

FOREST BATHING+ ON PRESCRIPTION

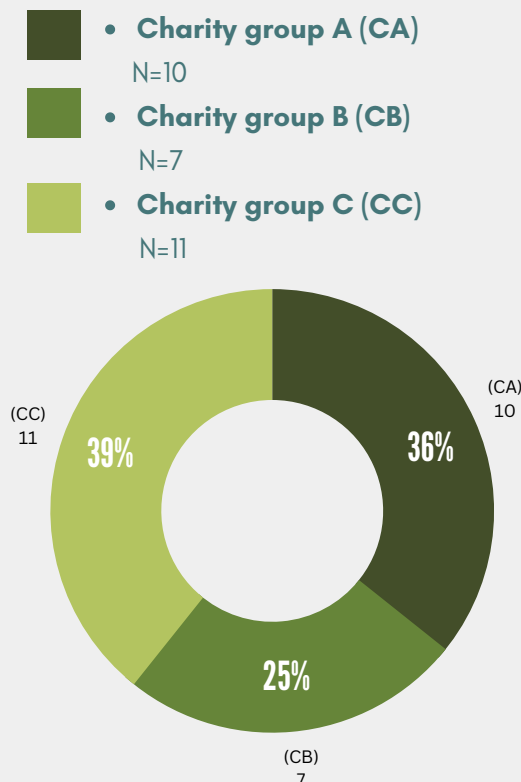
INTRODUCTION

The primary aim of this study was to evaluate the impact of The Forest Bathing Institute's (TFBI) six-week Forest Bathing+ (FB+) programme on self-reported wellbeing within a UK population who have been referred or self-referred via 'Green Social Prescribing' (GSP). The overarching research question was: 'What are the perceived effects of TFBI's six-week FB+ programme on individual and subjective wellbeing?'

STUDY AIMS

- To understand the participants' experience and perspective on the six-week FB+ programme.
- To measure the impact that FB+ has had on the participants' subjective wellbeing.
- To understand the pathways and/or barriers that participants may have experienced during the 6-week FB+ programme.

PARTICIPANT NO. N=28



METHODOLOGY

QUANTITATIVE METHODS:

- UCL wellbeing questionnaire (1) completed before and after each FB+ session.

QUALITATIVE METHODS:

- Interviews (online, semi-structured) conducted 24hours after each FB+ session and written feedback in the wellbeing questionnaire.
- Follow-up Interviews were conducted six weeks after the programme ended.



AUTHOR

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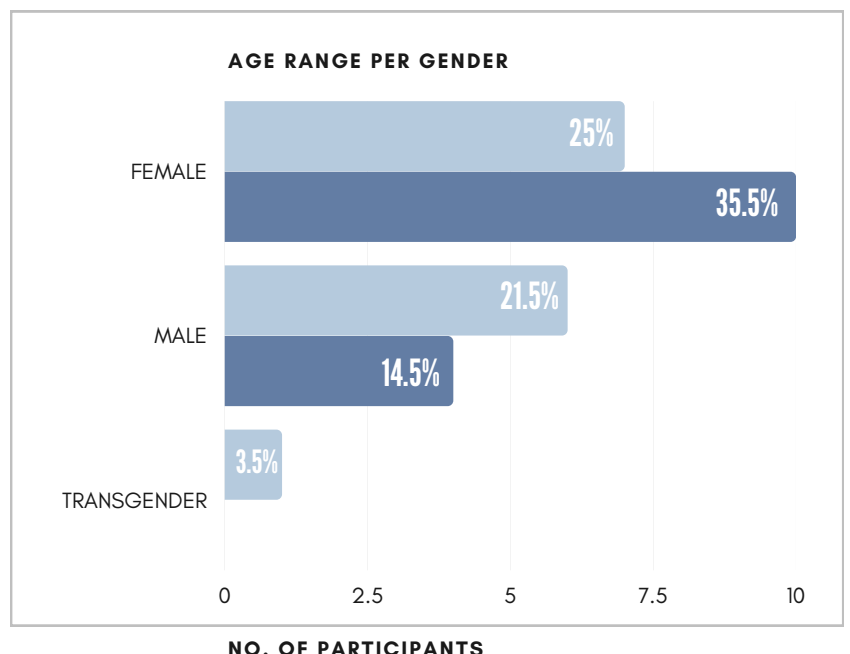
AFFILIATIONS

