Gardens with kerb appeal - A framework to understand the relationship between Britain in Bloom gardeners and their front gardens

Britain in Bloom is a UK national campaign to help people improve their local environment through gardening, a popular and accessible pastime. This research presents a framework to understand the relationships between gardeners and their front gardens (yards). Interpretative Phenomenological Analysis of focus group data with 20 Britain in Bloom gardeners in Greater London explores: why people garden in front gardens; how social cohesion may emerge from front gardening activities; and the health benefits of the presence of front gardens for residents and passers-by. Front gardens played a key role in supporting participants' personal identity and self-expression. Maintaining a front garden was seen as making a positive and satisfying contribution to their local area and to others' pleasure. Social cohesion in the street or neighbourhood occurred through informal verbal communication and knowledge-sharing. These findings are relevant to the impacts of front gardens and community greening initiatives in private spaces.

Keywords: community cohesion; front gardens; fulfilment; gardening; Royal Horticultural Society Britain in Bloom

Introduction

Who needs a front garden? Why do many properties have these spaces? What are they used for and what societal value do they provide? This research seeks to understand how dedicated gardeners relate to their front gardens (also known as front yards) and how these places provide opportunities for social engagement and wellbeing. Front gardens are an example of semi-private space, where design and management are under the owner's full autonomy, but where features and activities are also open to public view and comment

Gardening is a common leisure activity around the world and thus can have multiple roles, meanings, and experiences for gardeners. The provision and extent of

domestic gardens has been studied in various national contexts including Romania (Badiu et al., 2019), Germany (Wellmann et al., 2020), India (Balooni et al., 2014), Ecuador (Finerman & Sackett, 2003), Chile (Reyes-Paecke & Meza, 2011), South Africa (King & Shackleton, 2020), Belgium (Notteboom, 2018), and Spain (Garcia-Garcia et al., 2020). While leisure activities have an inherent sense of positivity (Cheng & Pegg, 2016; Perkins & Nakamura, 2013), this research presents the intimate relationships specifically relevant between UK gardeners and their front gardens, whether they are planting ornamental plants or produce for home consumption.

The UK has a long history of private gardening (Amherst, 2013), including the 'moral' cultivation of plants and development of specialist growing societies, which acted as a salutogenic response to hard working life in Victorian Britain (Hickman, 2013; Lawrence, 2020). The extent of private gardens rose with the advent of suburbs (1830 onwards) and the greater provision of space around these new residences (Harris & Larkham, 1999). The increasing popularity of gardening meant that it became an iconic and ordinary part of the British landscape (Bhatti et al., 2014; Ginn, 2012).

Gardens are the most readily accessible green spaces for residents, with an estimated 88% of households in Great Britain having access to a private or shared garden (Office for National Statistics, 2020). Although small in size, the 24 million residential gardens in Great Britain make up a combined area equivalent to approximately 30% of the total urban built-up area (Office for National Statistics, 2018). In England, an estimated 49.2% of the adult (16+) population partakes in gardening (Department for Culture Media and Sport, 2017).

Motivations to Garden

Gross (2018) reviewed the personal meanings of residential gardens to cover themes of creativity, ownership, identity, retreat, sense of place, and social networks.

Studies on motivations for gardening as a leisure activity in cultures similar to the UK, viz. USA, Norway, and New Zealand (Ashton-Shaeffer & Constant, 2006; Beard & Ragheb, 1983; Francis & Hester, 1990; Gross & Lane, 2007) suggest that key motivations include: seeking an intellectual challenge, the freedom of self-expression, an escape from negative stimuli, and facilitating social relationships.

Beyond these attempts at formal categorisation, literature focussing on gardeners' relationships with their gardens has been mostly ethnographic (Taylor, 2008). Analysing autobiographical narratives, Bhatti and colleagues (Bhatti, 2014; Bhatti et al., 2014; Bhatti & Church, 2004) demonstrate that the domestic garden is an important part of everyday life for ordinary people. For many, gardening is an enduring engagement and serious leisure pursuit (Cheng et al., 2017). Ashton-Shaeffer & Constant (2006) called for more research on the nuanced and emotive roles that gardens and gardening play in contributing to life satisfaction.

There is a notable gap in the literature regarding why people garden specifically in their front gardens. The above studies are either about back (rear) gardens - places hidden from public view and associated with private lives - or do not distinguish between all types of domestic gardens. One exception indicates that USA residents care for front lawns as a sign of respect for their neighbourhood (Robbins et al., 2001).

