A watercolor illustration of a forest scene. In the foreground, a red fox with a white chest patch stands on a grassy bank, looking towards the right. To its right, a green tent is pitched on the grass. In the background, a river flows through a dense forest of evergreen trees. The sky is a pale, hazy blue. The overall style is soft and artistic.

Green for health – Research innovation and collaboration  
across Yorkshire and the North-East

Event report

6 December 2023, The York Priory Street Centre




## Opening remarks

**Brent Kilmurray**, CEO of Tees, Esk and Wear Valleys NHS Foundation Trust, welcomed everyone to the event. He reflected on how fortunate we are in the North East to have so many amazing green and blue spaces, which can provide an oasis from the pressures of everyday, busy lives with many stressors. Not everybody, however, has access to these spaces. This is why initiatives, such as the Green Social Prescribing Initiative, which help bring more people to these spaces are important as they have the potential to improve mental health and wellbeing across society. The work of those presenting at this event, and the evidence being generated in this area, makes a compelling case for systematic investment in green and blue initiatives.



## Green interventions

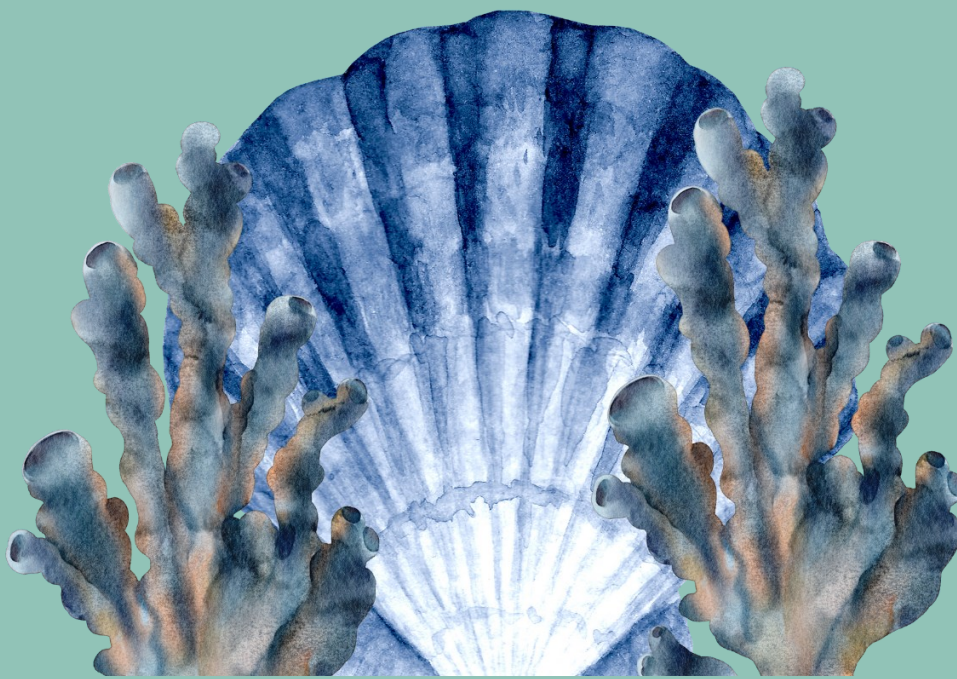


The first presentation of the day was by **Dr Hannah Armitt** and **Ellen Kingsley** on their NIHR-funded study '**Coproduction of a nature-based intervention for children with ADHD study (CONIFAS)**'. The project, which had co-production at its heart and running throughout from the design of the logo to data collection, aimed to co-create a nature-based intervention for children with ADHD (Attention Deficit Hyperactivity Disorder) and their families, to help manage the impact of ADHD symptoms on their lives. The families that tested the intervention gave positive feedback, including that the children enjoyed many aspects of the activities, found them less overwhelming than those they had tried previously, and felt calmer afterwards. Some however reported that it was difficult to set aside ten minutes for them each day and some children wished the activities were more fun and less like school work. Overall, the study sought to empower children and value all types of participation. The study team expressed their hope that a feasibility study would be the next step which would look to go beyond improving management of symptoms of ADHD to focusing on improving the quality of life and general level of wellbeing of the young people.

