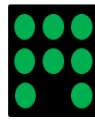




University of Essex



Loneliness &
Social Isolation
in Mental Health
Research Network

TrustLinks
Growing Communities • Transforming Lives

GROWING TOGETHER

EVALUATION 2022

Dr Carly Wood, Dr Jo Barton & Dr Claire Wicks

Correspondence email: cjwood@essex.ac.uk

School of Sport, Rehabilitation and Exercise Sciences,
University of Essex,
Wivenhoe Park, Colchester, Essex. CO4 3SQ
United Kingdom



Executive summary

Background

Growing Together comprises therapeutic gardening sites in Essex, which members attend to improve their mental health. Growing Together is person-centred and supports the whole person rather than just their specific mental health need or diagnosis.

Methodology

The evaluation measured members' wellbeing (via the Short Warwick Edinburgh Mental Wellbeing Scale), social and emotional loneliness (via the De Jong Gierveld Loneliness scale) and life satisfaction (via a single item measure). Wellbeing data collected by the University of Essex was combined with data routinely collected by Trust Links as members join the service and compared over five timepoints. Loneliness and life satisfaction data was collected at three timepoints over the nine-month duration of the University of Essex evaluation. Wellbeing data are referred to as baseline and Follow-up 1-4, to distinguish from the life satisfaction and loneliness data, which are referred to as timepoints 1-3. Four focus groups were undertaken in September 2021 to gain insight into how attending Growing Together impacts members wellbeing.

Findings

The results are based on data from 53 members aged 22-69years. On joining Growing Together, male and female members' average wellbeing scores were significantly lower (Figure 1) than the UK national average of 23.67 and 23.59 respectively. Male scores were not significantly lower than the UK average at any follow-up point. Female scores remained below the UK average follow-up one

and two but were not significantly lower than the UK average at follow up three and four.

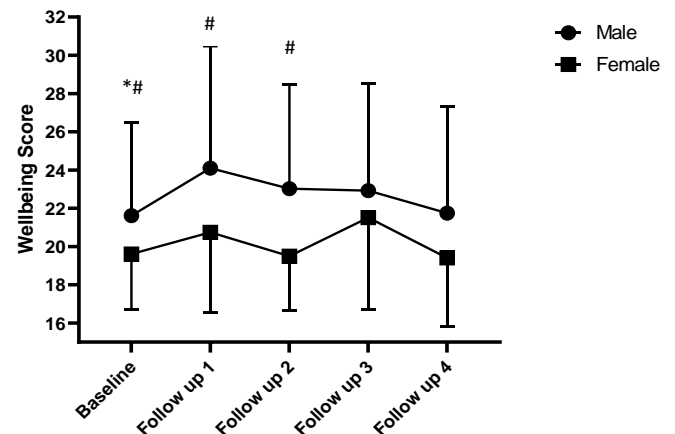


Figure 1: Changes in wellbeing over time

(* indicates significantly lower score than male UK population average; # indicates significantly lower score than female UK population average)

Scores for social loneliness were highest at T2 and lowest at T3. Females were classified as 'socially lonely' at all timepoints, whilst males were 'not socially lonely' at any timepoint. Life satisfaction increased by 0.53 points between timepoint 1 and 2, and 0.18 points between timepoint 1 and 3. Members described how the informal garden environment was a positive therapeutic space, with social interaction and gardening tasks benefitting wellbeing.

Conclusion

Attendance at Growing Together resulted in improvements in members' wellbeing, social loneliness and life satisfaction. The improvement in life satisfaction demonstrates the potential for significant public cost saving through investment in projects such as Growing Together.

Correspondence: Dr Carly Wood, Lecturer in Sport and Exercise Science, School of Sport, Rehabilitation and Exercise Science, University of Essex. Email: cjwood@essex.ac.uk

1. Introduction

1.1 Wellbeing

In keeping with Trust Links' 2020 evaluation of Growing Together, the following definition of wellbeing is used for this evaluation:

'Wellbeing, put simply, is about 'how we are doing' as individuals, communities and as a nation. Personal wellbeing is a particularly important dimension, which we define as how satisfied we are with our lives, our sense that what we do in life is worthwhile, our day-to-day emotional experiences (happiness and anxiety) and our wider mental wellbeing.' (ONS Reflections on Measuring National Well-being July 2013).

