

Sidney De Haan

Research Centre for Arts and Health (SDHRC)

Evaluation report 2023

Wilder Wellbeing

By Esther Coren and Grace Conium Parsonage



Canterbury
Christ Church
University



Executive Summary

- The post-intervention evaluation of the Wilder Wellbeing programme, based on historical data and respondent feedback, provides valuable insights into the programme's impact. Several key themes emerged that underscored the positive effects of the programme on respondents' wellbeing. These themes include enhanced nature connection, improved recovery, boosted mental wellbeing, increased enjoyment, and alignment with the Five Ways to Wellbeing.
- The Wilder Wellbeing programme offers a cost-effective mental health intervention. With a cost of £250 per weekly session for up to 12 participants, it amounts to approximately £20.83 per person per week. When compared to other clinical interventions, Wilder Wellbeing proves to be significantly more affordable. It is notably cheaper than NHS behavioural activation and counselling/psychotherapy, though slightly more expensive than NHS group mindfulness-based cognitive therapy. However, one advantage of Wilder Wellbeing is its accessibility and shorter waiting times compared to the NHS, where patients may have to wait as long as 18 weeks to access mental health services. This makes Wilder Wellbeing a cost-effective and timely alternative, relieving the pressure on the public health service while delivering valuable mental health support.
- The evaluation of the Wilder Wellbeing project, while limited in participant numbers and occasional incomplete attendance, provides promising insights into its potential as a mental health intervention. Respondents reported enhanced wellbeing, including feeling more relaxed, cheerful, and less anxious or stressed, increased physical activity, and a desire to engage in outdoor exercise. Respondents also reported having acquired new skills and made friends, which is particularly important for those managing isolation and loneliness.

Acknowledgements

We acknowledge the support of The Kent County Council Suicide Prevention Programme, Kent Wildlife Trust, and the Recovery and Wellbeing College.

The work of the Sidney De Haan Research Centre is funded by the Oak Foundation

Table of Contents

Executive Summary	2
Acknowledgements	3
Introduction	5
Background	5
Aims and objectives	5
Literature	5
Method	7
Ethics	7
Results	8
Return on investment	8
Questionnaire	9
Organisational evaluation	20
Artistic expression and practice	24
Discussion	29
Recovery and Wellbeing	29
Physical Activity	30
Social isolation	30
Structure and Routine	30
Barriers to Engagement	30
Limitations	31
Conclusion	31
Reference List	32

Introduction

Background

Kent Wildlife Trust runs the Wilder Wellbeing Programme together with the Recovery College, offering a six-week programme, consisting of weekly meetings lasting two hours in various green spaces around Kent. The programme is designed for people experiencing lowered wellbeing, feeling isolated, and lonely, and those living with mental or physical health conditions. Participants of the programme can be referred through social prescribing, the Recovery College, or can self-refer to the course. Each of the six weekly sessions is based around the Five Ways to Wellbeing, using nature connectedness and mindfulness as a way to improve wellbeing.

Aims and objectives

The purpose of this report was to report our evaluation of the Wilder Wellbeing initiative. The objectives as outlined by The Suicide Prevention Programme were:

- To assess the impact that the Wilder Wellbeing programmes have on individual mental health and wellbeing.
- To identify the enablers and barriers within the programme which can impact outcomes.
- To consider whether it is possible to compare outcomes against alternative options for investment.

In addition, the research question posed by The Suicide Prevention Programme was 'Does the Wilder Wellbeing programme offer a good return on investment for health commissioners?'

Literature

We have reviewed the existing literature exploring the effect green spaces have on wellbeing going back to 1987. Ecotherapy, also referred to as horticulture therapy, green space intervention, outdoor intervention, or nature-based rehabilitation, involves a range of practices and activities which aim to foster the mutual healing between human mental health and the natural environment (Chalquist 2009). Participation in these ecotherapy interventions was shown to aid in several aspects of health and wellbeing, including:

- Relief from stress (Ibes, Hiram and Schuyer 2018; Marselle, Warber and Irvine 2019; Choe Jorgensen and Sheffield 2020; Matisse and Price-Howard 2020)

- Improvements in reported self-esteem (Cornille, Rohrer and Mosier 1987; Schell, Cotton and Luxmoore 2012)
- Reduction in reported feelings of anxiety (Vujcic *et al.* 2017)
- Reduction in reported feelings of depression (Vujcic *et al.* 2017; Marselle, Warber and Irvine 2019)
- Benefits of emotional regulation (Richardson *et al.* 2020)
- Reduction in reported feelings of burnout (Vujcic *et al.* 2017)
- Increased in reported feelings of happiness (Buckley 2020)

Participation in ecotherapy was also demonstrated to improve non-mental health outcomes, including:

- Physical health (Burls 2007; Wilson *et al.* 2009; Adams and Morgan 2016)
- Contribution to skills and knowledge (Williams and Mattson 1988; Wilson *et al.* 2009; Crone *et al.* 2022)
- Social benefits (Burls 2007; Wilson *et al.* 2009; Schell, Cotton and Luxmoore 2012; Tucker *et al.* 2013; Bowen and Neill; Richardson *et al.* 2020; Crone *et al.* 2022)
- Benefits to the natural environment (Cornille, Rohrer and Mosier 1987; Burls 2007)
- Benefits to the wider community (Tristan, Nguyen-Hong-Nhiem and Tristan 1989; Kamitsis and Simmonds 2017; Richardson *et al.* 2020)

However, not all research has reported beneficial outcomes in all elements of the data collected. For example, The Wild Skills, Wild Spaces ecotherapy project, Wales, reported during the 2022 conference of the European network for the promotion of health-enhancing physical activity (HEPA). Crone *et al.* (2022) reported on the project which aimed to deliver an ecotherapy programme to improve the health, skills, and wellbeing of local communities in rural Montgomeryshire, Wales. They reported no significant changes in the quantitative element, which looked at connectedness to nature, wellbeing, and physical activity levels. However, they did report that in the qualitative component, 100% of the 40 participants reported wishing to continue with the programme, demonstrating the participant view that the project in their view had supported them (Crone *et al.* 2022). There are incidences in the literature where qualitative and quantitative results on the same study do not concur (e.g. Tonkin-Crine *et al.*, 2015).

Method

We were commissioned by Kent County Council (KCC) Public Health (Suicide Prevention Strategy) to assess the impact of the Wilder Wellbeing programme, to identify its enablers and barriers, and to consider its return on investment. A series of questions were devised based on an initial review of the existing literature on the link between the natural environment and mental health and wellbeing. These questions were piloted with a group of six Wilder Wellbeing participants at Tyland Barn, Maidstone, on 19th July 2023. Their feedback was recorded, and the questions adapted, as appropriate, based on these consultations. The resulting final questionnaire was then distributed amongst two Wilder Wellbeing programmes at the end of the six-week course in the autumn of the same year. These programmes were located at Pegwell Bay near Ramsgate and West Blean Woods near Canterbury.