Community engagement through gardening

Hassen & Kaufman (2016) define community engagement as 'the ability of a group or network of people, bound either by interest or by geography, to interact with one another for support, to promote inclusivity and to organise social activities' (page 120). The literature on the community-building effects of gardening is extensive, though focused on shared gardens (Jensen & Sørensen, 2020; Okvat & Zautra, 2011; Shinew et al., 2004). This includes gardens shared in numerous configurations - collections of

80 private plots such as allotments (Veen et al., 2015) or larger parcels everyone tends to
81 together (Spilková & Rypáčková, 2019), rehabilitation gardens (Marsh et al., 2017) and
82 other public green spaces (Harris et al., 2014). We have a strong understanding of how
83 community gardens work to (re)build and nurture a sense of community (Armitage et
84 al., 2008; Plummer & FitzGibbon, 2007; Veen et al., 2015). Such studies tend to look
85 for evidence of bonding, high community engagement, and increased social capital
86 (Firth et al., 2011). The perceived aesthetics and upkeep of a street do influence
87 community engagement (Hassen & Kaufman, 2016).
88 The history of urban communal gardens is well-documented and serves as
89 evidence for the social benefits of shared gardening spaces. Community gardens have
90 been linked to citizens' capacity to cope during times of socio-economic hardship (Chan
91 et al., 2015; Glover, 2004) and can help empower marginalised groups, such as severely
92 economically-disadvantaged people and minority ethnic groups (Crossan et al., 2016;
93 Cumbers et al., 2018; Metcalf et al., 2012). Nonetheless, though publically visible,
94 front gardens are not public green spaces or community gardens as they are privately
95 owned. There is very limited literature on the community benefits and social cohesion
96 that may result from gardening activities in private front gardens (Gehl, 1986).

97 ***Wellbeing through gardening***

98 There is increasing evidence relating to the health and therapeutic benefits of gardening
99 (Buck, 2016; Chalmin-Pui et al., 2021; De Bell et al., 2020; Soga et al., 2017), including
100 research that links tighter community cohesion with health and wellbeing (de Vries et
101 al., 2013). Kaplan & Kaplan (1989) found neighbourhood satisfaction to be correlated
102 with the view of a garden even if it belonged to someone else. Housing and
103 neighbourhood conditions are a significant factor in people's physical health, mental
104 health, quality of life, and self-development (Balestra & Sultan, 2013). A sense of

105 privacy, security, stability, and control associated with the home and neighbourhood are
106 likely to have an impact on wellbeing. For example, the degree of trust and feelings of
107 connectedness has an impact on how neighbours work together to achieve common
108 goals (cleaner and safe public spaces), exchange information, and maintain informal
109 social controls (such as discouraging anti-social behaviour in the neighbourhood)
110 (Putnam, 1993).

111 This research aims to create a thematic framework of the relationships between
112 keen gardeners and their front gardens to:

113 (1) Understand the psychology of why people garden in front gardens;
114 (2) Explore how community and social cohesion may emerge from gardening
115 activities in front gardens;
116 (3) Gain an insight into the health benefits of front gardens and of gardening in front
117 gardens.

118 Constructing a theoretical framework aims to better understand socio-cultural
119 mechanisms through which front gardens impact wellbeing outcomes (Chalmin-Pui et
120 al., 2019, 2021). This aims to provide new evidence to inform policy in tackling the
121 decline of domestic green spaces in new and existing urban developments (World
122 Health Organization, 2016).

123 **Research Context and Methodology**

124 Britain in Bloom (BiB) is a national campaign now run by the Royal Horticultural
125 Society (RHS) in the UK to provide a platform for people to improve their local
126 environment through gardening. The campaign brings together over 1,600 communities
127 in an annual competition with criteria of horticultural excellence, environmental
128 responsibility, and community participation. Each group runs independently, though the

129 national judging process is led by the RHS.

130 BiB was founded in 1963 to promote tourism and civic pride. BiB founder Roy
131 Hay, a horticultural journalist and broadcaster, was inspired by the new competition
132 “Fleurissement de France” which saw French towns competing for the best floral
133 displays and enjoying a boost in local tourism (Elliott, 2014). Hay garnered support
134 from the British Travel and Holidays Association to run BiB as a pilot. It officially
135 started the following year with a tiered regional and national judging process. BiB has
136 evolved through decades of leadership changes and funding difficulties. The RHS
137 became the organising body of BiB in 2002. Today, the focus has moved away from
138 municipal bedding plants, with awards presented for landscape sustainability,
139 biodiversity, edible gardening, and tree planting, for example (Elliott, 2014). BiB is the
140 UK’s longest-running gardening competition.

141 Doing research through BiB provides access to people who have some of the
142 greenest and most colourful front gardens. They may perhaps hold more developed
143 opinions on their (health) impacts. The authors acknowledge that the formal competitive
144 aspect is not a common experience for the vast majority of domestic gardeners.
145 Therefore, the analysis aims to gain an insight into whether the competition alters the
146 effects of greening front gardens beyond providing a stronger motivation to take part.
147 This is the first empirical study surrounding BiB.

148 Three separate focus group sessions were held with a total of 20 BiB
149 participants. The focus group format, as opposed to one-to-one interviews, better
150 uncovers aspects of community cohesion (Hennink & Leavy, 2013). Focus groups
151 afford the analysis of interactions between participants and the degree of agreements
152 and disagreements on given topics (Morgan & Krueger, 1993).

