Renewable Agriculture and Food Systems: 33(6); 530–541 doi:10.1017/S1742170517000643

Growing the community – a case study of community gardens in Lincoln's Abbey Ward

Jennifer Jackson*

Research Fellow, Lincoln International Business School, University of Lincoln, Lincoln, UK
*Corresponding author: jjackson@lincoln.ac.uk

Accepted 2 November 2017;
First published online 6 December 2017 **Themed Content: Critical Foodscapes**

Abstract

Community gardens, as previous research has found are as much about growing the community and the individuals involved, as gardening itself. The study of Green Synergy's community garden initiatives within Lincoln's relatively deprived Abbey Ward provided an exceptional case study in which to review the inter-relationship of impact both at a community and individual level. The social element of community gardening in building connections between social and natural capital is explored, and how community gardens can provide a 'counter-narrative' to perceptions of place and individual well-being.

The qualitative research approach which included observation, interviews, a focus group and workshop was designed to reflect the wide scope of the projects and generate both individual and communal reflection on the projects. The themes that emerged open up a further understanding of the multiple dynamics arising from the collaborative creation of 'green spaces' in providing bonding and bridging social capital within communities, together with challenging narratives of individual and community capacity. In so doing, it adds to existing research evidence on the diverse community connections, spaces and products that community gardening engenders.

Keywords: Community, community gardens, deprivation, natural capital, social capital

Introduction

Community gardening, as the name depicts, has been found in prior research to provide opportunities for developing connections and socializing within communities. In this respect, the role of social capital in community gardens has been at the forefront of growing debate and critique from a range of disciplinary perspectives (see for example, Hancock, 2001; Pretty and Ward, 2001; Glover, 2004; Glover et al., 2005*a*; Chitov, 2006; Kingsley and Townsend, 2006; Alaimo et al., 2010). Social capital, as the literature critiques, is a complex and contested concept, not easily defined. Its conceptual roots, as Portes (1998) relates, being based in sociological constructs and writers, but brought into the more popular debate and use following the seminal work of Putnam (1995, 2000), a political scientist. For the purposes of the paper social capital is mainly explored through Putnam's (2000, p. 19) view of social capital, as 'the connections among individuals or social networks and the norms of reciprocity and trust arising from those connections'. Social capital's relevance to community gardens is that in setting up and sustaining gardening groups social connections and networks are central at the individual and group level. Moreover, co-operation and reciprocity, such as volunteering, are often an integral part of their collective action and 'mutual benefit' (Putnam 2000), both within the gardens and the wider community.

As Firth et al. (2011) consider, using the social capital framework within community gardens also opens up the question of how it is generated, arguing that it is dependent on a number of inter-related factors, namely the provision of a physical space for members of the community to meet and the shared collective activity, interest and community intention that gardening engenders. Community gardens are identified in the literature as 'socially produced spaces … for strengthening communities' (Chitov, 2006) and 'spaces of connection' (Barron, 2016) as well as spaces of 'belonging' (Diamant and Waterhouse, 2009) and 'social interaction' (Smit and Bailkey, 2006; Flachs, 2010). Hence as Glover (2003, 2004) states 'community gardens are less about gardening than they are about community, in providing 'third places' outside of work and home …where people can gather, network and identify together as residents of a neighbourhood (Glover, 2004, p. 143). In this respect, Saldivar-Tanaka and Krasny (2004, p. 12) consider community gardens to be 'participatory landscapes', that are

viewed more as 'social and cultural gathering places, than as agricultural production sites', their collective design and use reflecting local needs.

Previous studies have, therefore, not unexpectedly, identified 'sociability' (Glover et al., 2005*b*) in the opportunities that community gardens provide to meet, interact and build relationships with others, and 'social cohesion', 'support' and 'connectedness' as integral processes to the community garden experience (Kingsley and Townsend, 2006). This is considered to help people get involved initially and to continue to take part (Aldridge and Sempik, 2002; Quayle, 2007) acting in both a 'bonding' and 'bridging' capacity (Putnam, 2000) of social capital within communities. Bonding is defined as strengthening bonds with people already known to each other, such as neighbors, family and friends; people who often have similar socio-economic backgrounds and demographics, such as class. On the other hand, bridging social capital is considered to provide links to people with 'weaker' ties and diverse demographics, who would not normally have communicated and connected before (Glover, 2004; Glover et al., 2005*a*). The latter is perceived as important for groups to prevent them from becoming too inward and exclusionary, thereby generating increased capacity for connections across communities, as will be further considered. However, Kingsley and Townsend (2006, p. 531) argue that whilst bonding and bridging social capital appear theoretically 'distinct', it is difficult to differentiate in 'real life situations', building on Putnam's notion (2000) that they are not necessarily 'either or categories'. This research study, therefore, provided an opportunity to expand the debate around bonding and bridging and in particular to determine how they interact in practice, rather than analyzing them as separate concepts.

Community building through the medium of community gardens is seen to further offer a 'counter narrative' to a 'negative collective identity' within a neighborhood and its residents (Glover, 2003, p. 190). Local residents at a 'grassroots' level are given the opportunity to change aspects and notions of deprived areas as 'active citizens', in which, 'garden volunteers, not their city officials, deliberate to make decisions that impact directly upon the locality in which the garden is situated' (Glover et al., 2005*a*, p. 455). The creation of gardens and 'community spaces' in often previously underused or derelict sites, transforms 'vacant lots to vibrant plots' (Santo et al., 2016) 'beautifying' and increasing the attractiveness, use and pride in an area (Armstrong, 2000). Community garden projects are also largely dependent on the social capital of volunteering and cooperation, engendering the sharing and building of resources, skills and knowledge at an individual and collective level. Such shared resources include knowledge of gardening techniques, cultivation and food production, to skills learned in participating and developing community projects (Quayle, 2007; Teig et al., 2009).

Pretty and Ward (2001); Glover (2004) and Kingsley and Townsend (2006) nevertheless caution and critically examine the 'dark side' of social capital within community gardening groups and its potential to be 'clannish or exclusive', particularly for non-dominant groups within society in involvement and decision-making. Indeed, one of the main criticisms of social capital is that sociability and networking within groups are not an unquestionable positive, but can exclude and act for the public 'bad', not just 'good'. An example of this is the bonding between gangs (Portes, 1998). Hence, as discussed previously, bridging as well as bonding capital, is important in opening connections. Contrarily, studies, such as Quayle's (2007), argue for the open door policy of most community garden projects that people of all ages and walks of life including those vulnerable could get involved and be given support if required. It is this potential contradiction of community garden projects to act as a bridge in the local community that underpins the research, as much as the impact of the community garden itself.