In addition to the new data gathered for this evaluation, historic organisational evaluation data was made available to the researchers. Thus, this evaluation also incorporates thematic summaries of existing evaluations going back to March 2022. Furthermore, a brief return on investment analysis was undertaken, gathering the total costs of running a Wilder Wellbeing programme, and comparing this with other mental health promotion services. Finally, the report provides examples of the arts-based activities that have accompanied the programme and the evaluation specifically, including the creation of poetry and nature-based collages.

Ethics

Formal approval for this evaluation was granted by Canterbury Christ Church University's Faculty of Medicine, Health, and Social Care Ethics Panel under the reference ETH2223-0315, on 14 August 2023. Participants were notified both verbally and in an information sheet of details of the evaluation and offered the opportunity to ask questions. Informed consent was obtained from all participants before completing the questionnaire. All consented to participate, and none withdrew.

Ten respondents completed the questionnaire across two Wilder Wellbeing courses, one at Pegwell Bay, the other at West Blean and Thornden Woods on 11 October 2023 and 12 October 2023, respectively.

Results

Return on investment

The cost per programme is £1500 for up to 12 participants for the full six-week intervention. This accounts for the staff time required for the engagement, including delivery, management, preparation, and engagement and promotion time with social prescribers. It also includes travel costs for the staff and materials needed for the session. Therefore, the cost to run each weekly session for up to 12 participants is priced at £250, so £20.83 per person per week, and £10.40 per hour, per person, per session. This is compared in Figure 1 against other, more clinical interventions using data from the *Unit costs of health and social care* (Curtis 2014; Curtis and Burns 2017; Jones *et al.* 2022).

Commented [EC1]: reference?

Intervention	Cost per session (£)	Cost per person, per session (£)	Cost per hour, per person, per session (£)	Reference
NHS behavioural activation	240	20	20	Jones <i>et al.</i> 2022
NHS counselling/ psychotherapy	--	--	50	Curtis 2014
NHS group mindfulness-based cognitive therapy	175	15	7.5	Curtis and Burns 2017
Wilder Wellbeing	250	20.8	10.4	Vicky Aitkenhead, per comms, 2023

Figure 1. Table of cost of clinical interventions based on Unit costs of health and social care of mental health compared against Wilder Wellbeing.

Looking at the typical costs of intervention, Wilder Wellbeing is much cheaper per hour, per person, when compared to NHS (National Health Service) behavioural activation as well as counselling/ psychotherapy. But it is slighter more costly than NHS group mindfulness-based cognitive therapy by £2.90 per person, per hour. However, the waiting times for accessing mental health services through the NHS can be as long as 18 weeks (NHS England 2015; Punton, Dodd and McNeil 2022). Therefore, ecotherapy projects such as Wilder Wellbeing may represent an opportunity to provide mental health intervention at a cost that is typically

cheaper than most NHS clinical interventions, whilst taking pressure off the considerable waiting times for NHS services.

Questionnaire

Due to the small numbers of participants at the locations selected for the evaluation, combined with not all attending the final session, limited conclusions can be drawn from the data. However, the trends are promising to suggest the impacts of ecotherapy as a mental health intervention. We report below, the breakdown of the answers to the questionnaire. Numbered sections 1-20 outline how much the respondents agree with the given statement (strongly agree; somewhat agree; neither agree or disagree; somewhat disagree; strongly disagree). Numbers 21 and 22 outline the open-ended questions that are featured at the end of the section.

Please note that with small numbers, percentages may be misleading, so please do refer to the actual numbers when reading these statistics.

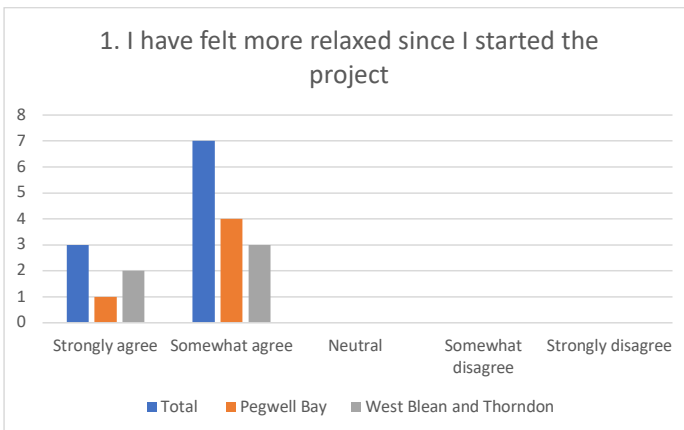


Figure 2. Responses to the statement: "I have felt more relaxed since I started the project."

From the responses of those who completed the evaluation, every respondent reported that they felt more relaxed than they did compared with at the start of the project.

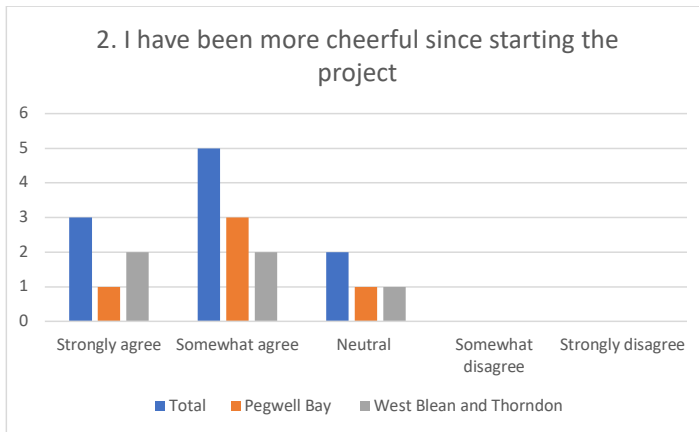


Figure 3. Responses to the statement: "I have been more cheerful since starting the project."

Following the trend suggesting a positive impact on their feelings throughout the project, most respondents, 80% (n=8), stated that they felt more cheerful since starting the project.

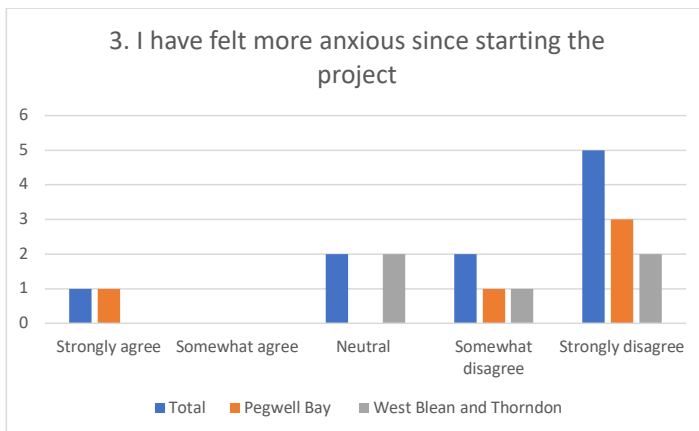


Figure 4. Responses to the statement: "I have felt more anxious since starting the project."

70% (n=7) of respondents stated that they did not feel as anxious since the start of the project. This percentage represents most respondents, However, as demonstrated in Figure 4, there were two neutral responses and one who strongly agreed that they felt more anxious.