Recruitment

Participants were recruited via the RHS Head of Communities who identified five potential BiB communities based on criteria of 1) front gardens categories, 2) urban locations, 3) accessibility by public transport for the researchers, and 4) a spread of socio-economic demographics.

Four groups in Greater London were sent an information sheet and consent form. Three groups provided a sufficient number of positive responses (5-8 people) and the researcher arranged dates, times, and room bookings.

Running the focus groups

For each BiB group, one focus group was organised in accessible, indoor communal spaces that the participants were likely to be familiar with. Two moderators ran each focus group.

The focus groups were based on a prepared list of questions (see supplementary material), which was loosely followed depending on the direction and flow of discussions. The moderator encouraged participants to respond to each other. Long periods of time could pass without any intervention from the moderator. Participants talked freely, listened actively, and responded to each other throughout. They were also receptive to moderation and prompts. In all focus groups, there was clear rapport and constructive interactions between the participants. Each focus group lasted approximately one hour.

Analysis

Interpretative Phenomenological Analysis of the focus groups was used to extract the subjective and idiosyncratic perceptions and motivations of individual participants (Stewart et al., 2007). This approach was used to understand individual experiences and

meaning-making rather than consensus or points of contention. The strengths of a phenomenological understanding of the data are a focus on an individual's perspective on their lives and the decisions they make. This kind of social inquiry is a reflexive process that affords creative linkages between specific lived experiences (McWilliam, 2010) and responds to the call for leisure research to explore different voices and practices of gardening with multiplicity in mind (Dubnewick et al., 2013).

Following Smith et al. (2009), after transcribing from audio recordings, abbreviated transcripts were coded thematically and textual analysis was complemented by analysis of tone and other observational notes. Iterative thematic notes were taken for each participant. Analytical notes included issue order, the frequency with which a concept was mentioned, how many different people mentioned the concept, emotional intensity, level of detail, time spent on the issue, and individual consistency. If responses provided more detail, held stronger emotion and if other participants voiced agreement, the comment was given more weight. All analysis was conducted in a reiterative process, with thematic mindmaps and linkages between themes created and continually reworked to structure the data and reach a saturation of ideas.

Results

In Summer 2016, three focus groups in three boroughs of Greater London (unnamed to ensure anonymity) were conducted with a total of 20 people (5, 13, and 2 people in each group). The mean age of respondents was 66 years old. Respondents were more likely to be female, retired, educated to high school or undergraduate level, and white British. The demographics of the respondents are fully summarised in table 1. Table 2 highlights the urban typologies associated with the groups.

Table 3 reports the frequency of topics from the focus groups. Thematic discussion and conceptualisation of the theoretical framework of gardeners' relationships with their gardens developed through the iterative process.

Some of the responses evoked gardening spaces other than front gardens such as back gardens or allotments. Outside of discussions about physical activity, the focus on front gardens was maintained in the analysis.

Thematic analysis

The thematic framework derived from the results provides insights on front gardens with respect to the psychology of why people garden in the front garden, the community and social cohesion that may emerge from front gardening activities, and the perceived health benefits of front gardening. The following discussion is structured around four key themes that were found from the focus groups: self-identity, community, fulfilment, and health.

Using quotes from the participants brings their ideas alive alongside the existing literature. Following an exploration of the four themes, a conceptual diagram illustrates how the four themes are inextricably linked.

Self-identity

Cultivating a strong sense of self was a deeply-rooted concept for the majority of gardeners. Their self-identity was linked to both the front garden itself but also the act of gardening there. As Freeman et al. (2012) and Gross (2018) summarised, gardens are expressions of their owners' identities. For the participants, this was manifest in several different ways, which are discussed in turn: a) familial and intergenerational identities, b) self-expression and creativity, c) a sense of being and coping.

Firstly, there was a link to childhood and a measured nostalgia for days gone by. Childhood memories arguably form the oldest and firmest sense of self that cannot be shaken by events later in the life-course (Cherrie et al., 2018; Gross & Lane, 2007). When describing their own identities as gardeners, participants quickly alluded to their earliest memories:

> My first recollection as a small child is digging a hole in the earth in the bottom of the garden and making myself a flower shop

One participant simply explained that his parents and family all loved to garden. Attachments to parents or grandparents sometimes determined what was planted today. For example, even though they don't grow well in her garden, one participant always plants lupins (*Lupinus* spp.) and dahlias (*Dahlias* spp.) to remember her late father's garden. She always has 'the most wonderful feeling' when she sees the dahlias blooming.

These vivid recollections are manifestations of the psychological role that gardens can play and are an example of gardens providing the opportunity for 'being away' - a key component of Attention Restoration Theory (Kaplan & Kaplan, 1989). This theory posits that exposure to natural environments restores the ability to concentrate on a task that requires effort and directed attention.