Wellbeing is important to measure as it is related to many health outcomes, life expectancy (Diener and Chan, 2011), recovery from illness (Lamers *et al.*, 2012) and positive healthy behaviours (Jané-Llopis and Matytsina, 2006). It is also associated with a range of broader outcomes such as employment and social relationships. Wellbeing can directly or indirectly impact on many aspects of our lives and as such enhancing or protecting wellbeing is key to living a full, healthy, and happy life.

1.2 Loneliness

The absence of fulfilling social relationships and contact can result in loneliness, which is defined as *'the unpleasant experience that occurs when a person's network of social relations is deficient in some important way'* (Perlman and Peplau, 1981). Loneliness can be considered in two separate components (Weiss, 1975). Emotional loneliness relates to the absence of an intimate relationship, for example with a partner; social loneliness relates to the absence of positive engagement with wider social networks. Loneliness is associated with increased mortality, poor sleep quality and increased risk of mental illness (Hawkley & Cacioppo, 2007; Steptoe *et al.*, 2013; Mushtaq *et al.*, 2014). Furthermore, individuals with mental illness are more likely to experience loneliness (Meltzer *et al.*, 2013), with increased loneliness also being associated with lower life satisfaction (Clair *et al.*, 2021).

1.3 Life satisfaction

Life satisfaction is defined by the American Psychological Association (2022) as *"The extent to which a person finds life rich, meaningful, full, or of high quality."* Life satisfaction is one component of subjective wellbeing (i.e. how people experience the quality of their lives) and is influenced by many demographic and psycho-social factors including age, gender, activity level and social relationships (Fernández-Ballesteros, Zamarrón and Ruiz, 2001). Life satisfaction is related to psychological distress (Antaramian, 2014), physical health (Siahpush, Spittal and Singh, 2008) and risk of mortality (Xu and Roberts, 2010). As such, increased life satisfaction can improve health and wellbeing.

1.4 Growing Together

'Growing Together' is one of the services offered by Trust Links, an independent charity based in Essex. Growing Together is a grassroots therapeutic community garden project which comprises

five sites at Westcliff, Rochford, Shoeburyness, Thundersley and Cressing Temple. The project was first established in 2000 at Westcliff in Southend-on-Sea and has been replicated at four additional sites since 2012, with the most recent site at Cressing Temple opening in January 2022, following the data collected for this evaluation. The programme is offered to adults (aged 18 years+) who have been referred to the therapeutic gardens to support their mental health problem or diagnosis, such as anxiety or depression, as well as their socialisation and onward progression, for example to voluntary or paid employment. Referral into the service is via a number of routes, including GPs, community psychiatric nurses, social prescription link workers, Jobcentres and self-referral.

Growing Together beneficiaries are called 'members' and typically attend the gardens once or twice a week, for a full day. However, during the coronavirus restrictions, when some of this research was undertaken, these hours were reduced. The gardens were closed from March-June 2020, when they reopened for groups of six for 1.5hour sessions. In April 2021, sessions increased to two-hours for groups of 10 members and in July 2021 three-hour sessions took place with groups of 10 members. From October 2021 there were no restrictions in place; members could attend for full days without limitations on numbers, as they did prior to the pandemic. When Growing Together is operating normally, there is no set duration of attendance and members can continue to access Growing Together as long as is needed. When on site, members are supported by horticultural project workers who lead on gardening activities, mental health staff who help to support the mental health and wellbeing of members; and volunteers, who are members of the public recruited to support members, engage with the project, and help to maintain the gardens.

Whilst therapeutic horticulture is the focus of Growing Together there are a number of other structured activities on offer. These include a music group, cookery classes, fitness classes, and vocational qualifications. Growing Together is a person-centred and holistic service, helping members to achieve independence. The focus is on supporting the whole person rather than just their specific mental health need or diagnosis, and working with the skills, strengths, and interests of the member.