From the perspective of individual well-being, both the connection within the community and creating a greener environment reducing social isolation and stress has itself a value in providing relief from issues such as poor mental health (Pretty et al., 2005; Burls, 2007; Mind, 2007). Indeed, in reviewing the interaction of 'people and green spaces' Burls (2007, p. 30) found that there is a 'strong connection between social and natural capital', with a multiplicity of outcomes at the individual and community level for those who participate. Like social capital, natural capital is subject to interpretation and difficult to precisely identify, but seeks to recognize the 'value' of natural resources and human effect on them, which in relation to community gardening, centre particularly on the use of land, biodiversity, wildlife and scenery (Hancock, 2001; Smit and Bailkey, 2006). The community benefits from the creation of more natural capital in the form of 'nearby nature', through a community's increased management and 'stewardship' of its natural resources. In this respect, Burls (2007) advocates wider citizen participation in creating 'green spaces' with its by-product of 'integrating the goals of social capital with the democratisation of natural capital', in the process participants generate 'well-being, renovating both self and the environment' (Burls 2007, p. 31–33) The 'counter narrative' that consequently results through community gardens, is not just more attractive and inclusive community spaces, but the community takes greater ownership of the value of its environment.

Building on the work of the 'therapeutic landscape' as proposed by Gesler (1992, 1993), Sempik's (Sempik and Aldridge, 2005; Sempik, 2008; Sempik et al., 2014) extensive work on social and therapeutic horticulture further emphasizes that the positive effects of taking part is based on an 'activity based paradigm', in which 'the natural environment is not simply a pleasant backdrop to these activities, it is the essential framework for them'

(Sempik, 2008, p. 19). Factors, such as being outside, nurturing/watching plants grow and the associated colors/textures are all considered central to connecting the individual to gardening projects, providing 'a restorative environment' (Mind, 2007, p. 5), 'sense of escape' (Quayle, 2007, p. 37) and 'connectedness' (Sempik, 2008, p. 13). While Sempik (2008) argues that social and therapeutic horticulture is different from community gardens because of its provision of specialized support and trained professionals, the impact of community gardens equally offers a potential synergy of multiple effects including improved health and well-being that underpins further social interaction, skills development and inclusion.

In considering the existing debate on community gardens, what is evident is that the existing concepts within the literature on community gardens of social and natural capital, community and individual impact are inter-related. Indeed Quayle (2007, p.79), in reviewing impact argues that 'the biggest benefit of all could be the connection between the themes, which allow so many benefits to be delivered by one project'. Draper and Freedman's (2010) comprehensive review of community garden literature equally considers that the main benefit of community gardens is their ability to meet 'myriad goals' and intentions specific to each project, group and community. This research about Green Synergy's diverse garden projects in the city of Lincoln's Abbey Ward, UK, therefore provided the opportunity to build on current research and understand more about the processes that underpin the connection between social and natural capital, what is produced and/or challenged in the fusion between individual intention and need, and community capacity and action.

Case study – Abbey Ward

As a research methodology case study was most appropriate, because it allows for an emphasis on an 'intensive examination of the setting', with Abbey Ward and its community issues not just an incidental 'backdrop' to the research, but central as a 'unit of analysis' and 'boundary' to the research (Bryman (2008, p. 53). Indeed, as Yin (2003, p. 13) argues case studies incorporate the ability to review community gardens within its 'real-life context', where it is not just about undertaking snapshot interviews but embedding the research in longer-term reflection and analysis within an area and a community garden organization. Moreover, using Stake's (1995, 2005) concept of an 'instrumental' case study, the intention was to do more than capturing and understanding the case study itself, by using it as a prism for 'insight' into the research questions and more 'general understanding' about community gardens. The case study and the rich data that resulted will now be consequently explored in relation both to context and the multiple, inter-related factors that surround community gardening.

The case study focuses on projects undertaken by Green Synergy during the spring and summer of 2014 in Lincoln's relatively deprived Abbey Ward. At the time of the research in April 2012, Green Synergy had only recently been initiated as a community group and then obtained charitable status. Green Synergy's (2013, p. 5) central objective was to 'create inspiring and therapeutic environments … in which people can socialise, learn and thrive'. As a 'collaborative community based organisation' Green Synergy had, at its center, 'growing' the community capacity of Abbey Ward through building up new networks, the sharing and learning of skills, and supporting of new community garden spaces created by its residents, as well as the encouragement of healthier lifestyles.

Green Synergy's philosophy since its inception has been to consult the community as to what they most want from the projects and how/where they should be developed for maximum benefit in the area (Whiting, 2012), given that the very nature of 'community' garden assumes community involvement. Abbey Ward has distinct areas in relation to housing and infrastructure which provided an opportunity to explore the notion of community gardening in varying community contexts. Equally the projects ranged in scope and setting which provided the ability to review the meaning/role of community gardens, in relation to both 'bonding' and 'bridging' social capital (Putnam, 2000).

Abbey Ward is the second most populous ward in Lincoln with 11,306 residents (UK Crimestats, 2016), reflecting its proximity to the city and industrial heritage when workers were housed near to factories situated by the River Witham. In recent years, with migrant workers and students at the University of Lincoln renting properties, Abbey Ward now has a more diverse and transient population compared with its previous more tight-knit, connected community (Walker, 2006).

The central area is dominated by Victorian terraced housing running parallel to the busy arterial street of Monks Road that runs through the area and into the city. While these houses have small gardens the front spaces and 'backyards' are mainly used for household needs, such as drying clothes outside, or storing rubbish bins and bikes, rather than cultivating and growing. Situated nearer to the River Witham, Stamp End's housing includes the Cannon Street estate of mainly 1960s two or three-storey blocks of flats with open and grassed spaces between the courtyards and walkways. In contrast, there is also Shuttleworth House, a 17-storey block of flats, one of Lincoln's few high-rise buildings. Situated to the end of Monks Road is the 1940s Tower Estate built by the Council in the 1940s, designed more for family living, while the larger gardens are associated with early council housing. These disparate physical features add to Abbey Ward's sense of communities being separated from each other.

Abbey Ward's deprivation is statistically represented in indices such as the Index of Multiple Deprivation (Open Data Communities, 2015), with the community gardens research located in the top 5% (Stamp End), to 30% (Tower Gardens) of the most deprived areas nationally. Abbey Ward encompasses areas that have high health deprivation and disability, with one area in the top '5% of most deprived areas nationally' (City of Lincoln Council, 2016).