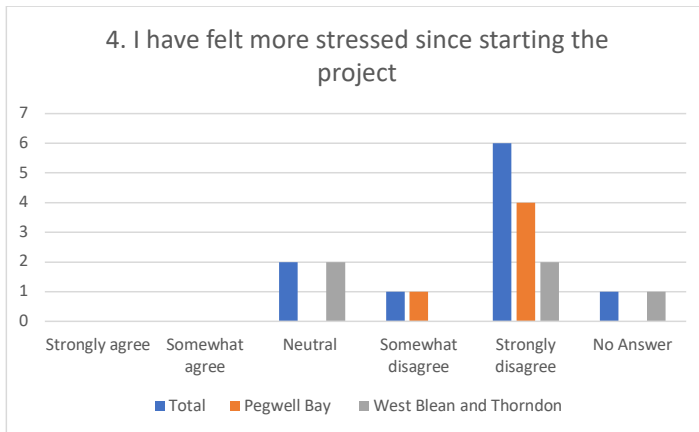


Figure 5. Responses to the statement: "I have felt more stressed since starting the project".

70% (n=7) stated that they did not feel as stressed since starting the project. This majority suggests encouraging results concerning the impact of the project on the reduction of stress levels for people experiencing mental ill-health. However, as can be seen in Figure 5, there was one instance of a respondent not answering this question, the only occurrence of its kind throughout the data.

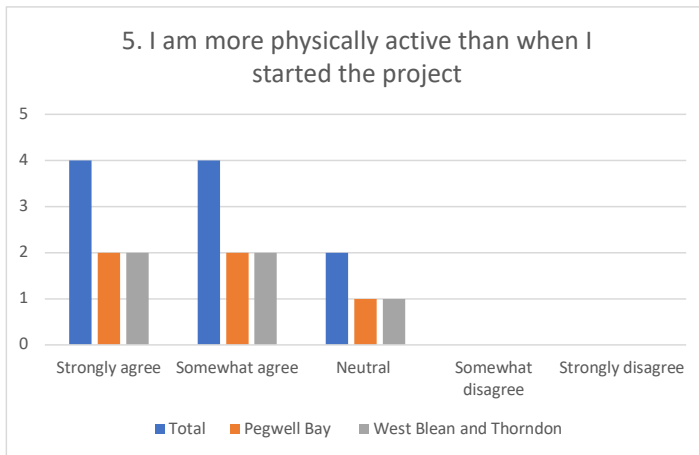


Figure 6. Responses to the statement: "I am more physically active than when I started the project."

Most respondents, 80% (n=8), answered that they had been more physically active since the start of the project.

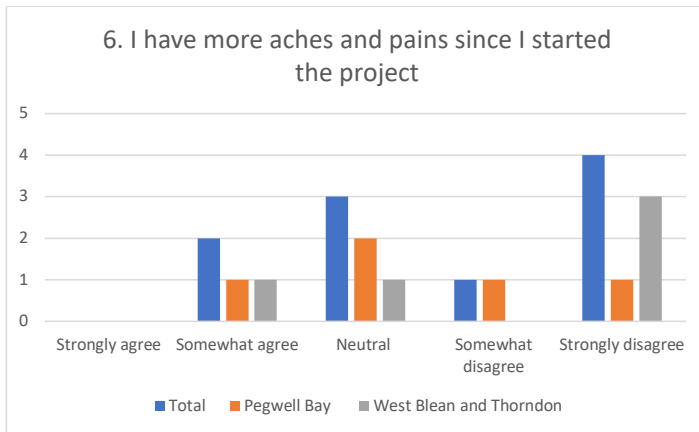


Figure 7. Responses to the statement: "I have more aches and pains since I started the project."

As demonstrated in Figure 7, there was a range of responses to this question. While half of the respondents (n=5) disagreed with the statement, some people experienced more.

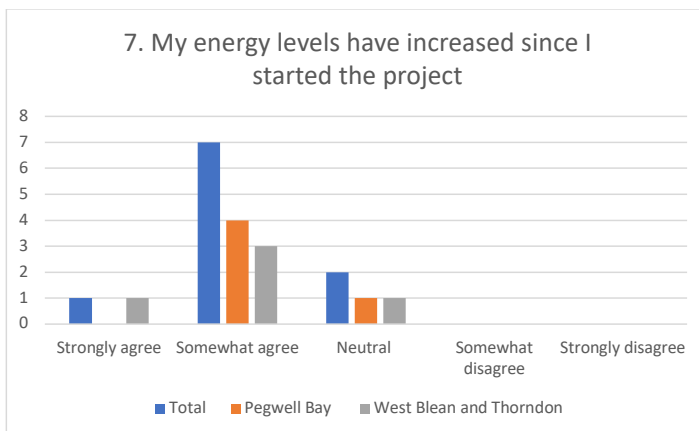


Figure 8. Responses to the statement: "My energy levels have increased since I started the project."

80% (n=8) reported they feel their energy levels have increased since the start of the project.

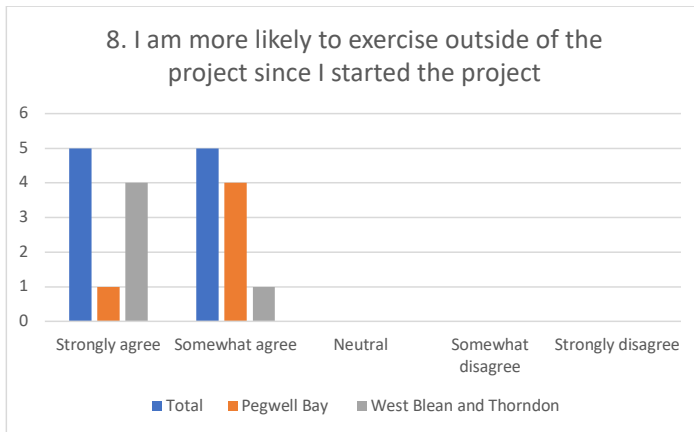


Figure 9. Responses to the statement: "I am more likely to exercise outside of the project since I started the project."

Every respondent reported they are more likely to exercise at other times since the start of the project.

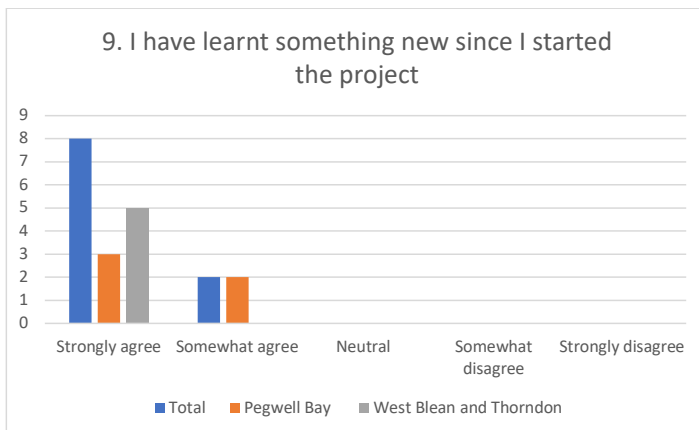


Figure 10. Responses to the statement: "I have learnt something new since I started the project."

All respondents reported they learned something new during the programme, and the vast majority strongly agreed with the statement.