2. Evaluation methodology

2.1 Evaluation overview

The evaluation combines wellbeing data collected independently by Trust Links and by the University of Essex, as part of a project funded by the UK Research and Innovation Loneliness and Social Isolation in Mental Health Research Network. Wellbeing data was combined to provide an insight into changes in wellbeing over an extended period of attendance at Growing Together, including across the coronavirus pandemic. Trust Links' data represents participants wellbeing scores upon entry to the Growing Together programme (a 'true' baseline) and some additional follow up measures. University of Essex data was collected once members had been attending Growing Together for varying durations, with some participants having just joined and others having been attending for more than ten years. Trust Links wellbeing data was collected between July 2016 and August 2020. University of Essex wellbeing data was collected at three timepoints between May 2021 and January

2022. Data were collected from members attending four Growing Together sites open during this time.

In addition to wellbeing, loneliness and life satisfaction data were collected as part of the University of Essex study at three time points between May 2021 and January 2022. Loneliness and life satisfaction data were not collected by Trust Links when participants joined Growing Together, and this data does not therefore reflect 'baseline' scores when members joined the project.

Quotations from members who took part in focus groups to discuss the impact of attending Growing Together on health and wellbeing and how this was influenced throughout the pandemic are also included, to provide insight into members' experience of how Growing Together benefits their health and the aspects of the service that they value.

All survey data was collected by Trust Links staff who work on the Growing Together project. For the University of Essex study, Trust Links staff were provided with training on the aims of the research and the recruitment of members to the study, including the importance of sharing the participant information sheet and gaining informed consent prior to participation. All garden members provided informed consent prior to participation in the University of Essex study, which was granted ethical approval by the School of Sport, Rehabilitation and Exercise Sciences (Ref: ETH2021-0911). Participants also consented to the wellbeing data collected independently by Trust Links being shared with the University of Essex for the purposes of research.

2.2 Survey outcome measures

Short Warwick Edinburgh Mental Wellbeing Scale

Members' wellbeing was assessed via the short form Warwick Edinburgh Mental Wellbeing Scale (SWEMWBS; Tennant et al. (2007)). The SWEMWBS consists of seven positively worded items. Participants respond on a 5-point scale ranging from "none of the time" (1) to "all of the time" (5). Scores for individual items are summed to give a total score ranging from 7-35; with higher scores indicating higher wellbeing. Wellbeing scores were compared to the UK (pre-covid) population normative score of 23.67 and 23.59 for males and females respectively (Fat *et al.*, 2017).

Loneliness

Members emotional and social loneliness was assessed via the six-item De Jong Gierveld loneliness scale, with three items for both the emotional and social loneliness subscales (Gierveld & van Tilburg, 2006). Items on each subscale are summed to give a range from 0-3, with higher scores representing greater loneliness. A score of between one and three on both subscales is considered to represent loneliness, whilst a score below one indicates that the member is 'not (emotionally/socially) lonely' (Van Tilburg & Gierveld, 1999).

Life satisfaction

Life satisfaction was measured using a single item that asked members to rate how satisfied they felt with their life on a scale of 0 to 10, with 0 = 'not at all satisfied' and 10 = 'completely satisfied'. The life satisfaction question was adopted by the Office for National Statistics in 2013 and has been widely benchmarked in national panel surveys (Helliwell et al., 2019; 2020) and national wellbeing and happiness comparisons (Clark and Georgellis, 2013; Clark et al., 2018). The average life satisfaction score in the UK general population between April 2020 to March 2021 was 7.39 (ONS, 2021).

2.3 Qualitative data collection

One focus group was held outside at each of the four Growing Together sites in September 2021 and recorded using two Dictaphones. The focus groups lasted between 1 hour and 1 hour and 31 minutes and were led by two peer researchers with lived experience of attending Growing Together to support their mental health. The peer researchers received training on facilitating focus groups from a University of Essex research assistant who also provided support during the focus groups. Members were asked questions about their experience of attending Growing Together and the impact on their mental health and wellbeing. They were also asked about how Growing together supported their wellbeing throughout the pandemic. Quotes from the focus groups are used throughout the results to support and illustrate quantitative findings.

2.4 Analysis

All survey data was entered into Trust Links' Charitylog database and then extracted for analysis by University of Essex researchers. Wellbeing data collected independently by Trust Links and for the University of Essex study were combined in date order. Five wellbeing measurement timepoints were included in the analysis: 43 members had a 'baseline' measure, 53 members had a measure at follow up timepoint 1 (FU1), 50 at follow up timepoint 2 (FU2), 37 at follow up timepoint 3 (FU3) and 22 at follow up timepoint 4 (FU4). The average duration between the wellbeing measures at baseline and FU1 was 0.86years, FU1 and FU2 1.70years, FU2 and FU3 0.44years and FU3 and FU4 0.27years. Data therefore reflect tracking of wellbeing over an average of 3.27years. Wellbeing data are referred to as baseline and FU1-FU4 to distinguish from the life satisfaction and loneliness data that were only collected at the University of Essex study timepoints.

