

An evaluation of a nature-based intervention for people with experiences of psychological distress

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“I feel much more positive, confident and better equipped to meet life’s challenges.”

(Cath, Season 8)

Grow are...

Directors: Julie Wright & Jo Wren

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executive summary

- We collected data from 87 people before and after they participated in Grow, across 9 programmes ('seasons'), over 3 years. Participants' wellbeing increased significantly by the end of the intervention, in every season, on all wellbeing indicators used.
- 87.5% of participants reported Grow has had a significant or great benefit to their mental health; 63.6% of participants reported Grow has had a significant or great benefit to their physical health.
- Of those we contacted 4-8 months *after* they had completed Grow, 74% of participants reported they had engaged with either volunteering, work, training or education.
- Survey responses & personal testimonies clearly indicates how nature connectedness and social connectedness are perceived to be powerful, mutually reinforcing tools in aiding recovery and an increased care of self.
- Our findings suggest that Grow provides a unique combination of 'ingredients' that can be used as a model for other nature-based interventions.
- Our evaluation adds to the growing evidence base supporting the use of nature-based interventions in treating mental health problems and experiences of psychological distress.
- We therefore add to existing demands for greater use of nature-based interventions in mental health care and support; but also for extending access to nature on a community and societal level as a marker of fairness and equality.
- There is a need for additional research into the interrelated group, social, psychological and nature-connection dynamics involved in effective nature-based interventions; as well as the study of the effects of nature-based interventions over the longer term.

Mental health in context

Mental health is a significant and complex health issue within the UK. In 2014, 28% of adults in England reported having been diagnosed with at least one mental illness, and a further 18% reported having experienced a mental illness that was not diagnosed (Bridges, 2015).

Mental ill health has a profound impact on people's lives. Indeed, people who experience mental ill health have a higher suicide risk than the general population. In addition, it has been estimated that the risk of dying in people diagnosed with severe mental illnesses is on average 10 to 20 years earlier than the general population (Chesney et al. 2014).

Mental health problems are reported to be the largest single cause of disability in the UK, with an estimated cost to the economy of £105 billion a year (Centre for Mental Health, 2014). Within this context, ensuring people have access to help and support when they experience mental health distress is a key area of national policy and funding. For example, the Mental Health Taskforce, formed in March 2015, developed a national strategy for improving mental health outcomes across the UK's health and care system over the next five years.

As part of this movement towards improving access to and the quality of mental health services, there has been a shift from a heavily 'medicalised' system of delivering mental health treatment to an approach that designs services focused on the principles of recovery from mental health distress.



Nature-based interventions

There is growing recognition that the physical environment can promote mental health and wellbeing. Several studies have shown that access to and regular engagement with green space is important for mental health, particularly for improving self-esteem and mood (Barton & Pretty, 2010).

Mental health charities such as MIND increasingly advocate nature-based interventions as an alternative or additional form of treatment for a range of mental health issues (e.g. MIND, 2007).

In light of evidence which suggests contact with nature has therapeutic benefits, therapy programmes have been designed which focus specifically on people's interactions with nature.

A recent report commissioned by Natural England highlighted the mental health benefits of nature-based interventions (Bragg & Atkins, 2016). In particular, they noted benefits in terms of a reduction in depression, anxiety and stress related symptoms, alongside increased social contact, inclusion and a sense of belonging.

However, it was further recognised that referrals to such interventions are relatively uncommon from those in primary mental health care services (e.g., GPs, health visitors).

Given that these services are often the first port of call for people with mental health problems, it is important to increase awareness and understanding of therapy programmes that utilise nature-based approaches. This report is intended to contribute to that growing knowledge base.

“**I have** encountered no other mental health and wellbeing project in all these years that comes close to the positivity this project embodies”

(Annie, Season 10)

About Grow

- The project, in the words of the Directors, 'is designed to support people with experience of mental distress to experience the wellbeing benefits of connecting with nature, in a safe & supportive group'.
- Grow work with people who have experiences of depression, anxiety, stress & other 'moderate' mental health issues.
- Participants are recruited as part of a small closed group (8-12 people), who meet weekly, for a whole day, as part of an 8-week programme (referred to as a 'season').
- The intervention takes place in rural Sussex - transport to and from the location and food and drink is provided for the group. Each day is structured around an initial 'check-in' and a final 'check-out' where participants are free to share thoughts, reflect on how they are feeling.
- A number of activities are made available across a season, thanks in part to the input from the National Trust. These include guided nature walks, conservation tasks, green woodworking, wild food foraging, beach-combing, shepherding, mindfulness and creative activities.
- Participants input into discussion of what activities they would like to undertake across a season. Importantly, there is also flexibility on each day – people are free to engage in activities, walk, talk or simply be. Formal support is provided by two project staff and two additional trained volunteers.
- Throughout a season, participants are supported to develop their connection with nature further, and information is provided on related health, wellbeing and community resources. At the time of writing the project has been running for five years, running an average of four seasons a year.



