

## **Exploring the Relationship Between a 'Facebook Group' and Face-to-Face Interactions in 'Weak-Tie' Residential Communities**

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# Exploring the Relationship Between a 'Facebook Group' and Face-to-Face Interactions in 'Weak-Tie' Residential Communities

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## ABSTRACT

Using Facebook Groups to connect otherwise anonymous people that live in a single urban development is a relatively new phenomenon. Within residential developments there are a number of common management and performance issues experienced by many isolated inhabitants that are identified through building performance evaluation studies. Facebook is a ubiquitous social network tool and powerful communication platform, particularly popular among young adults. This paper explores the use of Facebook in relation to management and performance issues in two cases of Facebook Group usage within residential communities in the UK. Data was collected through longitudinal digital and physical visits to the residential communities and to the Facebook Group sites. Findings are presented in relation to home learning, site/neighbourhood and self-organising initiatives. We propose that weak-tie residential communities can develop collective efficacy and work together for the overall good of the residential development through communicating on a Facebook Group. This helps to improve the physical environment, facilitating further collective action. There is a clear overlap between social media narrative and the physical experience of daily life, which can help to empower residents.

## Keywords

Facebook Group, residential community, case-study, home use collective action, self-organising initiative

## 1. INTRODUCTION

This paper analyses the innovative use of a Facebook Group for 'grassroots' community self-organisation [1]. This paper examines how residents of apartment blocks self-organized in two case study housing developments in the North of England. Complex spatial, economic and social aspects of urban housing projects have generated a vast literature on the side-by-side rather than face-to-face character of urban interactions (for example [2, 3]) and the impact of the Internet and digital tools on community connectedness (for example [4, 5]). There is however little research on how social media sites are deployed to overcome the difficulty in triggering connective action in such environment. Or

examining whether social media are different from other digital tools.

The social network site (SNS) Facebook is a ubiquitous and powerful digital organism with currently 1.19 billion monthly active users worldwide [6]. Within the UK there are 24 million users logging on each day [7] and two-thirds (66%) of online adults say they have a current social networking site profile with 98% of those using Facebook [8]. A Facebook Group is usually a separate private, members' only space within the interface of the social network site (SNS) Facebook. A Facebook Group<sup>1</sup> can be open (anyone can join, all posts made will show up in the Newsfeed), closed (anyone can join but an administrator has to accept or invite them), or secret (members have to be invited and this will not show up in the Newsfeed) [9].

## 2. THEORETICAL CONTEXT

The use of Facebook in housing communities can be underpinned by two key concepts vital for understanding grass roots collective efforts to positively influence the course of events that affect people's lives: 'Collective efficacy' and 'collective action'.

Social organization within neighbourhoods in urban environments does not require strong ties to be successful [10]. Social organization through collective efficacy can be described as the combination of social cohesion and a 'shared expectation for social control' within the neighbourhood [11] but it is important to note this is situated and task specific. Support and cohesion are important in urban settings as they are about 'repeated interactions' [12, p.153]. [13] puts the emphasis on agency to describe collective efficacy: "Moving away from a focus on private ties...shared beliefs in a neighbourhood's capability for collective action to achieve an intended effect, coupled with an active sense of engagement on the part of the residents" (p.153). Collective efficacy describes a group capacity built on individuals' trust in an ability to collectively shape the reality they live in. It explains the resilient engagement of individuals in collective action.

Researchers have found that the Internet is useful for enhancing 'information exchange' between people in the same neighbourhood but only when used by those who would be

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<sup>1</sup> Group with a capital G denotes the Facebook Group

described as heavy Internet users, with ‘bridging ties’, that is, those individuals who have ‘weak ties across groups’. These people are the key actors in organizing collective action [14]. The use of digital tools (email and web page interactions) has been found to increase the size of the local weak tie relationships and in this manner the Internet was the bridging tie [15]. In a community network the use of information and communications technology (ICT) as an organizing tool can facilitate “community participation and collective action” by mobilizing weak tie networks [16:417]. The concept of ‘critical mass’ in collective action sheds more light on the dynamic emergence of the perception of collective efficacy. The theory of critical mass makes a parallel between the chemical chain reaction and social processes. It focuses on the interdependencies of group members, role of mobilising agents, and heterogeneity within the group in enabling them to develop positive responses towards their aims and the challenges they face [17]. When analysing a Facebook Group this approach points towards the need to consider trends in the changes of its size, activity level and presence of ‘mobilising agents’ to understand if the group has reached the point when it is capable of achieving its collective goals.