Changes in wellbeing scores over time were explored using statistical modelling and compared between males and females. Wellbeing scores at baseline and follow up points were also compared to the normative UK wellbeing score of 23.67 and 23.59 for males and females respectively. Members' wellbeing scores were also categorised into low, average, or high wellbeing using the normative data of Fat et al (2017). For both males and females' low wellbeing was a score below 19.25, average wellbeing a score between 19.98-27.03 and high wellbeing a score above 28.13.

Loneliness and life satisfaction was compared over the three University of Essex study timepoints; this did not include baseline measures on entry to the programme, except for four participants who joined Growing Together during the data collection period, and data cannot therefore be considered to reflect a true 'baseline'. To distinguish from the wellbeing data collection timepoints, data collection timepoints for loneliness and life satisfaction are referred to as timepoints one, two and three (T1, T2, T3). The average duration between T1 and T2 was 0.24years and between T2 and T3 was 0.29years. At T1 46 members completed the emotional loneliness subscale, whilst 49 completed the social loneliness sub-scale. These figures increased to 49 and 50 members at T2 for emotional and social loneliness respectively. At T3 34 members completed the emotional loneliness subscale and 36 completed the social loneliness subscale. For life satisfaction 53 members completed the scale at T1, reducing to 51 at T2 and 39 at T3. Changes in loneliness and life satisfaction data in males and females were tracked over time. Loneliness data was compared to the cut points identified by Van Tilburg & Gierveld (1999), whereby scores between one and three are classified as 'lonely'. Life satisfaction data was compared to the UK normative score of 7.39 for 2020/21 (ONS, 2021).

3. Results

3.1 Participants

A total of 53 members were included in the evaluation, with an average age of 47.4years (ranging from 22-69years). The participants were mostly males (n=37; 67.9%). The majority of members (n=18; 36.7%) had been attending Growing Together for between 1 and 3 years at the first University of Essex data collection timepoint (May-October 2021), however some participants (n=4; 8.2%) had only just started, and others had been attending for more than 10 years (n=5; 10.2%).

3.2 The impact of Growing Together on wellbeing

Changes in wellbeing over time

There was a statistically significant improvement in wellbeing over time, with a statistically significant difference in the rate of change between males and females. Male scores were higher than female scores at all timepoints. Male improvements in wellbeing occurred after a shorter duration of attending at Growing Together but plateaued with time; whilst female wellbeing fluctuated over time, with the greatest score at FU3 (Figure 1). At baseline the average score for male members was significantly lower than the UK population normative value for males of 23.67 (Fat et al., 2017). However, there was not a statistically significant difference to the UK population normative value at any of the four follow up timepoints, indicating enhanced wellbeing. Female wellbeing was significantly lower than the female mean population score of 23.59 at baseline, FU1 and FU2 but not at FU3 or FU4 where it was not significantly lower than the UK mean population score.

