

# HOW GREENSPACE MIGHT BE USED TO IMPROVE MENTAL HEALTH AND SUPPORT REDUCTIONS IN DRUG AND ALCOHOL USE AMONG PEOPLE IN SCOTLAND

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# WHAT IS "GREENSPACE" ANYWAY?



# WHAT EXISTS FOR MENTAL HEALTH?

## Care Farms



- Use of regular farming activities to promote mental and physical health, usually based on a commercial farm or any other agricultural landscape.
- It is estimated that there over 240 care farms in the UK with over 8000 people using them for some type of support.
- The range of support that care farms provide runs on a continuum between passively providing a therapeutic environment for service users and providing more structured programmes.
- Research shows that marginalised groups, in particular, are reported to benefit from the environment and opportunities provided by care farming.

# WHAT EXISTS FOR MENTAL HEALTH?

## Horticultural Therapy/Garden Therapy



- Horticultural therapy programmes are seen across the UK and are most commonly undertaken in specialised gardens within residential care, hospitals and rehabilitation facilities.
- The gardens offer people a chance to aid their recovery through therapeutic, hands-on green activities and by spending time in greenspace.
- They also provide a supportive social environment and the chance to build relationships in a non-threatening atmosphere.

# WHAT EXISTS FOR MENTAL HEALTH?

## Wilderness Therapy/Adventure Therapy



- Wilderness and Adventure Therapy programmes typically utilise larger areas of greenspace.
- They can range from high impact, adventure-based exercises such as outdoor running, cycling and hiking to lower impact activities such as forest walks and wilderness treks.
- Interventions are often residential programmes, and are often developed for adolescents and young people as a way of promoting recovery through the removal from high stress or chaotic environments.
- The feeling of 'being away' as well as learning new skills and the restorative effect of nature are often reported by participants as being particularly important factors in the success of these programmes.

# WHAT EXISTS FOR SUPPORTING REDUCTIONS IN SUBSTANCE USE?

- Some recent promising advances from the University of Plymouth. These findings show that spending time in a garden, allotment, or viewing scenes that are made up of at least 25% greenspace was associated with reduced strength and frequency of cravings for unhealthy food, alcohol, and tobacco (Martin et al., 2019). This shows even passive engagement with greenspace may support reductions in substance use.
- Other international research has also shown that horticultural therapy and care farming have been a successful component in substance use recovery programmes (Lehmann, Detweiler, & Detweiler, 2018 and Elings & Hassink, 2008 respectively).
- There have also been a number of wilderness therapy programmes, particularly in the USA, where reducing substance use is an outcome measure (Harper, Mott, & Obee, 2019).
- In Scotland, Phoenix Futures report that service users have a 41% higher successful completion rate of their recovery programme if they take part in their *Recovery Through Nature* programme (Phoenix Futures, 2019).
- Addaction and Wellbeing Works have also recently developed a garden project in the Addaction base in Dundee.

# MY RESEARCH

**Title of PhD:** “How might engagement with diverse forms of greenspace improve mental health and support reductions in drug and alcohol use among people in Scotland?”

## Why is this important?

- There is growing strain on mental health services.
- Drug related harm in Scotland is rising.
- Greenspace interventions could be a promising addition to current health and social care provisions.
- It is still unclear how and why existing programmes are successful.
- Greenspace interventions to support reductions in substance use remain uncommon.
- Existing research includes limited, if any, empirical evaluation.

# STAGE 1 – REALIST SYNTHESIS

- The core principle of theory-driven realist approaches is that, researchers should instead build assumptions, or programme theories, about how interventions are meant to work.
- The overarching enquiry of intervention effectiveness changes from the question of 'what works' to a more in-depth inquiry of 'what works, for whom, and in what context or circumstance'.
- Realist approaches hold that outcomes in complex interventions are achieved through underlying generative mechanisms which are present in the right contexts.
- This relationship is referred to as a context-mechanism-outcome configuration and make up the 'programme theories'.
- Each programme/intervention made up of a number of programme theories which are refined throughout the process.