The Facebook Groups in this paper are used for sharing information about the housing communities. Interactions within a Facebook Group form part of the digital and face-to-face dynamics of social media use. The digital is now interwoven, in many of our lives, increasingly through the use of portable devices such as smart phones and tablets [18]. For many, with high levels of social media use, they come to depend on social media for information seeking. These people may be described as having social media self-efficacy [19], they find the opinions of those on social media to be trustworthy and they rely on them when making decisions in their lives. Research into the influence of social interactions with others on social media is important to understand how these can move beyond the digital to face-to-face relationships and action. It is proposed that the use of social media sites as spaces for civic participation warrants further investigation [20].

### 3. AIMS AND METHODS

#### 3.1 Research questions

Two research questions arose from the literature above in relation to the case study:

1. Does the use of Facebook encourage self-organisation in response to issues experienced in relation to home use, site and neighbourhood engagement?
2. Do interactions on social media move beyond the Facebook Group into activity in the physical environment in the residential development?
3. Why was Facebook the tool of choice for the case study communities – how is it different to digital communication tools identified by earlier research?

These questions were identified as critical through in-depth building performance evaluation carried out in one of case studies [21]. The aim of the analysis was to see if and how the connectedness achieved through Facebook is used to facilitate collective home use learning [22], as well as to solve other issues affecting the whole community.

#### 3.2 Participants

Two mixed tenure new build residential developments were the focus of the research. These consisted of 180 (A) and 410 (B) apartments respectively built by private developers, as a part of wider regeneration projects in two separate deprived urban areas in two UK northern cities. The demographic of the residents in both developments are young professionals, the majority of who are typically heavy Facebook users [23]. Both case study Facebook Groups were initially started in autumn 2012 and now have 168 (Group A) and 353 (Group B) members as for early 2016. Group B is still growing and has included over 1/2 of the development’s population so far. The two developments differ in terms of proportion of homeowners and renters. In Group A there are more homeowners and in Group B the renters are the majority. The two case study Facebook Groups are closed, thus their activity is not visible for non-members. They were both identified during the close links developed by researchers with the leaders of this process. In the development that housed Group B the links resulted from prolonged participation in an in-depth year long building performance evaluation and in Group A they were through personal contact over a prolonged period. In both cases gaining insight into the Group’s activity was possible because of mutual trust.

#### 3.3 Methods

Researching closed Facebook Groups poses specific research challenges, which we tackled through a transparent and ethical approach following the AOIR current guidelines [24]. All names used are pseudonyms. Institutional ethical approval was gained and access to the closed Groups was facilitated through the Group administrators. The researchers were invited to explain to all Group members in both cases the aims, scope and methods of planned research actions for discussion and approval before being invited to join the Group. All Group members’ were offered the chance to decline the researchers access to the Groups but none did. When the data was downloaded (September 2014) there were 124 Group members in A and 179 in B. In the course of research there have been unexpected difficulties described in the analysis section that caused a split of the Group B into two parallel Facebook Groups. Here only the first Group is analysed as a case study.

A date for downloading the whole content of the Facebook Group (from the initial conception) was agreed and communicated to Group members. The download was carried out using NCapture in two formats: as .pdf files as well as spreadsheet for analysis with NVivo. n=2863 interactions (posts) were downloaded for Group A and n=1312 for Group B from September 2012 to September 2014. Background information about the causes, context and wider impact of the Facebook Group was gathered through interviews with the leaders (1 in Group A and 2 in Group B) and additionally cross correlated with interviews with other residents in one case study, including those engaged and those not engaged in one Group’s activity (20 interviews in Group B), as well as in-depth analysis of both Facebook sites. The interviews were transcribed and coded. On site visits to both sites, social and physical observations and photographic surveys helped to verify the relevance of issues discussed on Facebook.

Quantitative content analysis was undertaken on the levels of activity, main actors and details of postings. The one year long duration of the project in Group B also allowed observing the impact of Facebook discussions on actions taken offline over a

period of time. Collaborative discussions with the leaders of both Groups were used to verify the themes, which arose from the data [25] and to ensure the themes were credible in the eyes of the participants.

