

Presentation by

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MSc Sustainable  
Development in  
Practice research  
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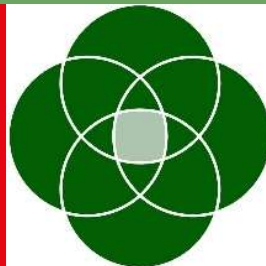
28<sup>th</sup> September  
2023

MSc Dissertation Research:

# Exploring Relationships between Nature Connection and Cycling

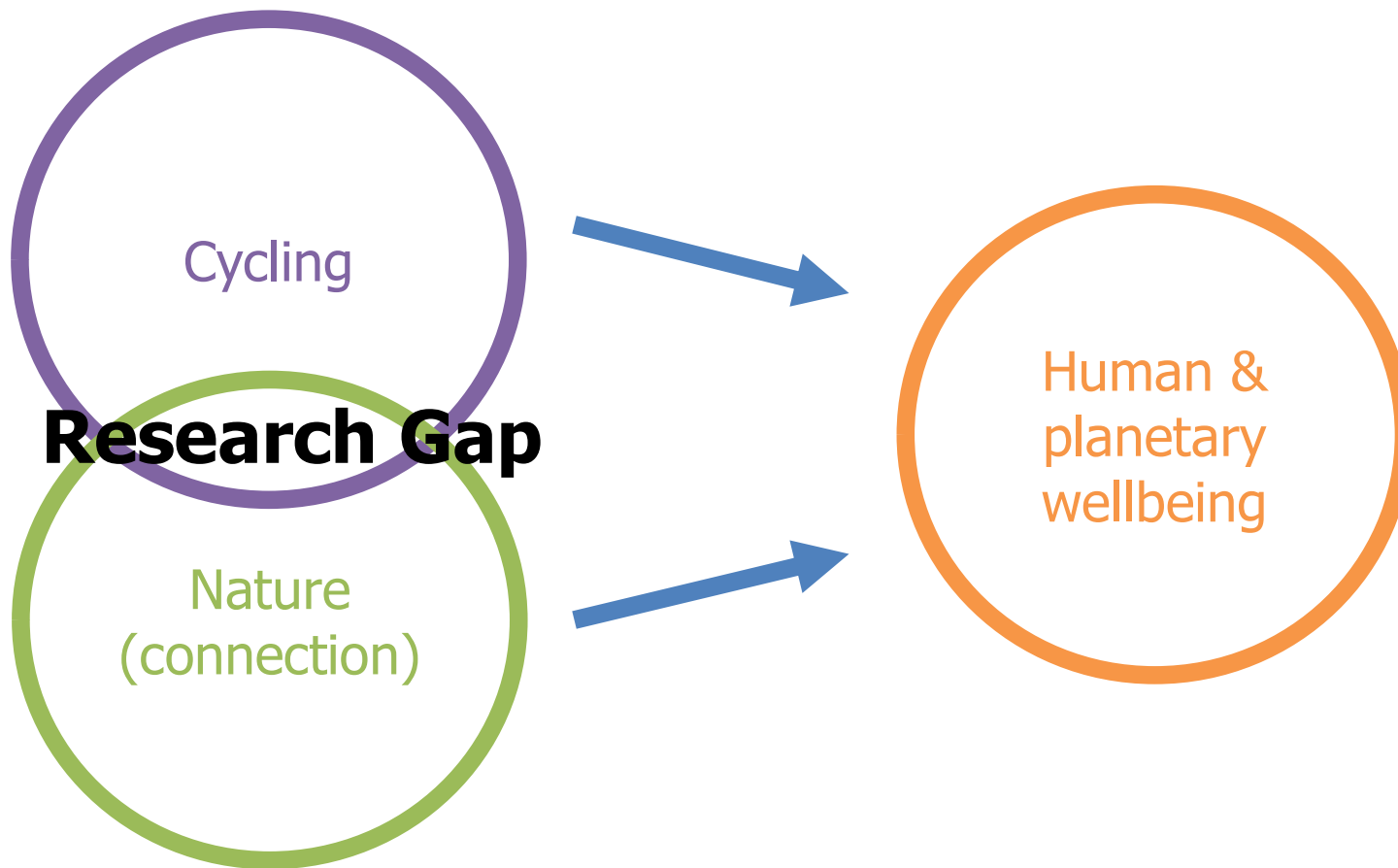
**UWE  
Bristol**

University  
of the  
West of  
England



Centre for  
Transport &  
Society

# Why this topic?



# Nature connectedness

- Feeling part of nature → doing more to protect it
- 5 pathways (Lumber *et al.*, 2017)
- Already in use (e.g., National Trust)
- Connection vs connectedness

Resources available:

[findingnature.org.uk/resources](https://findingnature.org.uk/resources)

| Pathway  | This pathway is about...                          |
|--|---|
| Contact       | Tuning in to nature through the senses.           |
| Emotion       | Feeling alive through the emotions nature brings. |
| Beauty        | Noticing nature's beauty.                         |
| Meaning     | Nature bringing meaning to our lives.             |
| Compassion  | Caring and taking action for nature.              |

(Nature Connectedness Research Group, 2022)

# Research aim and questions

**Research aim:** To conduct a preliminary investigation into whether and how cycling and nature connection may relate to each other.

