Phakama
The Edible Garden: Bitesize
Evaluation Report
Summary

The Edible Garden: Bitesize was a project run by Phakama as part of Sanctuary Housing’s Shine! project. Shine! was a two year national arts programme, that enabled Sanctuary residents to take part in create activities across the country. Shine! commissioned a number of arts organisations to run these projects, Phakama being one of them Phakama delivered to eight Sanctuary run care homes in 2016.

Throughout the project Phakama aimed to create an inclusive environment in which the residents felt listened to, had an increased sense of belonging, and felt less isolated. To do this Phakama worked with schools local to the homes to ensure that there was an intergenerational link was made, and that each resident taking part was able to connect with someone on a personal level.

To ensure that the project met its aims Phakama, with the help and knowledge of Project Oracle, were able to create evaluation tools to investigate whether or not the project successfully increased the wellbeing of the residents involved (agreeing that the aims of the project all fell into the category of wellbeing).

The evaluation tools were created by researching a variety of evaluative measures used to measure similar outcomes to those of the Edible Garden. These were then adapted so that they were right for this project.

These evaluative tools proved that the Edible Garden: Bitesize was a success, proving that wellbeing went up as a direct result of the workshops, and also highlighting that once the students had met with the residents, their perception of the elderly became more positive.

Background

After successfully delivering two previous phases of The Edible Garden in conjunction with Sanctuary Housing Phakama were again commissioned to deliver the intergenerational project within care homes as part of Sanctuary’s Shine! programme.

Phakama works in a non-hierarchical way, focusing on Give and Gain, believing that everyone has something to give to a project, and everyone can gain something from it. Phakama focuses on the stories of the individual, and each and every person taking part in a project has an importance, a story to share. The Edible Garden does not detract from this way of working. There is a need for projects such as this one, as it gives different generations a chance to interact and learn from one another, whilst increasing wellbeing and happiness throughout. Both generations gave to this project with stories, songs and connections, and both gained relationships, knowledge and new interactions.

The intended outcomes for the project were:

1. Improved sense of wellbeing for the residents taking part
2. Increased understanding of the older generation away from stereotypes for the students taking part
From January – March 2016 Phakama visited eight homes, six in the Southwest of England and two in London. Many of the homes were linked with local schools, at which Phakama also delivered workshops to help build and create intergenerational links and relationships between the school and the homes. The workshops explored storytelling with elements of music and design, with the aim of connecting the two generations, creating a dialogue, a starting point for the two groups to come together and connect.

The project followed a structure of three workshops per home/school pairing: one workshop with just the residents, one workshop with just the school and the third workshop in which the school students visited the care home and both generations met at what was called a ‘sharing’ – where the two groups were able to sing together and for one another, share food and exchange personal stories.

**Methodology**

The evaluation aimed to investigate how effective the Edible Garden Programme is in achieving some of the key outcomes identified in the programme Theory of Change (found in appendix fig.1). The evaluation had the following aims:

1. To understand how effective the edible garden programme is in improving the wellbeing of Sanctuary residents, many of whom have dementia.

2. To understand to how far the programme improves the views of young people have of older adults, namely Sanctuary residents

In order to assess this, the Project Phakama and Project Oracle teams worked together to design evaluation tools, drawing on existing high quality research in the field. They aimed to ensure that the tools were appropriate to the abilities and interests of the two types of participants. For the older adults, this meant creating tools which were appropriate given the varying level of dementia they were experiencing, and which were not too taxing for the careworkers and family members supporting them. For the young people, this meant designing tools which were engaging, fun and brief to complete.

The final tool selected for older adults was an adapted version of the Cincinnati Wellbeing Observation Scale for Adults with Dementia. The Cincinnati Tool was designed by academics at the Universities of Cincinnati and Miami, to help understand the experiences of adults with dementia, who often struggle to communicate their needs. Care workers use the scale to rate the mood of older adults, based on their words, behaviours and body language. The tool was piloted twice, with a total of 53 adults.

The full scale contains 7 sections, including 19 questions. Each section represents a different component of subjective wellbeing. The Phakama team adopted 9 questions across 4 of these sections, focusing on the domains on Interest in the activity, Pleasure, Self Esteem and Sadness. These domains were selected because they had the greatest alignment with the types of activities occurring in the Edible Garden programme. This allowed the tool to be completed by Sanctuary Care Workers in 5 – 10 minutes, at the beginning or end of a session. The Care workers were able to
complete these observations quickly and with ease, there was always a facilitator nearby to explain the observation and talk to the carer through any issues that might come up.