In relation to crime one area of Abbey Ward is in the most 1% of deprived areas nationally (City of Lincoln Council, 2016), with anti-social behavior, criminal damage and arson accounting for a large percentage of recorded crimes (UK Crimestats, 2016). Issues identified in the statistics are echoed by residents who seek to ensure that what is perceived as a downward spiral does not continue. A survey undertaken by Community First in 2013 found that residents believed the area was 'getting much or slightly worse' with regard to crime and anti-social behavior, litter and graffiti, improving the sense of community, opportunities to meet others in the neighborhood, and affecting decisions within the area considered priorities. A report by Lincoln's Community Cohesion Strategy (City of Lincoln Council, 2013, p. 7) also reflected that the 'neighbourhood scored relatively poor in regard to respondent's feelings of belonging … and consistently poor across all community cohesion questions'.

In response to community issues, isolation and the perceived decline of the area, multiple third and public-sector agencies have been involved and resident groups formed. The Tower Estate Action Group (TAG) was initiated by residents to voice concerns that the Tower Estate had become 'forgotten': 'Ten years ago, it was a lovely place to live and now it has been run-down and forgotten … I am hoping that, as we work to make things better, people will start feeling proud to live here and we can bring back some of the community spirit that people living here used to have' (Lincolnshire Live 2011).

Similarly, Shuttleworth House Residents Group was formed in response to issues surrounding the tower block. The Shuttleworth House Action Plan of 2012 stated that '… social interaction between residents is minimal due to the fabric structure of the building, which encourages isolation'. A 'large percentage of residents' were also considered to be 'vulnerable', 'socially isolated' with 'multiple difficulties' 'making it extremely difficult to develop a proper functioning 'community' (Aegis Communities, 2011, p. 14). The report further highlighted the 'negative' media about the building and residents' concerns about its appearance.

Community gardening growing projects

The research concentrated on two of Green Synergy's main projects the Stamp End Community Growing Project and the Tower Estate's Community Garden. All projects were organized on a day-to-day basis by the project lead of Green Synergy with support from volunteers, community groups and agencies in planning, designing and undertaking the projects. The range of projects provided many ways for established and new residents of different ages, mobility, health profiles and skills to engage in community gardening and food growing. This created a broad context for the research in the variety of community gardens and participants that could be included in the study, furthering understanding of the diverse settings of community gardening and the dynamics of participation.

Stamp End's projects were funded by the People's Health Trust from 2013 to 2014, which provided the opportunity for residents to engage in three regular and differently focussed gardening sessions per week. On Mondays, a group just for women took part in 'supported therapeutic' indoor gardening projects at a local community organization's premises, combined with work in raised beds and the walled garden attached to the premises. This was complemented by an 'open' gardening group on Wednesday afternoons, which men could also attend. On Fridays, alternative street gardening sessions called 'Meet the Neighbours' took place in the walking spaces between Cannon Street's low-rise flats to develop neglected communal growing spaces. In Shuttleworth House, gardening events took place in the foyer of the building with residents encouraged to do some planting in containers and pots that they could then take to their flats. Near the River Witham, grassed areas by the banks of the river were also dug into strips and planted.

The funding from Cory Environmental Trust in consultation with the Tower Action Group enabled the establishment of a small 'pocket size' community garden for local residents on the Tower Estate in the summer of 2013, which had previously been an unused piece of land by the side of some houses. While Groundwork Lincolnshire undertook the landscaping of the site, the Tower Action Group supported it, particularly the young people from the estate, who helped with the start of the garden. In addition, events were held on the street by the local shops with activities to engage adults and children in gardening and growing.

Research methods

Given the community-based nature of the case study research, there was a focus on involving Green Synergy and its participants as much as possible in a qualitative research process, gathering their narratives around participation in the projects. To provide the background to the research and understanding of the projects prior to the interviews, the researcher attended and participated in some gardening sessions where informal observation and discussions took place with those attending, with

https://doi.org/10.1017/S1742170517000643 Published online by Cambridge University Press

participants always informed of the researcher's role and research intentions. This had inter-connected advantages for the research in that the researcher had a familiarity with the projects which provided context to the more formal interviewing process, as also found within other community garden research (Saldivar-Tanaka and Krasny, 2004; Firth et al., 2011).

Seventeen semi-structured interviews (seven male and ten female) and one focus group with eight female project members were undertaken during regular gardening sessions, events and community/neighborhood meetings, so that participants were easy to access within the familiar context of the community venue and gardens. These took place over the spring and summer growing season from March to July of 2013 and included a range of new and more established garden projects. While there were common questions for each participant and for the focus group, the emphasis was on gathering viewpoints and experiences from the perspective of the user with participants leading the conversation, which opened up further research conversations and directions. Six interviews were also undertaken with Green Synergy's project lead, two of its trustees, a community development worker, a representative of public health related to community gardens in Lincolnshire County Council and a neighborhood manager of Abbey Ward. A workshop was also held to bring together participants, to discuss their perceptions and experiences of community gardening as a group in terms of what it had provided both at an individual and community level, as well as where they envisaged the project developing.

All interviews and the focus group were recorded and transcribed verbatim resulting in a large amount of rich qualitative data. This was analyzed manually into themes and sub-themes by annotating all transcripts and then aggregating and categorizing responses within word documents in relation to the research questions. The emerging themes are discussed in the following section of the paper.

Themes

Social interaction/social capital

The themes that arose as the motivations for getting involved in the various projects and for sustaining participation furthered understanding of the inter-relationship between the impact of the project at the individual and community level. The following themes were found to be inter-connected in the narrative of community garden participants: social networks and isolation, health and well-being, environmental concerns and interests in gardening/cultivation, volunteering, community issues, such as vandalism, and empowerment.

As other studies have found (Saldivar-Tanaka and Kransy, 2004; Glover et al., 2005*a*, *b*; Chitov, 2006; Kingsley and Townsend, 2006; Flachs, 2010; Santo et al., 2016), social interaction, networks and connections are central to the development of social capital and are at the core of community gardening when building capacity. The Green Synergy gardening sessions provided an important means of reducing social isolation, something to break up the 'monotony' of the day or week. Interviewees with a range of backgrounds including older retired women, unemployed men and those with health issues, mentioned the need to get 'outside', and away from 'staring at the same four walls'. Even participants who had been living in the community for a long time recalled how the sessions provided a means of connecting to neighbors and those living nearby:

> 'I've been around here 9 years and … I don't know any of the neighbours; I see them, I say hello to them but I don't know their names or anything. So, you want to know your neighbours'.'
>
> 'I don't do anything …I'm on my own … so I've just got myself to put up with and meeting other people and that sort of thing, it gives me something to look forward to…I just didn't want to get old and retire and do nothing'

The paradox is that while many residents lived close to their neighbors in low and high-rise flats, as in Saldivar-Tanaka and Krasny's (2014) study, isolation was often magnified by proximity, rather than lessened because surrounded by other residents they became more acutely aware of lack of communal interaction and support. As a participant explained, 'if you're in a block of flats and you do have problems … if you're not careful, I've found you can become very isolated … And so … I've found doing something like this and getting out I've met some other people from around the area as well as who live in the block and get talking'.