**Research questions:**

1. Is there an association between individuals' levels of nature connectedness and the amount of time they usually spend cycling?
2. Does the nature connectedness of individuals differ by cycling 'type' (i.e., non-cyclist, utility, leisure etc.)?
3. What are the areas of interplay between nature connection and cycling in cyclists' and non-cyclists' experiences and perceptions of them?

# Research methods

## Quantitative:

- 12-question survey: cycling type/duration & Nature Connection Index (NCI) (Richardson *et al.*, 2019)
- Convenience sampling: Bristol adults ( $n = 420$ )
- Statistical analysis

## Qualitative:

- Seven semi-structured online interviews
- Transcription and thematic analysis



# Results: quantitative analysis

Time spent cycling was not associated with NCI scores

Respondents who cycled for leisure/recreation had significantly higher NCI scores than other respondents

RQ1: Are individuals' NCI scores related to monthly cycling minutes?

No statistically significant linear relationship ( $n = 417$ ,  $r_s = .082$ ,  $p = .094$ )

RQ2: Do NCI scores differ by cyclist type (CT) e.g., leisure, utility, non-cyclist?

NCI score is significantly different ( $\chi^2(3) = 7.862$ ,  $p = .049$ ). Post hoc: n/s.

'Leisure' group ( $n = 228$ ) mean NCI is significantly higher than 'Non-Leisure' ( $n = 181$ ) ( $p < .01$ )

# Results: qualitative analysis

| Themes                       | Sub-themes                      |
|------------------------------|---------------------------------|
| Cycling as Enabler to Nature | Nature on the Ride              |
|                              | Cycling to Nature               |
|                              | Empowerment through Cycling     |
| Shared Space Ambivalence     | Positive Spaces                 |
|                              | Stress and Danger               |
|                              | Marginalisation of Cyclists     |
| Common Ground                | Wellbeing and Fitness           |
|                              | Enjoyment and Exhilaration      |
|                              | Freedom and Adventure           |
|                              | Formative Childhood Experiences |
|                              | Protection                      |
|                              | Threat                          |

**Victoria:** "And it was actually really amazing to kind of come through [St Andrew's Park] on a frosty morning, and see that ... and in the winter when you've got the mist gathering on the harbour and you do feel that thing of being next to nature ... sometimes it's more like the weather that makes you feel close to nature on your bike, you don't necessarily see the woods"

**Amy:** "cycling helps you realise how close things are and how those green corridors are connected so ... cycling helps me to spend more time in nature and know more about places to go"

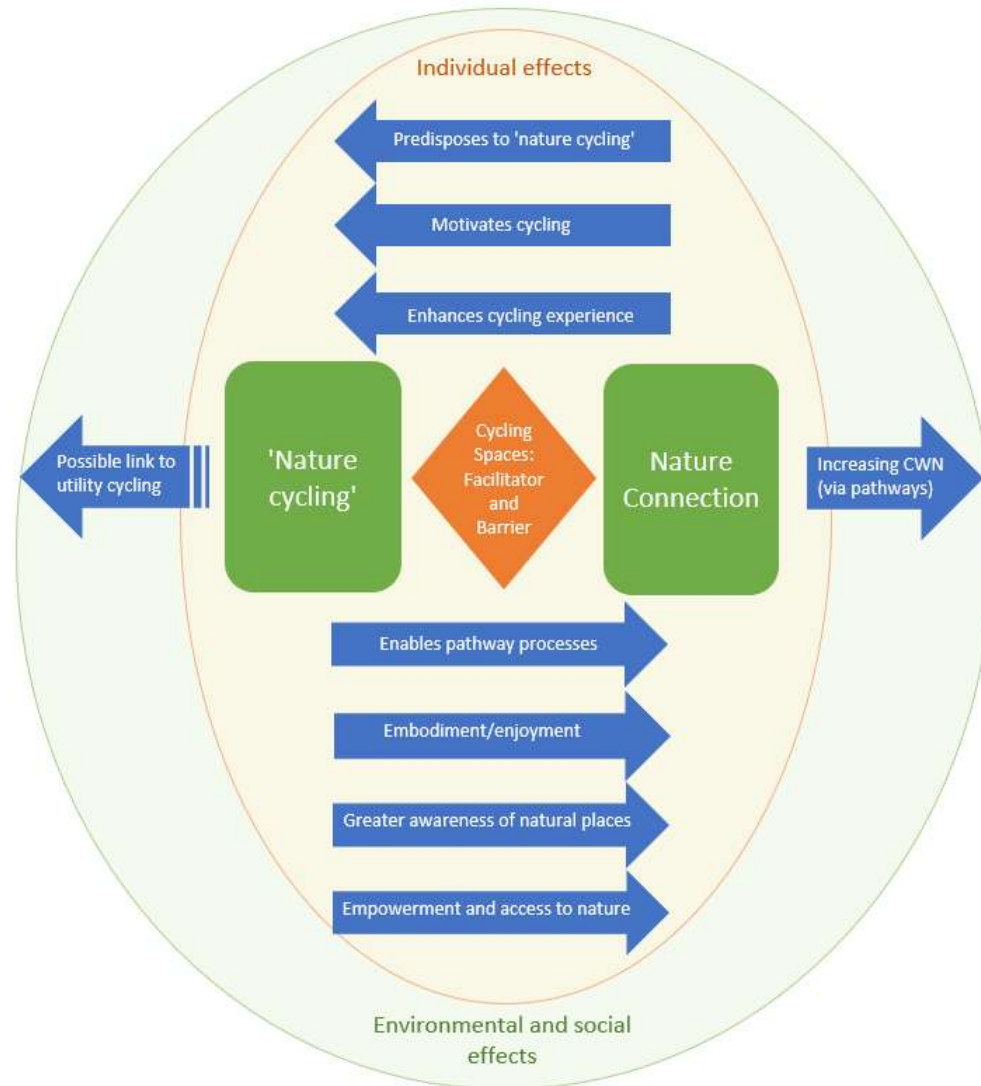
**Ann:** "it would be really good in the future to take up cycling in terms of like, my commute ... a lot of opportunity to be around nature which is probably going to be really good for my mental health and also I was thinking sort of early in the morning is quite a good time to see the birds and animals"