## 4. DATA

This section presents two narratives of the Facebook Groups from their formation through to the collective efficacy seen in the two developments:

### 4.1 Group A - beyond face-to-face meetings

In Group A the face-to-face residence committee was the starting point for the Facebook Group. The idea behind it arose from the wish of the committee members to be able to do more within the development, beyond the physical meet-ups (these happened every few months). The Group was set up in late 2012 as a space for sharing information on home use problems. The Group leader describes:

*We wanted to share the information we had, there seemed to be many leaking toilets which we were slowly finding out about and these were leaking due to poor pipe work. We thought if the same plumber came to look at all of them, he would be able to fix it more easily.*

This collective action, which focused around the toilet plumbing issue, subsequently spread to cover a wide range of activities on the Group.

The Group leader felt one of the successes of the Group was that it was quite small to begin with (60 members) and that those people were also the keen homeowners who wanted to be involved in the running of the development. She also described early tensions between Group members who were trying to self-organise: “*One of the original admins of the Group would say really inflammatory comments about the management company and that would rile everyone up.*” As residents were leaving the Group, the leader stated that they would private message her to say: “*It’s too stressful, I don’t want to be a member. It’s not very nice to get notifications of people arguing.*” The Group administrator felt the need for conflict resolution and for her to be the diplomat. She thought this was key to her role and was part of her personality, which she felt helped towards the smooth running of the Group.

Posts on the Group range from: communicating details of the residents association meetings and posting the minutes for all to read. These would then be commented on and discussions about the actions needed within the development were documented within the Group. Managing anti-social behaviour, such as improper use of the rubbish bins and areas was a often shared through images of overflowing rubbish bins and ‘ranting’ commentary asking why people could not be bothered to open the bin lids, posted on the Group. The development management company was seen to be particularly difficult to get to carry out any sort of maintenance work – one resident posted: “*Has anyone else contacted the firm about the intercom? My email was ignored and John was fobbed off that an engineer was coming last Friday but it’s still not working*” This post gained 10 comments in response complaining about the property management company and five Likes. There were also long discussions about the residents “*right to manage,*” in light of the company’s poor performance and lack of communication. Some Group members were keen to set up on their own to do a “*better job.*”

These interactions all helped to build the Group’s capacity for self-organisation and well as individual’s civic action.

As the Group got larger, the leader stated that it became time consuming and difficult to approve new members as each had to be messaged to gauge whether or not they live in the development. Originally, they accepted everyone but then they ended up with lots of ‘spammers’ who would simply post adverts. There were also tensions with residents who were not members of Facebook and this caused a few problems. As the leader explained:

*Some of the older residents did not like the use of Facebook. For the other residents, Facebook was the obvious solution and the easiest to set up but not everyone is a member. It’s a political reason (for them) – they don’t agree with Facebook. We tried to set up a digital group within another forum, but it was SO difficult. There are some people who are heavily involved in the community of the development but they miss out on things that you only find out about through the Facebook Group.*

These ‘offline’ residents were in the minority. The Group was viewed in a positive light by the members (less so by the property management company), however, there have been tensions regarding the way some members interact. In the interview with the leader, she discussed problems with pet fouling within the development. As a result dog owners were singled out (as only seven pet licenses were given out) on the Group for causing the fouling seen in front of the residential block. The leader said she found the members spying on each other and reporting both to the property management and on the Group site. She found this very uncomfortable. This illustrates some of the community boundary tensions that exist when digital media is used by individual members in a civic action of ‘surveillance’.

Some tensions existed (student halls nearby and know prostitution) in terms of the immediate vicinity to the development, which meant the residents sought to improve their own security. The local police officer was invited to become a member of the Group and interacted through the Group site when he was on shift, letting members know goings on in the wider community. Sometimes residents Tagged him in posts to alert him to antisocial behaviour, which demonstrates an interesting way for citizens to empower themselves by drawing on the latent social capacities within their community.

### 4.2 Group B – slow start; tensions and action

In Group B the face-to-face residents committee was also the starting point for the Facebook Group - the Group experienced dynamic growth as a result of a conscious marketing strategy to attract new members as only approximately 1% population of the development attended its physical monthly meetings. All involved were aware of the weak mandate of the committee’s voice, which did not have a strong negotiating position in terms of self-governance. As one of those few residents active in the committee recalls: “*We didn’t want to make decisions on behalf of 600 in a group of 6 people*”. An idea emerged “*...well why don’t you sort of hijack the [Facebook] group and start putting up posters and trying to get the people joining in [Facebook]. And start asking people questions.*” Deployment of existing residents Facebook Group was seen as a chance to strengthen the mandate

of the Residents committee and solve community wide issues on a civic basis.