A sense of family identity was evident as three participants explained that divisions of labour between husband and wife were an immutable part of their household as 'the front garden is a central part of your living'. For example, the husband gardens in the front and the wife in the back, together forming a team.

Secondly, the importance of the garden for participants' sense of identity is in the merit they attributed to themselves and the control they had on their immediate environment. It was their means of self-expression and creativity. Bhatti (2014)

understood that domestic gardens provide the context for a sense of self both as a creative being and as a social actor. One participant took pride in her individual power to shape her garden:

> at least I know that if anything goes wrong, it's my fault and if it's all lovely, it's my fault

Finally, participants' identities could be wholly tied with the garden. One man claimed 'I'm known as Mr Front Garden now' and a lady said that, even without any particular technical knowledge, '[gardening] gave me time to just be me'. More poignantly, another stated: 'I'd never be without a garden, […] it's my support', i.e. a coping mechanism.

Community

Gardening in front gardens created several layers of community amongst gardeners and within the local area. Knowledge sharing between gardeners, but also with non-gardeners builds a community based on joint learning, advice-giving, and having the space to experiment. Synchronously, a sense of community consists of the beautification of the neighbourhood, and the pleasure that greening front gardens brings to other residents and passers-by.

Emotions were shared in response to fellow gardeners' tales: encouragement, consolation, commiseration, and astonishment. As a community, they were battling similar challenges (slugs, cats, etc.) and aiming for similar goals. All of the participants said that they notice and take inspiration from what they see others doing in their front gardens. Gardeners also come together as a community outside of their gardens. A charity plant swap raised over £6,000 by bringing together the enthusiasm of both keen and fledgling gardeners.

Gardening is a broad skill to acquire. Individual learning is supported by intentional experimentation in the garden (Armitage et al., 2008). One participant provided an analogy that several women agreed with:

> I do it like I do my cooking, I make it up as I go along

Both within the community of gardeners and with passers-by, there is a camaraderie formed between the front garden and the pavement. For example, passers-by often compliment or pose a question to the gardener – a form of social engagement they may be reluctant to initiate elsewhere. There were many mentions of this phenomenon:

> They all stop and talk. 'What's the name of that', 'What did you do with your lavender?'

This attitude gives people the confidence to improvise, to learn from mistakes, and to take on new challenges. Knowledge-sharing inherent to the learning processes of gardening include: trial and error, exchanging information from television shows, magazines, catalogues, advice passed down from generation to generation and over the hedge neighbour to neighbour. Indeed, social development occurs when these skills are shared and developed based on deliberation and discussion within a group (Chan et al., 2015; Plummer & FitzGibbon, 2007).

Gardening in front gardens was also motivated by a strong sense of bettering the local community through beautifying the area and creating pleasure for others. One respondent involved in the judging process explained that he favours 'gardens with kerb appeal and lots of colour'. The concept of kerb appeal refers to the attractiveness of house exteriors being an aesthetic experience to be viewed from the street. There is an added sense of responsibility to make an effort in the front garden because of its public nature:

> We concentrate on front gardens and residential frontages because it isn't just for our own pleasure, it's also for the community

One participant stressed the importance of his own privacy from the road. When indoors, he appreciates the 'defensible space' created by the front garden plants by blocking the vista from the road to his bay window. He can see the plants from inside, and more importantly, passers-by cannot see into his living room. Instead, they enjoy the 'intervening' floral display. Alexander (2002) dismissed front gardens as merely distancing the road and pavement from the house with what he assumes are blocking walls, fences, and hedges. This participant adds complexity to Alexander's view. The front garden does buffer the home from the street but the barrier is visually permeable and it does not preclude the owner's intimate relationship with the front garden or positive impacts for passers-by.

Moreover, the pleasure of front gardens is accessible to all - 'you don't have to know which flower it is to think it's a pretty flower'. For everybody, a greener area is nicer to walk around. One participant hypothesised that

> If you suddenly took away all the plants tomorrow, it would suddenly look pretty grim and grey. This area is very hard and intimidating. The plants make it look softer

This idea of softening the hard edges of urban landscapes by adding window boxes and container plantings was proposed by many participants, noting that even in small areas where there is only space for bins,

> People are making an effort to detract from the wheelie bins in the front yard. You walk past and you see the wheelie bins and the flowers - but the flowers detract from the wheelie bins

Humans prefer curved vegetation over angular visual stimuli in an urban environment

(Hareli et al., 2016). Softer shapes are associated with peacefulness while angular shapes have been related to anger, aggression, and antagonism. This attractiveness associated with front gardens was repeatedly said to be making the roads more beautiful and raising the status of the borough:

> It attracts people and it brings in tourism [...] it's bringing in business as well, and so your garden has a real knock-on effect

Green and colourful front gardens become a 'positive sell' for the area. Residents in one focus group had noticed real estate agents deliberately passing by greener front gardens when showing prospective clients a property. Crompton and Nicholls (2019) estimate premiums of 17-24% on property values for views of residential gardens. Local businesses in one of the areas perceived an economic benefit too. In addition to taxes, they are willing to pay for the greening of private buildings' front facades. Local councils are said to also be encouraged to invest in the area as local residents are more involved in upkeep.