Indeed, in workshop discussions, the consensus was that being part of Green Synergy was predominantly a 'social thing', in which they recognized both the effect of bonding and bridging capital in Green Synergy's projects, which they characterized as 'a social group with a strong emphasis on gardening'. For some, not knowing anyone when they joined the projects meant they could 'find new friends and have a laugh'. One participant recalling; 'When I first came … well there was two and twos …. more individuals, but now it seems to be getting together and not so much I'm with her and she's with me, you know, that sort of thing – we seem to be able to get together more now.'

Consequently, as Kingsley and Townsend (2006) and this study finds, bonding and bridging functions within community gardening are blurred, rather than distinct, with projects in Abbey Ward providing opportunities both to connect those of similar age, class and gender, as well as meet others beyond their normal social circles as 'a form of bridging social capital'. This meant that even the 'closed' women's gardening group provided a means of bringing together older retired and young women who would not have connected without the

https://doi.org/10.1017/S1742170517000643 Published online by Cambridge University Press

group. As one younger participant said, of meeting some of the older women from the group, 'I've met loads of people since I've been doing this. Like, all the ladies that have been here today, they're all lovely.' Similarly, participants who did not normally go out unaided could attend alone and be included in the confined surroundings of the walled garden and the support of the group; 'if [name's] not [with me] I have to sit at home all day and get depressed … But I can do the gardening with my illness … So, it's brilliant … Whether you're old or young, or whatever, they all help you.' From this group, participants also gained skills and their 'confidence back' to take part in the more open gardening sessions, so 'closed' sessions did not necessarily mean that they were less inclusive in actual operation than 'open' ones.

Indeed, within the projects the general emphasis on people being able to 'go at their own pace' and be supported with issues such as poor mental health and disability meant reducing barriers to participation and connecting with other participants. Undertaking tasks such as 'pricking and potting on' using tables and raised benches, also meant that gardening could be undertaken by those not able to dig, weed or plant. Equally, participants reflected; 'There's a number of residents with mental health issues that [participate] … and it's great to see that the people that we wouldn't normally … interact with are coming along.' Hence, as found in the work of Quayle (2007) and Eizenberg (2013), community gardening in Abbey Ward brought together individuals from all 'walk of life … by allowing for different types of activities and different engagements with place to occur' (Eizenberg, 2013, p. 54).

In establishing the community gardens some tensions that other studies have also found (Kingsley and Townsend, 2006; Teig et al., 2009; Eizenberg, 2013), nevertheless arose. Projects could develop from being a 'new exciting thing', to having 'some conflict'. The solution presented by the project lead and the groups themselves were establishing open routes of dialogue and shared values/'rules' of participation. Hence, they sought to ensure that they retained a 'safe nice feeling that everyone is welcome', it did not 'become cliquey, or that stronger personalities push quieter personalities out', to reduce potential exclusion. Moreover, as Eizenberg (2013) considers of the challenges of community garden groups, conflict can be 'part and parcel of reaching agreement and collaboration' in seeking shared 'vision' and action (Eizenberg, 2013, p. 92–93). Awareness, debating and resolution of tensions thus was a continuous process, in which Green Synergy's gardening groups developed rather than diminished. In summary, this research highlights that against the background of an increasingly fragmented community and social isolation within Abbey Ward, community gardening engendered confidence and participation in varied social interaction, connecting diverse groups of people that fostered both bonding and bridging social capital.

Social spaces – 'like-minded people'

Firth et al. (2011) explored how social capital in community gardening is fostered by inter-related factors, in the social space, that it provides, the activity, mutual interest and reciprocity that is engendered. This study, therefore, sought further understanding of how such processes determine value in social networks. The community gardening activities within Abbey Ward provided residents with a source of conversation, using the 'common language' (Glover et al., 2005*a*) of gardening, which provided 'bridging' and 'bonding functions' between 'like-minded people', where previously it would have been difficult to initiate dialogue and friendships. Of a conversation with a resident 'outside' of the project; a participant explained, 'we was having a right natter for about 20 min about … gardening and that sort of thing … But without Green Synergy I wouldn't have had that conversation with that person; I wouldn't have known that person had an interest in gardening as well.' Hence it was widening neighborhood networks: 'You're doing different things, meeting people round your neighbourhood that you didn't know were about, like-minded people.'

Community gardening also created multiple, diverse 'spaces of connection' (Barron, 2016) where none previously existed, such as at the gardening sessions at the entrance to the high-rise flats of Shuttleworth House. As a resident said: 'There isn't any shared space … so you go in there, you go in the lift, go to your flat and that's it. So, it is trying to create those spaces where people can come together … it's the first step, bringing people together.' Such small examples of the benefits of facilitating and removing barriers to interaction included residents of different ethnic backgrounds stopping to talk at the gardening sessions and speaking in the lift when previously no-one had spoken. As Eizenberg (2013) and Barron (2016) relate the value of space within community gardening is not only that it provides places to occupy and meet, but that the group is involved in the co-production of their own 'material environment' according to its own 'vision – and is thus constructed as a community' (Eizenberg (2013, p. 124). This will be further considered within the paper in relation to the counter-narrative that gardening groups develop their neighborhood.

For many participants, a 'central aspect' (Pretty and Ward, 2001) of the social capital formed through community gardening was based on the 'reciprocity' developed between them and the projects, with the opportunity to volunteer, help others including fellow participants and 'give back' to the community through the projects. In this respect, older residents as in Quayle's study (2007) found that they could share skills and expertise with a younger generation who did not have the same gardening knowledge. Similarly, an unemployed participant said, 'I can turn around and say, well, I'm not sat on me jacksie all day … I'm doing gardening and putting something back into our local community.' In other words, the

co-operative aspect of gardening underpinned motivation to participate, making it pleasurable rather than onerous: 'so it wasn't as if we've turned up and we've gone, 'Oh, do I have to do this?' It was more, 'I don't mind doing this, I'm a volunteer… It brought out a sense of well-being'. This study, therefore, builds an understanding of the co-operative processes that underpin participation in the social networks of community gardens, in particular, the connections of shared 'language', space, interest and skills, creating bridging and bonding links within the community that did not previously exist.