In partnership with The
Forest Bathing Institute (TFBI)

PARTICIPANT AGE & GENDER

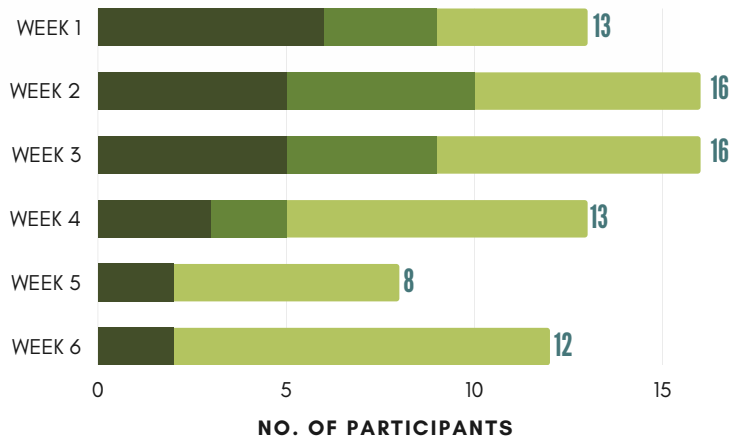
50% AGED 18-30 YEARS

50% AGED 39-75 YEARS

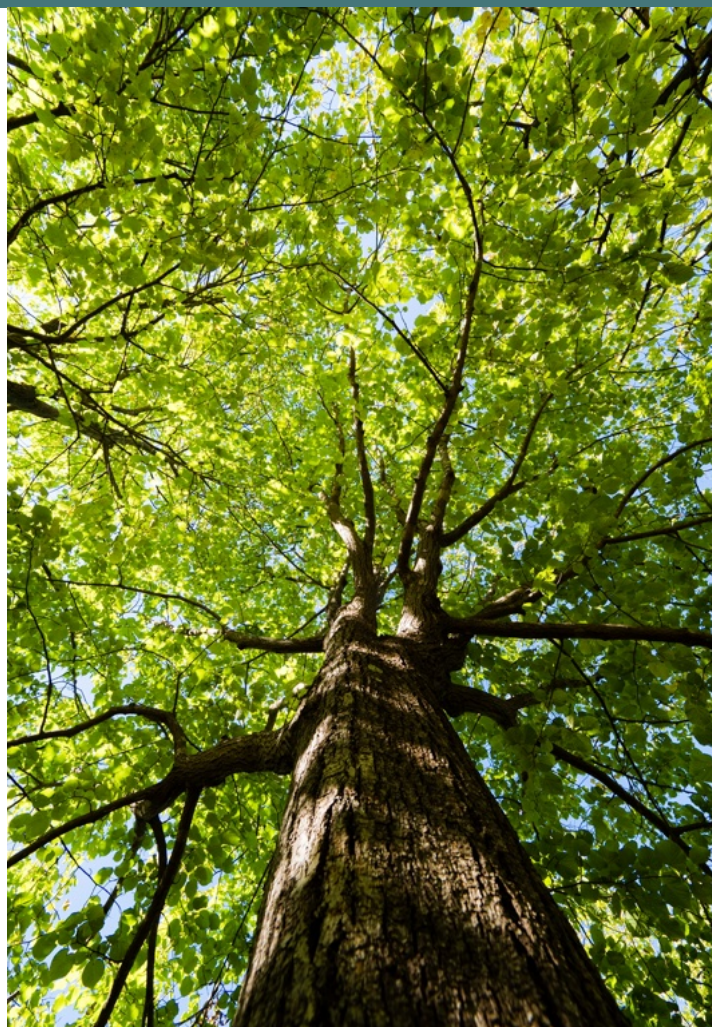
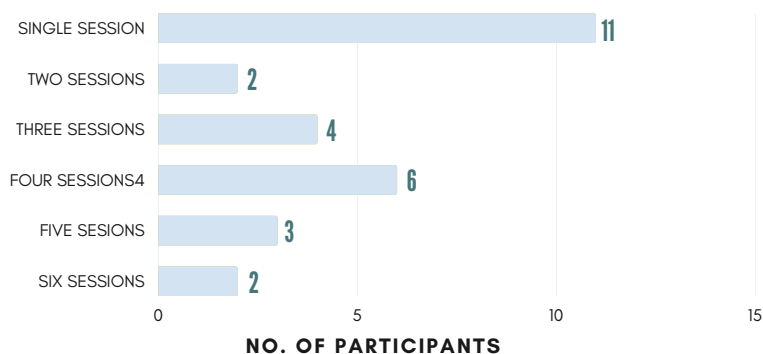