The importance of perception in residents' evaluation of neighbourhoods should not be underestimated. According to the US Census (2004), neighbourhood appearance is an important reason homeowners choose where to live. It affects individual preferences and has an influence on actions residents are likely to take in their own front gardens (Nassauer et al., 2009).

A consequence of a greener urban environment is the respect it instils in the local area. Applicable to both residents and visitors, 'the more you do, the more people respect it so it doesn't get trashed'. This was echoed by another participant:

> 'greening an environment is just amazing, especially when it's shared, everybody cares together about their street and their area'.

Cooper (2006) also found that a cultivation of care arose when a garden was visibly valorised and shared with the local community.

Perceived neighbourhood upkeep by others has led to actual upkeep, lower fears of crime, and improved neighbourhood satisfaction (Hur & Nasar, 2014). Participants in one area noticed that while they used to encounter anti-social behaviour and dog-fouling, the situation improved once those involved understood the area was well cared for. Nonetheless, there are still cases of unhelpful behaviour such as smokers leaving cigarette butts in compost and littering in green spaces.

Chatting in a friendly and informal manner to other people was a major topic of conversation in all three groups. Open-ended, non-transactional verbal communication to get to know others in their vicinity was a strong reason for gardening in the front garden. Participants love chatting to neighbours and people they have never met before, noting that this is especially relevant for people living in isolated situations. There was a strong recognition that this generated a lot of pleasure for the other party in the conversation as well as for themselves. Greener front gardens led to more socialisation in the community, as they become an icebreaker for people who might not otherwise talk to each other. For example, areas frequented by students, local residents, and workers on lunch breaks mean that daily patterns of use are established and spontaneous chats make the area friendlier.

As further evidence that people other than themselves enjoy vegetated front gardens, participants said that they often witnessed a knock-on effect in their local area. Following their efforts, all participants gradually noticed more window troughs, hanging baskets, balconies fitted with flower pots at the homes of neighbours who had previously never shown any interest. One BiB campaign leader acknowledged that although it was often harder to motivate tenants than homeowners, it was feasible for

tenants to take pride in their front gardens as neighbours generally wanted to 'keep up with once another':

> If people see nice gardens in their field of visions, they'll try to copy

This speaks to the existence of a spatial contagion effect of garden styles and practices between adjacent front gardens and the potential power of garden role-models at a street or neighbourhood scale (Kirkpatrick et al., 2009; Zmyslony & Gagnon, 1998).

Fulfilment

Fulfilment - a deep feeling of pleasure when achieving a goal, desire, or meaning in life – is treated as a standalone theme that was independent of a growing community, self-identity or good health and purely stemming from the front garden itself. In horticultural therapy, it is widely known that a sense of belonging is a key factor in enabling social inclusion through meaningful occupations fostering affirmation, feedback, a sense of achievement, and the possibility for self-determination (Diamant & Waterhouse, 2010).

Feelings of fulfilment were expressed in several ways such as: 'it's good to see things grow'. Given that many gardeners are often trialling plants and methods for the first time, learning as they go along, additional satisfaction comes from this process and potential successes. The front garden was described as 'an ongoing project' accompanied by 'contentment that varies through the year' and that the whole endeavour is 'immensely satisfying'. Sometimes the enjoyment was associated with specific activities, such as 'weeding, which I find to be a very very fulfilling thing to do' or linked to a particular plant or sensory stimulus: 'when the lavender was out, it's just brilliant to walk past it, the scent!'. Participants see gardening as a worthwhile activity in itself that culminated in 'always feel[ing] much better afterwards'.

> It makes you feel happy, blissful. It detracts from the urban landscape, […] all the concrete. That helps my wellbeing

In addition to the innate satisfaction from gardening, participants also experienced rewarding feelings from contributing to their local community. When winning a prize or receiving a heartfelt comment about their garden, the fulfilment felt when congratulated by fellow gardeners was highly valued. Moreover, knowing that they were contributing to others' enjoyment was relished. One introverted participant recognised that the front garden is his only outlet of

> Exhibitionism, it's important to be seen and I can justify it because I know it's lovely and it inspires people. I get a lot of positive reinforcement from it

All the participants shared uplifting anecdotes of people coming by: 'it is satisfying for me because people do come up and chat'. One participant living near a school sees the joy children are getting from the flowers in her front garden. Another particularly evocative story that enchanted the rest of the participants involved

> Two Japanese young ladies [...] knocked on the door and said 'Excuse me, do you mind if we take a photo of your front garden because we think it's so beautiful'. I said 'My goodness please do!' and it made my day

Participants had many such stories of the satisfaction they felt when people expressed happiness at seeing beautiful front gardens.