The human soul, the human spirit the human mind

As Burls (2007) has noted the establishment and 'stewardship' of 'green spaces' through 'active participation' creates a connection between social and natural capital that has outcomes and benefits both at the communal and individual level, not least that the community has more links to 'nearby nature'. Furthermore, Sempiks' (2008) extensive work in social and therapeutic horticulture argues that the context of growing, nurturing and working in a 'natural setting' provides an essential, not incidental, background to participation. In relation to mental health issues, such as depression, the social function of the projects combined with the 'nurturing' aspect of growing plants was found to have an important effect on general well-being, in relation to what was described as its holistic effect on the 'human soul, the human spirit, the human mind'. Participants emphasized factors such as having their hands in the soil, the 'therapy' and 'peaceful' effect of 'seeing something literally grow', with a 'bit of water, bit of TLC'. Involvement in community gardening was consequently seen to provide an 'equal' 'simple activity' that developed confidence in those that were more vulnerable and less likely to take part, such as participants in the 'supported therapeutic' Monday sessions in the walled garden, as well as general well-being for all participants, as the following quotes illustrate:

> 'the fact that some [participants] have struggled, as we do, with our own personal issues, this has become a really positive outlet for them.'
>
> 'It's non-discriminatory, and that's the great thing about plants. They love whoever – similar to animals – as long as you show them a bit of love and tender love and care, they'll reward you back by flourishing. And it's a metaphor for life really, isn't it?'

As found in other studies (Saldivar-Tanaka and Krasny, 2004; Quayle, 2007), a number of the participants were in flats or did not have access to a garden and the community garden projects were an alternative way to still be connected to plants and 'nearby nature', however small. Until participating in community garden projects, some participants did not realize that they could grow in containers: 'not everybody lives in house with a garden, do they? They've either a kitchen window sill or just a little space outside the back door or a balcony – there's something nice about living things, isn't there? … You don't have to have a garden.' Moreover, the exchanging of advice in gardening sessions, such as how seeds/plants could be bought relatively cheaply, together with the sharing of produce helped emphasize that money or knowledge does not need to be a barrier to take part in gardening. Hence, a by-product of involvement in the projects and reciprocity between participants was both saving money by growing their own vegetables and flowers that now made their homes more colourful.

At the 'macro' level the establishment of community gardens resulted as part of a wider concern about the environment wanting to make the area 'greener', rather than a 'bland concrete jungle'. One participant said, 'I think we don't pay much attention to the environment, the green stuff, … It's beautiful, it serves a purpose, it looks good … We spend too much attention knocking up buildings … So, I think if I can be a part of helping re-establish the green stuff.' Consequently, more residents were taking a proactive role in increasing natural capital through 'direct engagement' (Burls 2007). Compared with formal 'green spaces', like Abbey Ward's Arboretum, these community garden projects could better 'reflect' the 'creativity' and intention of the community (Saldivar-Tanaka and Krasny, 2004).

Contrarily in establishing the gardens and increasing participation, there was an awareness among participants of the paradox that the notion of gardening could itself place barriers, for as Teig et al. (2009) consider 'community gardening is not for all', in that as an activity it does not naturally appeal to everyone. Consequently, that as much as community gardens have the potential to bring people together, building social and natural capital, it can also detract. As participants recalled in workshop discussions about trying to get other residents involved, 'as soon as you say gardening, they say oh I can't be bothered', that particularly the physicality of gardening and connected perceptions that it is 'too much hard work', were given as reasons not to participate. It was therefore seen as essential that promotion of the gardens emphasized the social and therapeutic effects of taking part and that it was important to be 'visible' at events and open gardening sessions to break down any preconceptions potential volunteers might have.

The case study consequently highlights the relatively under-stated consideration that concepts of gardening can provide barriers, as much as links to involvement, while more generally determining that small-scale growing initiatives are valued in connecting residents of urban landscapes to diverse and local approaches to 'nearby nature'.

Caring for the community

The background in which the community gardens operate has been presented earlier through detailing the social

https://doi.org/10.1017/S1742170517000643 Published online by Cambridge University Press

fabric of Abbey Ward in relation to issues, such as crime, health inequality and sense of belonging. It was therefore unsurprising that a number of participants voiced concerns about perceptions of the area and how that related to daily living:

> 'I know it is going downhill because it was such a lovely area to be in, but now, when it gets dark and everything, we don't go out. We just stay put; we lock the doors. You just can't put anything in the garden that's really nice because it will go.'
>
> 'I do think in Abbey the fear and reality match up … so it's quite normal to see crime activity… or signs – whether that be broken bottles in the street or a car with a broken window'.

Hence, for some who were 'incensed' by issues, such as rubbish and vandalism, the rationale for participating was connecting with others who 'want the area to look nicer', 'cleaner, tidier and safer', thereby countering the negative 'narratives' (Glover, 2003) and reputation of the area, and helping to 'brighten the community up', as much as 'greener'. Community gardening consequently acted, as Armstrong (2000) has also found, as a 'catalyst' for residents to 'address' other issues:

> 'Supposing, it wasn't just about gardening, because perhaps most people can be taught gardening, but it's caring for the community, let's not have cans growing out of bushes and let's not have – 'oh well, I didn't want that chip paper so it can disappear there', …It's a combination, isn't it, of things?'

The 'sense of collective efficacy' (Glover, 2003; Teig et al., 2009) that creates social capital within community gardens created a renewed sense of pride and 'caring', in which, as Glover (2003, p. 206) argues, there is 'a belief that the situation was not immutable'; that with joint action and trust community gardeners were empowered to 'intervene for the common good of the neighbourhood', (Sampson et al., 1997, see Teig et al., 2009, p. 1115). This resonates with a common theme within the literature about community gardens, which is the gardens providing a 'symbolic focus' of 'recovery', and 'reclaiming' space, 'salvation' and change within neighborhoods (Armstrong, 2000; Glover, 2003; Saldivar-Tanaka and Krasny, 2004; Teig et al., 2009; Eizenberg, 2013). More than symbolic actions, community gardens provide a collective practical recourse to communal problems. One of the main distinctive features of Green Synergy's projects was seen to be that because of direct resident involvement, there was 'ownership' of the projects, such as ownership over the cultivated strips by the River Witham, entailing as Eizenberg (2013, p. 62) argues, 'not only the determination of space, but self-determination' literally 'from the ground up'. As found in this study and previous research (Quayle, 2007; D'Abundo and Carden, 2008; Meenar and Hoover, 2012) this was important for reducing potential vandalism, facilitating 'protection' of and 'respect' towards the area by local participants. Indeed, precisely because of resident involvement, rather than that of the council there was, for some, greater personal resilience towards issues such as vandalism and the on-going ability to 'tame the place', as expressed emphatically by a participant:

> 'People have said to me, 'there's no point – people will just rip it all up again,' and it's like, well, at the end of the day, I don't care. I'm still going to keep putting stuff there and eventually they might get the hint that it's just going to be there … Whereas if it was the council doing it, it wouldn't get replaced. They'd think, 'Oh, we've tried it once, that's it.'