**Dr Zoe Moula** described an AHRC-funded study connecting children with nature through the arts, via a process known as '**artscaping**.' The key challenges they were hoping to address through the 'artscaping' intervention included the sharp rise in

children's mental health problems, young people's disconnection from nature, and the marginalisation of the arts in school curricula. Over eight weeks the children were encouraged to embrace the presence of the arts everywhere, moving from traditional forms of art and craft towards experiential methods of connecting with nature through activities such as foliage-inspired collages, story-making and observational drawing. The research team found increases in the measured self-confidence, self-esteem, and calmness of the young people before and after. Children also reported feeling happier with their life, more optimistic about their future, and spending more time outdoors. An almost five-fold increase was seen in the number of drawings they made that were of animals and plants following the intervention, suggesting that the natural world had become a much greater source of value and happiness for them.

In her talk entitled '**Leadership, Youth Mental Health and the Eco-Crisis**' **Professor Bernadka Dubicka** spoke about the wide-ranging negative impacts of climate change on mental health, particularly among young people. She explained that studies have shown that climate and the environment are one of the top three sources of anxiety in children; also, that of 10,000 16–25-year-olds surveyed, 45% reported that concern about climate change negatively impacted their daily functioning. In its 2021 position statement, the Royal College of Psychiatrists declared a 'global ecological and mental health emergency'. The statement set out how climate change, pollution and biodiversity loss have created a health crisis, the impact of which will be felt for generations to come. It stated that it is imperative that psychiatrists are informed and actively engage in these issues in order to deliver effective mental health care. Unfortunately, not all psychiatrists and other mental health practitioners share this view and more needs to be done to push for the urgency of prioritising consideration of climate related distress.

