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1 **Gardens with kerb appeal - A framework to understand the** 2 **relationship between Britain in Bloom gardeners and their front** 3 **gardens**

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

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

20 **Introduction**

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

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

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

38 The UK has a long history of private gardening (Amherst, 2013), including the
39 ‘moral’ cultivation of plants and development of specialist growing societies, which
40 acted as a salutogenic response to hard working life in Victorian Britain (Hickman,
41 2013; Lawrence, 2020). The extent of private gardens rose with the advent of suburbs
42 (1830 onwards) and the greater provision of space around these new residences (Harris
43 & Larkham, 1999). The increasing popularity of gardening meant that it became an
44 iconic and ordinary part of the British landscape (Bhatti et al., 2014; Ginn, 2012).

45 Gardens are the most readily accessible green spaces for residents, with an
46 estimated 88% of households in Great Britain having access to a private or shared
47 garden (Office for National Statistics, 2020). Although small in size, the 24 million
48 residential gardens in Great Britain make up a combined area equivalent to
49 approximately 30% of the total urban built-up area (Office for National Statistics,
50 2018). In England, an estimated 49.2% of the adult (16+) population partakes in
51 gardening (Department for Culture Media and Sport, 2017).

52 ***Motivations to Garden***

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

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

60 Beyond these attempts at formal categorisation, literature focussing on
61 gardeners' relationships with their gardens has been mostly ethnographic (Taylor,
62 2008). Analysing autobiographical narratives, Bhatti and colleagues (Bhatti, 2014;
63 Bhatti et al., 2014; Bhatti & Church, 2004) demonstrate that the domestic garden is an
64 important part of everyday life for ordinary people. For many, gardening is an enduring
65 engagement and serious leisure pursuit (Cheng et al., 2017). Ashton-Shaeffer &
66 Constant (2006) called for more research on the nuanced and emotive roles that gardens
67 and gardening play in contributing to life satisfaction.

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

73 ***Community engagement through gardening***

74 Hassen & Kaufman (2016) define community engagement as 'the ability of a group or
75 network of people, bound either by interest or by geography, to interact with one
76 another for support, to promote inclusivity and to organise social activities' (page 120).
77 The literature on the community-building effects of gardening is extensive, though
78 focused on shared gardens (Jensen & Sørensen, 2020; Okvat & Zautra, 2011; Shinew et
79 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).

153 ***Recruitment***

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

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

161 ***Running the focus groups***

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

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

173 ***Analysis***

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

177 meaning-making rather than consensus or points of contention. The strengths of a
178 phenomenological understanding of the data are a focus on an individual's perspective
179 on their lives and the decisions they make. This kind of social inquiry is a reflexive
180 process that affords creative linkages between specific lived experiences (McWilliam,
181 2010) and responds to the call for leisure research to explore different voices and
182 practices of gardening with multiplicity in mind (Dubnewick et al., 2013).

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

193 **Results**

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

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

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

206 **Thematic analysis**

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

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

216 ***Self-identity***

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

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

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

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

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

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

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

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

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

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

258 ***Community***

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

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

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

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

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

280 They all stop and talk. ‘What’s the name of that’, ‘What did you do with your
281 lavender?’

282 This attitude gives people the confidence to improvise, to learn from mistakes, and to
283 take on new challenges. Knowledge-sharing inherent to the learning processes of
284 gardening include: trial and error, exchanging information from television shows,
285 magazines, catalogues, advice passed down from generation to generation and over the
286 hedge neighbour to neighbour. Indeed, social development occurs when these skills are
287 shared and developed based on deliberation and discussion within a group (Chan et al.,
288 2015; Plummer & FitzGibbon, 2007).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

370 tenants to take pride in their front gardens as neighbours generally wanted to ‘keep up
371 with once another’:

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

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

376 ***Fulfilment***

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

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

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

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

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

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

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

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

412 ***Health***

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

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

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

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

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

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

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

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

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

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

455 *Competition*

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

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

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

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

470 *Theoretical framework*

471 In qualitative work, the focus is not on providing causal explanations but on deepening
472 understanding of phenomena under study (Patton, 2002). The conceptual diagram in
473 figure 1 brings together the topics and themes from the focus groups. This becomes the
474 theoretical framework to answer the key research questions, as linkages between themes
475 are more readily drawn diagrammatically than in linear text. The diagram is best read
476 from the top down, following the arrows for sequence. The four themes of self-identity,
477 community, fulfilment, and health in the centre row are developed into their constituent
478 parts. The theoretical framework follows criteria outlined by McMillan & Schumacher
479 (2001) for theories useful to the further development of knowledge: it provides a simple
480 narrative of the observed phenomenon, is consistent with observations, provides means
481 for verification and revision, and stimulates further research. This could provide
482 scientific underpinnings for social and health impact assessments in planning decisions
483 (Bond et al., 2013).