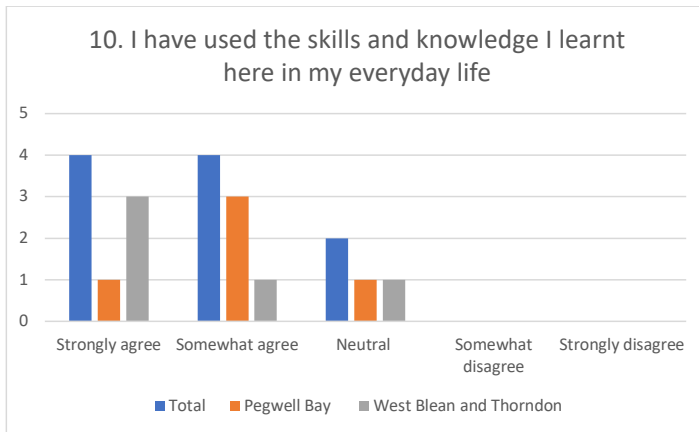


Figure 11. Responses to the statement: "I have used the skills and knowledge I learnt here in my everyday life."

80% (n=8) stated that they would use the skills they have learnt during Wilder Wellbeing in their everyday life.

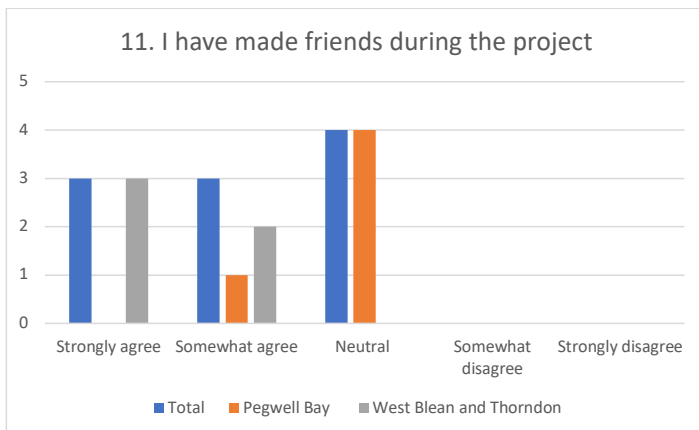


Figure 12. Responses to the statement: "I have made friends during the project."

This question was asked as the target demographics of those who can participate in Wilder Wellbeing include those experiencing isolation and loneliness. 60% (n=6) of the respondents reported that they had made friends during the project. However, when each project is considered individually, all respondents from West Blean and Thorndon felt they had made friends, but only one at Pegwell Bay.

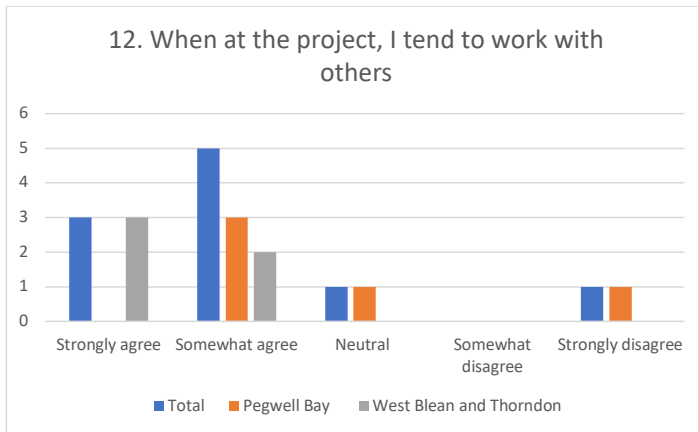


Figure 13. Responses to the statement: "When at the project, I tend to work with others."

The majority, 80% (n=8), reported they tended to work with others at the project. Again, there is a slight difference with the responses from each group where all those from West Blean and Thorndon reported they worked with others, compared to 60% (n=6) of those from Pegwell Bay.

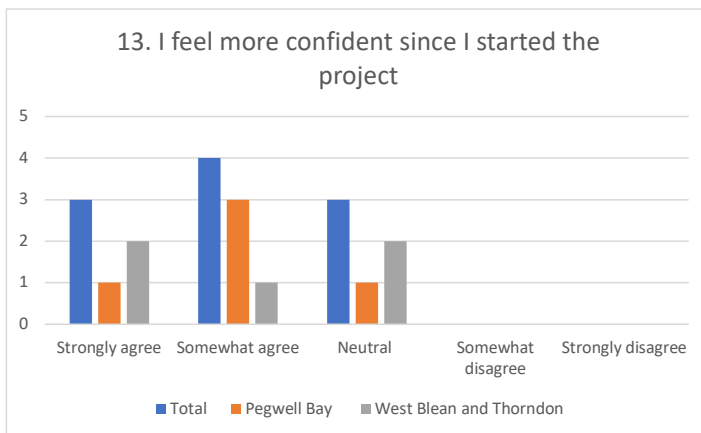


Figure 14. Responses to the statement: "I feel more confident since I started the project."

70% (n=7) reported that they felt more confident than they had at the start of the project.

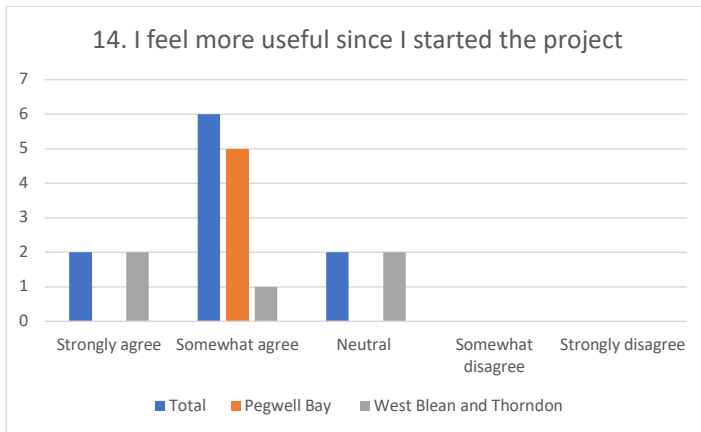


Figure 15. Responses to the statement: "I feel more useful since I started the project."

Nearly all, 80% (n=8), of respondents reported they felt more useful than they did at the start of the project.

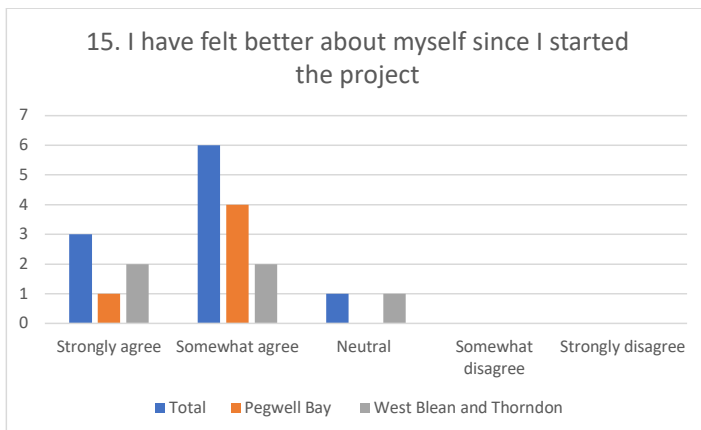


Figure 16. Responses to the statement: "I have felt better about myself since I started the project."