Beneficiary involvement

People with direct experience of mental health issues are involved in the development and running of the project at every stage. Here's how:

- Majority representation on the management team from people with lived experience of mental health issues.
- Directors and staff team have their own personal experiences of mental health issues, as do the current management and staff team.
- A volunteer pool which includes people with their own experiences of mental health issues who have participated on the project.
- Regular opportunities for participants to steer the direction of activities through consultation processes – e.g. focus groups and online surveys.
- Previous participants volunteer as ambassadors for Grow – promoting their activities at outside events such as World Mental Health day, talks to funders, lectures and presentations at the University of Brighton.
- Participants and volunteers are involved in the formulation of organisational strategy via focus groups and management meetings.



Evaluating Grow

We, the authors of this report, are psychological researchers working in the School of Applied Social Sciences at the University of Brighton. Our backgrounds and focus in psychology are very different, but we both share an interest in the social and psychological benefits of nature-based interventions.

To evaluate Grow, we measured participant's wellbeing using an established 10-item tool twice: just before they took part in Grow, and then again just after they had completed a Season of eight full-day, once-weekly sessions.

Participants also completed a short survey, which contained a series of open-ended questions about people's experiences of Grow.

We collected data across nine Seasons, with 91 people completing evaluation forms out of a total of 108 participants. Furthermore, 4-8 months *after* they had completed Grow, 77 of those participants completed progression surveys, addressing the longer-term effects of taking part in the programme.

A much smaller number of participants also took up our invitation to write up their experiences freely as a series of diary or blog entries. We refer to these as case-studies.

Taken together, we think our findings clearly indicate that Grow had a substantial positive impact as an intervention. But you can be the judge of that as you read on!

Matt Adams & Julie Morgan



University of Brighton

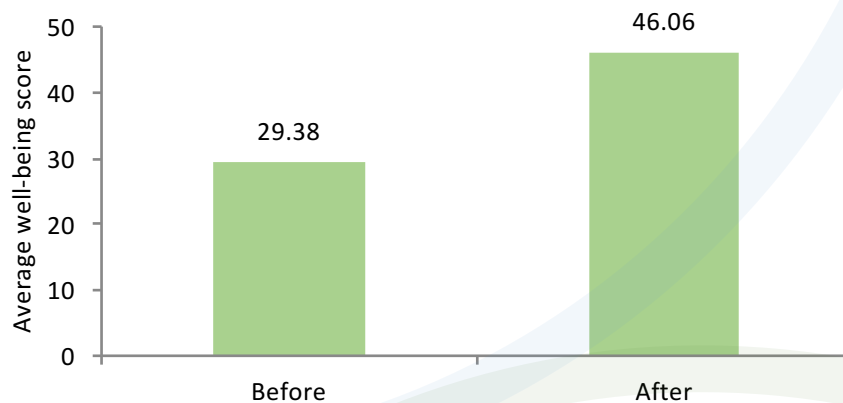
Evaluation

Demonstration of impact - meeting people's needs

The data we collected, across **9 Seasons, with 91 participants**, clearly indicate that Grow had a substantial positive impact as an intervention.

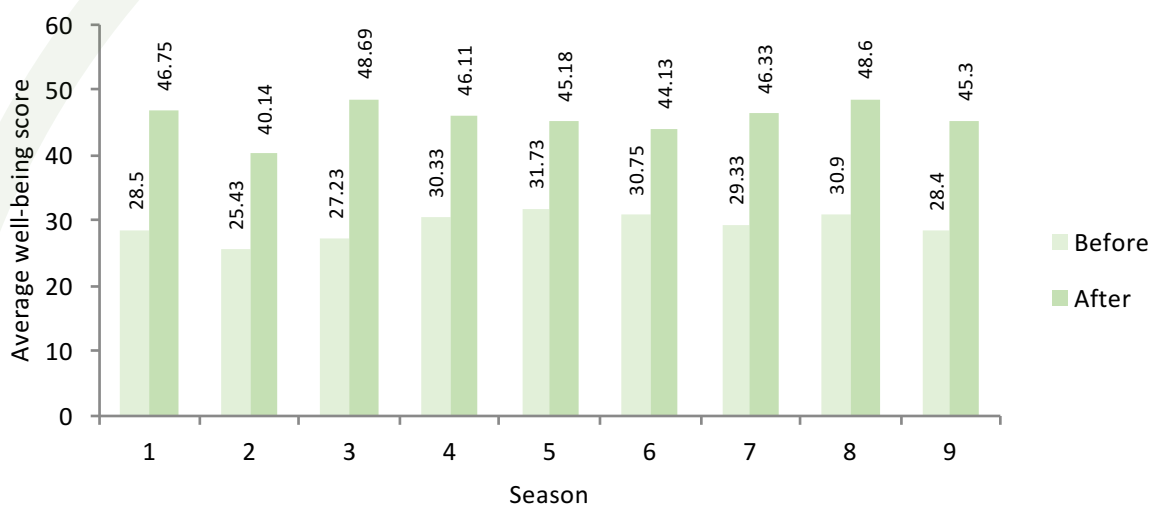
Figure 1 shows people who took part in Grow reported a significant increase in their well-being, from before taking part to after completing an 8-week season.*

