and exists only digitally. The study examines the virtual existence of local communities.

To create statistical data from the group feed posts were coded using Atlas.ti. Only two codes were used: cohesion and control. In this simple coding style, it was possible to manually go through several thousand pages of Facebook feed. The motive of the writer in terms of cohesion / control was interpreted from the tone and wider context in addition to the lexical content. David and Sutton (2011, 342) describe this is as latent coding.

A line had to be drawn as to what material is of interest. The focus was on posts that were personally written by the user who had put in the effort of formulating the message in text and communicated directly to the local audience. Ads were omitted. The original posts were analyzed, comments were not. In other research comments have sometimes been included in the analysis (e.g. Farina 2015) or a similar approach as in this study has been implemented (e.g. Stock 2016).

Discretion was used in deciding what counts as social cohesion and what constitutes social control. Posts about vandalism are obviously social control, but for example posts about found bikes that likely have been stolen are more complicated to interpret. The writer wants to help someone recover the stolen bike, but also wants to direct attention to bike theft in the area. These were usually coded as both cohesion and control. The tone and choice of words in a post sometimes indicated whether the aim was control, neighborhood assistance or both. Coding of different groups was revised as work progressed to keep the coding consistent throughout the data. The total number of coded entries was 6302.

Research ethics have been considered by protecting participants from any harm that might be caused by the study. Identities have been protected by reporting the findings as general characterizations of discussions and in the form of statistics. No direct quotes have been used as to avoid any traceability. In this study local Facebook groups are considered public in the sense that when membership is required it appears to be for purposes of keeping fake accounts out. Membership as such is available to anyone. Informed consent is not considered a requirement in a

study of this nature and would be virtually impossible to receive from all parties involved. The ethical guidelines of the Association of Internet Researchers (2012) have been followed.

Collective efficacy, control and cohesion

Some light will be shed on the motive for choosing social control as an object of interest in this study. The collective efficacy of a community has its foundations in the social cohesion of a neighborhood and the expectations for social control (Sampson 2012, 127 and 152).

The level of collective efficacy has been measured through questionnaires that measure how strongly people agree to propositions such as "this is a close-knit neighborhood" or how likely they consider that someone would intervene in case of disturbance. The questions measure both social cohesion and expectations for social control. By combining these two the resulting variable measures the community's collective efficacy. (Sampson et.al. 1997, 919–922.)

Collective efficacy is connected to many indicators of well-being, such as low crime rates, higher birth weight, fewer teen pregnancies and generally more altruistic behavior (Sampson 2012, 178 and 212; Odgers et.al. 2009, 954–955). Social cohesion and the expectations for social control are among the basic building blocks of any community. Therefore, the difference in the level of social control in local Facebook groups presents itself as a fruitful subject for further investigation. The differences and their possible explanations may be sociologically revealing of the communities and the role of virtual networks within them.

Results of qualitative analysis

The first result of the qualitative analysis is a typology of local Facebook discussion groups. The content of discussion groups is for the most part similar in most neighborhoods. However, in some districts the discussion group consists mostly of old photos dating typically from the 50's to the 80's. People reminisce about old neighbors and schoolmates. These can be called nostalgia groups.

Some districts have a separate group for announcements, mostly about upcoming events. Information on jumble sales, park yoga, panels at the local library and the like is spread through these groups. In most districts announcements are a part of the general discussion group feed. Singles groups were also found when collecting the data. These are usually meant for singles of all ages in the wider district. One local group was found dedicated to lost, found and stolen things. Two groups were devoted to neighborhood help.

Messages fall into categories that are similar in all studied Facebook groups. One of the most common message types has to do with things that are lost, found or stolen. There is at least one local Facebook group solely for this purpose. Requests for local information are common. Questions are often about small details that only locals would know. Residents also request concrete, face to face assistance. People may ask to have a rarely needed item for loan or ask to have a ride home from the doctor. It is also quite common for someone to offer help without anyone asking for it first.

Another type of posts are complaints about something going on in the neighborhood. Vandalism, traffic violations and noise are some the most common subjects for complaints. These posts clearly represent social control as meant in this study. Some posts are warnings. Neighbors are warned, for example, about suspicious looking people taking peeks into people's back yards and dog owners
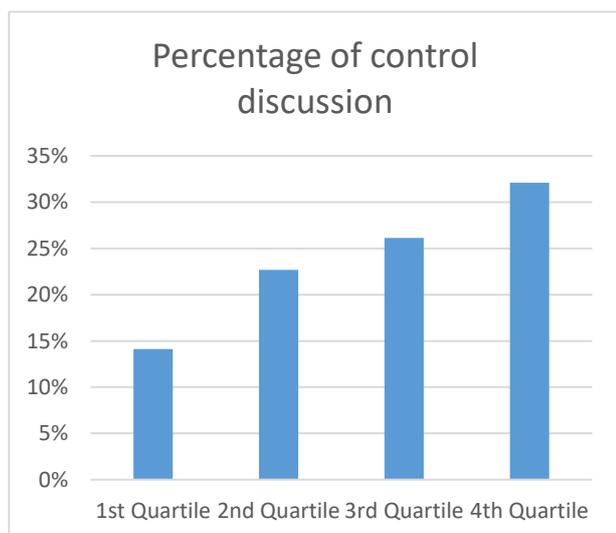
warn about pieces of food left by a jogging trail that they think might be poisoned on purpose. Warnings can be seen as manifestations of both social control and social cohesion.