Most respondents, 90% (n=9), reported that they felt better about themselves compared to the start of the project.

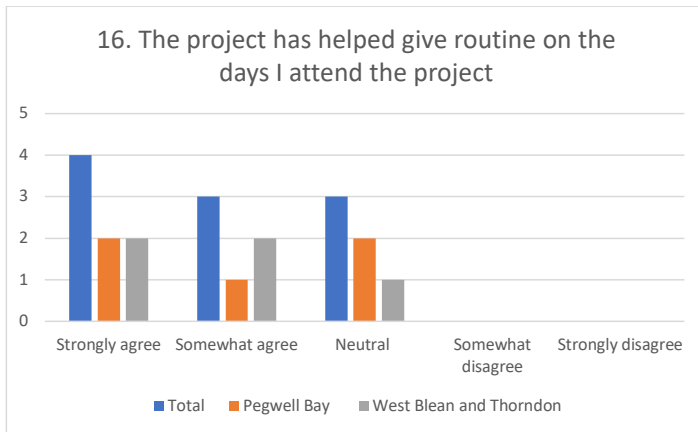


Figure 17. Responses to the statement: "The project has helped give routine on the days I attend the project."

70% (n=7) of respondents reported that the project helped give structure to their day on the days they attended.

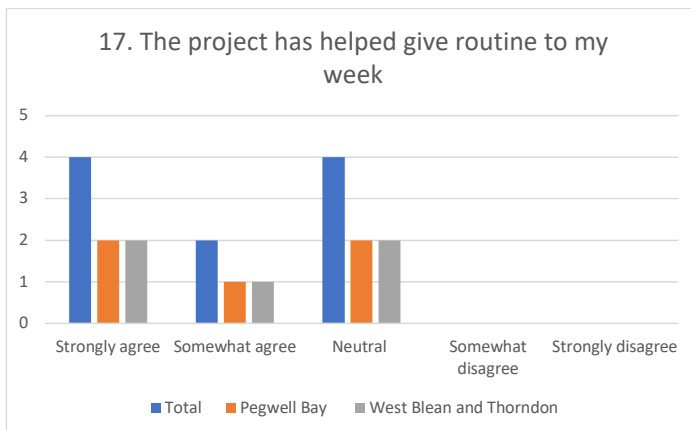


Figure 18. Responses to the statement: "The project has helped give routine to my week".

Interestingly, involvement in Wilder Wellbeing was reported to not only provide daily structure on the days people attended the project, but also extended to the other days in the week. 60% (n=6) reported the project helped give structure to their week.

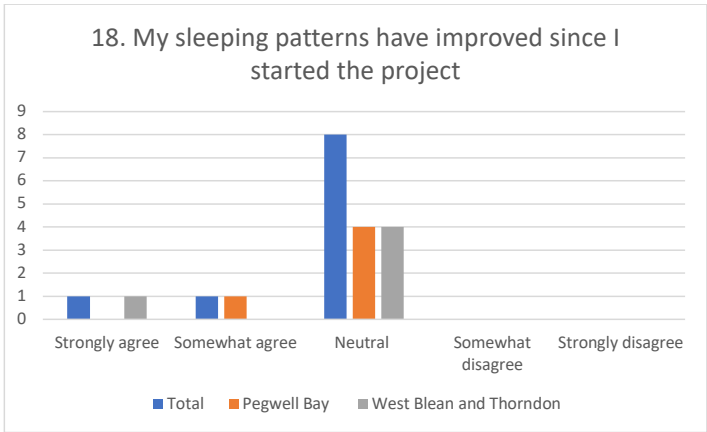


Figure 19. Responses to the statement: "My sleeping patterns have improved since I started the project."

Only 20% (n=2) responded that the project has helped them to sleep better, with 80% (n=8) saying that they neither agree or disagree.

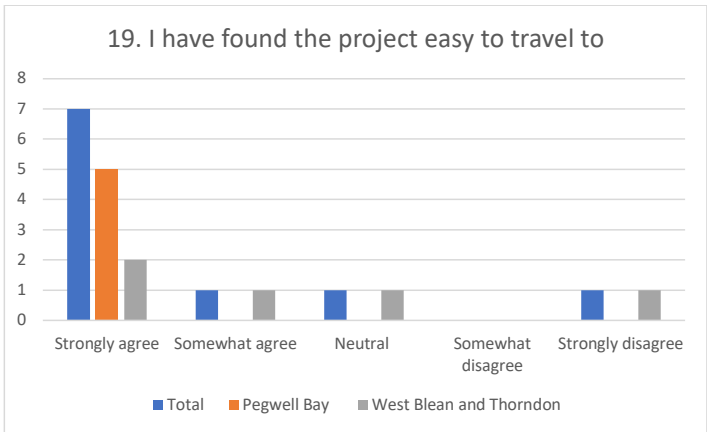


Figure 20. Responses to the statement: "I have found the project easy to travel to."

Almost all respondents reported that they found the projects easy to travel to, and all of those at Pegwell Bay strongly agreed with this statement.

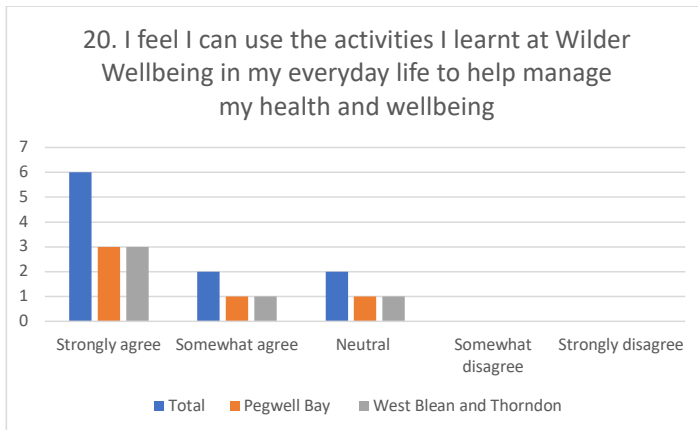


Figure 21. Responses to the statement: "I feel I can use the activities I learnt at Wilder Wellbeing in my everyday life to help manage my health and wellbeing."

80% (n=8) of respondents felt they could use the activities they learnt at Wilder Wellbeing in their everyday life to help manage their health and wellbeing.

21. Was there anything that made it difficult for you to participate in the project?

This question was open-ended to determine whether there were any barriers to engagement with Wilder Wellbeing. Half responded that there was no barrier to their participation. However, 30% (n=3) noted that existing health problems, both mental and physical, sometimes impacted their ability to participate.

"Spine problems/ sciatica cause a lot of pain- I am sometimes less mobile than I would like. This is not a reflection on the course."

20% (n=2) also acknowledged the challenges of getting to the location, where one said they would not have been able to attend without a volunteer driver.

"I do not drive so needed to get a taxi as no public transport links."

22. How did you find out about the project?

Half (n=5) of the respondents were signposted to the Wilder Wellbeing project through the Recovery College. Four were aware through word of mouth, and one from the Safe Haven project.