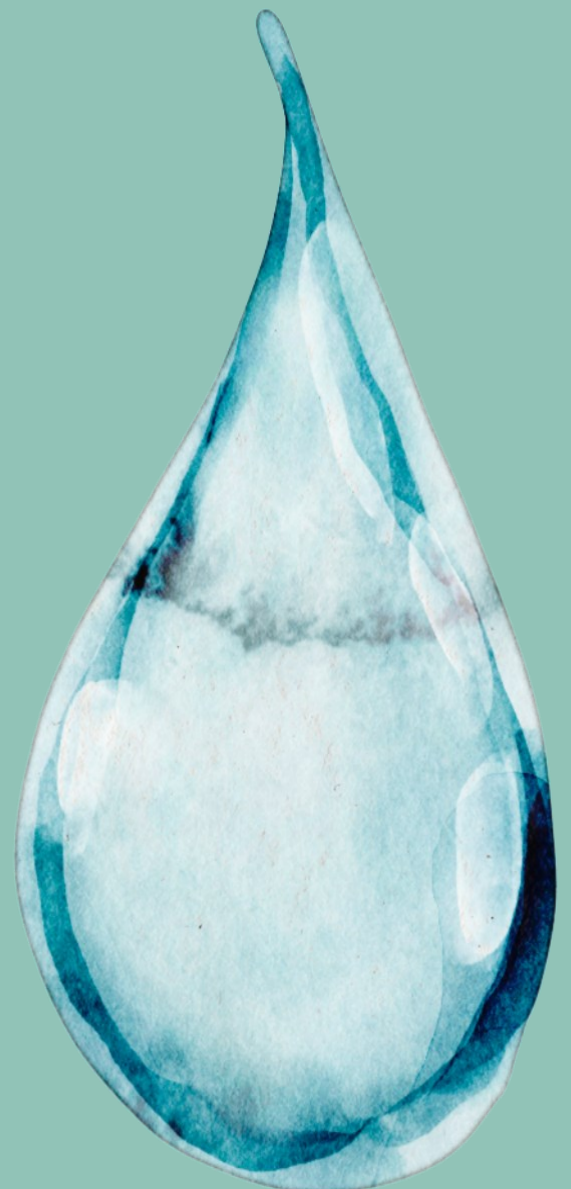




## People, place and space

**Dr Rachel Turnbull** introduced us to the concept of **biophilic design**, that is design inspired by nature and its rhythms and patterns, especially those that induce positive feelings in us. This approach is based on our innate biological connection with nature and hence a corresponding innate biological need to preserve this connection in our lives. Urban designers and architects inspired by biophilic principles design spaces which reflect, directly or indirectly, experiences of being in nature. Her current study is seeking to understand and co-produce from the ground up, with people with lived experience, place-based architectural and design interventions and then evaluate the impact of these. Dr Turnbull invoked several studies that have found quicker surgical recovery times if beds face trees and nature rather than a wall. Biophilic design has been shown to have not only positive health impacts, but also economic benefit, through cost savings achieved by shorter hospital stays and reduced need for analgesic medication. Dr Turnbull highlighted some local biophilic design projects on a neighbourhood scale (Dock Branch Park, Wirral Council), building scale ('The Spine' building, Liverpool) and street scale (Shields Health Hub, community co-designed garden used for talk therapy and sensory experiences).

**Dr Stephanie Wilkie** spoke about rethinking healthy spaces and how combining environment and person-centred approaches can enhance health and wellbeing. Exposure to different environments has the potential to improve physical activity and restore mental health. Dr Wilkie focused on **the restorative mechanisms of visual contrast**, where high-contrast environments appear to be more restorative than low contrast environments. She also talked about **place-related identity**, discussing how places are important and have meaning to us. How a place is integrated into our sense of



self affects how restorative we find an environment, which in turn influences our mood. Dr Wilkie suggested that care could be further personalised by extending people-related approaches to include consideration of place. Blue and green spaces are not all created equal and visual contrast, as well as a place's associations and meanings for a person or group of people, could be considered to identify optimal locations for interventions. Dr Wilkie highlighted that there is plenty of opportunity for collaborative work to co-produce protocols to effect change and impact health, in a cost-effective way.

**Dr Amanda Seims'** presentation '**Making Space for Adolescent Girls in Bradford,**' described a study which engaged thirty-five girls across three sites, supported by a landscape designer from Bradford Council to co-design green spaces. Previous studies showed that adolescent girls were less likely to be physically active and less likely to use green spaces compared to their male peers. Youth provision in urban parks often takes the form of skate parks, multi-use sport areas, such as basketball courts, and BMX tracks, which typically appeal to and cater more for boys than girls. This study included a series of workshops with the young people involving visits to the parks where they re-imagined these spaces in a more adolescent-girl friendly way. Creative design experts were on hand to help the participants think beyond traditional designs. It was also important to set clear expectations and limits as to what was affordable/possible and ensure that everyone was updated on timelines throughout. The workshops resulted in the redesign of several parks across the Bradford area. The feedback received about the newly designed areas and features has been hugely positive. Community members have reported that the parks feel safer, that they have become a more social space, are being used more by young women and that people generally seem to be caring for and respecting them more. Next steps include further focus groups to continue assessing how the fact of co-designing the spaces has influenced attitudes and behaviours towards them. It is hoped to potentially then use this evidence to promote gender equity in urban planning and design.



## Engaging communities

Following lunch, **Dr Charlotte Dean** talked about the work of Hull-based Community Interest Company **Rewilding Youth**. The company was set up in 2020 in the first year of the COVID pandemic to create more opportunities for young people in the Humber area, particularly those from more disadvantaged communities, to engage with the natural world 'beyond their bedrooms'. Charlotte spoke of combatting a 'nature deficit,' and the mental health problems that this can lead to, by organising projects in local nature spots that draw on traditional crafts and outdoors pursuits (e.g., foraging) and which increase the skills, confidence, mood, and nature-connectedness of the young people. Her hope is that, through initiatives like this, young people will also be drawn to becoming active advocates for and agents of positive environmental behaviours and practices.