Shuttleworth House with its 140 high rise flats also had issues, with its residents group raising concerns about residents feeling stigmatized by the appearance of the building. The 'communal garden' space, in this case, depended on residents working together to create a more colorful space on their balconies, which collectively and individually was making their own positive statement about the building. Indeed, as residents stated it was 'calming the community down' … I think we're slowly turning Shuttleworth House's reputation around by standing there and saying, 'No, no, enough. Why should we put up with it? We live here, we want to feel safe, secure.' The opportunity to make the flats more attractive and enhance living was vividly captured in the following participant's description of transforming their balcony:

> 'The block of flats that I live in has got a really bad reputation and people, as soon as you say you live there, people straight away cast an opinion of you … But at the end of the day, you make your flat what you want. … So, it's my own space and that's why I've started doing this … cause in the summer my balcony's going to look amazing!'

Similarly, with concerns about anti-social behavior on the Tower Estate, the resident group ensured that young people were involved in digging the new community garden so that they felt connected to its creation and continuing development. Involving young people and particularly those in more disadvantaged areas has been viewed as a positive by other researchers. Quayle (2007) found that young people welcomed alternatives to 'hanging out on the streets'. Allen et al. (2008) have also argued that social capital can facilitate the mentoring of disadvantaged youth by 'caring unrelated adults', through developing 'close bonds' and a 'strong help network' through 'constructive activity' within community gardens. In the case of the Tower Estate, the strength and knowledge of connections within the community provided the link between a mainly older women's residents group and younger residents who the former wanted to nurture as much as the garden, to contribute to a positive future for the area.

Those who had taken part in digging the new garden reflected that it alleviated the boredom of having nothing to do while unemployed and that they also wanted to create more respect for the area in making the estate more attractive. This included some participants who had been 'in trouble' with the police, but a

https://doi.org/10.1017/S1742170517000643 Published online by Cambridge University Press

resident said the community garden offered the opportunity to take part without labeling: 'if you were to talk to other agencies [they] would say, 'Ooh you've got those ones there have you? They're the troublemakers' … But that just goes to show that if you go in with no preconceptions and they know that you've got no preconceptions then they're fine'.

What therefore emerges, as found in Firth et al.'s (2011) study, is that social capital that already exists within communities and community groups, such as Shuttleworth House's Residents Groups can act as a foundation to further bonding and bridging capital based on the shared activity and purpose that being part of community gardening provided. However, there were also reflections by participants that community connections and their continuing growth and existence were not an inevitable part of the social landscape, rather that networks and groups were constantly changing and fluid, requiring the constant building of capacity. A member of a resident group, for example, explained that the slow and gradual process of strengthening the community to act was 'like pulling teeth', when establishing networks and connections and engaging residents. The experience of community gardeners and groups within Abbey Ward was therefore mostly focused on how to get more people to participate, and overcoming perceived 'apathy'. Demonstrating visible changes to the appearance of the area was, therefore, an important factor, creating 'trust' with residents that community projects were 'working' and engaging more.

For community and public-sector agencies in Abbey Ward community gardens were a different approach to community development projects, in their 'simplicity' of bringing different parts of the community together, without emphasizing deprivation, or particular groups of the population: 'growing your own vegetables and your own plants … hits home to everybody whether you're a migrant family or whether you're a British family … I think that actually is the simplest way you need … just the interaction with people with a common interest … they're not being made to come to just tick boxes'. Community gardening also allowed agencies to concentrate on the 'positive' for funding, rather than the negative: 'When you're bidding for funding – you have to talk about the deficits … or the things that people think are disadvantages. And it just feels like you're digging a bigger hole all the time … I think this is a fantastic way of bridging gaps, bringing people together, and overall well-being for the community.'

Funding for community gardening, therefore, incorporated much wider and inclusive meanings than narrow definitions of 'deprivation', uncovering issues such as loneliness and daily life stresses that are beyond economic indicators and statistics that define areas. Moreover, while criticism of perceived neoliberal intention within community gardens exists, in which communities and individuals instead of public agencies act as the 'preferred antidote to a host of contemporary social problems' (Pudup, 2008, p. 1235), the research in Abbey Ward rather identifies with Burl's (2007, p. 33) assertion that 'far from feeling exploited … participants felt a sense of civic engagement, ownership and personal agency' in taking part in creating new narratives of their community and self-identity. Indeed, the case study illuminates how collective concern through community gardens acts to reflect more inclusive notions of community issues, empowering differing approaches and interaction within community groups to seek to redress them.

Discussion and conclusion

As this extensive case study found it is only by reviewing the 'holistic' (Quayle, 2007; Flachs, 2010) nature of community gardens that impact and inter-connection at the individual and community level can be more understood. In particular, the research in this study opens up a further understanding of the dynamics that exist within community gardens, in the multi-layered connections developed between the individual, community and environment, that will be discussed in this section.

At the center of community, gardening is its social context as a 'participatory landscape' (Saldivar-Tanaka and Krasny, 2004) providing opportunities for building 'new forms' of social capital in its 'bonding' and 'bridging' functions. This research further establishes the range of connections and networks that underpin the social capital fostered in community gardens, based on diverse shared spaces, sources of conversation, interest, activity and reciprocity (Firth et al., 2011).

While a 'dark side' to the social capital with community gardens has been found in other research (Glover, 2004) in its potential to exclude, this research identified social isolation within high-density housing that Green Synergy's 'open policy/low levels of entry' and mutual support sought to preclude. Indeed, bonding and bridging capital were 'blurred', so that even notions of 'closed' groups brought together diverse members, such as older and younger women who would not have communicated, or supported each other, that then connected to other groups.