Organisational evaluation

A total of 61 post-intervention evaluation forms were made available to the evaluators dating from March 2022 to May 2023 from programmes located across Kent, at West Blean and Thornden Woods, Hothfield Heathlands, Romney Marsh, Allhallow, Pegwell Bay, Oare Marshes and Lydden Temple Ewell. These feedback forms asked the following questions of the participants at the conclusion of their six-week course:

1. What did you enjoy most about the programme?
2. Have you learnt new tools and skills, to use in the future to help your wellbeing?
3. Do you feel you have made connections:
 - a. with other people?
 - b. with nature?
4. What did you like the least? What improvements would you suggest?
5. Would you recommend a programme like this to others? Yes/No. Why?
6. Any other comments?

From these data, several themes were identified concerning the experiences of individuals participating in the Wilder Wellbeing programme. These themes are nature, recovery and mental wellbeing, enjoyment, the five ways to wellbeing and how the programme feeds into them, and finally the barriers to engagement. These themes are explored further below. Figure 22 below presents some of the keywords that were used to develop these themes, where larger words denote greater frequency within the survey.



Figure 22. Word cloud of quotes from the historic Wilder Wellbeing surveys; March 2022 to May 2023.

1. Nature

One theme drawn out from these historic questionnaires concerns nature/the natural environment. Here, the respondents commented on the various activities, including birdwatching and species identification, as well as benefits to their connection to nature.

"I like the connections I made with other people and the area. I feel this is now a safe space I can visit again and explore."

2. Recovery and mental wellbeing

Another theme drawn from the evaluation forms was a recognition by respondents that the programme was helpful for their own mental wellbeing and recovery. This featured comments on techniques for mindfulness including breathing exercises, grounding, and meditation.

"The breathing exercises were excellent ways of grounding oneself and being in the moment."

In addition, there were reports of the programme supporting reduced social isolation, as well as helping respondents recognise the importance of social connection to their mental health.

"Keep connecting with others, even on bad times."

3. Enjoyment

Another theme concerned reported enjoyment by the respondents. Some of the enjoyment is tied in with themes that have already been outlined here, including being in nature and conducting activities such as birdwatching. There were also notions of enjoyment of things they do not normally do, as well as prioritising self-care.

“Getting out and about and doing things I wouldn't normally do.”

“I have really enjoyed giving myself 2 hours every week!”

4. The five ways to wellbeing and how the programmes promote them.

One of the focal points of the Wilder Wellbeing programme concerns the 5 Ways to Wellbeing, originally developed by the UK government's 2008 *Foresight Project on Mental Capital and Wellbeing*. These five ways are: connecting with others, being active, taking notice, keeping learning, and giving. Project respondents demonstrated awareness of some of these ways, including connecting with others, being active, taking notice, and keeping learning, within the historic evaluations.

“Connections with nature and wildlife, animals, and other participants.”

“It is very good for building a foundation of being active.”

“Simple ideas of looking at things in more detail using photography and drawing for mindfulness.”

“Looking in detail and stopping and looking and learning.”

5. Barriers to engagement

The final theme concerned the barriers raised by respondents. These focus on aspects of the project which made participation difficult for respondents. One key concern was the weather. While there was acknowledgement that there was nothing that could be done to change this, there were suggestions e.g., having the sessions at times of the year, when weather conditions were likely to be more favourable.

“Rain- can't change the weather.”

“The weather, perhaps try a course in the late spring.”

Individual physical accessibility was another difficulty experienced by some participants. There were reports of challenges concerning long periods of standing and uneven terrain which impeded mobility.

“Standing in one position for long periods as I have a back problem.”

Other barriers concerned the timing of sessions, as one of the events ran at the same time as lunch. Also parking charges were noted, for respondents interacting with these natural spaces outside of the programme, which may impact accessibility and thus the long-term viability for respondents to continue to use and enjoy these spaces.

“Car parking charges, though waived for us in this course which was good.”

“Timing a little difficult as start is same as lunch. Perhaps start at 1pm.”

The final barrier concerns the mental health of the individuals taking part. While this programme is aimed at those experiencing lowered wellbeing, feeling isolated, and lonely, and those living with mental or physical health conditions, these conditions also acted as a barrier to participation.

“Sometimes starting/ leaving house is the hardest part.”

The post-intervention evaluation forms offer valuable insights into the experiences of its participants. The themes that emerged from these evaluations highlight the positive impact of the programme on nature connection, recovery, mental wellbeing, enjoyment, and alignment with the Five Ways to Wellbeing. Respondents expressed appreciation for the connection to nature, citing activities such as birdwatching and species identification. This connection to the natural environment not only fostered a sense of enjoyment but also played a pivotal role in participant mental wellbeing and recovery. Techniques such as mindfulness exercises and social interaction were identified as effective tools for enhancing respondents overall mental health.

The programme effectively aligned with the Five Ways to Wellbeing, where respondents recognised the programme's ability to promote these aspects of wellbeing and valued the opportunity to engage with them. However, several barriers to participation were also identified. Weather conditions, individual physical accessibility challenges, timing conflicts, parking charges, and the respondents own mental health and physical conditions acted as hindrances.

Artistic expression and practice

There were several arts activities as part of the Wilder Wellbeing programme. Locations differed in terms of landscape and facilitator, resulting in a range of arts-based practices. On the last day of the six-week programme, participants were invited to create a group poem based on their experience with Wilder Wellbeing. These have been collected and reproduced here, with permission, for locations at Tyland Barn and Pegwell Bay on 19 July 2023 and 11 October 2023, respectively.

Wilder Wellbeing Poem

Date: 19 July 2023

Location: Tyland Barn, Maidstone.

Tyland Barn, where the butterflies and wind whisper between green leaves.

*The bright summer colours are softened by the drifts of grass and move in the gentle breeze,
I look into the pond to see depth and reflections from another world rippling beneath my feet.*

*I didn't catch a single insect from the pond,
But slowly the feelings of grey eased.*

Sitting on the bench feeling calm, Dark rainclouds looming overhead.

The colour of a transformative flower was blowing softly in the wind.

A chance to take a breath to spend time outside under the beautiful flowers, slowly wondering through nature.

*Green fields filled with pops of colourful wildflowers,
provided meditation and peace during meditation.*

Pretty, colourful plants swaying calmly in the breeze as we breath peacefully, putting us at ease.

Wilder Wellbeing Poem

Date: 11 October 2023

Location: Pegwell Bay, Ramsgate

Peaceful Pegwell

At Pegwell Bay we did lots of things, walking within the lovely nature reserve.

In sometimes cloudy and wet weather, we went to the hide and stood still, watching the birds through binoculars, listening to them too.

And then the amazing seals resting on the shore, we saw lots of trees with apples on and the beautiful horses and highland cows.

*At the mouth of the river as it reaches the sea,
we walk, connect and notice,
Plants flowering in a multitude of green
As the Konik ponies eat grass, not worried about us.*

Feeling safe, walking in the chilly air, we saw a Kestrel hovering over the calm water.

As I walk on the treacherous path, the fierce wind blows away, I hear the leaves and nature continue to follow in the same direction, in such a wondrous way.