**Professor Divine Charura** and **Raphaela Berding** from York St John University introduced us to an initiative they had set up with **asylum seekers** who were staying in York whereby they **co-created a community allotment from scratch**. Despite it being challenging at times to adapt the cultivation of the crops, particularly those they had sourced which were commonly grown in the countries they had left behind, to the British climate, the project proved a significant success both horticulturally and in terms of





improving the wellbeing of the participants. The clinically validated mental health surveys the participants took showed substantial increases in their confidence, motivation, sense-of-belonging and mood from before to after.

**Professors Viv Burr and Nigel Rice** from the University of Huddersfield presented their **fascinating analysis from a qualitative piece of research** undertaken in partnership with three community organisations from across the North of England: Peak District Mosaic based in Sheffield, Super Slow Way from Blackburn, and the Hesse Road Network in Hull. From the focus group interviews they conducted they identified a number of common priorities, benefits, and motivating factors for participants across the three organisations, including group ethos, personal development, and safety. Nested beneath these shared themes were however some more granular differences that reflected the demographic make-up of each group. For instance, for the exclusively white and mainly female and elderly Hesse group safety meant primarily physical safety while out and about, whereas for the other much more ethnically diverse groups, overcoming fear of discrimination was the main concern.

Growing community  
resource and access to  
green space

**Dr Mikel Subiza-Perez**  
presented his research  
with 'Born in Bradford'  
looking at the **connections**  
**between access to green**  
**space and mental health**  
**from the perspective of**  
**environmental**  
**epidemiology and using**





**big data and satellite mapping techniques.** He explained that we know already that environmental assets (such as green and blue spaces) are not distributed evenly across the socio-economic gradient and that more affluent neighbourhoods tend to fare better in terms of vegetation cover and biodiversity than more deprived areas. His research did not however produce any conclusive evidence for a correlation between the amount of vegetation around where we live and our mental health status. Mikel predicted that this might be because other factors such as the quality of the space and the amount a person uses it may have more bearing and called for more rigorous research designs to explore these angles.

University of Hull PhD student **Esther Carter** spoke about an exciting initiative she leads which is endorsed and promoted by the GB Olympic Team entitled '**Green2Gold**'. This involved co-creating with young people and local community and fitness experts 'Family Activity Trails' aimed at improving both the physical and mental wellbeing of young people across the Humber area. The scheme built on an existing walking trail in Withernsea which was designed to demonstrate and educate the public about coastal erosion. Several activity stations were added to the trail with QR codes leading to a website giving instructions for various





activities - some overt physical exercises, others eliciting physical exertion via stealth e.g., scavenger hunts). A second trail was created in Hull. There was a successful launch with Team GB representatives and there have been very promising initial results from the pilot phase showing an average increase in participant mood from start to finish.

The last speakers of the day were **Professor Peter Coventry and Trish Darcy** from the University of York. They recounted their findings from an evaluation they conducted of **the Yorkshire and Humber Green Social Prescribing (GSP) programme** (one of seven test and learn sites across the UK) in partnership with the Hey Smile Association. The surveys and measures they conducted showed statistically significant effects in terms of increases in life satisfaction and reductions in depression and anxiety. The most beneficial forms of activity were found to be horticulture (gardening) and care farming. These findings echoed the conclusions of an earlier systematic review of GSP interventions conducted by members of the team. More research however is needed to determine which are those aspects that have the real benefit and to see if those benefits are sustained over the long term and for people with serious and enduring mental health problems.

### Closing remarks

In her closing remarks, **Dr Hannah Armitt** praised the consistent quality, interest and timeliness of the work presented and identified a shared vision of a northern powerhouse driving forward research at the interface of nature and mental health.

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