Messages are quite similar throughout the city, and for the most part discussion promotes social cohesion. There are, however, differences in the amount of social control exercised through the Facebook group. The use of local discussion groups could be described as pragmatic. There is not much socializing or banter. Almost all of the discussion has to do with practical issues. The pragmatic nature of discussion is an important starting point for elaboration further on in the article.

Results of quantitative analysis

The amount of social control varies between residential areas. To enable comparison of the amount of social control in local Facebook groups the 41 groups were divided into quartiles (4th quartile containing 11 groups). The percentage of control posts varies between 14% and 32% (*Fig. 1*). In all groups cohesive discussion is the most prevalent, but the differences in the amount of control are notable.

Areas were placed on the map of Helsinki (*Fig. 2*). The darker the color, the more social control there is in the Facebook group.[1] It is noticeable that the densest cluster of control-oriented Facebook groups is situated in the north of Helsinki. Also, an area in the southeast stands out from the surroundings. East of Helsinki is characterized by a lighter color indicating more cohesive discussion and less social control.

Figure 1. Percentage of control discussion in local Facebook groups divided into quartiles.

The northern areas in question are known to have more detached housing than other residential areas, as is the individual area located in the southeast (City of Helsinki Urban Facts 2017). The percentage of detached housing was calculated for each quartile. An average of all the areas in that quartile was used. The averages were examined in comparison to the amount of social control in the local discussion group (*Fig. 3*).

---

[1] It should be noted that the Facebook groups are placed on the map based on the district mentioned in the group's name. In reality the geographical area of influence can in many cases be assumed to extend farther.
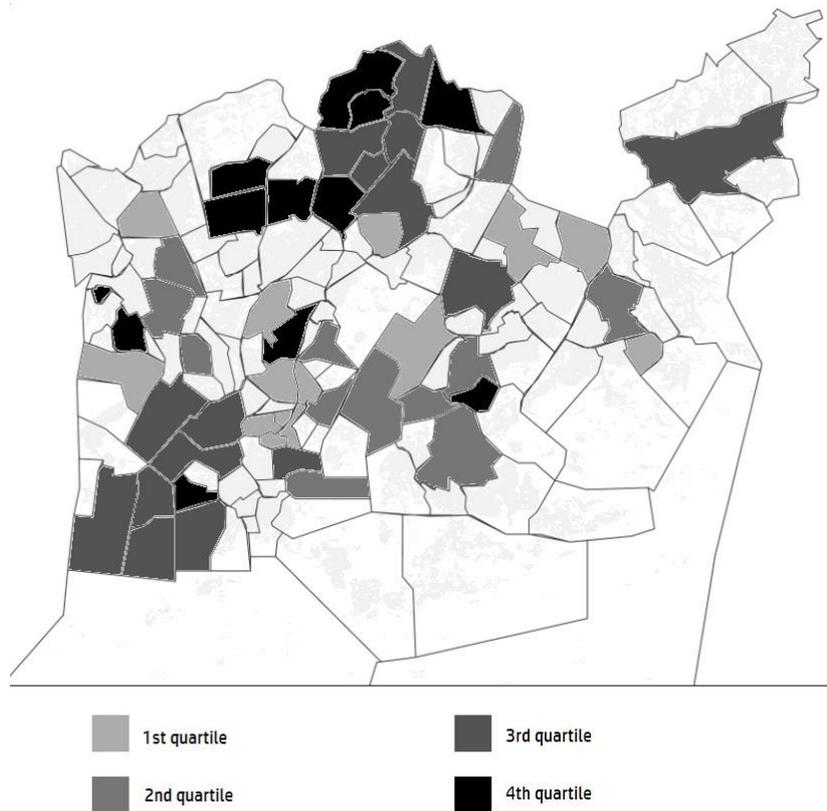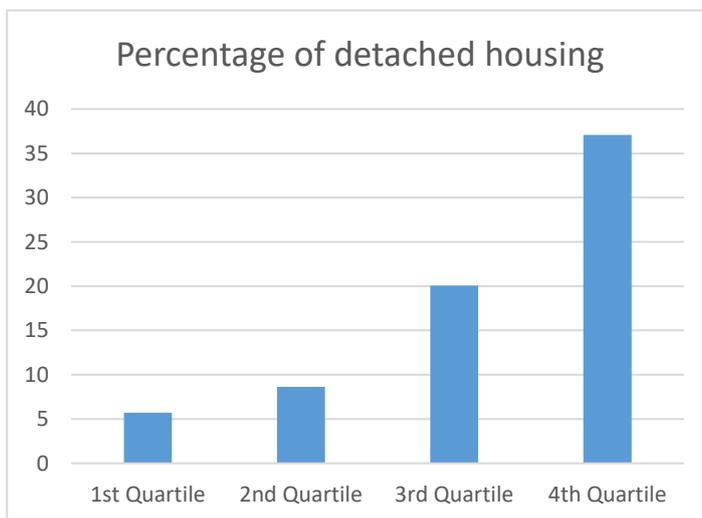
Figure 2. The geographical distribution of local Facebook discussion groups by amount of social control.