Health

A significant part of the wellbeing benefits of front gardens and gardening was via a fulfilled self-identity and a sense of belonging in a community (Pitas et al., 2020). In addition, participants also specified therapeutic benefits, with some experiencing and overcoming depression and other physical illnesses.

Most participants cited moderate physical exercise as the first and most obvious health benefit of front gardening. Regular front gardening results in many of the health benefits associated with a physically active life, though muscle strains and overused joints may limit the benefits (Franke et al., 2013). One participant told the story of an overweight BiB gardener (not present) who achieved a healthy weight after being much more active through gardening. Any type of exercise was beneficial and even ten minutes outdoors was felt to be therapeutic. Indeed, a study on gardeners found that gardening preserves physical function in older adults (Park & Shoemaker, 2009).

Gardeners have a high level of control over what they can and cannot do. This contributes to injury prevention. One participant, who is finding herself gradually restricted in her gardening activities as she ages, beamed that

> It is wonderful for you to get out in the fresh air and to get some exercise, do a bit of bending and stretching and maybe settle down on the patio with your cocktail. Life could not be more perfect.

Everybody agreed that the uniqueness of gardening as a physical activity was that it is adaptable to physical (dis)ability, injury, and fitness levels. Even when there were struggles or health obstacles that limited gardening activities, participants are advising each other: ‘don’t overdo it, do what you can do’. Similarly, Scott et al. (2014) found that the majority of respondents over the age of 60 reported that they had made physical adjustments to their gardening activities to cope with their declining abilities.

Other aspects of physical health included easier access to more fruit and vegetables. One participant proposed that air quality in the garden improved with more dense planting. Another participant noticed healthier sleep patterns after gardening.

Regarding mental health, participants were mostly coming back to the aforementioned themes of fulfilment, self-confidence, and a sense of belonging in their

community. More specifically about mental ill health, one participant explained that she continues to garden despite several back-related problems and depression. Although she finds the exertion exhausting, she feels better when she is active and takes managed risks. A different participant made a poignant statement that led to a contemplative silence in the room and murmurs of agreement:

> If you can learn to grow something which is beautiful in front of you I think you can grow a garden in your heart. And I think people who can grow a garden in their heart, are the people who can overcome all sorts of terrible personal pain, grief, all sorts of things.

The line between the physical and mental impacts of gardens is not clearly demarcated (Gendle, 2016) nor did it seem to be a relevant distinction for the participants. Taken together, the presence of green front gardens and gardening in the front gardens does have a role to play in the health of BiB members.

Competition

The competitive aspect of BiB plays a role in participants' involvement and continued enthusiasm, but it is not an all-consuming factor in their interest. As one participant summarised,

> I've always said I'm not competitive and I honestly don't believe I am but it sort of pushes you to do a bit more and a bit more and as best you can.

Having said this, one participant who took the competition seriously strives to win and is disappointed when he does not. He had even cancelled a holiday to ensure his front garden was ready for judging. He takes this attitude because he enjoys it and winning has become a part of his identity just as much as his garden has. Barring this exception, all other focus group participants insisted that the main consequence of the competitive

element was increased encouragement between neighbours to beautify and green house frontages. These impacts strengthen the three themes of self-identity, fulfilment, and community. Therefore, the competitive aspect of participants' relationship with their front gardens was more important than hypothesised.

Theoretical framework

In qualitative work, the focus is not on providing causal explanations but on deepening understanding of phenomena under study (Patton, 2002). The conceptual diagram in figure 1 brings together the topics and themes from the focus groups. This becomes the theoretical framework to answer the key research questions, as linkages between themes are more readily drawn diagramatically than in linear text. The diagram is best read from the top down, following the arrows for sequence. The four themes of self-identity, community, fulfilment, and health in the centre row are developed into their constituent parts. The theoretical framework follows criteria outlined by McMillan & Schumacher (2001) for theories useful to the further development of knowledge: it provides a simple narrative of the observed phenomenon, is consistent with observations, provides means for verification and revision, and stimulates further research. This could provide scientific underpinnings for social and health impact assessments in planning decisions (Bond et al., 2013).

Limitations

This study faced some key limitations. Firstly, nearly all participants identified as white British. This is not representative of the UK population in general nor of UK leisure gardeners. While this fact guided our choice of phenomenological analysis to understand the individual lived experiences of our respondents, future research would benefit from sampling a more diverse group (in terms of age and ethnicity, for

example). This would help reflect the balance between alternative and dominant narratives of gardening as a leisure activity (Dubnewick et al., 2013). It is also acknowledged that BiB gardeners, who are by definition part of a gardening community, are likely to be more convinced and vocal about the benefits of gardening. These community groups may be presenting an idealised picture of an inclusive 'community' (Neo & Chua, 2017; Yuen & Johnson, 2017) and it is important to be critical about how social exclusion or processes of marginalisation may be operating within such leisure groups (Christensen et al., 2019).