The seals bask in the sun, watching the busy bees pollenating and eating, Oh what fun.

Connecting in nature, making friends, learning to slow down and enjoying the moment.

Another form of art that was utilised in the Wilder Wellbeing programme was the making of collages using materials from nature. Participants were invited to select items that they were drawn to, and then create a piece of work from those materials. These were created within group settings, and individually. The photographs of the work was taken with the permission of those who created them.



Figure 23. Photograph taken of a group collage on 06 September 2023 at Pegwell Bay. © Grace Conium Parsonage



Figure 24. Photograph of collage 'Hippo' taken on 12 October 2023 at West Blean and Thorndon. © Grace Conium Parsonage



Figure 25. Photograph of collage. Taken on 12 October 2023 at West Blean and Thorndon. © Grace Conium Parsonage



Figure 26. Photograph of collage. Taken on 12 October 2023 at West Blean and Thorndon. © Grace Conium Parsonage



Figure 27. Photograph of collage "Offering". Taken on 12 October 2023 at West Blean and Thorndon. © Grace Conium Parsonage



Figure 28. Photograph of collage. Taken on 12 October 2023 at West Blean and Thorndon. © Grace Conium Parsonage

Discussion

The Wilder Wellbeing Programme is designed to address the holistic wellbeing of individuals experiencing lowered wellbeing, social isolation, and those experiencing mental ill health. The six-week programme, conducted in various green spaces across Kent, employs nature connectedness and mindfulness as essential components to enhance participants' overall wellbeing. This evaluation, commissioned by Kent County Council's Public Health (Suicide Prevention Strategy), aims to delve into the impact of the Wilder Wellbeing initiative. The literature review has revealed a range of positive outcomes associated with ecotherapy interventions, and the return on investment has demonstrated it is a cost-efficient intervention when compared with other NHS offers dealing with mental ill health. This discussion will focus on key themes illuminated by the research findings. These include the impact on recovery and well-being, the promotion of physical activity, the effect on social isolation, the establishment of structure and routine, and the identification of barriers hindering full engagement with the Wilder Wellbeing programme.

Recovery and Wellbeing

Considering the responses from the questionnaire delivered to the participants of the Wilder Wellbeing programme, there are some positive indications that participation was helpful in the respondent's recovery and wellbeing across several factors. The responses indicated a positive impact on their levels of relaxation and cheerfulness after completing the project. However, there was a range of responses concerning their levels of anxiety, which could reflect external or individual mental health factors which may contribute to levels of anxiety in some individuals. In addition, while the trends indicate a reduction in feelings of stress, this was the only question which resulted in a one respondent not providing an answer. This could be due to many reasons, such as the individual not seeing the relevance in the question, not wanting to answer the question, or simply accidentally missing it out when answering. Also, this is a population with mental health problems, which can imply variable mood (Saxena, Dubey, and Pandey 2011) and self-management, (Schrank *et al.* 2012).

There are also encouraging results for positive impacts of the Wilder Wellbeing programme on respondents' increased levels of confidence, usefulness, and feeling better about themselves.

Beyond the promising results showing a positive impact on a range of wellbeing factors, there are also indications that respondents may continue to use what they have learnt throughout the project and apply these to their everyday life. This has the potential to provide long-lasting

results by enabling participants to take ownership of their mental health and provide them with tools they can use to support management of their conditions. These results are supported by the historic organisational evaluation data from Wilder Wellbeing, which suggested that respondents were able to apply the skills and mindfulness techniques they learnt during the project.

Physical Activity

There are also encouraging results regarding the positive impacts of the initiatives on the respondents' levels of physical activity. This is perhaps unsurprising given that the projects involved physical activity throughout the intervention, commonly nature walks, which would increase their weekly activity levels. There were also promising results which could support the ability of Wilder Wellbeing's programme to positively impact respondent's energy levels, and a desire of the respondents to exercise outside more than before they embarked on the project. This has the potential to improve both physical and mental health.

Social isolation

Results on social factors, differed between the two sites evaluated in this exercise, which highlights the differences in the various groups, where the dynamics between individuals may play a significant role in determining the development of social relationships between respondents. The fact that respondents are more likely to be lone working at Pegwell Bay could account for their lower responses regarding making friends at the project. Social impacts are also reported and supported by the responses within the historic organisational data, which highlights the potential social opportunities within Wilder Wellbeing.

Structure and Routine

Regarding the impact the Wilder Wellbeing project has on respondents' structure of the week and their everyday life, the results may suggest that for those attending the sessions, the project can provide daily routine, which may be a challenge for those experiencing mental ill-health. The results for the impacts on respondents' sleeping patterns are not significant, which could demonstrate that the respondents were unsure of the relevance of the question, as there were a high proportion of neutral responses in this area.

Barriers to Engagement

The results on the question of aches and pains varied. This could be accounted for by pre-existing health conditions of some of the respondents. Regarding how easy the respondents found the programmes to get to, while the results demonstrated most found it easy, it is important to remember that those who may have found the projects

difficult to access may not have joined in the first place or may have been put off joining. Therefore, while this question cannot demonstrate the accessibility of the project, it can suggest that of those who came, most found it easy to get to.

Barriers of physical accessibility and pre-existing medical challenges have also been noted within the historic data of the Wilder Wellbeing surveys. Given the demographics of the people who attend and the required locations of these programmes, there are limited opportunities to further address these. The staff and practitioners at the Wildlife Trust and the Recovery College have supported individuals in the programmes outlined here, continuing this same practice, will alleviate some of the barriers mentioned by the respondents.

Limitations

The findings from the evaluation of the Wilder Wellbeing project provide valuable insights into its potential as a mental health intervention. However, we acknowledge several limitations. The primary constraint is the low number of participants. Additionally, not all participants attended the last day of the six-week sessions, further limiting the generalisability of the findings. Additionally, it also becomes apparent that some of the participants are repeat users, having attended Wilder Wellbeing programmes in the past. Whilst this does demonstrate people enjoy this initiative and may suggest it has been beneficial for their health and wellbeing, it is worth bearing in mind when considering the results.

Conclusion

Despite limitations, the trends observed in the responses are promising and suggest that Wilder Wellbeing has the potential to positively impact individuals experiencing challenges to their mental health. Notably, respondents reported feeling more relaxed, cheerful, and less anxious or stressed since starting the project. They also expressed an increased level of physical activity and energy, as well as a desire to exercise outdoors. Furthermore, respondents reported learning new skills and knowledge, which they reported being able to apply in their everyday lives. Many respondents felt they had made friends during the project, which may be particularly important for individuals experiencing isolation and loneliness.

However, we acknowledge the challenges faced by some respondents, including existing health problems and project accessibility issues.

Understanding these barriers is crucial to improving the inclusivity and effectiveness of the Wilder Wellbeing programme. In summary, whilst the study limitations, particularly the small sample sizes, mean that definitive conclusions are not appropriate, the positive trends observed in the data suggest that Wilder Wellbeing has the potential to provide valuable support to individuals experiencing mental ill-health. These initial findings suggest that ecotherapy, as exemplified by Wilder Wellbeing, can be a promising approach to improving mental health and wellbeing.

