



AIMS

Greenspace programmes are defined as outdoor health initiatives designed to support physical and mental wellbeing. With rising levels of poor mental health and drug/alcohol harm in Scotland, greenspace programmes could offer person-centred approaches to support and recovery, since emerging evidence suggests positive outcomes for those with substance dependence while taking part. This project aimed to refine a theoretical framework (i.e., an identified group of theories that interact together to explain outcomes) showing what causal processes lead to positive outcomes for people with poor mental health and problem substance use. The project then looked to move this theoretical framework into practical implementation guidance for practitioners interested in setting up their own greenspace interventions for this target group.



KEY FINDINGS

- There has been limited exploration and understanding about why greenspace programmes work which makes replication and continued successful implementation challenging.
- To address this gap, this project firstly used qualitative interviews to refine a theoretical framework to show what causal mechanisms are important within a greenspace programme in order for desired outcomes to be achieved, and in what contexts this happens in. The voices of people with lived experience of drug and/or alcohol use were central to this, alongside programme staff/volunteers, wider health professionals, and local decision makers such as commissioners.
- The refined framework showed that programmes are successful in supporting a person's wellbeing and recovery due to: the feeling of escape and getting away from daily stressors; having space and time to reflect; increased physical activity; improved self-confidence with learning new skills; feelings of purpose; improved relationships; and decreased isolation through shared experiences.
- While this framework provided essential detail on why programmes 'work', it was not a practical implementation tool for future interventions. As such, further interviews were undertaken to discuss the theoretical components further and identify examples of how these could look in practice.



These practical examples acted as a bridge between theory and practice on the ground and therefore provided clear guidance on how to use the theoretical framework to inform intervention development and implementation in services.

- Final outputs were the theoretical framework plus three practical guidance manual documents: a buy-in/referral guidance manual; a service delivery guidance manual; and an outcome evaluation guidance manual (see the front covers of the documents and website link at the bottom of page 3).



WHAT DID THE STUDY INVOLVE?

Previous informing work

Previous work from the research team (Masterton et al. 2020; 2022) involved development of an initial theoretical framework seeking to explain causal pathways. However, there were notable gaps around missing lived experience input, consideration of how to measure outcomes, and inclusion of pre- and post-programme support pathways. These gaps informed application for this current study.

Work Package 1

In WP1, we conducted 33 qualitative interviews with stakeholders (people with lived experience of problem substance use, programme staff/volunteers, strategic decision makers (e.g., in policy), and health professionals external to the programmes), and four focus groups (with 17 people in total, all with lived experience of problem substance use). This allowed us to test and refine the existing framework from the informing work above, particularly from the perspective of those with lived experience. We also prioritised exploration of identified gaps of pre-programme planning, post-programme support, and measuring outcomes/evaluation within the previous framework. This allowed a refined, theoretical framework to be developed, addressing previous gaps, to show why greenspace programmes work, for whom, and in what contexts, as well as an identified list of evaluation methods that could be used to measure outcomes identified in the framework.

Work Package 2

In WP2, we conducted a further 47 interviews with the same stakeholder groups to aid moving the theoretical framework components into 'examples in practice' in order to create a practical guidance manual for intervention development. The objective was to build a bridge between theory and practice on the ground so the theoretical work could easily be used to inform practical intervention development and implementation in services. Throughout these interviews and guidance manual development, we specifically asked participants' views on the relevance and accuracy of the practice examples to ensure they were acceptable from a range of viewpoints and would therefore aid service delivery. We also asked participants with lived experience their views on the feasibility and acceptability of evaluation methods identified in WP1 in order to develop and refine the outcome and evaluation guidance. This was important so that evaluation was explored, not just from a practitioner perspective, but also from the perspective of recipients of the intervention.

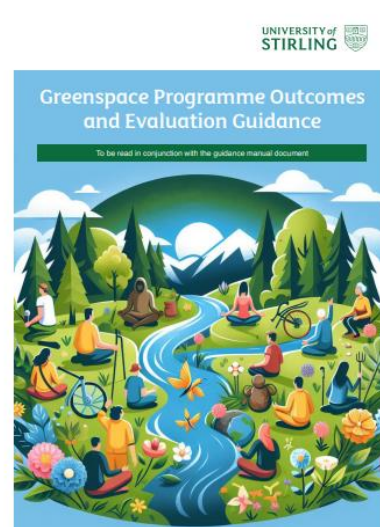
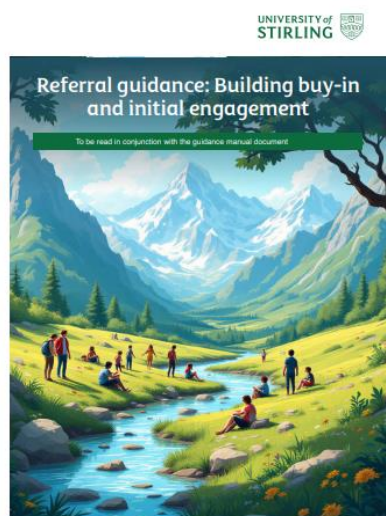
Work Package 3

WP3 involved working with our Graphics team to develop the guidance manuals, refining and editing the documents alongside the project team and advisory groups, and knowledge exchange events for practitioners and wider stakeholders to inform dissemination. See dissemination section (pg. 3).



WHAT WERE THE RESULTS AND WHAT DO THEY MEAN?