Nonetheless, the framework presented here reflects data from a largely non-gardening population who were not organised as a community had improved health outcomes following the addition of plants in their front gardens (Chalmin-Pui et al., 2021). There are also alternative, less formalised actors of the urban greening agenda including guerrilla gardeners (Certomà & Tornaghi, 2015) and permaculture approaches (Kirkpatrick & Davison, 2018) for example. BiB gardeners might represent a sub-section of UK gardeners but do not fully represent all the socio-cultural factors around front gardens. If an individual owns a front garden, there are no imposed practices or expectations of social capital from the 'community' (Blackshaw & Long, 2005) as there might be in community gardens or allotments (Beilin & Hunter, 2011; Ghose & Pettygrove, 2014; Tan & Neo, 2009). While gardening can be a form of gentrification (Cole et al., 2017), it can also be an expression of independence and radical thought (Longhurst, 2006). Gardening in front gardens can be the needed bridge to "communicate across those cultural boundaries that divide communities in a way that is at the same time respectful of the differences that separate them" (Blackshaw & Long, 2005, page 255).

Conclusion

This study identified the benefits of front gardens and gardening in front gardens to individual health and wellbeing alongside other social health gains to the wider community. Using focus groups with members of three BiB communities in Greater London, this study has identified new relationships between enthusiastic gardeners and their front gardens. Previous research work of this nature was limited to back gardens or community gardens only. Four key themes emerged: self-identity, community, fulfilment and health. Participants perceive that front gardens and/or gardening therein: are a strong part of their personal identity and self-expression; provide the gardener with individual benefits, including feelings of satisfaction, fulfilment, and other mental health benefits; contribute to the local area and provide pleasure to neighbours and passers-by. Gardening in front gardens was suggested to be a means of building a community in a neighbourhood or street, and social cohesion has emerged in this way. Mechanisms through which this occurred includes informal dialogue, knowledge-sharing, and making the area more attractive for residents, passers-by, and businesses. The health benefits of front gardens come from gardening as a physical activity as well as from the fulfilment and positive affect derived from the presence of these highly visible green spaces. These socio-cultural mechanisms through which front gardens lead to wellbeing outcomes have been brought together and can be used in further research on the impact of front gardens and community greening initiatives in private spaces.

Implications of this study can also contribute to effective communication of the impacts of front gardens with the general public, local authorities, planners, and developers. The impact that private green spaces can have on communities is often ignored by land-use planners and policy-makers (Garcia-Garcia et al., 2020; Kotsila et al., 2020; Notteboom, 2018) but both public and private green spaces do play a critical

role in promoting wellbeing. Front gardens can be understood as unique buffer zones that connect the home to the outside world while simultaneously separating the private from the public realms. The ideas of self-expression, belonging in a community, fulfilment, and health can quickly convey expected impacts of greening front gardens that are currently paved over. Encouraging people to explore and use their front gardens, to take pride in them and engage with the natural world, is likely to lead to a range of social and health benefits (as well as environmental ones).

Finally, we turn to broader themes of urban green infrastructure. Although the more dominant rationales for urban greening are linked to climate change and environmental ecosystem services (see Galluzzi et al., 2010; Tratalos et al., 2007), only two participants mentioned that front gardens might create more sustainable drainage, without any details or emotion. When not in an explicitly ecological context, narratives based on flooding or permeability are not a common motivation for gardening for this demographic. This is despite the fact that Greater London is the largest urban built-up area in the UK and has the highest concentration of paved-over front gardens (Greater London Authority, 2005; Royal Horticultural Society, 2015; Smith et al., 2011).

On the other hand, people can be reached in emotional terms on issues of the self and of the community. This observation thus provides a rationale for shifting the focus from flooding (Kelly, 2018; Murata & Kawai, 2018) to community and wellbeing when trying to encourage people to garden or when promoting green spaces to developers, planners and policy-makers. This provides a mechanism through which to battle the 'tyranny of small [poor] gardening decisions' (Dewaelheyns et al., 2016) where actions taken by individual residents, for example using excess fertilisers and pesticides or paving over their front gardens, lead to a collective detrimental effect on ecosystem services and people's wellbeing.

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Supplementary material: Focus group questions

- Did you garden before participating in the BiB campaign and what convinced you to get involved in the campaign?
- What gardening support did you receive and how crucial was this?
- Talking specifically about front gardens, what were the positive and negative aspects of BiB engagement in your community? Other impacts?
- Has the campaign had any therapeutic benefits for you or your community?
- How might it have been improved for better engagement?
- Is there anything else that you would have changed about your gardening experience?