The amount of social control exerted in the Facebook groups has a noticeable connection with the predominance of detached housing. Also, in these areas the group's membership and geographical area of influence are smaller.

In this statistical analysis, not all factors that characterize an area have been considered. Nevertheless, the connection between a high rate of control and detached housing is distinct and makes sense in terms of urban sociology.

Figure 3. Percentage of detached housing in quartiles by amount of control discussion in Facebook discussion groups.

Different uses of local Facebook groups

The results of the quantitative analysis show that social control through Facebook is more prevalent in neighborhoods with detached housing. Groups in these areas tend to be more local and thus the membership is also smaller. What can these differences implicate? A qualitative analysis of discussion in local Facebook groups reveals that people use the groups quite pragmatically. This

suggests that people have harnessed their local Facebook group to serve them in needs that existing networks could not fulfill.

In high rise areas there are organizations through which social control can be exerted. Cases of disturbance can be taken up with the real estate manager, housing cooperative or the tenant committee. There are parties who have power to exert social control and in whose interest it is to do so. In areas with detached housing the situation is different. There are no such organizations in whose interest it is to tackle disturbance, apart from the police. It is possible that local Facebook groups have been adopted as a means of getting connected for purposes of social control in the neighborhood.

Detached housing districts are commonly well-to-do. Individuals whose socio-economic status is high typically have wide networks, but those networks are located elsewhere than the neighborhood itself (Campbell et.al. 1986; Henning & Lieberg 1996). The geographical scatteredness poses a problem for local social control. A spatially scattered network doesn't share an interest for social control in any specific neighborhood. The Facebook group provides a platform for creating new local networks that share an interest in social control.

In high rise areas socioeconomic status is typically lower. People whose socioeconomic status is relatively low are typically networked in their immediate neighborhood (e.g. Granovetter 1973; Henning & Lieberg 1996). Organization for social control already exists and in the new social media forums social control is less pronounced.

There are also other ways to explain the lower level of control in high rise areas. Cost of living is not the only factor that guides people's choice of residential area. Those who choose to live in a house of their own might appreciate privacy and peace more than residents who choose a high-rise area. Not all high-rise areas lower in socioeconomic status either. Areas close to downtown Helsinki and newly built high-rise districts have some of the most expensive apartments. Residents' ideas about acceptable urban behavior vary and this reflects in their control tendencies and expectations.

In terms of collective efficacy, it seems that local Facebook groups are beneficial for both social cohesion and control. Assistance given in discussion groups obviously advances social cohesion. For social control the discussion group has offered a channel through which neighbors find others who share the interest of keeping the area peaceful. Hampton's (2010) findings suggest that internet use breaks down some of the ecological barriers to collective efficacy in disadvantaged neighborhoods. The results of this study suggest that local Facebook groups strengthen collective efficacy also in the more affluent communities.

Thoughts on methodology and future research

In this study the data was collected manually, and the processing was done mostly by close reading by a human. Automated methods were not used for data collection or in any major way to process the data. The study originated from an exploratory interest about the content of local Facebook groups and qualitative text analysis was the intended method. The acquisition of capabilities necessary for extensive use of automated methods was not feasible given the resources and time frame.

The yields of this study leave open the obvious possibility of taking better advantage of computerized data processing. When the quantitative examination came under consideration the workload had to be assessed. With this data set it was possible to process the whole data manually

through close reading. With digital methods the data set size could naturally be increased by magnitudes and big data research would become possible.

The approach chosen in this study requires the semantic understanding of Facebook posts. The interpretation of the writer's motives through tone and choice of words is difficult with computerized methods. With a different research question and methodology, however, approaches such as data mining would probably be most useful. Topic modeling, sentiment analysis and similar tools would likely prove their utility along with many other computerized applications.