Figure 1: Overall change in well-being experienced from being part of Grow



As Figure 2 shows, significant increases in well-being are found across all seasons of Grow, with no differential effect between different seasons.**

Figure 2: Change in well-being in each season of Grow



*The difference in wellbeing was highly statistically significant [$t(86) = 20.22, p = .0001$].

**Statistically there was no significant difference in well-being improvement across all seasons [$F(8,76) = .94, p = .49$].

Evaluation

Demonstration of impact - meeting people's needs

Looking in more detail, the project met people's needs exceptionally well – improvement in wellbeing was highly significant across all measurement scales.*

Average measures of wellbeing across 9 Seasons, 91 participants

Self-esteem & confidence



59%

average increase

Sense of purpose & meaning



54%

Sense of belonging & community



73%

Physical exercise



44%

Feeling connected to nature



59%

Coping with stress & anxiety



66%

Feeling positive / happy



54%

Trust & hope



49%

Relaxation



57%

Social opportunities



57%

*There were statistical differences between before & after the intervention on all these well-being indicators [$t_s > 12.13$, $p_s < .001$]

Evaluation

Demonstration of impact - health

People who took part in Grow also overwhelmingly reported benefits to their mental and physical health. **Figure 3** shows 87.5% of participants reported Grow has had a significant or great benefit to their mental health.

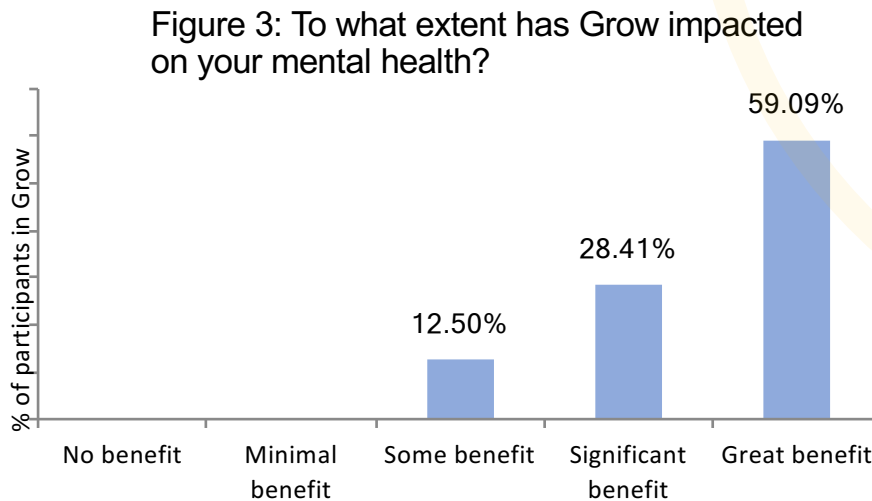
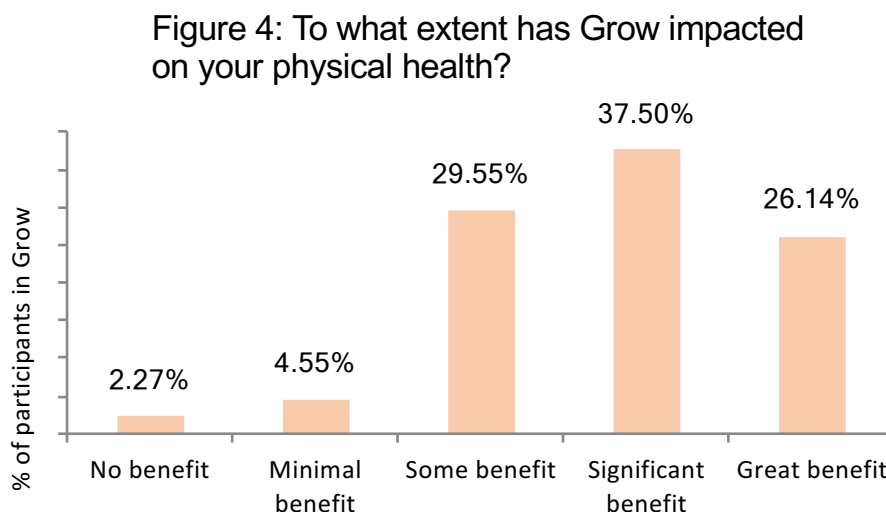


Figure 4 indicates that 63.6% of participants reported Grow has had a significant or great benefit to their physical health.