ATTENDANCE: 6 WEEK FB+ PROGRAMME

CHARITY A CHARITY B CHARITY C

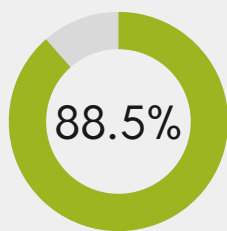


TOTAL ATTENDED SESSIONS (OUT OF 6)

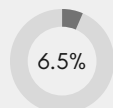


QUESTIONNAIRE RESULTS: POSITIVE & NEGATIVE EMOTIONS & GENERIC WELLBEING SCORES (N=28)

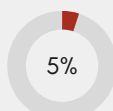
POSITIVE EMOTIONS



IMPROVEMENT IN POSITIVE EMOTIONS

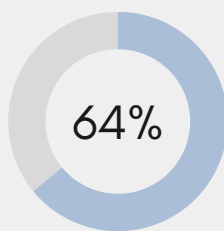


NO DIFFERENCE IN POSITIVE EMOTIONS

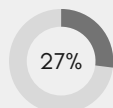


DECREASE IN POSITIVE EMOTIONS

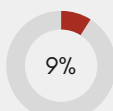
NEGATIVE EMOTIONS



REDUCTION IN NEGATIVE EMOTIONS

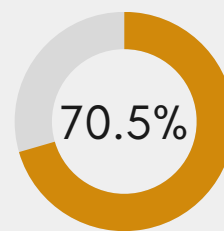


NO DIFFERENCE IN NEGATIVE EMOTIONS

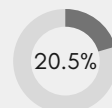


INCREASE IN NEGATIVE EMOTIONS

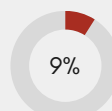
GENERIC WELLBEING



IMPROVEMENT IN GENERIC WELLBEING



NO DIFFERENCE IN GENERIC WELLBEING



DECREASE IN GENERIC WELLBEING

FEELING

“INSPIRED”

INCREASED BY 24%-48%

FEELING

“IRRITABLE”

DECREASED BY 28%-48%

FEELING

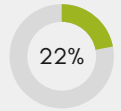
“ENGAGED”

INCREASED BY 24%-25%

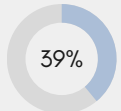
WELLBEING QUESTIONNAIRE RESULTS :

Av.% wellbeing improvement in each FB+ session (N=28)

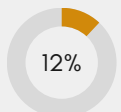
SESSION 1



IMPROVEMENT IN
POSITIVE EMOTIONS

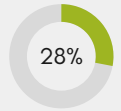


REDUCTION IN
NEGATIVE EMOTIONS

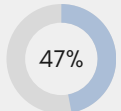


IMPROVEMENT IN
GENERIC WELLBEING

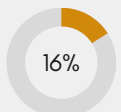
SESSION 2



IMPROVEMENT IN
POSITIVE EMOTIONS

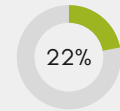


REDUCTION IN
NEGATIVE EMOTIONS

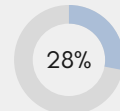


IMPROVEMENT IN
GENERIC WELLBEING

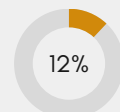
SESSION 3



IMPROVEMENT IN
POSITIVE EMOTIONS



REDUCTION IN
NEGATIVE EMOTIONS



IMPROVEMENT IN
GENERIC WELLBEING

"I enjoyed the experience. It was very good for relaxing and connecting with people." (P22)