Reference List

- Adams, M., & Morgan, J. (2016). *An evaluation of a nature-based intervention for people with experiences of psychological distress*. Brighton: University of Brighton.
- Bowen, D. J., & Neill, J. T. (2016). Effects of the PCYC Catalyst outdoor adventure intervention programme on youths' life skills, mental health, and delinquent behaviour. *International Journal of Adolescence and Youth*, 21(1), pp. 34-55.
- Buckley, R. (2020). Nature tourism and mental health: parks, happiness, and causation. *Journal of Sustainable Tourism*, 28(9), pp. 1409-1424.
- Burls, A. (2007). People and green spaces: promoting public health and mental well-being through ecotherapy. *Journal of Public Mental Health*, 6(3), pp. 24-39.
- Chalquist, C. (2009). A Look at the Ecotherapy Research Evidence. *Ecopsychology*, 1(2), pp. 64-74.
- Choe, E. Y., Jorgensen, A., & Sheffield, D. (2020). Does a natural environment enhance the effectiveness of Mindfulness-Based Stress Reduction (MBSR)? Examining the mental health and wellbeing, and nature connectedness benefits. *Landscape and Urban Planning*, 202, pp. 103886. Available at: <https://doi.org/10.1016/j.landurbplan.2020.103886>
- Cornille, T. A., Rohrer, G. E., & Mosier, J. G. (1987). Horticultural Therapy in Substance Abuse Treatment. *Journal of Therapeutic Horticulture*, 2, pp. 3-7.

- Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the Workplace. *Journal of Occupational Health Psychology, 6*(1), pp. 64-80.
- Crone, D., Sellars, P., Clayton, D., & Mercer, J. (2022). 'This has just given me life back' – Mixed method evaluation of the Wild Skills, Wild Spaces ecotherapy project, Wales, UK. Paper presented at the *HEPA Europe Conference*; France, Nice, 32(2).
- Curtis, L. (2014). *Unit Costs of Health and Social Care 2014*. Canterbury, UK: Personal Social Services Research Unit, University of Kent.
- Curtis, L., & Burns, A. (2017). *Unit Costs of Health and Social Care 2017*. Canterbury, UK: Personal Social Services Research Unit, University of Kent.
- Ibes, D., Hiram, I., & Schuyler, C. (2018). Greenspace Ecotherapy Interventions: The Stress-Reduction Potential of Green Micro-Breaks Integrating Nature Connection and Mind-Body Skills. *Ecopsychology, 10*(3), pp. 137-150.
- Jones, K. C., Weatherly, H., Birch, S., Castelli, A., Chalkley, M., Dargan, A., Forder, J. E., Gao, J., Hinde, S., Markham, S., Ogunleye, D., Premji, S., & Roland, D. (2023). *Unit Costs of Health and Social Care 2022 Manual*. Canterbury, UK: Personal Social Services Research Unit, University of Kent and York, UK: Centre for Health Economics, University of York,
- Kamitsis, I., & Simmonds, J. G. (2017). Using Resources of Nature in the Counselling Room: Qualitative Research into Ecotherapy Practice. *International Journal for the Advancement of Counselling, 39*(3), pp. 229-248.
- Marselle, M. R., Warber, S. L., & Irvine, K. N. (2019). Growing Resilience through Interaction with Nature: Can Group Walks in Nature Buffer the Effects of Stressful Life Events on Mental Health? *International Journal of Environmental Research and Public Health, 16*(6), p.986. Available at: <https://doi.org/10.3390/ijerph16060986>
- Matisse, M., & Price-Howard, K. (2020). A Pilot Study Utilizing Ecotherapy as a Therapeutic Modality for Persons with Trauma-Related Stress Disorders. *The Practitioner Scholar: Journal of the International Trauma Training Institute, 2*, pp. 26-46.
- NHS England. (2015). *Improving Access to Psychological Therapies (IAPT) Waiting Times. Guidance and FAQ's*. London, UK: NHS

England. <https://www.england.nhs.uk/mental-health/resources/access-waiting-time/> (Accessed 15 August 2023)

- Punton, G., Dodd, A. L., & McNeill, A. (2022). 'You're on the waiting list': An interpretive phenomenological analysis of young adults' experiences of waiting lists within mental health services in the UK. *PloS ONE*, 17(3), p. e0265542. Available at: <https://doi.org/10.1371/journal.pone.0265542>
- Richardson, M., Richardson, E., Hallam, J., & Ferguson, F. J. (2020). Opening Doors to Nature: Bringing Calm and Raising Aspirations of Vulnerable Young People Through Nature-Based Intervention. *The Humanistic Psychologist*, 48(3), pp. 284-297.
- Saxena, P., Dubey, A. and Pandey, R. (2011). Role of emotion regulation difficulties in predicting mental health and well-being. *SIS Journal of Projective Psychology & Mental Health*, 18(2), pp.147-155.
- Schell, L., Cotton, S., & Luxmoore, M. (2012). Outdoor adventure for young people with a mental illness. *Early Intervention in Psychiatry*, 6(4), pp. 407-414.
- Schrank, B., Bird, V., Rudnick, A. and Slade, M. (2012). Determinants, self-management strategies and interventions for hope in people with mental disorders: systematic search and narrative review. *Social science & medicine*, 74(4), pp.554-564.
- Taylor, S. (2010). *Cold Looks and Hot Tempers: Individual-Level Effects of Incivility in the Workplace*. PhD Thesis. LA, USA: Louisiana State University and Agricultural & Mechanical College.
- Tonkin-Crine, Sarah, Sibyl Anthierens, Kerenza Hood, Lucy Yardley, Jochen W. Cals, Nick A. Francis, Samuel Coenen, Alike W. van der Velden, Maciek Godycki-Cwirko and Carl Llor, 2015. 'Discrepancies between qualitative and quantitative evaluation of randomised controlled trial results: achieving clarity through mixed methods triangulation', *Implementation Science*, 11(66), pp. 1-8. Available at: <https://doi.org/10.1186/s13012-016-0436-0>
- Tristan, J., Nguyen-Hong-Nhiem, L., & Tristan, J. T. (1989). Horticultural Therapy and Asian Refugee Resettlement. *Journal of Therapeutic Horticulture*, 4, pp. 15-20.
- Tucker, A. R., Javorski, S., Tracy, J., & Beale, B. (2013). The Use of Adventure Therapy in Community-Based Mental Health: Decreases in Problem Severity Among Youth Clients. *Child & Youth Care Forum*, 42(2), pp. 155-179.

- Vujcic, M., Tomicevic-Dubljevic, J., Grbic, M., Lecic-Tosevski, D., Vukovic, O., & Toskovic, O. (2017). Nature based solution for improving mental health and well-being in urban areas. *Environmental Research*, 158, pp. 385-392.
- Williams, P. N., & Mattson, R. H. (1988). Horticultural Activities and Demographic Factors Influence Children's Self-esteem. *Journal of Therapeutic Horticulture*, 3, pp. 39-54.
- Wilson, N., Ross, M., Lafferty, K., & Jones, R. (2009). A review of ecotherapy as an adjunct form of treatment for those who use mental health services. *Journal of Public Mental Health*, 7(3), pp. 23-35.