However, as much as social capital is 'self-reinforcing', (Pretty and Ward, 2001), its 'maintenance and reproduction' resides in 'social interaction' and 'relationships' (Glover et al., 2005*a*, *b*), which are of themselves fluid and changing and subject to tensions (Teig et al., 2009; Eizenberg, 2013). This research found that building and establishing capacity was a continuous process for the community garden groups. Moreover, that resolution of conflict arising at times within groups was an integral part of maintaining social connections and community intentions, in which groups learned to reconcile tensions through open dialogue and shared values of participation.

As the study further highlighted 'connectedness' within community gardens provides both a 'therapeutic' and

https://doi.org/10.1017/S1742170517000643 Published online by Cambridge University Press

'participatory' landscape. Consistent with Sempik's (2008) findings, the physical connection with the natural environment is not an incidental background to community gardening, but an essential reason for participation and continuing to participate, helping facilitate a 'restorative environment' (Mind, 2007) for health and well-being. The relationship between nurturing/growing plants and people is a common metaphor in the literature (D'Abundo and Cardo, 2008; Pudup, 2008), with this research about Green Synergy equally identifying that community gardening provided participants with a positive therapeutic outlet, if not necessarily resolving particular personal issues. However, countering this, and a fact that is understated in the literature, is that 'community gardening is not for all' (Teig et al., 2009). The groups in Abbey Ward sought to break down preconceptions of negativity surrounding gardening and its physicality to increase participation, hence often emphasizing its social, fun and therapeutic values.

While occupying only 'pocket-size' areas of a predominantly urban context, Abbey Ward's community gardens nevertheless provided different perspectives of how to connect to 'nearby nature', trickling down to diverse spaces in flat entrances and individual growing on balconies for those living with limited or no outdoors spaces. Moreover, in caring for the community and the environment, what arises, as Burls (2007) argues, is a connection between social and natural capital, in which community gardening cultivates both, based upon a communal 'stewardship' and understanding of the value of more 'green spaces'.

Research within Abbey Ward as a deprived area with negative connotations further provided an opportunity to understand how community gardens act as a 'catalyst' (Armstrong, 2000) for change. Confidence was created such that community issues could be addressed, thereby transforming neglected areas (Santo et al., 2016) and increasing locals' pride in an area. Community gardens providing residents with a 'counter narrative' (Glover, 2003) of identity and areas, something that they could take responsibility of and contribute to, rather than being reliant on other agencies to maintain their community. Indeed, precisely because of community ownership and involvement gardens were afforded 'protection' and the residents a greater resilience to act against potential vandalism, accompanied by a renewed sense of personal and community pride.

Moreover, the findings illustrate that the counter-narrative is not a blanket response, but specific to the area in which the residents lived and their own perceptions of what was required and who needed to be 'nurtured'. Hence, for the Tower Estate, it was important to involve young disaffected people, whereas, for Shuttleworth House and its surroundings, the emphasis was on creating an improved perception and view on the building and its environs. While community gardening cannot itself reduce communal issues, such as anti-social behavior, crime rates, or vandalism, the 'collective efficacy' (Teig et al., 2009) derived from social capital provided small-scale local approaches for action.

The research within Abbey Ward provides only a snapshot of community garden dynamics at a particular time and place but suggests that impact is multi-layered in precipitating action and change at the communal, environmental and individual level. While community gardening is not a panacea for all and participation and impact mainly depend on individual and communal intention, its main advantage lies in its flexible and holistic approach to facilitating a more connected community.

Acknowledgement. The author is grateful to Green Synergy and its volunteers who supported and participated in the research. The editor and anonymous reviewers gave valuable and insightful recommendations in the revising of the paper.

References

Aegis Communities 2011. Shuttleworth House Action Plan 2012. Available at http://developmentplus.org.uk/wp-content/uploads/shuttleworth-house-action-plan-2012-2-pages.pdf (Accessed 12 December 2013).

Alaimo, K., Reischl, T.M., and Allen, J.O. 2010. Community gardening, neighborhood meetings, and social capital. Journal of Community Psychology 38(4):515–531.

Aldridge, J. and Sempik, J. 2002. Social and Therapeutic Horticulture: Evidence and messages from researchCCFR Evidence (6), Loughborough University. Available at https://dspace.lboro.ac.uk/dspace-jspui/bitstream/2134/2928/1/Evidence6.pdf (Accessed 12 March 2013).

Allen, J.O., Alaimo, K., Elam, D. and Perry, E. 2008. Growing vegetables and values: Benefits of neighborhood-based community gardens for youth development and nutrition. Journal of Hunger & Environmental Nutrition 3(4):418–439.

Armstrong, D. 2000. A survey of community gardens in upstate New York: Implications for health promotion and community development. Health and Place 6(4):319–327.

Barron, J. 2016. Community gardening: cultivating subjectivities, space and justice. The International Journal of Justice and Sustainability 22(9):1142–1158.

Bryman, A. 2008. Social Research Methods, 3rd edn., Oxford: Oxford University Press.

Burls, A. 2007. People and green spaces: Promoting public health and mental well-being through ecotherapy. Journal of Public Mental Health 6(3):24–39.

Chitov, D. 2006. Cultivating social capital on urban plots: community gardens in New York City. Humanity and Society 30 (4):437–462.

City of Lincoln Council 2013. Community Cohesion Strategy 2013–2018, Available at http://www.lincoln.gov.uk/your-council/information-policies-and-publications/corporate-publications/ (Accessed 23 October 2013).

City of Lincoln Council 2016. Lincoln Against Poverty Lincoln Poverty Profile, Available at http://www.lincolnagainstpoverty.co.uk/lincoln-poverty-profile-2016/ (Accessed 12 November 2016).

D'Abundo, M.L. and Carden, A.M. 2008. 'Growing wellness': The possibility of promoting collective wellness through

community garden education programs. Community Development 39(4):83–94.

Diamant, E. and Waterhouse, A. 2009. Gardening and belonging: Reflections on how social and therapeutic horticulture may facilitate health, wellbeing and inclusion. British Journal of Occupational Therapy 73(2):84–88.

Draper, C. and Freedman, D. 2010. Review and analysis of the benefits, purposes, and motivations associated with community gardening in the United States. Journal of Community Practice 18(4):458–492.

Eizenberg, E. 2013. From the Ground Up: Community Gardens in New York City and the Politics of Spatial Transformation. Farnham, UK and Burlington, USA: Ashgate Publishing Limited.

Firth, C., Maye, D., and Pearson, D. 2011. Developing 'community' in community gardens. Local Environment 16(6):555–568.

Flachs, A. 2010. Food For thought: The social impact of community gardens in the greater Cleveland area. Electronic Green Journal 30(1):1–9.