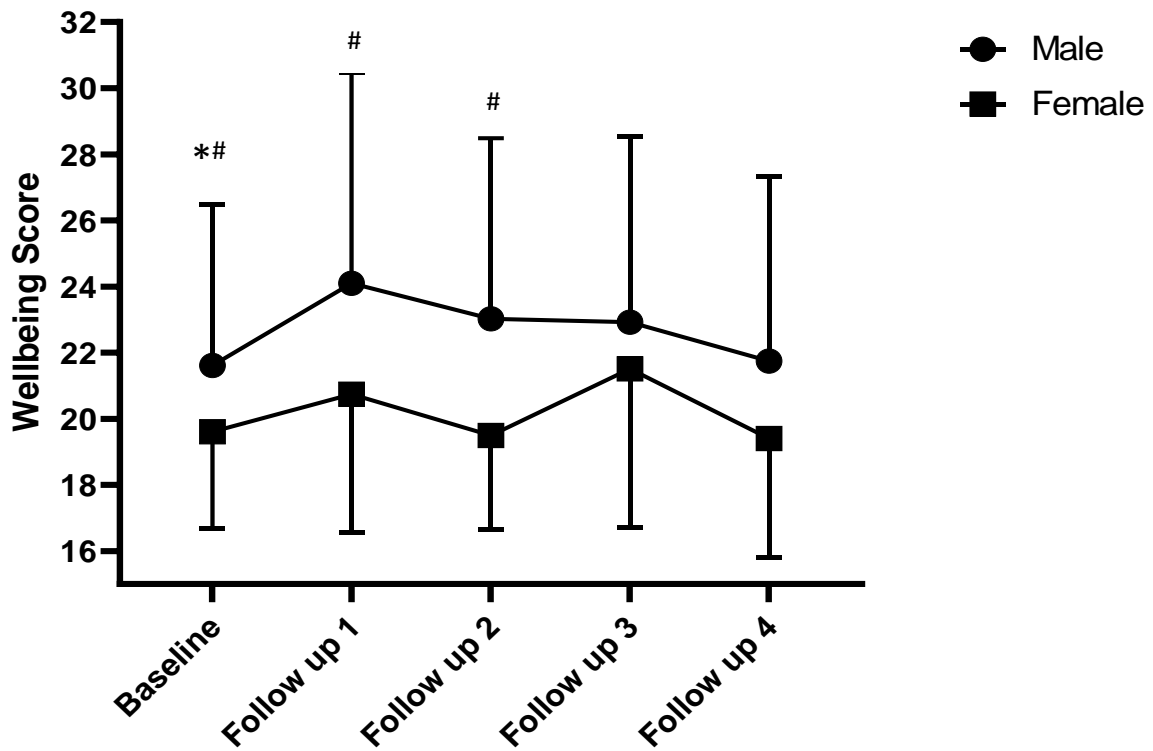


Figure one: Changes in wellbeing over time (error bars represent standard deviation; * indicates significantly lower score than male UK population normative value; # indicates significantly lower score than female UK population normative value)

The percentages of participants defined as having ‘low’ wellbeing (a score below 19.25) also reduced from baseline at follow up one, two and three (Figure 2). Compared to baseline, the percentage of participants in the ‘high’ wellbeing category (with a score above 28.13) was also greater at all follow up points.

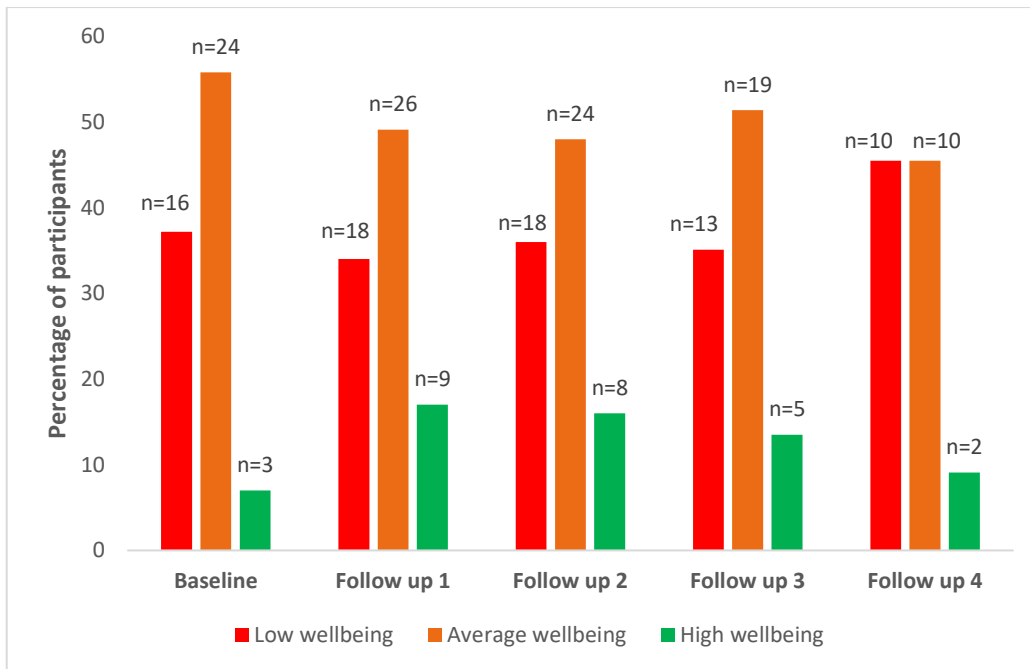


Figure 2: Changes in wellbeing categories over time

Members’ Experience: Growing Together and Wellbeing

Members described how engaging with various aspects of the Growing Together projects led to improved wellbeing, including the physical space, gardening activities and opportunities for physical activity. The non-clinical informal space of the gardens was felt to be a more conducive therapeutic environment than formal medical or indoor therapeutic settings previously encountered. The space encourages social interaction and ‘informal’ conversations, offering opportunities to discuss worries or concerns with other members or with staff.