Leader 1 explained the reason behind the success of Facebook in developing self-organisation and civic participation in relation to community related issues, compared to the low interest in residents committee meetings (in a highly anonymous urban development):

*Facebook .....allows everybody to have an equal say without someone judging them based upon the way they look like, the kind of person they would talk to or that they don't look like a person who is going to have an opinion on something'... I think Facebook takes that out and allows people to be kind of very direct with another person without the opinion of being incredibly rude.*

Leader 1 also points towards a conversation dynamic specific to social media that attracts more people to join in as opposed to face to face meeting, thus building up capacity for civic action:

*...you can kind of craft your opinion into a very concise and direct kind of statement that says everything you wanted to without stopping at every word, getting nervous, becoming embarrassed and red or anything like that... [and] keep private at the same time.'*

Leader 2's experience is that:

*lots of people are antisocial not because they are malicious just because they don't think. So they dropped some of their rubbish and don't think about how it actually affects other people. But if some people are chatting about it on Facebook, then they'll think 'Oh, God, I do that...*

She had observed instances when complaining on Facebook about some behavioral issues, which were then picked up by the offending residents anonymously. This actually solved the problem in a very efficient 'nudging' way and without fuss.

Both Groups' leaders felt that time was needed to develop residents interactions and Group membership to make the Groups successful, particularly in terms of civic action. The Facebook site was set up in 2012 but after a year there were less than 40 members (out of approximately 600 residents) and its use reduced with posts sent as rarely as once a month. Building the capacity of the Group to become a forward thinking and a solutions oriented environment, where actions were initiated and decisions affecting the whole development are shaped, required substantial time commitment from leaders, particularly in the first year of embedding the change. In the first eight months of introducing the Facebook site, the Group grew from 36 to 124 members.

Critical tensions developed between the residents committee and the Group administrator who wanted to remain the sole person in control of the Group. This resulted in a civic fracture with a new separate residents' Facebook Group being set up (which the researcher joined also). An explicit Facebook link with the face-to-face residents committee was established. As one of the leaders recalls in the interview the aim was to "provide updates on things happening around development and use the group to gauge the opinions of residents on current issues and new initiatives." The resident's committee got a dedicated profile within the group separate from the individuals involved. After over a year of parallel existence of the two Groups the new one has 317 members and is still growing compared to stable number of 220

on the old one. The new Group also has significantly more traffic than the original Group. Gaining a leading role by the new group has been a gradual process. For many months the two existed in parallel with same members posting same feeds in both environments – not to miss out the potential for the needed response. The main difference was an intense activity of the Residents' committee specific to the new Group. The founders and leaders of the new Group also secured all relevant questions posted were responded to. As an action research element early in the process of the new group's development, the researchers gave feedback to its leaders on the interim research results of the original Group's activity as well as relevant research findings on the long-term sustainability of Facebook Groups. Main findings indicated that online activity and human and social capital of the leaders were good predictors of a Group's survival. However leaders who were too controlling were common in Groups, which failed to thrive. This guidance has been followed with a few new administrators appointed and the Group's constant growth in terms of number and efficacy in solving issues experienced by its members.

Never the less the Facebook Group was a minority for a prolonged period of time - until the last quarter of 2015. Thus the Residents committee secured varied offline communication channels to reach wider representation of the residents with information: information boards in communal areas, leaflets, community events.

### 4.3 Content Analysis

Quantitative information about the group dynamics, level of activity and main actors [26] in relation to specific themes selected for the study was retrieved through analysis of Facebook data to evaluate success indicators of the Groups in terms of group size and activity level related to the concept of critical mass [27]. The themes selected covered three areas of civic engagement:

1. individual home use;
2. community and neighbourhood related issues and Facebook Group capacity for connected action; and
3. collective action in a physical environment: self-organising initiative via Facebook.

The number of posts on each theme were analysed across the three years of data collected (Table 1) to help tease out any significant patterns. The number of posts for each theme in Group B reveals a drop in activity in 2013 and a massive increase in 2014. It also shows relatively strong presence of individual home use issues compared to other themes in the first year of the Group's activity (Table 1). This may indicate an intuitive use of the Facebook Group by residents looking for answers to their own problems. A drop in such activity might be explained by a lack of critical mass of the Group to deliver advice needed. The growth in number of members and traffic eventually solved this problem. Group B became a forum that attracted discussions about issues going far beyond problems specific to individuals. In contrast Group A has a consistently high level of interaction compared to Group B because of greater critical mass. The high level of home use discussion in 2013 (Group A) was contributed to by a shared problem of the TV signal going down during Wimbledon (a top international tennis tournament in the UK) causing 127 posts over a 10 day period. This shows how key performance events linked to shared digital viewing can galvanise a community.