Due to resource limitations, it was not possible to observe every older adult participating in the programme. With this in mind, it was decided to select a purposive sample of older adults, in collaboration with the care homes. 3 adults were selected from each care home, representing those experiencing mild, moderate and severe levels of dementia. Staff were asked to select those most representative of each type. This led to a total of 24 adults being selected to participate in the evaluation, out of a potential 133.

Baseline observations were conducted during the first session with older adults, before they had engaged with young people. Endline observations were taken at the end of the third session, after older adults and young people had been supported to meet, interact, sing and share stories with one another.

The evaluation tool used with young people was a mood tree, designed by the Phakama and Project Oracle teams. The tool was based on the Mood Tree technique described by the Happy Museum, a consortium of museums working together to improve evaluation methods in dynamic environments\(^1\). Edible Garden participants were given an image of a tree, with 8 words printed on it. 4 words represented a positive stereotype about older adults, and 4 words represented a negative stereotype. The words were selected based on several research reports looking at the impressions younger adults have of senior citizens\(^2\),\(^3\). Words were selected based on the most common impressions described in these reports, and the judgement of the Phakama and Project Oracle teams of which stereotypes were relevant to UK based young people.

A facilitator introduced the mood tree at the beginning of the first session with the young people, before they had engaged with any of the senior citizens. Young people were asked to choose which 4 of words best represented their honest opinion of older adults, and were informed that results would not be linked back to them, or used to assess them in any way. Young people were encouraged not to speak with one another whilst completing the tool.

### Results

A total of 24 older adults participated in the evaluation. 1 older adult was not able to attend the third edible garden session, so their data was not included in the evaluation. This led to data from 23 older adults being included in the analysis.

Possible scores on the tool ranged from 0 – 36, with 36 indicating the highest level of wellbeing. At baseline, the average wellbeing score was 17. By the end of the intervention, the average score was

---


\(^3\) Hummert 1990, Multiple Stereotypes of Elderly and Young Adults: A Comparison of Structure and Evaluations *Psychology and Aging* 5(2),182
22. This represented a 5 point improvement in wellbeing, which can be interpreted as an improvement in average wellbeing by one third of the original score.

To establish the robustness of this finding, statistical significance testing was undertaking. Significance testing is a way of understanding whether the improvement seen might have happened by chance, even without the support of the Project Phakama team. A p value of less than 0.05 indicates that the result is unlikely to have occurred by chance. The smaller the p value, the greater the confidence we can have in the finding. Two-tailed t-tests were used to calculate the statistical significance.

Effect sizes were also calculated, (Cohen’s d). An effect size is a standardised way of assessing how large the impact of an intervention has been on participant. An effect size between 0 – 0.3 represents a small effect, and is the magnitude commonly seen in social interventions. 0.3 – 0.7 represents a medium effect size. An effect size of 0.7+ is generally considered large. An effect size of 0.8 is equivalent to helping a young person improve by one GCSE grade over 1 year.

Table 1 summarises the results of this analysis, for the whole scale, and for each of the subscales. As can be seen, the overall change in wellbeing was statistically significant at the level p<0.02, meaning that it is highly unlikely to have occurred by chance. The effect size was 0.76, representing a large effect size not commonly seen in social programmes. This is an impressive improvement during a relatively short programme.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Average Baseline Score</th>
<th>Average Endline score</th>
<th>Significance</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>17.0</td>
<td>21.9</td>
<td>P&lt;0.02*</td>
<td>0.76</td>
</tr>
<tr>
<td>Interest &amp; Pleasure in Activity</td>
<td>10.6</td>
<td>12.71</td>
<td>P&lt;0.02*</td>
<td>0.71</td>
</tr>
<tr>
<td>Sadness</td>
<td>1.7</td>
<td>0.7</td>
<td>P&lt;0.02*</td>
<td>0.80</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>7.5</td>
<td>9.1</td>
<td>P&lt;0.07</td>
<td>0.53</td>
</tr>
</tbody>
</table>

* Significant at p<0.02 level

There were also statistically significant changes in two of the three subscales, namely improved interest and pleasure, and reduced sadness. The improvement in self esteem was marginally significant, with a medium effect size.

There were no statistically significant differences in scores based on the dementia status of the residents.

Results for young people.

All 58 young people participating in the programme completed a mood tree. To analyse the results of the mood tree, the average number of positive and negative words selected by young people was calculated. To enable significance testing, a total score was calculated for each young person. Each

---

positive word selected represented 1 point, and each negative word was scored -1. Thus pre and post scores could range from +4 to -4.