*The difference in wellbeing was highly statistically significant [$t(86) = 20.22, p = .0001$].

**Statistically there was no significant difference in well-being improvement across all seasons [$F(8,76) = .94, p = .49$].

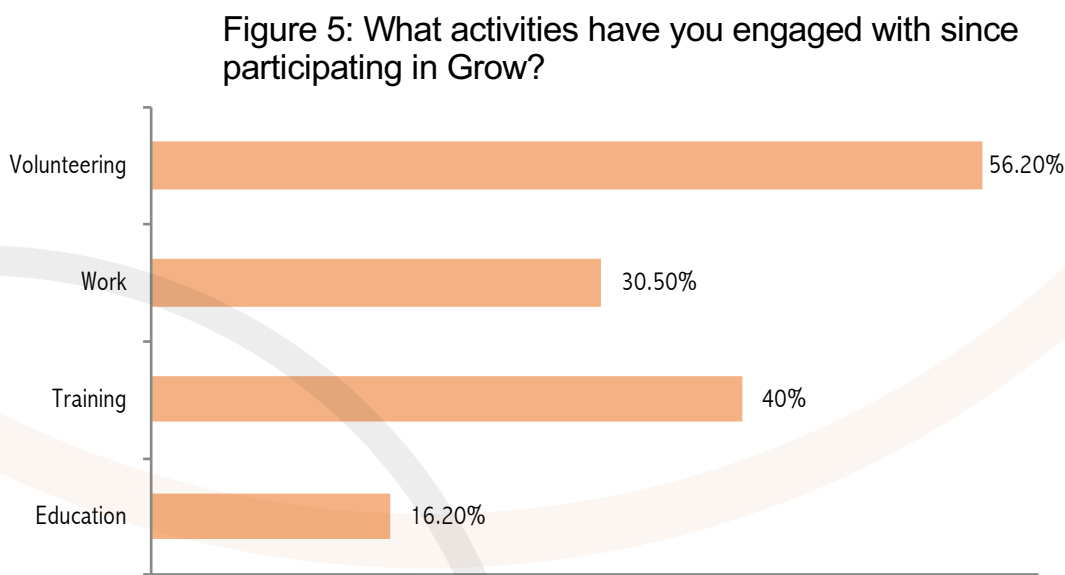
Evaluation

Demonstration of impact over time

The above indicators clearly evidence that Grow met people's well-being needs on a range of measures exceptionally well. Furthermore, 4-8 months *after* they had completed Grow, 77 out of 108 participants across 9 seasons completed progression forms about the longer-term effects of taking part in the programme. Here's what we found:

- 89% of participants reported their **social interaction had increased** as a result of Grow, and 82% reported learning or developing **social skills** since taking part in Grow.
- 86% reported their **mental and physical health had continued to improve** since participating in Grow.
- 65% believed they were **likely to use mental health services less** as a result of the wellbeing effects of Grow.
- 77% reported they were **learning or developing practical skills** since taking part in Grow, with 74% of participants reporting that they had **engaged with either volunteering, work, training or education** following their participation in Grow.

Figure 5 shows the percentage of participants who have engaged with each activity following Grow. (Note that participants can respond to more than one activity).



Detail from the survey questions

Survey responses & personal testimonies told us more about which needs were met and how. Participants told us in their own words about the benefits of Grow. What they told us offers further insight of what aspects of Grow make it such a unique and valuable intervention, and we highlight three themes here.