**Table 1: Longitudinal comparison of number of posts per year**

Key for post themes relating to: (A) Home use issue (B) Site/community/neighbourhood issue (C) Collective action in a physical environment: self-organising initiative

Post themes relating to:	Year of post					
	Group A			Group B		
	2012	2013	2014	2012	2013	2014
A	220	595	309	26	5	441
B	187	271	269	10	8	493
C	162	153	62	4	2	120

There were ongoing issues with upkeep of each development raised on Facebook: dog fouling, noise, parking tickets and garbage topping the list in both cases (under theme B). The interaction and focus of both the Facebook Group discussions started at a local level and was driven by fear of economic loss to protect the owners' investment in the development. The focus then evolved towards wider civic engagement and improved communication with the wider neighbourhood.

Other analyses undertaken covered the timing of posts (and Comments) and which Group members were posting. For *home use issues* and *community issue* posts, most answers came within under one hour. For the *collective action* it was usually within 24 hours. This illustrates the relative urgency of individual issues over broader community issues, which can thwart attempts at civic action. As a result, there were fewer Group members who were active in commenting on both *home use issue* and *community issues* and who also initiated discussion on *collective action issues*.

## 5. FINDINGS AND DISCUSSION

### 5.1 From home learning to collective efficacy

The content analysis shows us that home issues and neighborhood issues were the main focus for postings within both Facebook Groups. The leader of Group A proposed that “*we wanted to share the information we had*” with residents turning to Facebook to find the answers to their problems. Of the overall interactions posted with in the Groups - 78% in Group A and 85% in Group B were focused on *home use* issue, *community* issue to collective action – themes which are related to improving the residents local environment. Both Groups discussed issues with *home use* and through feedback from the other Group members this became *home learning* [28] as the members shared their experiences of solving problems in their homes. Social media platforms can be used for learning but that it is important for one or some members

to be able to have more knowledge to support Group members' interactions during the process [29]. In the case of *home learning* a Group moderator (not necessarily the administrator) would be useful to scaffold the Group discussion/feedback to ensure all members get the most from the interactions within the Group.

Weak ties among neighbours [30] also coexist with the inconsiderate behaviour of some residents, community organisation, and the home use issues experienced. When problems with dumping rubbish became a problem the Group leader suggested that the Group (B) makes people feel and behave differently due to the public and collegiate nature of the discussions – she said “*they dropped some of their rubbish and don't think about how it actually affects other people. But if some people are chatting about it on Facebook, then they'll think 'Oh, God, I do that.'*” Improvements in rubbish collection areas was seen to improve after the Facebook discussions.

Gaining a critical mass to enable residents to engage in face-to-face community related meetings proved to be difficult for the resident organisers [31]. As direct communication structures within the community available to individual residents were scarce, social media was seen by the residents as an opportunity - an alternative way to start the self-organising activity. It was important that there were key members to lead the development and running of the Group – the ‘mobilising agents’ [32]. These were the Group administrators (and often the chair or member of the residents association) and in both Groups they drove the interactions on the Groups through responding to questions and often managing Group tensions. This leadership role is critical within the communication infrastructure for community building [33]. The Group members' wish to get involved for the good of the community was started by the Group leaders and administrators and data from the two Groups shows members working efficaciously within the social media space of Facebook to change their surroundings - improve the state of their bins, for example [34]. The immediacy of interactions from the Group members shows how often the Group members engage and that would not be possible without the Facebook interface, discussed in more detail in the following sections. In a few cases this resulted in instantaneous conflict resolution between neighbours, which proves a substantial advantage compared to unnoticed anger developing over time, due to lack of communication. However such immediacy does have a negative side. Group A members were quick to turn inwards to find the culprit of the dog fouling incident and in that sense they made use of the panopticon of social media [35] for collective efficacy to ensure the self-regulation of the issues and behavioural norms [36, 37]. This Group panopticon view was exacerbated by the ‘always-on’ nature of Facebook [38] and could be viewed as the Facebook Group interface shaping the residents interactions, and bringing self-regulation to the fore, in ways that would not happen in solely face-to-face communication.