484 **Limitations**

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

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

498 Nonetheless, the framework presented here reflects data from a largely non-
499 gardening population who were not organised as a community had improved health
500 outcomes following the addition of plants in their front gardens (Chalmin-Pui et al.,
501 2021). There are also alternative, less formalised actors of the urban greening agenda
502 including guerrilla gardeners (Certomà & Tornaghi, 2015) and permaculture approaches
503 (Kirkpatrick & Davison, 2018) for example. BiB gardeners might represent a sub-
504 section of UK gardeners but do not fully represent all the socio-cultural factors around
505 front gardens. If an individual owns a front garden, there are no imposed practices or
506 expectations of social capital from the ‘community’ (Blackshaw & Long, 2005) as there
507 might be in community gardens or allotments (Beilin & Hunter, 2011; Ghose &
508 Pettygrove, 2014; Tan & Neo, 2009). While gardening can be a form of gentrification
509 (Cole et al., 2017), it can also be an expression of independence and radical thought
510 (Longhurst, 2006). Gardening in front gardens can be the needed bridge to
511 “communicate across those cultural boundaries that divide communities in a way that is
512 at the same time respectful of the differences that separate them” (Blackshaw & Long,
513 2005, page 255).

514 **Conclusion**

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

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

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

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

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

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816

817

818 **Supplementary material: Focus group questions**

819 • Did you garden before participating in the BiB campaign and what convinced
820 you to get involved in the campaign?

821 • What gardening support did you receive and how crucial was this?

822 • Talking specifically about front gardens, what were the positive and negative
823 aspects of BiB engagement in your community? Other impacts?

824 • Has the campaign had any therapeutic benefits for you or your community?

825 • How might it have been improved for better engagement?

826 • Is there anything else that you would have changed about your gardening
827 experience?

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

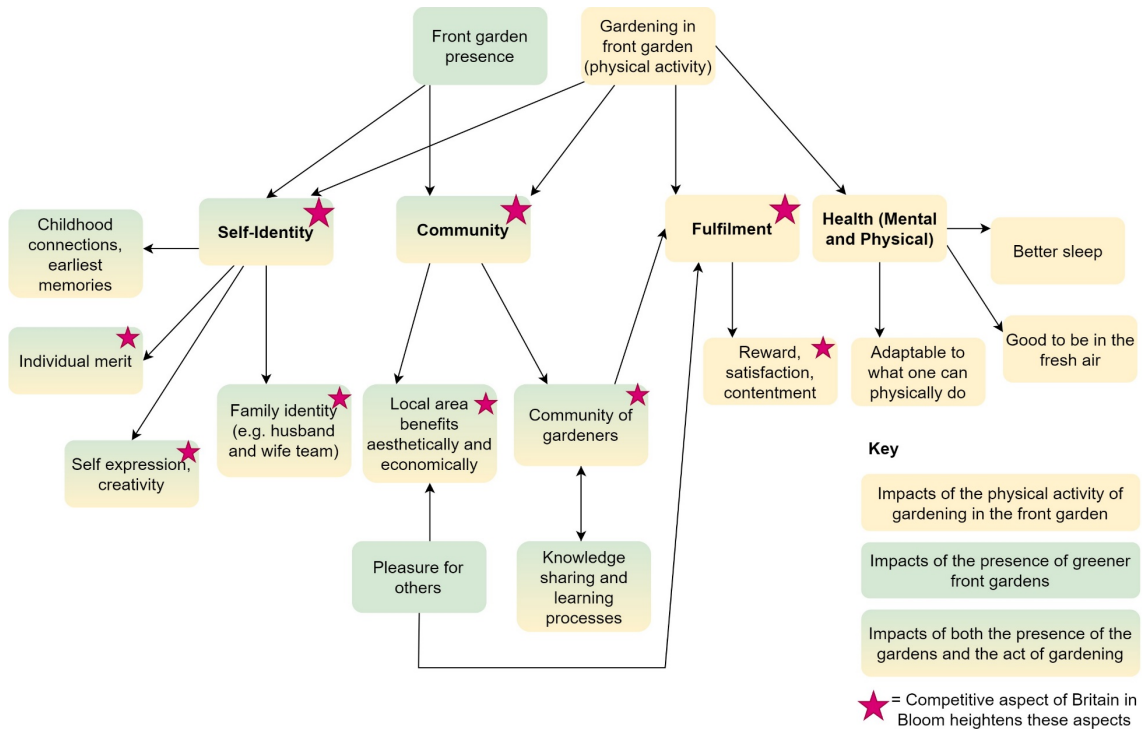
Topic	Instances
Knowledge-sharing	17
Confidence	13
Exercise	12
Pleasure for others	10
Breaks ice between strangers, getting to know others	10
Attracts people, tourism, business to area	8
Knock-on effects	8
Satisfaction	7
Happiness	7
Chatting to others	7
Sensory enjoyment	6
Passers-by commenting	6
Respect 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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