“Oh it’s a big difference going into a doctor’s office or a group in a building. You’re sort of on the back foot from day one, whereas if you’re coming down here doing a bit of gardening and you happen to start discussing stuff, it’s different, and that is the difference.”

Gardening itself is experienced as therapeutic, and offers members an outlet for stress or tension, providing a distraction from everyday stressors or causes of anxiety. The gardens were described as an ‘oasis’ by one member.

“So wellbeing-wise I feel a lot happier in myself knowing that I’ve come to do a bit of gardening at my own pace. Chatting with friends.”

“What’s important to me is Growing Together’s there, and you can always guarantee letting off



steam, like come here, get your hands mucky weeding or whatever.”

Some members also acknowledged the link between physical and mental health and appreciated the opportunities that Growing Together provided for being active, including gardening, fitness classes or walking around the gardens.

“Because it helps my physical health, which will have a knock-on effect with my mental wellbeing, and I also feel like I’m doing something productive.”

3.3 Impact of Growing Together on Loneliness

Scores for emotional and social loneliness fluctuated over the three timepoints. Overall, emotional loneliness was highest at T2, representing greater emotional loneliness. Scores at T1 and T3 were similar, with a slightly lower score at T1. Females had greater experience of emotional loneliness than males at T1 and T2, with the female score being highest at T1 (Table one). The male score was lowest at T1 and highest at T2. According to the cut points of van Tilburg and Gierveld (1999) both males and females were classified as ‘emotionally lonely’ at all timepoints.

Overall scores for social loneliness were also highest at T2 and lowest at T3. Females had greater experience of social loneliness at all timepoints, with the female score being lowest at T2 (Table one). According to the cut points of van Tilburg and Gierveld (1999) females were ‘socially lonely’ at all timepoints. The male score was highest at T2 and lowest at T3; with males being considered ‘not socially lonely’ at any of the timepoints.

Table One: Changes in members emotional and social loneliness over the survey timepoints

		Timepoint 1 (T1)	Timepoint 2 (T2)	Timepoint 3 (T3)
Emotional Loneliness (0-3scale)	Male	1.40±1.03 (n=35)	1.77±0.96 (n=34)	1.70±1.15 (n=23)
	Female	2.09±0.83 (n=11)	1.80±1.01 (n=15)	1.36±1.21 (n=11)
	Total	1.57±1.03 (n=46)	1.78±0.96 (n=49)	1.59±1.16 (n=34)
Social Loneliness (0-3scale)	Male	0.83±1.16 (n=36)*	0.94±1.08 (n=35)*	0.57±0.95 (n=23)*
	Female	1.46±1.39 (n=13)	1.40±1.30 (n=15)	1.46±1.39 (n=13)
	Total	1.00±1.24 (n=49)	1.08±1.16 (n=50)	0.89±1.19 (n=36)*

*Indicates that the score is classified as ‘not lonely’ according to the cut points of van Tilburg and Gierveld (1999)

3.4 Impact of Growing Together on Life Satisfaction

Life satisfaction was lowest at T1, increasing at T2 and decreasingly slightly at T3. However, the score at T3 was still 0.18 higher than T1 (Figure three). Female scores were lower than male scores at all timepoints and increased consecutively across the timepoints. Male scores increased at T2 and

decreased slightly at T3. The total life satisfaction score was significantly lower than the UK normative value of 7.39 at T1, but not at T2 or T3 (ONS, 2021).