The neighbourhood structures that have emerged physically as a result of the Facebook Groups A and B indicate that participation through small civic self-organisation can be very effectively facilitated by Facebook Group membership, particularly where attempts at a face-to-face organisation have failed, allowing for shared digital discussions which have in turn led to concrete community actions, such as tidiness of communal areas and changes to the management structure. Identity formation in Facebook serves as a social lubricant, encouraging individuals to

convert latent to weak ties and enabling them to broadcast requests for support or information [39], is supported in these cases.

## 5.2 Facebook Group efficacy

Over the time period studied, the Group memberships both grew and the total number of residents from the developments increased. Group A had 93% of the residents' members of the Group and Group B had 86% of the residents. The analysis of the data point us towards the proposal that there is value in the use of social media sites as spaces for participation in both social and civic life [40]. The continued use of these Groups by a large number of the residents points us to the view that this platform is useful to the residents. The characteristics of Facebook, as an efficient platform for being connected and engaged but at one's own pace and preferred intensity, without the dynamics of face to face personal interaction, is perceived by residents as a great advantage over traditional face-to-face meetings.

What Facebook appears to offer that other digital tools, in the past [41] could not is its ubiquitous nature in society today and reach of use into the physical environment through smartphones. The notifications embedded in the Facebook interface mean that the attention of a resident can easily be sought and a response gained in a very short period of time, often seconds. The analysis shows the majority of posts on *home use* were commented on in less than one hour. Another difference is the layer of visual information readily available to Group members. The visual tools (taking and uploading site specific images) make small interactions and favours easy: helping others through sharing the unwelcome (parking tickets distributed), or welcome (food to share) prompt for action. The opportunity for Group leaders to take a back seat and let the other members self organize is possible within the functionality of a Facebook Group interface [42].

Perhaps the greatest potential of digital media lies in its capacity to empower a small group through mass exposure to other interested persons through the use of pre-existing communication media – in this case Facebook. This certainly happened in Group A, where an initially small group of activists rapidly reached a critical mass of residents in their housing development. This growth enabled rapid social learning and mass decision-making, which was compelling to the housing developer against whom complaints were being made. There is a need for local communities to develop methods of communication that disseminate knowledge to others and thus help to empower them [43]. The case study here is a good demonstration of that effect through Facebook. The dynamics of Facebook interactions have developed interactions beyond the digital space and encouraged communication practices in the physical environment of the residential development.

## 6. CONCLUSIONS

The Facebook Groups in this study were intentionally deployed by key actors as innovative tools to drive up engagement in solving collective issues within weak-tie communities of urban residents. It proved to be a more efficient and engaging communication and self-organisation platform than traditional face-to-face meetings. A Facebook Group has a great potential to facilitate collective action but also there is the constant peril of any initiatives being trivialized by either members within the

Group or by vested interests externally. The digital and physical environments cross over and follow up of the initiatives present in Facebook discussions as real life actions is the crucial factor that ultimately builds trust among Group members. This makes their engagement worthwhile – showing tangible results from digital discussions. This form of collective efficacy supports the community through the repeated interactions [44] of residents on the Facebook Groups. Both Facebook Groups managed to collectively solve some problems of individual members, as well as prompt actioning of collective problems. They also brought to attention issues relating to neighbouring communities. Both Groups managed to establish effective direct links with some external actors important for security and well being of the residents. However these successes depended on gaining critical mass and problem solving efficiency achieved through persistent substantial voluntary time commitment of members who initially took on the leading roles. These members clearly had a high level of social media self-efficacy [45] and as leaders engaged not only in Facebook activities but also in parallel in prolonged involvements in the physical environments aimed at connected actions for community benefit. These were repeatedly and transparently reported via Facebook with adjoining open invitations for wider engagement. Exploiting the potential of Facebook Groups' for efficient and long term self-organisation of its members is a challenging and highly demanding task requiring genuine involvement, a good sense of when to withdraw or engage, and how to deal with criticism constructively. This can be exhausting for the leaders of the Group, unless the Facebook Group begins to self-manage and self-organise effectively as a self-regulating entity. Without this self-regulation, there is a serious danger of burnout for the leaders, and a succession strategy is needed to ensure the continuity of leadership. Further research is needed over a longer period of time to understand the deeper efficacy of digital media sites such as Facebook for the self-management of housing. A clear overlap between social media narratives and the physical experiences of daily life is evident for residents in both case developments, which bodes well for the development of Facebook activism within housing communities. Facebook also allows its users to preserve a clear distinction between their Facebook identity and daily privacy. This means a weak ties community remains as such but is still enabled to efficiently solve together collective issues. This seems to be the key of why Facebook proved to work well for both developments as a digital tool for collective empowerment and civic action.