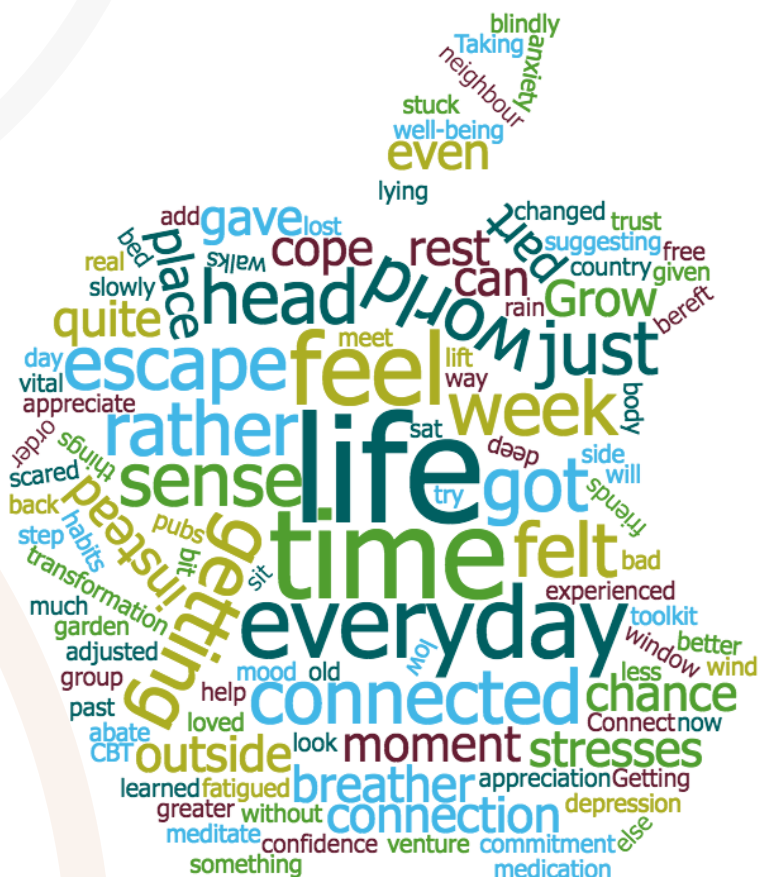
Theme 1 Escape

“taking time out from everyday life has helped me discover what are some of my needs to improve my wellbeing”
(Will, Season 9)

First & foremost, Grow provides people with regular access to nature. Reassuringly, if unsurprisingly, this aspect was often highlighted as essential ingredient to reported increases in wellbeing. It was often described as an ESCAPE – away from everyday life, pressures, routines; but also an ESCAPE into – the moment, one's body, self or surroundings. Clients commonly reported that our other themes, e.g. positive social contact, were enhanced by the natural setting.

What's this?

A wordcloud. It represents all the survey and case study responses we have included in this theme. The bigger the word, the more often it came up.