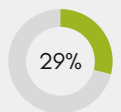
"Felt relaxed while smelling, listen and noticing the nature of the forest." (P23)

"I was feeling a massive discomfort on my body, not anymore." (P24)

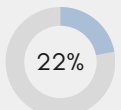
"I feel so much better after the session." (P22)

"I definitely feel better after this session. I feel a bit like when you do exercise & you get a bit of a rush. More positive. Negative thoughts have gone away while I have been doing the activities." (P5)

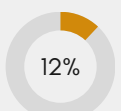
SESSION 4



IMPROVEMENT IN
POSITIVE EMOTIONS

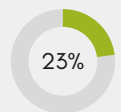


REDUCTION IN
NEGATIVE EMOTIONS

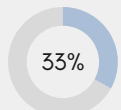


IMPROVEMENT IN
GENERIC WELLBEING

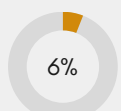
SESSION 5



IMPROVEMENT IN
POSITIVE EMOTIONS

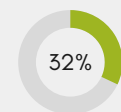


REDUCTION IN
NEGATIVE EMOTIONS

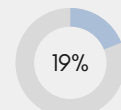


IMPROVEMENT IN
GENERIC WELLBEING

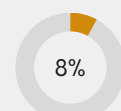
SESSION 6



IMPROVEMENT IN
POSITIVE EMOTIONS



REDUCTION IN
NEGATIVE EMOTIONS



IMPROVEMENT IN
GENERIC WELLBEING

"A most uplifting experience on many levels. Something that should be done regularly to uplift your soul." (P6)

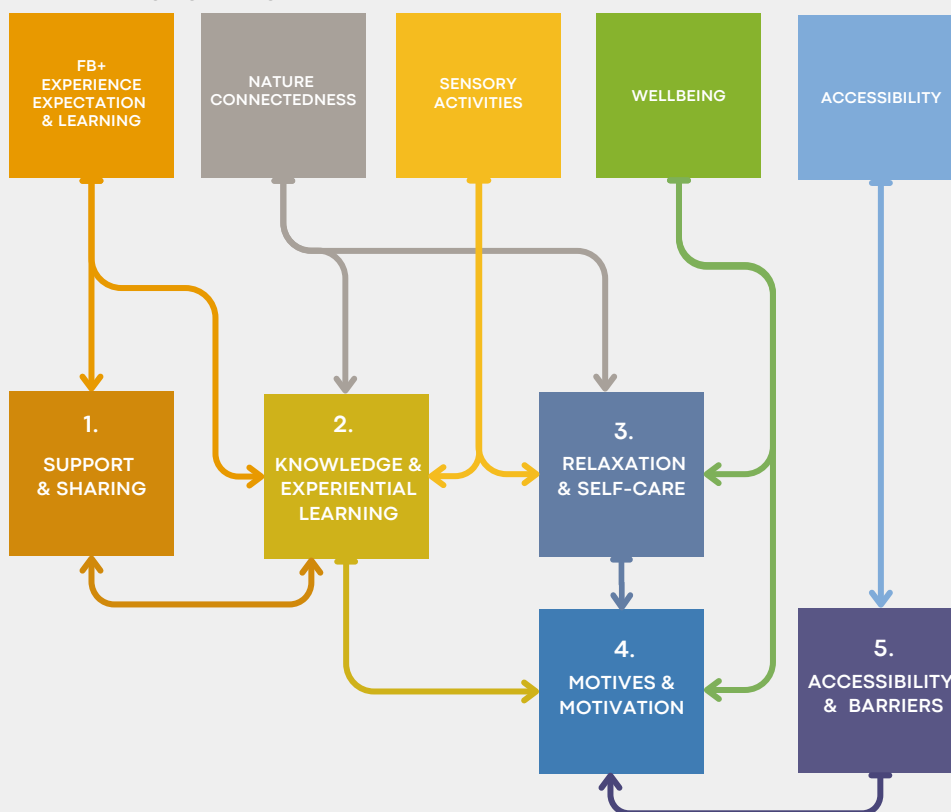
"Loved the extended tree laxation today! Great session resetting my mood and energy." (P4)