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## 8. REFERENCES

- [1] Bennett, W. L., & Segerberg, A. (2012) The logic of connective action: Digital media and the personalization of contentious politics. *Information, Communication & Society*, 15(5), 739-768.
- [2] Tonkiss, F. (2005) *Space, the City and Social Theory: Social Relations and Urban Forms*, Polity Press, Cambridge, UK.

- [3] Galster, G.C., Friedrichs, J. (2015) The Dialectic of Neighbourhood Social Mix: Editors' Introduction to the Special Issue, *Housing Studies*, 30(2), 175-191.
- [4] Sampson, R. J. (2008). Collective efficacy theory: Lessons learned and directions for future inquiry. *Taking stock: The status of criminological theory*, 15, 149
- [5] Hampton, K. and Wellman, B., 2003. Neighboring in Netville: How the Internet supports community and social capital in a wired suburb. *City & Community*, 2(4), pp.277-311.
- [6] Protalinski, E. (2013) Facebook passes 1.19 billion monthly active users, 874 million mobile users, and 728 million daily users. [Online] Available from: <http://thenextweb.com/facebook/2013/10/30/facebook-passes-1-19-billion-monthly-active-users-874-million-mobile-users-728-million-daily-users/#!rpc3V>
- [7] Halliday, J. (2013) Facebook: four out of five daily users log on via smartphone or tablet [online] Available from: <http://www.theguardian.com/technology/2013/aug/14/facebook-users-smartphone-tablet>
- [8] Ofcom (2014) Adults' Media Use and Attitudes Report 2014 [online] Available from: <http://stakeholders.ofcom.org.uk/market-data-research/other/research-publications/adults/adults-media-lit-14/>
- [9] Stirling, E. (2014). "We use Facebook Chat in Lectures of course!" Exploring the use of a Facebook Group by first-year undergraduate students for social and academic support. In: Kent, M. & Leaver, T. *An Education in Facebook? Higher Education and the World's Largest Social Network*. Routledge, London, pp. 23-31.
- [10] Sampson, R. J. (2008). Collective efficacy theory: Lessons learned and directions for future inquiry. *Taking stock: The status of criminological theory*, 15, 149.
- [11] Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277(5328), 918-924.
- [12] Sampson, R. J. (2008). Collective efficacy theory: Lessons learned and directions for future inquiry. *Taking stock: The status of criminological theory*, 15, 149
- [13] Sampson, R. J. (2008). Collective efficacy theory: Lessons learned and directions for future inquiry. *Taking stock: The status of criminological theory*, 15, 149
- [14] Kavanaugh, A. L., Reese, D. D., Carroll, J. M., & Rosson, M. B. (2005). Weak ties in networked communities. *The Information Society*, 21(2), 119-131.
- [15] Hampton, K. N. (2007). Neighborhoods in the Network Society the e-Neighbors study. *Information, Communication & Society*, 10(5), 714-748.
- [16] Hampton, K. N. (2003). Grieving for a lost network: collective action in a wired suburb special issue: ICTs and community networking. *The Information Society*, 19(5), 417-428.
- [17] Marwell, G., Oliver, P. (1993) The critical mass and the problem of collective action. Cambridge University Press, Cambridge, UK.
- [18] Stirling, E. (2015). 'I'm always on Facebook!' Exploring Facebook as a mainstream research tool and ethnographic site. In Snee, H., Hine, C., Morey, Y., Roberts, S. & Watson, H. (eds) *Digital Methods for Social Sciences: An Interdisciplinary guide to research innovation*. Palgrave.
- [19] Hocevar, K. P., Flanagan, A. J., & Metzger, M. J. (2014). Social media self-efficacy and information evaluation online. *Computers in Human Behavior*, 39, 254-262.
- [20] Mihailidis, P. (2014). The civic-social media disconnect: exploring perceptions of social media for engagement in the daily life of college students. *Information, Communication & Society*, 17(9), 1059-1071.
- [21] Stevenson, F., Baborska-Narozny, M. (2014). Designing resilient housing for co-evolutionary adaptivity. In: Nicol, F., Roaf, S., Brotas, L., Humphreys M. (eds.) Proceedings of 8th Windsor Conference: Counting the cost of comfort in a changing world. pp. 436-445. NCEUB, Windsor (2014).
- [22] Baborska-Narozny, M., Stevenson, F., Chatterton, P. (2014) A Social Learning Tool barriers and opportunities for collective occupant learning in low carbon housing. *Energy Procedia*, 62, 492-501.
- [23] Markham, A., Buchanan, E., & AoIR Ethics Working Committee. (2012). Ethical decision-making and Internet research: Version 2.0. *Recommendations from the AoIR Ethics Working Committee. Final Draft, Association of Internet Researchers*.
- [24] Quiñones-García, C., & Korak-Kakabadse, N. (2014). Compulsive internet use in adults: A study of prevalence and drivers within the current economic climate in the UK. *Computers in Human Behavior*, 30, pp. 171-180.
- [25] Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, 39(3), 124-130.
- [26] Kraut, R.E., Fiore A.T. (2014) The role of founders in building online groups, *Leadership*, CSCW 2014 722-732.
- [27] Marwell, G., Oliver, P. (1993) The critical mass and the problem of collective action. Cambridge University Press, Cambridge, UK.
- [28] Baborska-Narozny, M., Stevenson, F., Chatterton, P. (2014) A Social Learning Tool barriers and opportunities for collective occupant learning in low carbon housing. *Energy Procedia*, 62, 492-501.
- [29] Mao, J. (2014). Social media for learning: A mixed methods study on high school students' technology affordances and perspectives. *Computers in Human Behavior*, 33, 213-223.
- [30] Granovetter, M.S. (1973) The Strength of Weak Ties, *American Journal of Sociology*, 78 (6), pp. 1360-1380.
- [31] Marwell, G., Oliver, P. (1993) The critical mass and the problem of collective action. Cambridge University Press, Cambridge, UK.
- [32] Marwell, G., Oliver, P. (1993) The critical mass and the problem of collective action. Cambridge University Press, Cambridge, UK.
- [33] Kim, Y.C., Ball-Rokeach, S.J., (2006) Civic engagement From a Communication Infrastructure Perspective, *Communication Theory* 16 (2006) 173-197.
- [34] Sampson, R. J. (2008). Collective efficacy theory: Lessons learned and directions for future inquiry. *Taking stock: The status of criminological theory*, 15, 149.
- [35] Marichal, J. (2012). *Facebook Democracy: The Architect of Disclosure and the Threat to Public Life*. Burlington, VT, Ashgate Publishing Company.
- [36] Öngün, E. & Demirağ, A. (2014). Are We Digital Masters Or Captives? A Critical Evaluation Of Panoptic Versus Synoptic Effect Of Surveillance In Social Media. *Journal of Media Critiques [JMC]*, 1(DCI).
- [37] Sampson, R. J. (2008). Collective efficacy theory: Lessons learned and directions for future inquiry. *Taking stock: The status of criminological theory*, 15, 149