As shown in Table 2, at base line on average young people chose around 1 negative word, and 2.5 positive words to represent older adults. By the end of the edible garden programme, on average the young people chose around 3 positive words, and only 1 negative word. The average total score at baseline was 1.2, rising to 2.02 at the endline. This can be interpreted as each young person gaining one new positive opinion about an older person as a result of the intervention.

<table>
<thead>
<tr>
<th>Total score</th>
<th>Average baseline score (out of 4)</th>
<th>Average end line score (out of 4)</th>
<th>Significance</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total score</td>
<td>1.16</td>
<td>2.02</td>
<td>P&lt;0.001</td>
<td>0.50</td>
</tr>
<tr>
<td>Positive words</td>
<td>2.64</td>
<td>2.98</td>
<td>P&lt;0.01</td>
<td>0.39</td>
</tr>
<tr>
<td>Negative words</td>
<td>1.48</td>
<td>0.97</td>
<td>P&lt;0.001</td>
<td>0.56</td>
</tr>
</tbody>
</table>

Statistical significance and effect size calculations were performed, as above. As outlined in table 2, the results were significant at the level p<0.001. The effect size was 0.5, representing a moderate effect, higher than the 0.2 – 0.3 commonly seen in social programmes.

Table 3 summarises the words selected by young people. As can be seen, after the intervention, more young people rated older people as kind, generous and friendly. Fewer young people said that old people were unhappy, lonely and forgetful. Interestingly, there was also a decrease in number of young people who felt that older adults were wise. Conversations with school staff suggested that could be because many of the young people were experiencing their first encounter with an older adult with moderate to severe dementia. Meeting older adults with this condition may have given young people a new insight into the realities of this condition, even whilst demonstrating that poorly older adults can still be friendly, kind and generous.

<table>
<thead>
<tr>
<th>Total Number of times selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
</tr>
<tr>
<td>Unhappy</td>
</tr>
<tr>
<td>Lonely</td>
</tr>
<tr>
<td>Forgetful</td>
</tr>
<tr>
<td>Lives in the past</td>
</tr>
<tr>
<td>Kind</td>
</tr>
<tr>
<td>Wise</td>
</tr>
<tr>
<td>Generous</td>
</tr>
<tr>
<td>Friendly</td>
</tr>
<tr>
<td>Total Negative words</td>
</tr>
<tr>
<td>Total Positive words</td>
</tr>
</tbody>
</table>

Conclusions and Recommendations
Overall, the evaluation found evidence that the edible garden programme is having a strong positive effect on both older adults in Sanctuary care homes, and young people. The wellbeing of older adults improved by approximately 1/3, whilst on average, young people gained one new positive opinion about older adults. Both of these changes were statistically significant at the p<0.02 level. Effect sizes for the programme ranged between 0.4 to 0.8, indicating that the programme had a large positive effect on participants.

Alongside the qualitative evaluation report conducted by Phakama in 2014, this provides good evidence that the Edible Garden programme is achieving its key aims of improving wellbeing for older adults, and helping to improve the impressions younger adults have of older adults.

Going forward, there are several ways Phakama team could consider developing the methods they use to monitor and evaluate outcomes:

1. Some of the language in the adapted Cincinnati observation scale could be changed, to make it easier for use by carers with English as a second language.
2. Additional positive and negative words could be added to the mood tree for young people, to allow a larger range of stereotypes to be represented
3. Additional outcomes in the Edible Garden theory of change should also be investigated.

Bibliography


Appendix

Fig. 1 – Theory of Change
**Activities**

1 session. Eating, making, tasting food

Sharing food stories/memories/recipes

Sharing stories from personal cultures

1 Performative sharing of stories to audience

Workshops in Creative Arts (music/art/drama/movement)

**Assumptions**

There is time to share, learn and enjoy different foods

The group has an interest in food they want to share

The group has stories they want to share

There is enough interest in each other to perform

There is enough enthusiasm within the group to join in

**Intermediate outcomes**

1. Increased ability to share, learn and enjoy different foods

2. Learn how to connect and develop people skills and teamwork

3. Intergenerational collaboration of participants

4. Cultural exchange

5. Beginning to break down institutional barriers within care homes and education

6. Increased understanding of the self through exploration, discovery, collaboration and confidence

7. Personal enjoyment

8. Increased knowledge of sustainability of world around us

9. Increased empathy and understanding of others

10. Increased knowledge of heritage

**Aims**

1. Increased understanding between different generations through celebration of every individual

2. Improved wellbeing of elderly people in care homes and young people

*Project Phakama - Edible Garden 2015/16*