"While being grounding, it was sensorily uplifting experience that enabled me to fit more comfortable into my old body + mind." P6)

"I think my mood is better starting today as I'm looking forward to today's session. I really don't feel as negative as I have starting other sessions." (P5)

QUALITATIVE RESULTS: FIVE MAIN THEMES (from interviews and written comments N=12)

INTERVIEW TOPIC AREAS:



MAIN THEMES:

1. SUPPORT & SHARING
2. KNOWLEDGE & EXPERIENTIAL LEARNING
3. NATURE-BASED EXPERIENCE OF RELAXATION & SELF-CARE
4. MOTIVES & MOTIVATION
5. ACCESSIBILITY & RELATED BARRIERS

1. SUPPORT & SHARING

SUPPORT

FB+ PRACTITIONERS:

- Inclusive, friendly and welcoming.
- Created a safe and trusting environment.
- Created an accessible and exciting learning experience.

SHARING

GROUP 'CIRCLE TIME':

- Enriched experience
- Help participants feel less 'self-conscious'.

"...they're leading and they're supportive and its very gentle and inclusive. I think they're very mindful of different people's needs and it just feels like a lovely accepting, welcoming space." (P4).

"... there's no wrong answers or anything, ... it's a safe environment really... anybody could say anything really." (P3)

2. KNOWLEDGE & EXPERIENTIAL LEARNING

KNOWLEDGE

OF NATURE:

- Increases confidence & comfortability to engage with nature.

"I'd probably do more... smell and touch. I feel a bit more confident maybe doing that and realizing that it is good for you..." (P5)

EXPERIENTIAL LEARNING

SENSORY ACTIVITIES:

- Help to awaken to senses.
- Promotes nature awareness.
- Aid relaxation.
- Promotes nature appreciation.

"My senses have been heightened... I think by learning what to look out for... You can see how you to use it now... being aware more of textures and smells." (P2)

QUALITATIVE RESULTS: FIVE MAIN THEMES (from interviews and written comments N=12)

3. RELAXATION & SELF-CARE	4. MOTIVES & MOTIVATION	5. ACCESSIBILITY & BARRIERS
<p><u>RELAXATION:</u></p> <p>SLOW PACE OF FB+:</p> <ul style="list-style-type: none"> • Promotes calmness & peace. • Slows movement, breath & mind and body. • Promotes resilience. 	<p><u>MOTIVES TO ATTEND:</u></p> <ul style="list-style-type: none"> • To engage with nature more as a more routine habit. • To get outside more to feel better. • The motive to support wellbeing. • FB+ drives wellbeing motives. 	<p><u>ACCESSIBILITY:</u></p> <ul style="list-style-type: none"> • Interest in attending FB in more local/community areas. (e.g. walking distance) • Logistics, clearer meeting point signage.
<p>"I think your attitude changes as you've kind of relaxed and taking some deep breaths and just enjoyed being outside... and I think you feel stronger, more able to cope with life as a result." (P3)</p>	<p>"... it's absolutely helped me through quite a tricky time in my life.... To have that there... you know, the value of looking forward to it, doing it and then the impact after I've done it. I've definitely felt that for sure." (P4)</p>	<p>"There's FB going on where I live... but it's like £30-45 a session which...even at the best of times without all the cost-of-living crisis, that's quite a lot of money. So that's prohibitive. It would be amazing if there was some form of more affordable course." (P4)</p>
<p><u>SELF-CARE</u></p> <p>CONNECTION WITH NATURE:</p> <ul style="list-style-type: none"> • Promotes relaxation. • Promotes 'self-care.' • Offers people some 'time-out' and 'space' for themselves and a 'break' from day-to-day life. • Support wellbeing by being outside in different environment from daily life. 	<p><u>MOTIVATION BARRIERS</u></p> <ul style="list-style-type: none"> • Stress, low mood. • Doing Forest Bathing alone - more motivated in groups, (especially as a woman for safety aspects). • Motivated by group practice over self-practice. 	<p><u>BARRIERS:</u></p> <ul style="list-style-type: none"> • Weather conditions. • (inc. high pollen seasons). • Cost of Forest Bathing. • Physical and mental health • Work commitments and childcare needs.
<p>"I think there's a real value of taking yourself out of this... sterile environment, ... and I guess that's why it feels like a holiday, because... you're going somewhere else with the purpose of relaxing." (P4)</p>	<p>"If I'm, I'm stressed or feeling down, I don't particularly want to go out, but I make myself go because I know I feel better when I do..." (P2)</p>	<p>"I'm a freelancer and I never know when I'm gonna work, so I was worried that I wouldn't be able to come... there's a lot of standing around and you really do, if you really need to sit down, you really need to bring your own chair." (P3)</p>