- [38] Stirling, E. (2014). *Why waste your time on Facebook?: a temporal analysis of first-year undergraduate students and transition in UK Higher Education* (Doctoral dissertation, University of Sheffield).
- [39] Ellison, N. B., Steinfield, C., & Lampe, C. (2011). Connection strategies: Social capital implications of Facebook-enabled communication practices. *New Media & Society*, 14(6), 1461-1481.
- [40] Mihailidis, P. (2014). The civic-social media disconnect: exploring perceptions of social media for engagement in the daily life of college students. *Information, Communication & Society*, 17(9), 1059-1071
- [41] Hampton, K. and Wellman, B., 2003. Neighboring in Netville: How the Internet supports community and social capital in a wired suburb. *City & Community*, 2(4), pp.277-311.
- [42] Kraut, R.E., Fiore A.T. (2014) The role of founders in building online groups, *Leadership*, CSCW 2014 722-732.
- [43] Seyfang, G., Park, J., Smith, A. (2013): A thousand flowers blooming? An examination of community energy in the UK. *Energy Policy* 61, pp. 977-989.
- [44] Sampson, R. J. (2008). Collective efficacy theory: Lessons learned and directions for future inquiry. *Taking stock: The status of criminological theory*, 15, 149.
- [45] Hocevar, K. P., Flanagan, A. J., & Metzger, M. J. (2014). Social media self-efficacy and information evaluation online. *Computers in Human Behavior*, 39, 254-262.