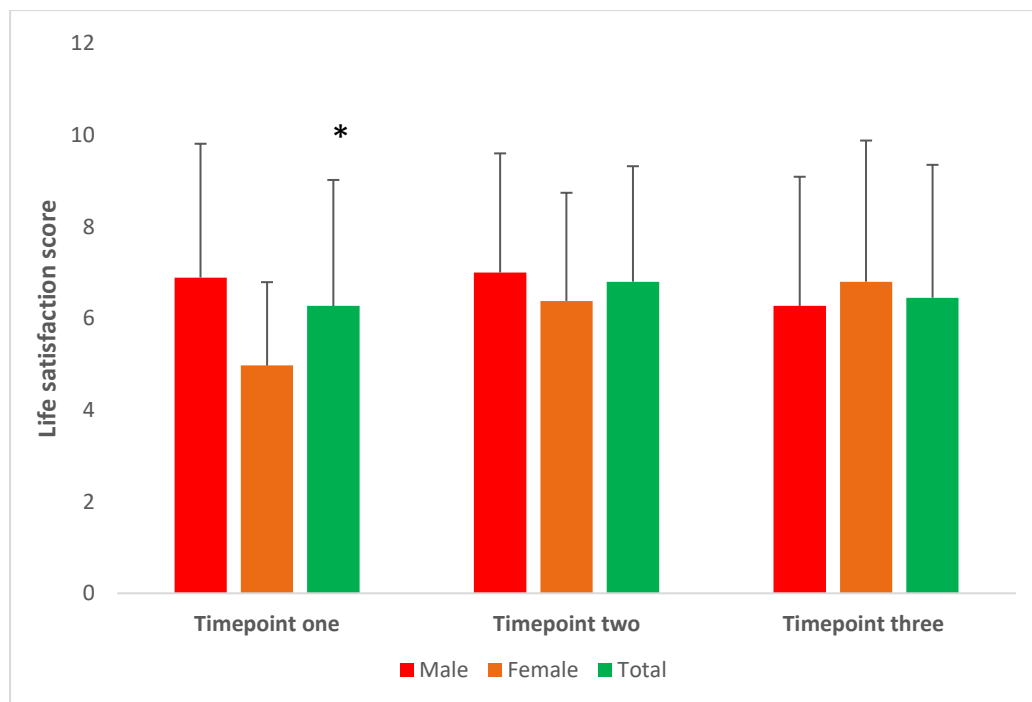


Figure three: changes in members life satisfaction over the three survey timepoints (* indicates significantly lower score than UK norm for 2020/21)

3.5 Members experience of Growing Together during the pandemic

Members described how Growing Together had been a constant source of support throughout the pandemic even when the gardens were closed. Growing Together staff maintained contact with members through telephone calls, social media posts (e.g., videos of the gardens) and other ‘live’ online activities. Relationships established with other members were also sources of support during the pandemic.

“And what also helped is the fact that anytime during the day you could either phone a member of staff, maybe Growing Together, or anybody and just say, “Look I’m sorry, I’m feeling a little bit low”.”

For some members, the support provided by Growing Together staff was critical for them feeling able to ‘survive’ the pandemic.

“We’ve all survived the Coronavirus 19 through Growing Together being there. So, I don’t know what we would have done without.”

Where members had experienced declines in wellbeing due to the pandemic, returning to the



gardens as restrictions lifted was described as having an immediate and positive effect on their wellbeing.

“When it first came back, we were so grateful to be back. I mean even seeing someone for an hour, or two hours was, it’s kind of like drip-feeding you happiness again. I mean it really made a difference to my mood as soon as I started coming back.”

4. Key findings and recommendations for future research

4.1 Wellbeing

Members experienced significant changes to their wellbeing following entry into Growing Together, with differences in the pattern of change between males and females. At baseline, both male and female wellbeing scores were below the UK normative value, however male wellbeing was not significantly lower than the UK pre-covid normative value at any follow up points. Female wellbeing was significantly lower than the pre-covid normative value at FU1 and FU2, but not at the remaining follow up points. The potentially slower rate of improvement in females may indicate that Growing Together is more successful at improving and maintaining wellbeing in males. Milligan et al (2015) suggest that many community activities tend to be viewed as gender-neutral, ignoring the idea that men and women may engage with, or perform activities within different environments, in different ways. It is suggested that male wellbeing benefits from ‘male-friendly’ approaches which enable men to be involved in the development of community activities (Culph et al., 2015; Moylan et al., 2015; Kelly et al., 2021). This co-production approach is at the heart of Growing Together; and thus, may explain differences between male and female responses. Additional research is required to understand differences between genders to maximise the benefits of Growing Together for women. Women’s only gardening groups may be one means by which female wellbeing can be specifically targeted.