- This work provides an up-to-date, explanatory framework for greenspace programmes for people with poor mental health and problem substance use showing the causal influences of: the feeling of escape and getting away from daily stressors; having space and time to reflect; increased physical activity; improved self-confidence with learning new skills; feelings of purpose; improved relationships; and decrease isolation through shared experiences. This expands evidence for an approach which may have wide implications and potential for improving the health and wellbeing for those already experiencing health inequalities. These findings are in the process of being written up and published.
- The manuals provide practical guidance for planning, implementation, and delivery, particularly for those with less experience of intervention development. This could now make greenspace programme development more pragmatic and resourceful for practitioners, while ensuring the interventions are still based on rigorous, empirical work, with consideration of lived experience voice central. There are three documents:
 1. The main service delivery guidance manual providing key considerations in how to set up, plan, risk assess, design, and refine greenspace programmes for people with poor mental health and substance dependence;
 2. The evidence-based evaluation guidance manual describing how to potentially measure benefits of programmes, as well as consideration as to whether these are acceptable from the point-of-view of service users;
 3. A buy-in/engagement guidance manual designed to support initial conversations between potential participants, referrers, link workers, and/or support workers.
- The documents, and more detail around their development and purpose, can be found on the project website: <https://greenspace.stir.ac.uk/>





WHAT IMPACT COULD THE FINDINGS HAVE?

Throughout development, the guidance documents were reviewed extensively by our advisory groups, the project team, and by organisations we worked with across the project. This allowed numerous iterations of the output, ensuring it was acceptable from the point of view of a range of stakeholders, and had the best chance of impact. We have had plentiful feedback during KE events and subsequent discussions around potential impact:

- Service users could benefit from more greenspace programmes being set up in a way that enhances likelihood of beneficial outcomes. They could also benefit from more lived experience informed service delivery, evaluation, and initial referral processes, as this facilitates a trauma-informed, person-centred approach.
- Practitioners could benefit from having empirically informed guidance documents to aid with all parts of greenspace programme development and implementation and could benefit from increased buy-in from potential participants and commissioners/funders who better understand the processes and benefits of programmes through user friendly interfaces.
- Additionally, practitioners working in environmental/ecological roles within programmes (e.g., rangers) could benefit from a more in depth understanding of how nature could be used as a health asset to benefit a range of people. This could encourage more effective multidisciplinary team working.
- All practitioners could benefit from thorough consideration around what support and staff expertise might be needed to reduce risk of harm to participants and the environment itself.

As mentioned above, the Impact Acceleration Award (if successful) will allow us to run an event with an explicit focus on impact and how project findings may inform policy. Additionally, further future project plans include mapping of referral and implementation pathways to better understand how this approach is currently supported and implemented in different places across Scotland and how it could be more effectively embedded to improve access for a range of people most at need of support. This future project is in planning.



HOW WILL THE OUTCOMES BE DISSEMINATED?

In the third work package, we designed and ran three knowledge exchange events with health and social care practitioners, commissioners, other strategic decision makers, programme staff/volunteers and attendees, academics, and other interested stakeholders. We ran two in-person with 40 attendees overall, and one online with 75 attendees across Scotland and England. In these events we shared the refined framework and guidance documents, guiding attendees through the outputs and then facilitating group discussions around how best to disseminate them, where, and with whom, as well as additional modes of dissemination that might be effective. All attendees received copies of the guidance documents and have been encouraged to share with colleagues and networks. As a result of these events, ongoing dissemination is already happening. We set up list of organisations compiled from event feedback who we sent the documents to and have run multiple meetings with organisation leads to discuss their use. We continue to receive multiple emails with feedback about how helpful the documents are. As noted above, the project website is now live (<https://greenspace.stir.ac.uk/>) and this provides a central location for project information, guidance manuals, and journal articles as they are published.

We have presented at one international conference, one national conference, and are submitted an abstract for another international conference in London next May. We have two papers submitted into high quality journals (BMC Public Health and Drugs: Education, Prevention and Policy), and we are in the process of writing another two manuscripts. As these are made public, we will continue to seek out dissemination activities such as conferences or community events where findings may be well received/informative. Our work has also had exposure through the Green Health component of NHS Lothian Charity: <https://greenhealth.nhslothiancharity.org/2025/10/guest-blog-new-guidance-to-help-people-with-poor-mental-health-and-substance-dependence-get-out-into-nature/>

To take dissemination further, the Project Lead has applied for ESRC 'Impact Acceleration Account' funding for a 'Rapid Response Award'. This will enable a one-day event to be developed and run as a strategic platform to engage key decision-makers, particularly those in Scottish Government (e.g., in the Drug Policy Division) and senior public health roles, who are often difficult to reach through smaller, community-based events. Through amplifying lived experience voices, offering hands-on taster sessions, and showcasing the robust empirical foundation of these approaches, the event will aim to shift perceptions of nature-based programmes from "nice-to-have", to promising, powerful, scalable components of support and recovery systems. The event will promote the use of the guidance documents to support development and evaluation of programmes, showing that there are already existing supporting resources to begin implementation quickly in an evidence-informed way.



CONCLUSION

Greenspace programmes can support recovery and improved wellbeing among those with poor mental health and problem substance use. This study firstly contributes to an emerging evidence base, by refining and developing an existing theoretical framework for how greenspace programmes can achieve optimal outcomes. Secondly, guidance documents were developed for practitioners to provide practical insight about how to use theoretical findings so more people and organisations can develop evidence-based interventions for this population



RESEARCH TEAM & CONTACT



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Additional Information:

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