RECOMMENDATIONS:

FOR UK FOREST BATHING FACILITATORS

- Consider a standardised group size in future Forest Bathing programmes that promotes social opportunities.
- Identify and seek funding and investment from statutory bodies to subsidise future Forest Bathing programmes to make them accessible and affordable.
- Consider facilitating Forest Bathing programmes in local, urban forests e.g., areas that are accessible by foot or public transport by the local communities.
- Consider a standardised follow-up session(s) after Forest Bathing programmes (e.g., follow-up session once a month) thereby offering opportunities for continued group practice across seasons/ the year.
- Support the growth of UK Forest Bathing research by evaluating future programmes and by using flexible evaluation tools.

FOR UK FOREST BATHING RESEARCH

- Consider integrating coproduction into study designs.
- Consider evaluating Forest Bathing programmes conducted in urban forests e.g., areas that are accessible by foot or public transport.
- Consider investigating the cost-effectiveness of UK Forest Bathing as a subsidised nature-based activity.
- Consider investigating additional outcomes in future evaluations such as feelings of 'social connectedness' and adversities such as Biphobia.
- Consider evaluating Forest Bathing programmes during different seasons to measure the impact on wellbeing and effectiveness as a year long GSP intervention.

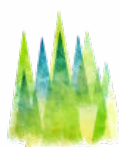
CONCLUSION:

Overall the findings of this evaluation study demonstrate subjective wellbeing improvements across both quantitative and qualitative results, which echoes findings within the existing UK evidence (2,3). The phenomenological approach in this mixed-method study offered participants a chance to share their perspectives and experiences of FB+, and this complemented the findings of the wellbeing questionnaire (1).

In summary, the effectiveness of the six-week FB+ programme evidenced in this evaluation study indicates that Forest Bathing could be considered a successful GSP wellbeing intervention in the UK, but that the accessibility, barriers & GSP pathways need to be researched further to deliver consistent practice with supporting quality framework. The overall efforts of this evaluation study seek to inform the future development of FB programmes in the UK; to contribute to the wider understanding and experience of GSP interventions; and add to the growing evidence of effective nature-based activities within the field of 'Creative Health'.

WITH THANKS TO:

All the participants who contributed to this evaluation study. Their willingness to share their perspective and experience of the FB+ programme was incredibly insightful and impactful. Thank you also to TFBI founders Gary Evans and Olga Terebenina, the two forest bathing practitioners Jo Bristow-Watkins and Katie Robinson who led this six-week FB+ programme and to Surrey County Council – without you all this research evaluation would not have been possible – thank you!



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BATHING INSTITUTE

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UNIVERSITY COLLEGE LONDON

REFERENCES

- (1) Thomson J, Chatterjee HJ. UCL Museum Wellbeing Measures Toolkit UCL Museum Wellbeing Measures Toolkit Contents [Internet]. London; 2013 Sep.
- (2) McEwan K, Giles D, Clarke FJ, Kotera Y, Evans G, Terebenina O, et al. A Pragmatic Controlled Trial of Forest Bathing Compared with Compassionate Mind Training in the UK: Impacts on Self-Reported Wellbeing and Heart Rate Variability. *Sustainability* 2021, Vol 13, Page 1380.
- (3) McEwan K, Potter V, Kotera Y, Jackson JE, Greaves S. 'This Is What the Colour Green Smells Like!': Urban Forest Bathing Improved Adolescent Nature Connection and Wellbeing. *Int J Environ Res Public Health* [Internet]. 2022 Dec 1.