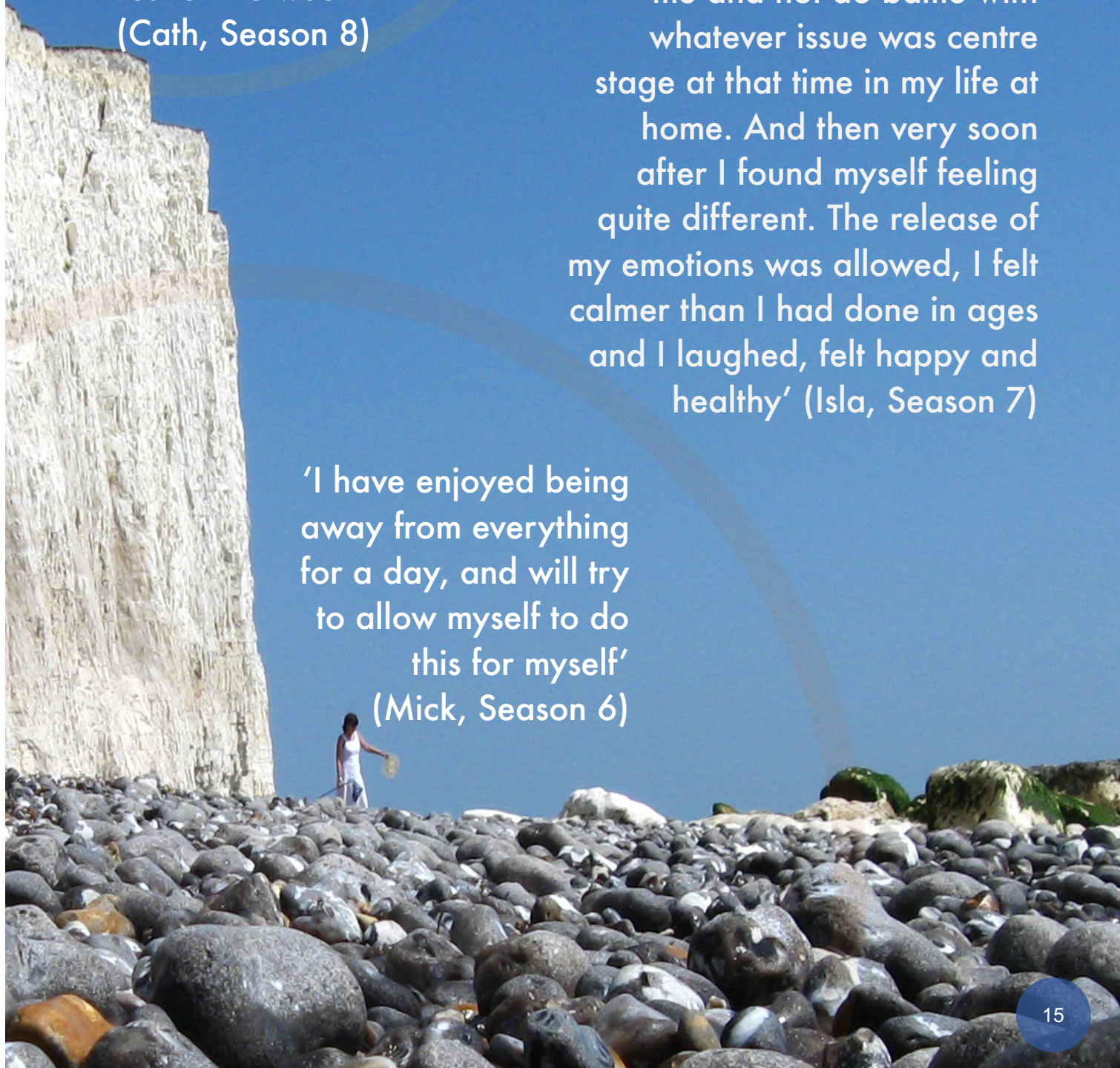


Theme 1 Escape

'[Grow] was an escape from the stresses of everyday life, and a chance to have a breather, so I could cope with life for the rest of the week'
(Cath, Season 8)

'Often when I got to the farm I was very emotional and quite down at first, just sinking into the place with a huge sense of relief - a time for me, to just be me and not do battle with whatever issue was centre stage at that time in my life at home. And then very soon after I found myself feeling quite different. The release of my emotions was allowed, I felt calmer than I had done in ages and I laughed, felt happy and healthy' (Isla, Season 7)

'I have enjoyed being away from everything for a day, and will try to allow myself to do this for myself'
(Mick, Season 6)



Detail from the survey questions

Theme 2 Social contact

**'[I was]
encouraged by
others in the group
who share the
same difficulties'**

(Jo, Season 1)

Grow participants talked about the benefits of being part of a group at Grow in terms of feeling supported, accepted and trusted by others. This was often described in terms of positive emotions stemming from being able to relate to the experience of others.

'I was able to see that other people feel and struggle in the same way I do'

(Pat, Season 4)



Theme 2 Social contact

'[I] enjoyed meeting other people who had a mutual understanding of what it's like to suffer from mental health conditions. It was helpful to be with people who understood if you were feeling unwell, tearful or 'delicate'. You could be yourself and not have to pretend' (Cath, Season 8)

'I finally met other people like me. People who were living with severe mental illness and who wanted to get better. People who wanted to be outside, and away from the city. People who could be hilarious about the utter weirdness of the world we had all been inhabiting... Suddenly I was around folks who understood that getting out of bed that morning deserved recognition by a full cheerleading squad with pompoms' (Ali, Season 4)

'For the first time in my life I was spending time with people that not only understood my struggles but empathised with them... which was an almost entirely new experience for me. I was able to let down my guard, let people in and learn about myself' (Hal, Season 9)



Theme 2 Social contact

'Feeling valued accepted and able to communicate in a group which is something I have found difficult' (Will, Season 12)

'I feel less isolated and want to pursue friendships' (Cal, Season 9)

'I had forgotten that I could enjoy company and sharing things with others' (Ed, Season 8)

'I am less shy and more ready to chat with people' (Bo, Season 9)

The social dimension of Grow was relatedly linked to a more positive and accepting sense of self. Participants also stated that the positive group experience had direct consequences on their ability to be with others more generally in group and social settings.

'Grow has given me such a boost in my confidence. I used to get that from friends and family, but it never touched what I got from a group of people I didn't know before who were completely non-judgemental. None of us knew anything about each other's history. I was able to be myself and I got on with everyone... Before, I wouldn't even have said hello. I feel like I'm climbing the ladder back to the person I was. My mental health is vastly better' (Cath, Season 3).



Theme 3 Care of self

'I feel like I have gained a greater understanding and compassion for the issues I suffer with and it has allowed me to become more accepting of myself in general' (Po, Season 8)

'I feel more integrated as a person, more able to be all of my whole self and not hide away some aspects of myself' (Maya, Season 11)

'I gradually started to feel that there was hope and that I was allowed a me-shaped life' (Anya, Season 7)

'It has allowed me to feel peaceful with being myself – a wonderful thing' (Keith, Season 6)



Case study: Katherine

Katherine took part in *Grow* in the Autumn of 2015.

Although we've changed her name to preserve anonymity, all the words below (and this picture) are Katherine's own. Hopefully they provide further insight into what participating in *Grow* feels like for those involved & the themes we identified.



"How I have been affected by my mental health [is] something that ***I tended to run away from*** before - until my depression or anxiety would get so bad I'd have to take notice of it! I wouldn't allow myself to really acknowledge how badly I have been affected by these things and some of the reasons I believe that they happened in the first place."

"Grow gave me the space to allow all of that to surface. It is not like counselling where you sit in a room and trawl through your pain. It is so different and ***it really worked*** for me."

"Often when I got to the farm I was very emotional and quite down at first... And then very soon after I found myself feeling quite different. The release of my emotions was allowed, I felt calmer than I had done in ages ***and I laughed***, felt happy and healthy..."

"For starters ***I felt safe***... I felt the group and the place very much held me, and I wasn't expected to be anything other than how I was feeling and what I was able to do or not do on that day."