830 Table 1: Demographics of the 20 research participants

Gender	13 women
	7 men
Age	27-85 years old (mean age 66)
Occupation	12 retirees
	3 self-employed
	5 employed full-time
Education	3 GCSE or equivalent
	6 A-Levels or equivalent
	7 Bachelors/Undergraduate University degree or equivalent
	1 Masters/Postgraduate University degree or equivalent
	1 Doctorate University degree or equivalent
	2 Other recognised academic or vocational qualification
Ethnicity	19 White British
	1 Black British
BiB Involvement	26 years to 1 year. Mean length of involvement: 8.5 years
Gardening spaces	17 have a front garden
	17 have a back garden
	5 have a shared garden
	3 have an allotment

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833 Table 2: Description of areas of the three focus groups

Group	Greater London	Urban typology	Level of deprivation IMD * (2015)
A	Outer London, South West	Suburban, residential	30% least deprived
B	Outer London, North East	Urban, residential, small businesses	30% most deprived
C	Inner London, Central	Dense urban, mix of business workers, local residents, university students, homeless people	40% most deprived

834 * The English Index of Multiple Deprivation (IMD) measure is based on LSOA (Lower
835 Super Output Areas i.e. neighbourhoods), which are ranked out of 32,844 LSOAs in
836 England; where 1 is the most deprived LSOA. Deciles are calculated from rankings.
837 Data from the Ministry of Housing, Communities & Local Government (2015).
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839

840 Table 3. Frequency counts of topics emerging from the focus groups

Topic	**Instances**
Knowledge-sharing	17
Confidence	13
Exercise	12
Pleasure for others	10
Breaks ice between strangers, getting to know others	10
Attracts people, tourism, business to area	8
Knock-on effects	8
Satisfaction	7
Happiness	7
Chatting to others	7
Sensory enjoyment	6
Passers-by commenting	6
Respect shown by others	5
Fresh air	5
Help from council to green up area	4
Charity days and volunteering	4
Rewarding	3
Time to be me	3
Eating fresh fruit/vegetables	3
Life support	3
Relaxation	3
Bees	2
Sustainable drainage	2
Privacy	1

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843 Figure 1. Conceptual diagram

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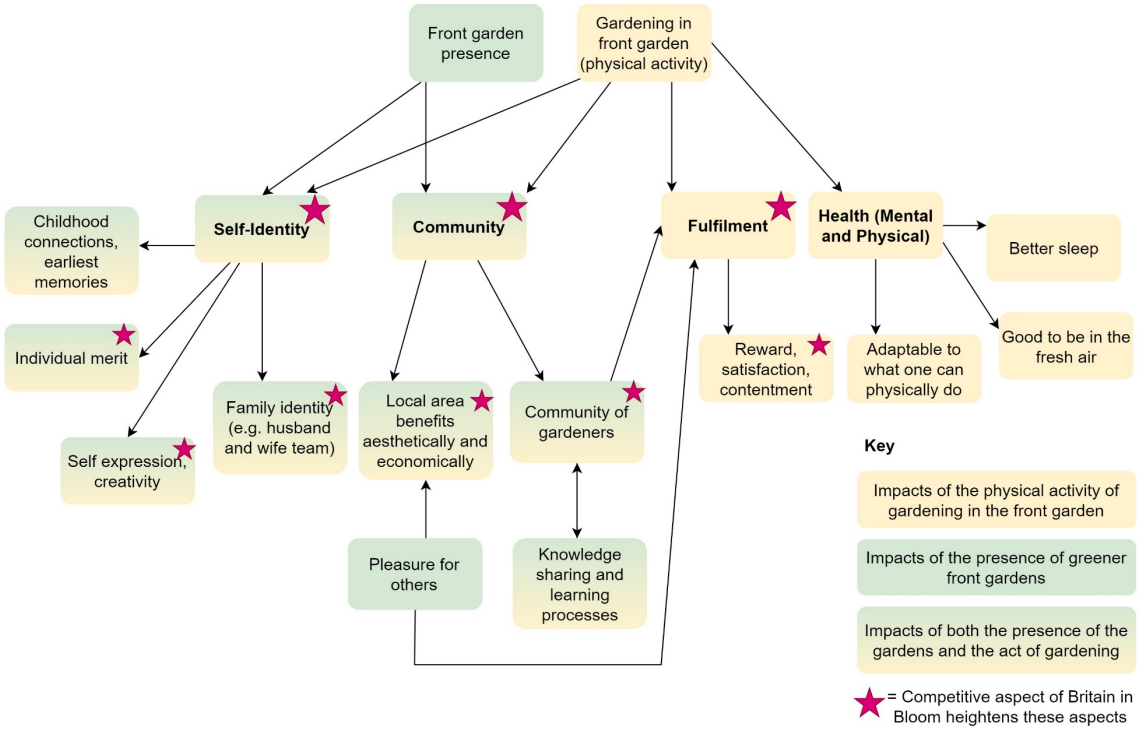

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