Gesler, W. 1992. Therapeutic landscapes: Medical issues in light of the new cultural geography. Social Science and Medicine 34(7):735–746.

Gesler, W. 1993. Therapeutic landscapes: Theory and case study of epidauros, Greece, environment and planning. Society and Space 11(2):171–189.

Glover, T.D. 2003. The story of the queen anne memorial garden: Resisting a dominant cultural narrative. Journal of Leisure Research 35(2):190–212.

Glover, T.D. 2004. Social capital in the lived experiences of community gardeners. Leisure Sciences 26(2):143–162.

Glover, T.D., Parry, D.C., and Shinew, K.J. 2005*a*. Building relationships, accessing resources; mobilizing social capital in community garden contexts. Journal of Leisure Research 37 (4):450–474.

Glover, T.D., Shinew, K.J., and Parry, D.C. 2005*b*. Association, sociability, and civic culture: The democratic effect of community gardening. Leisure Sciences 27(1):75–92.

Green Synergy 2013. Business Case for a City Farm and Community Garden in Lincoln Available at https://democratic.lincoln.gov.uk/documents/s2605/City%20Farm%20-20Appendix%20A.pdf (Accessed 14 November 2013).

Hancock, T. 2001. People, partnerships and human progress: Building community capital. Health Promotion International 16(3):275–280.

Kingsley, J.Y. and Townsend, M. 2006. 'Dig In' to social capital: Community gardens as mechanisms for growing social connectedness. Urban Policy and Research 24(4):525–537.

Lincolnshire Live 2011. Available at http://www.thisislincolnshire.co.uk/Community-group-sets-shop-Lincoln-s-forgotten/story-13060642-detail/story.html (Accessed 2 May 2013).

Meenar, M.R. and Hoover, B.M. 2012. Community food security via urban agriculture: Understanding people, place, economy, and accessibility from a food justice perspective. Journal of Agriculture, Food Systems, and Community Development 3(1):143–160.

Mind 2007. Ecotherapy The green agenda for mental health, Mind Week Report, Available at http://www.mind.org.uk/media/273470/ecotherapy.pdf.

Open Data Communities 2015. Indices of Deprivation 2015 Explorer. Available at http://dclgapps.communities.gov.uk/imd/idmap.html (Accessed 12 November 2016).

Portes, A. 1998. Social capital: its origins and applications in modern sociology. Annual Review of Sociology 22:1–24.

Pretty, J. and Ward, H. 2001. Social capital and the environment. World Development 29(2):209–227.

Pretty, J., Peacock, J., Sellens, M., and Griffin, M. 2005. The mental and physical health outcomes of green exercise. International Journal of Environmental Health Research 15 (5):319–337.

Pudup, M.B. 2008. It takes a garden: Cultivating citizen-subjects in organized garden projects. Geoforum 39(3):1228–1240.

Putnam, R.D. 1995. Bowling alone: America's declining social capital. Journal of Democracy 6(1):65–78.

Putnam, R.D. 2000. Bowling Alone: The Collapse and Revival of American Community. New York, NY: Simon and Schuster.

Quayle, H. 2007. The true value of community farms and gardens: Social, environmental, health and economic, Federation of City Farms and Community Gardens. Available at https://www.farmgarden.org.uk/system/files/true_value_report.pdf (Accessed 25 March 2013).

Saldivar-Tanaka, L. and Krasny, M.E. 2004. Culturing community development, neighborhood open space, and civic agriculture: The case of latino community gardens in New York City. Agriculture and Human Values 21:399–412.

Sampson, R.J., Raudenbush, S.W., and Earls, F. 1997. Neighborhoods and violent crime: a multilevel study of collective efficacy. Science 277(5328):918–924.

Santo, R., Palmer, A., and Brent, K. 2016. Vacant Lots to Vibrant Plots: A Review of the Benefits and Limitations of Urban Agriculture. John Hopkins Center for a Livable Future. Available at https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/news-room/News-Releases/2016/vacant-lots-to-vibrant-plots.html (Accessed 15 May 2017).

Sempik, J. 2008. Being Outside: Exploring Perceptions of Nature and Health in Therapeutic Gardens. CCFR Loughborough University. Available at http://www.britsoc.co.uk/media/25588/ExploringNatureandHealth.doc (Accessed 13 March 2013).

Sempik, J. and Aldridge, J. 2005. Health, Well-being and Social Inclusion: Therapeutic Horticulture in the UK, CCFR Evidence (11), Loughborough University, Loughborough Available at https://dspace.lboro.ac.uk/dspace-jspui/bitstream/2134/2922/1/Evidence11.pdf (Accessed 12 March 2013).

Sempik, J., Rickhuss, C., and Beeston, A. 2014. The effects of social and therapeutic horticulture on aspects of social behaviour. British Journal of Occupational Therapy 77(6): 313–319.

Smit, J. and Bailkey, M. 2006. Urban agriculture and the building of communities. In van Veenhuizen R (ed). Cities Farming for the Future: Urban Agriculture for Green and Productive Cities. Manila, The Philippines: International Institute of Rural Reconstruction and ETC Urban Agriculture, pp. 145–171, Available at http://www.ruaf.org/sites/default/files/Chapter%206_1.pdf (Accessed 12 May 2017).

Stake, R.E. 1995. The Art of Case Study Research. Thousand Oaks, CA: Sage Publications.

Stake, R.E. 2005. Qualitative Case Studies In NK Denzin and YS Lincoln (eds). *Handbook of Qualitative Research*, 3rd edn., Thousand Oaks, CA: Sage Publications, pp. 443–466.

Teig, E., Amulya, J., Bardwell, L., Buchenau, M., Marshal, J.A., and Litt, J.S. 2009. Collective efficacy in Denver, Colorado:

Strengthening neighborhoods and health through community gardens. Health and Place 15(4):1115–1122.

UK Crimestats 2016. UK Crimestats Lincoln Abbey Ward Available at http://www.ukcrimestats.com/Neighbourhood/Lincolnshire_Police/Lincoln_Abbey (Accessed 14 December 2016).

Walker, A. 2006. Monks Road: Lincoln's East End Through Time. Lincoln: Survey of Lincoln.

Whiting, M. 2012. A Feasibility Study of Community Growing Projects in the Abbey Ward of Lincoln. Lincoln: Green Synergy.

Yin, R. 2003. Case Study Research, Designs and Methods, 3rd edn, Thousand Oaks, CA: Sage Publications.

https://doi.org/10.1017/S1742170517000643 Published online by Cambridge University Press