"The sessions were so adaptable, we could do what suited us - having that ***choice felt very significant*** for me, as so much of my life was out of my control."

Case study: Katherine

"Grow has given me back my *much loved connection* to nature. I felt bereft without it, but I was too scared to venture out on my own and had lost my confidence."

"By the end of the season I could feel myself really coming out of my shell... *I began to see possibilities*"

"I am now volunteering at a local forest school, this is a *wonderful combination* for me of being outdoors in the woods and working in a creative way with young children."

"Seeing *their delight and wonder* at the natural world reminds me of that part of me that was hidden and damaged for so long, but through Grow now has a chance to heal and to come out to play".

"It is so good to have *gained confidence* on Grow to start doing my own thing again. And now I've just heard that I've got a paid job working for an outdoor after school club – can't believe my luck!"

"I needed Grow to help me begin *to value myself* once more, to feel safe and able to access nature and to feel I am not alone in my depression and anxiety, diseases which are so easy to become isolated with".

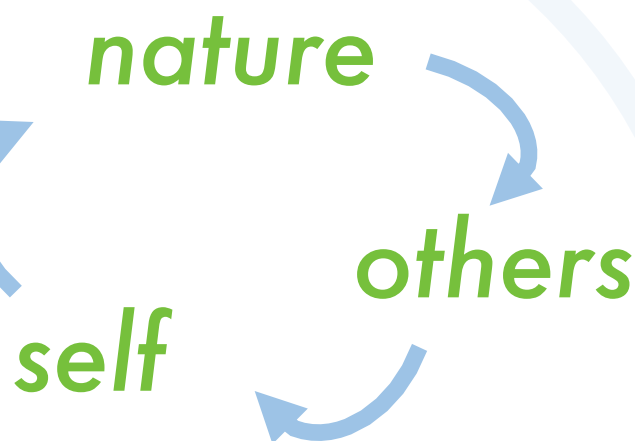
"Grow opened a gateway for me, to *a feeling of hope* and the ability to improve my life "

"Grow has really made *a huge impact on me*, my life and my children's lives - it feels like they've got their mum back..., it's not just for a season, it is life-changing".

why Grow works I: connecting with nature, self & others

Our findings suggests first and foremost that Grow is remarkably effective nature-based intervention. It has had a significant impact on the physical, mental and emotional health and wellbeing of participants; and managed to achieve this despite changing seasons, individuals, and group dynamics over many instances of the programme.

Why is Grow so effective? Our findings suggest that is the bringing together of a unique set of ingredients that is the key to Grow's success: a new or renewed contact with nature, with others, and with one's sense of self, alongside the development of social and practical skills, in a trusting and supportive environment. Combined they create a virtuous circle in which recovery has a genuine chance to germinate and flower – to grow!



why Grow works II: recovery capital

1

'recovery is both a personal and a social process—in which resolution of internal distress takes place alongside social reengagement in ways that may be mutually reinforcing'
(Tew, 2013, p. 360)

We think adopting a recovery model of mental illness helps to think about how and why Grow is effective. This model is wary of medical framings of recovery as being 'cured' or 'symptom-free'. Instead it understands recovery as a gradual, idiosyncratic, active process that is aided by supportive and healing environments (Leamy et al. 2011). It emphasises personal strategies for coping with stressful experiences and situations, recognizing the role of self, others, relationships and settings.

2

Recovery capital is considered central to the recovery process. 'Capital' includes economic, social, relationship, identity and personal resources. Their availability is key to recovery.

Recovery capital is 'a way of conceptualising factors that may be important in enabling people to make a sustainable recovery from currently disabling mental health difficulties' (Tew, 2013, p. 362).

3

**Social connectedness
Optimism about the future
Positive sense of identity
Meaning in life
Empowerment**

A recent review identified 5 key and interlinking 'recovery processes'.

Nature! As with the the recovery model more generally, natural settings have not featured as something that contributes to recovery capital. Following the success of Grow and similar nature-based interventions, it is certainly plausible that nature-connectedness, social contact and self-reflection work in a mutually reinforcing dynamic that encourages recovery from mental illness.

4

So what's missing?

X 5 recommendations

● ***Shout about it***

Our evaluation adds to the growing evidence base and supports the funding of nature-based interventions in treating mental health problems and experiences of psychological distress.

● ***Recovery capital***

We think the value of nature-based interventions can be understood to add to the 'recovery capital' model of psychological distress. This is a framework for conceptualising recovery that so far emphasises the interrelated importance of personal, social, cultural resources. We think access to nature should be added to this list & inform future research.

● ***Getting it right***

Our findings suggest that Grow provides a unique combination of 'ingredients' that can be used as a model for other nature-based interventions, including easy access, the provision of choice, and the nurturing of social contact. Further research into the effectiveness of these factors will be valuable.