# Results

For some people and some journeys:  
Nature connection appears to influence cycling, and vice versa, in multiple ways.

Cycling spaces can both enable and hinder these relationships.

Summary of possible relationships suggested by the research and supported by the literature





# Limitations & further research

## Limitations:

- Influence of the pandemic
- Small and specific geographical scale

## Further research:

- Do these findings differ over a larger scale (e.g. Britain) and/or in other places? Do they differ post-pandemic?
- What are the conditions for 'nature cycling' and why do some people experience it and not others?
- To what extent can cycling afford 'pathway' experiences?

### The 10 kinds of Covidiot you'll see in the park this weekend

Now we're allowed to spend as much time as we like in open spaces, our parks are packed... with chumps

THE CONVERSATION

COVID-19

Arts - Culture - Business - Economy - Cities - Education - Environment - Energy - Health - Medicine - Politics

### COVID-19 has created more cyclists: How cities can keep them on their bikes

June 24, 2020 / 12:21pm GMT

By David

As physical distancing measures to limit the spread of COVID-19 begin

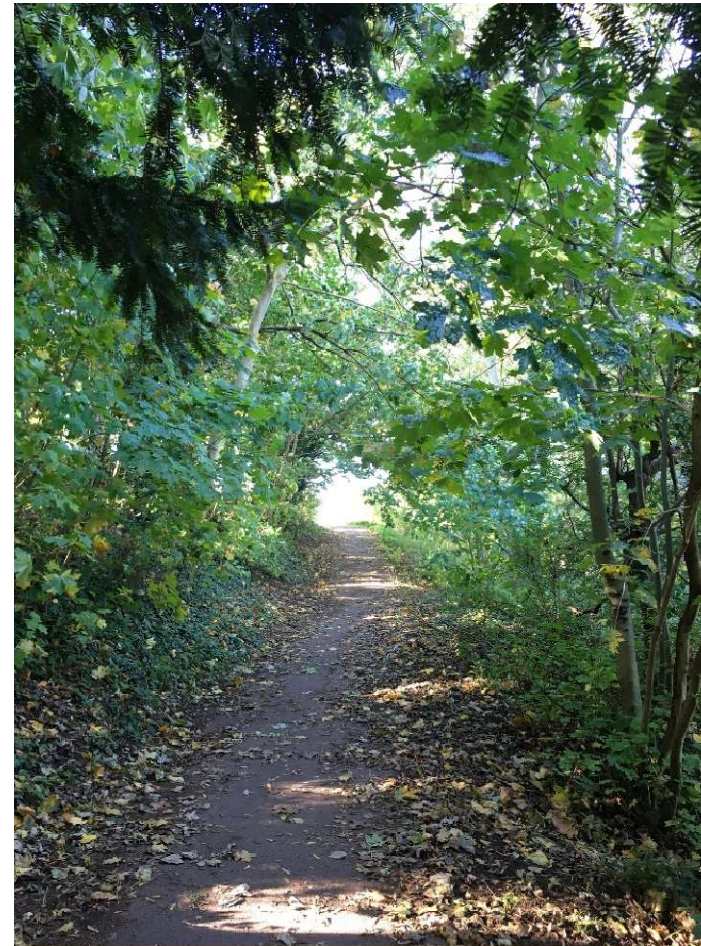
# Next steps

My current work:

- PhD research: Exploring the concept of 'nature cycling' in the West of England

Also aiming to:

- Prompt greater consideration of nature as part of cycling experiences
- Raise awareness about nature connectedness/pathways





Thank you

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# Image credits

The Conversation (2020) *COVID-19 has created more cyclists: how cities can keep them on their bikes.* Available from: <https://theconversation.com/covid-19-has-created-more-cyclists-how-cities-can-keep-them-on-their-bikes-137545> [Accessed 28 January 2021].

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