Conclusion

Local communities in Helsinki have extended themselves into the virtual world. The novelty of social media has subsided, and it has become an integral part of everyday life. Local Facebook groups along with other social media are at the heart of local communities' virtual existence. This side of the neighborhood is not separate from the face-to-face physical world, rather together they form the community. Kellerman (2014) depicts the internet as a "second action space". It seems that some communities have expanded to the virtual realm in a way that merges the physical and the digital in a seamless way.

A large percentage of adults in Helsinki take part in a neighborhood Facebook group. Residents have taken a pragmatic approach to the new networking platform. The new form of communal life is mainly used for everyday cooperation and social control of the neighborhood. Cohesiveness is prevalent in all discussion groups but differences in control tendencies are revealing.

The communality of local Facebook groups holds a promise of something durable. It is purely bottom up and it is based on practicality rather than a communal ideal. A good guess is that local Facebook groups will continue to thrive until something better comes along. What is clear from the popularity and the level of activity in the local Facebook-groups is that a local community that lives also virtually can no longer be fully understood only by studying the face to face physical existence. The virtual part of the community must be taken into account.

Sources:

Association of Internet Researchers 2012: Ethical Decision-Making and Internet Research: Recommendations from the AoIR Ethics Working Committee (Version 2.0).

Campbell, Karen E. & Marsden, Peter V. & Hurlbert, Jeanne S. 1986: Social Resources and Socioeconomic Status. Social Networks 8, 97–117.

City of Helsinki Urban Facts 2017: Helsinki by District 2016. City of Helsinki Urban Facts, Helsinki.

Creswell, John W. 2014: Research Design. Qualitative, Quantitative & Mixed Methods Approaches. Sage, Los Angeles.

David, Matthew & Sutton, Carole D. 2011: Social Research: An Introduction (2nd ed.). Sage, Los Angeles.

De Zúñiga, Homero Gil & Barnidge, Matthew & Scherman, Andrés 2017: Social Media Social Capital, Offline Social Capital, and Citizenship: Exploring Asymmetrical Social Capital Effects. Political Communication 34 (1), 44–68.

Facebook 2018: Terms of Service < https://www.facebook.com/legal/terms> Accessed 5.2.2018.

Farina, Matteo 2015: Facebook first post telling. Journal of Pragmatics, 2015 (90), 1–11.

Hampton, Keith N. 2010: Internet Use and the Concentration of Disadvantage. Glocalization and the Urban Underclass. American Behavioral Scientist 53 (8), 1111–1132.

Henning, Cecilia & Lieberg, Mats 1996: Strong ties or weak ties? Neighbourhood networks in a new perspective. Scandinavian Housing and Planning Research 13 (1), 3–26.

Kellerman, Aharon 2014: The Internet as Second Action Space. Routledge, New York.

Kim, Bumsoo & Kim, Yonghwan 2017: College students' social media use and communication network heterogeneity: Implications for social capital and subjective well-being. Computers in Human Behavior 73, 620–628.

Kraemer, Jordan 2015: Friend or Freund: Social Media and Transnational Connections in Berlin. Human–Computer Interaction 29 (1), 53–77.

Levenshus, Abbey Blake 2016: Building context-based knowledge of government social media communication through an ethnographic study of the US Coast Guard. Journal of Applied Communication Research 44 (2), 174–193.

Marwick, Alice & Boyd, Danah 2014: 'It's just drama': teen perspectives on conflict and aggression in a networked era. Journal of Youth Studies 17 (9), 1187–1204.

Odgers, Candice L. & Moffitt, Terrie E. & Tach, Laura M. & Sampson Robert J. & Taylor, Alan & Matthews, Charlotte L. 2009: The Protective Effects of Neighborhood Collective Efficacy on British Children Growing Up in Deprivation. A Developmental Analysis. Developmental Psychology 45 (4), 942–957.

Sampson, Robert J. 2012: Great American City. Chicago and the Enduring Neighborhood Effect. The University of Chicago Press, Chicago.

Sampson, Robert J. & Raudenbush, Stephen W. & Earls, Felton 1997: Neighborhoods and Violent Crime. A Multilevel Study of Collective Efficacy. Science 227, 918–924.

Stock, Mechtild 2016: Facebook: A Source for Microhistory?. In Knautz, Kathrin & Baran, Katsiaryna S. (ed.): Facets of Facebook. Use and Users. De Gruyter Saur, Berlin.

Wohn, Donghee Yvette & Ellison, Nicole B. & Khan, M. Laeeq & Fewins - Bliss, Ryan & Gray, Rebecca 2013: The Role of Social Media in Shaping First-Generation High School Students' College Aspirations: A Social Capital Lens. Computers & Education 63, 424–436.