Despite fluctuations in wellbeing scores across the follow up points, scores did not return to baseline values, suggesting that Growing Together can both improve and maintain wellbeing. This is likely to be particularly important in the context of the coronavirus pandemic, where wellbeing scores decreased nationally and were below pre-pandemic levels in February 2022 (Smith et al., 2020; ONS, 2022; Wood et al., 2021). All data collected at follow up timepoints two, three and four was collected between August 2020 and January 2022, with participants wellbeing at these later timepoints not being statistically lower than pre-covid normative values. Thus, it could be speculated that Growing Together supported the maintenance of members wellbeing at a time where scores were decreasing nationally.

4.2 Loneliness

Improvements in social loneliness were observed in members who had been attending Growing Together over the course of nine months, despite the average member having attended for between 6 months and 15 years at the time of data collection. Although there was little overall change in emotional loneliness, the fluctuations in emotional loneliness are likely to be reflective of life outside of

the Growing Together gardens due to the focus on intimate relationships. Social loneliness was lowest at T3, perhaps as a result of the significant easing of coronavirus restrictions announced for January 2022 and the removal of all Growing Together restrictions in October 2021, meaning that members could attend for a full day and that there were no limits on the number of members present. Furthermore, members change in social loneliness at T3 moves them into the 'not socially lonely' category (van Tilburg & Gierveld, 1999), whilst scores at T1 and T2 were just above the cut-off. Given that population social interaction was limited throughout the pandemic, the maintenance and reduction in social loneliness in members may positively reflect on the critical social interaction derived through Growing Together.

Loneliness increases annual GP visits by 1.8-fold and A&E visits by 1.6-fold (Chief Medical Officer, 2018); it is possible that the reductions in loneliness experienced through Growing Together may reduce public health costs. Using data from a range of nature-based interventions Pretty et al (2020) predicted these savings to be £714 after one year and £5317 after 10 years. However, the explanations for changes in social isolation reported are speculative.

4.3 Life satisfaction

Improvements in life satisfaction were observed in both male and female members over the course of the nine-month data collection period, with increases of 0.53 between T1 and T2 and 0.18 between T1 and T3. A 1pt increase in life satisfaction is both difficult and costly to achieve, with positive and negative changes occurring as a result of significant life events such as marriage and divorce usually being less than one point (Clark and Georgellis, 2013; Clark et al., 2018; Helliwell et al., 2019; 2020). On average between T1 and T2, which were on average 0.24years apart, scores increased by more than half a point. The cost implications of these changes in life satisfaction could be significant. It is reported that a 1pt increase in life satisfaction is more economically beneficial to individuals who have low life satisfaction. For individuals on a median income of £23,000, a 1pt increase in life satisfaction from 6 to 7, is suggested to be equal to an extra £7140 of income (Collins, 2016; Pretty et al., 2020). Thus, it is possible that the changes in life satisfaction may provide economic benefits.

4.4 Recommendations for future research

To further demonstrate the health and wellbeing benefits of Growing Together, future research should be conducted to:

- Understand how wellbeing in female members can be further enhanced
- Measure loneliness and life satisfaction at entry into Growing Together and at multiple time points to understand how attendance affects scores from the start of engagement
- Seek to further demonstrate the health economic benefits of Growing Together

4.5 Conclusion

Attendance at Growing Together is beneficial for members' wellbeing, loneliness, and life satisfaction. Following attendance at Growing Together, male and female wellbeing improved to levels equivalent

to the UK normative value. Continued connection with Growing Together throughout the coronavirus pandemic protected members' wellbeing, despite decreases in wellbeing nationally. Loneliness and life satisfaction scores also improved over the course of nine months, despite members having attended Growing Together for significant periods of time prior to these measures. The improvements in wellbeing, life satisfaction and loneliness demonstrate the potential for significant public health cost savings through investment in Growing Together and similar projects. The experience of Growing Together for members who took part in focus groups indicates the importance of the non-clinical, supportive, outdoor environments at Growing Together. Increased wellbeing occurs in the safe and non-threatening setting through development of social relationships, peer support, and engagement in gardening tasks and positive activities. Members' wellbeing was supported through the coronavirus pandemic through continued contact with and support from Growing Together staff.

5. Funding

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