● ***Use nature as a preventative measure***

Everyday access to nature is a foundation stone for wellbeing in children and adults. Making sure people have that access should therefore be high on the list of priorities for local and national government.

● ***Fairness & equality***

We therefore add to existing demands for greater use of nature-based interventions in mental health care and support; but also for extending access to nature, and the places and spaces in which nature is accessible, on a community and societal level as a marker of fairness & equality.

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Grow

For a few hours the bomb in my head stopped ticking
And the perpetually unfinished lists were still
I didn't have to run anymore, fear or hide myself

The anger the sirens the squawking were far away
And all I heard was birdsong
All I saw was beautiful

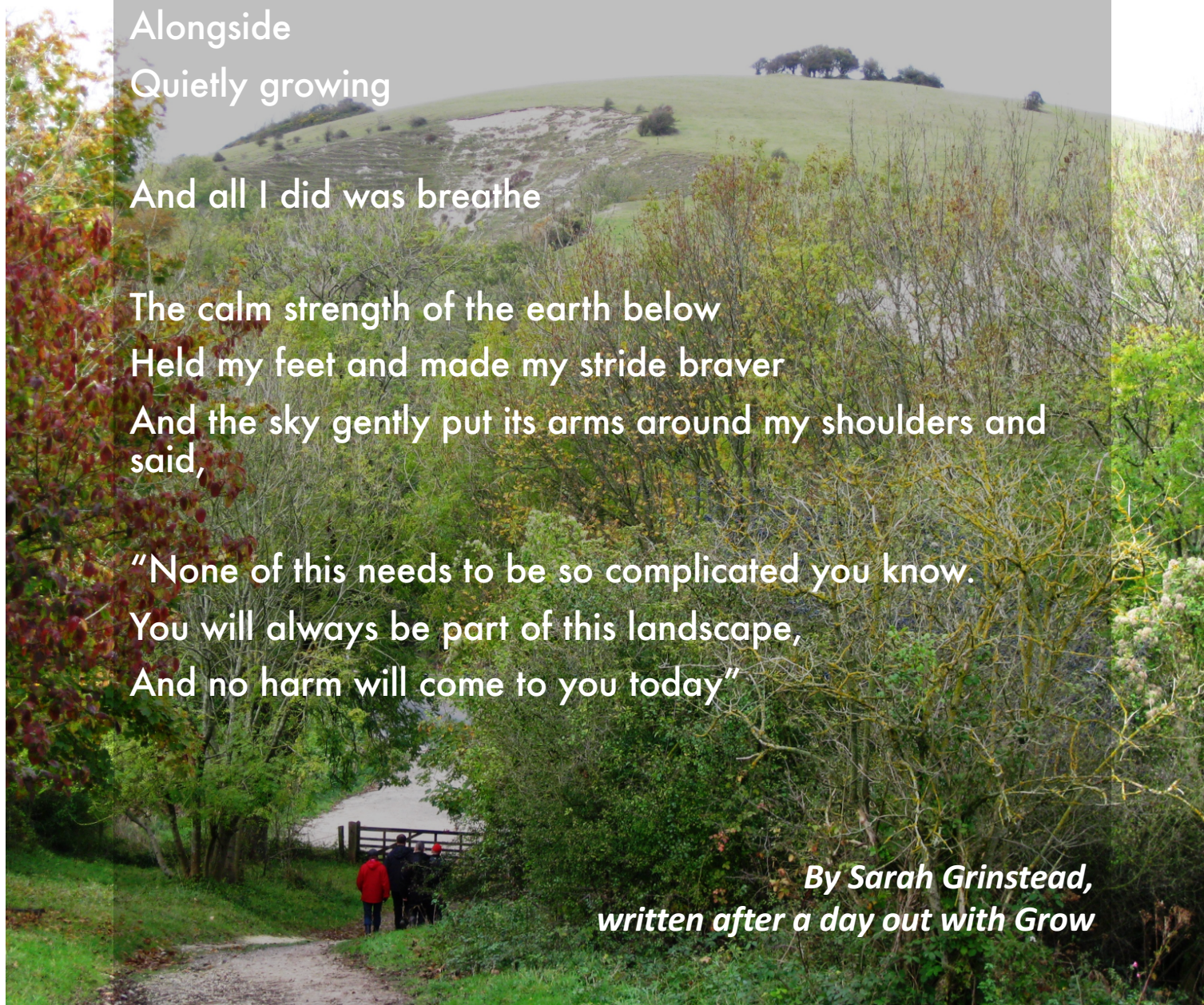
Nature minded its own business
I'm just another thing
Alongside
Quietly growing

And all I did was breathe

The calm strength of the earth below
Held my feet and made my stride braver
And the sky gently put its arms around my shoulders and
said,

"None of this needs to be so complicated you know.
You will always be part of this landscape,
And no harm will come to you today"

*By Sarah Grinstead,
written after a day out with Grow*





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