# Context + Mechanism = Outcome



**(Environment)**

+



**(Resources + Reactions)**

=

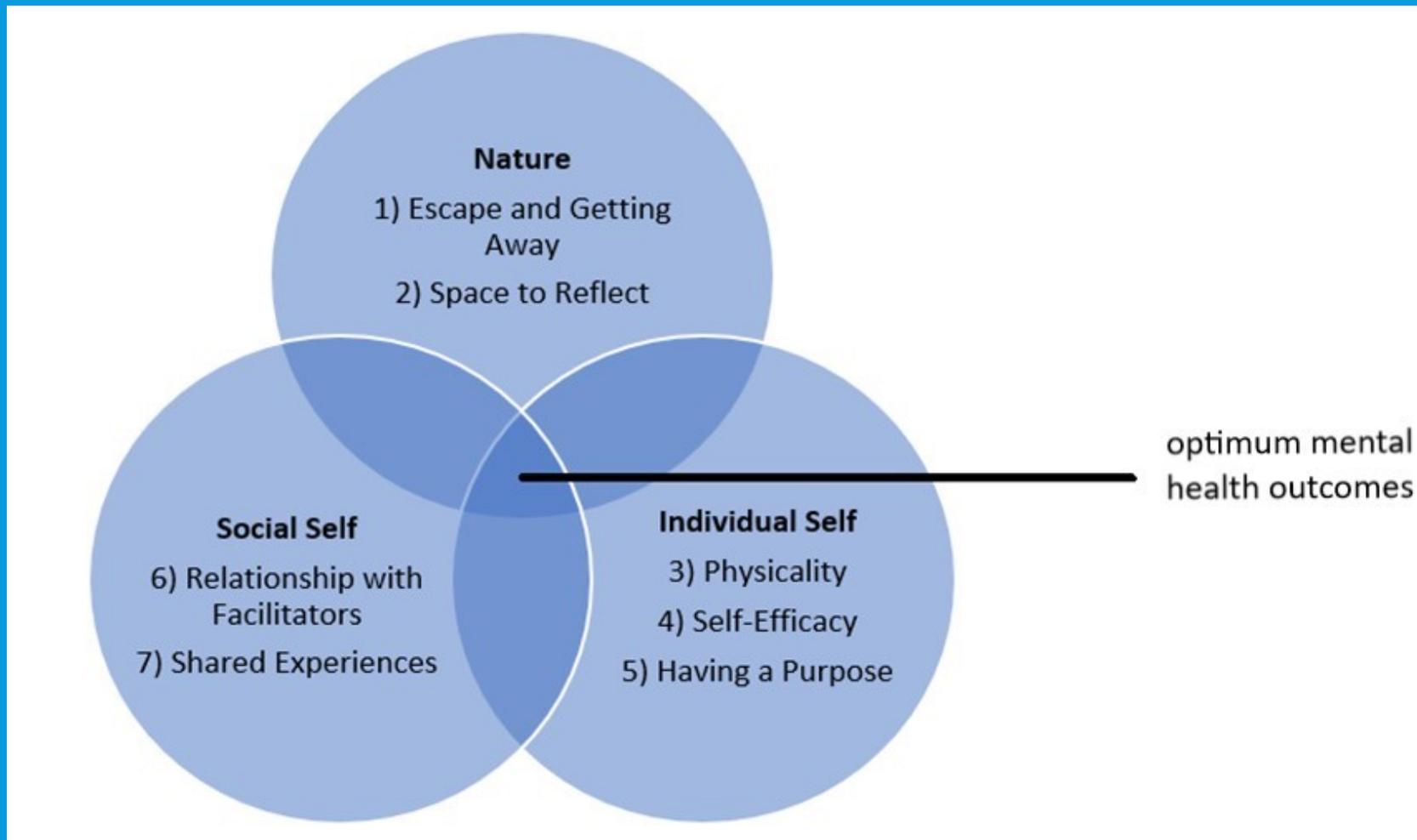


**(Effect)**

# THE SYNTHESIS PROCESS

1. The researcher reads literature and has initial conversations with stakeholders to build assumptions, or programme theories, about how interventions are meant to work. These programme theories consist of context-mechanism-outcome configurations (CMOc), of which there will be many.
2. These are called initial programme theories and once these theories have been developed, evidence should be then be gathered through systematic searching of the literature. This will then either allow initial programme theories to be accepted, refined, or rejected.
3. Refinement of the programme theories will then provide an explanatory framework which will allow a far greater theoretical understanding of the intervention process and why it is successful.

# OVERARCHING CONCEPTUAL FRAMEWORK FOR HOW GREENSPACE PROGRAMMES ARE EFFECTIVE FOR MENTAL HEALTH.



## NEXT STAGES – GREENSPACE AND SUBSTANCE USE

Link between mental health and substance use: the use of drugs or alcohol may be a way of trying to reduce or cope with existing symptoms of poor mental health. In other instances, drugs or alcohol may be used as coping strategies to stressful life events.

Given this relationship, if engagement with greenspace is successful in improving mental health, it is feasible to suggest it may also be effective in supporting reductions in substance use

For the second stage of my project, I will be collaborating with a few organisations who already provide nature-based programmes as part of their recovery framework.

Currently there is very little robust evaluation of greenspace programmes so by working alongside service users and staff using a realist evaluation approach, this could be an effective way to develop pathways about what is successful, how they work, why they work, for whom do they work.

# PLAN

- The realist evaluation will be informed by the realist synthesis undertaken in my first year as this will inform the initial programme theory for the intervention.
- I will then test the initial programme theory using focus groups and/or interviews to develop context-mechanism-outcome configurations with programme staff and service users.
- As with the realist synthesis, this will provide an overarching theory (or theories) of what works, for whom, in what circumstances and will allow a greater theoretical understanding of programmes.
- If accessible, client files will be used to create quantitative outcome measures, such as frequency of drug use, as well as other mental health outcome measures which will be chosen at the start of this phase.
- Testing quantitative outcome measures is important as it will allow me to analyse how effectively (if at all) engagement with greenspace programmes is supporting mental health improvement and substance use reduction. Baseline measures will be taken at 0 months and then again at 6 months (and possibly at 12 months).

QUESTIONS?

