

**RACHEL MANNING**

**UNIVERSITY OF EXETER**



# Curriculum-based environmental education: impact on young people's emotions (emerging themes)





# Background

- Growing evidence that mental health and wellbeing issues are rising in young people at an unprecedented rate. Research is suggesting that the onset of depressive symptoms has decreased from adulthood to adolescence (Seligman et al., 2009; Patel et al., 2007)
- Young people are increasingly being exposed to complex ways of thinking, experiences, problems and pressures that they may not be well equipped to handle (Call et al., 2003)
- Increasing policy and practice interest in the potential for natural environments to provide human health and wellbeing benefits (Ohly et al., 2016)
- Environmental education research has placed a focus on environmental attitudes, pro-environmental behaviours and beliefs – need to understand affective impacts of curriculum based experiences in nature (Petegem et al., 2007).

# Theories of Restoration and Stress Reduction

## Attention Restoration Theory (ART)

(Kaplan, 1995)

ART suggests that the ability to concentrate may be restored by exposure to natural environments.

According to ART time spent in the natural environment encourages more effortless brain function allowing it to recover its capacity for directed attention. A restorative environment requires four properties

- Extent
- Being away
- Soft fascination
- Compatibility

## Stress Reduction Theory (SRT)

(Ulrich, 1983)

SRT focuses on how natural environments can reduce stress and aversive emotions.

According to SRT environments that contain water, vegetation and expansive views produce an unconscious autonomic response decreasing negative affect and increasing positive affect – leading people to feel less stressed in natural environments.

SRT suggests this impact is based upon our evolutionary relationship with the natural environment.

## Exploring Attention Restoration Theory and Stress Reduction Theory in education environments

Nature's broken Path to restoration: a critical look at Attention Restoration Theory (Joye & Dewitte, 2018)

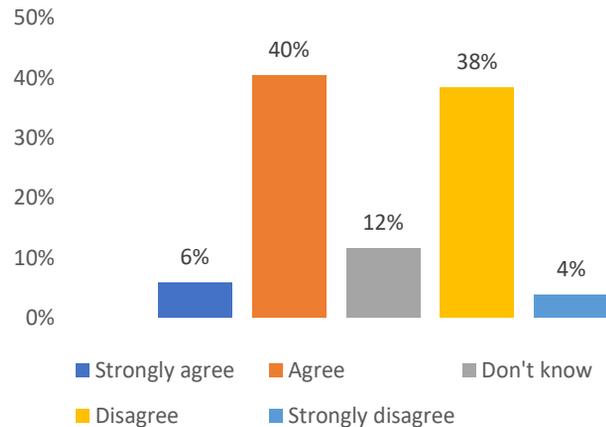
Restorative spaces or scary places: the impact of woodland on the mental wellbeing of young adults (Milligan & Bingley, 2007)

Is love for green in our genes? A critical analysis of evolutionary assumptions in restorative environments research (Joye & van Berg, 2011)

Influence of environmental preference and environment type congruence on judgements of restoration potential (Wilkie & Stavridou, 2013)

### Wellbeing Indicators Survey (pilot study)

Visiting Slapton has made me feel refreshed and relaxed



# Introduction

## *My Research*

**Aim: to explore the emotional impacts of curriculum based environmental education**

**Objectives:**

- 1. Investigate wellbeing needs of young people**
- 2. Identify mediators of positive and negative emotions in curriculum based environmental education**
- 3. Explore how to effectively frame environmental education to support young people's wellbeing**

**Data Collection**

**Data Collection Site**

- **FSC Slapton Ley**

**Participants**

- **GCSE and A Level Students**
- **Preparing for Biology and Geography coursework**

**Methods**

- **Focus groups**
- **Visual techniques (drawings/timelines)**
- **Solicited participant diaries**

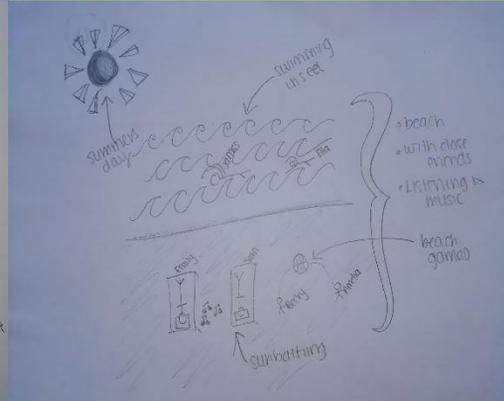
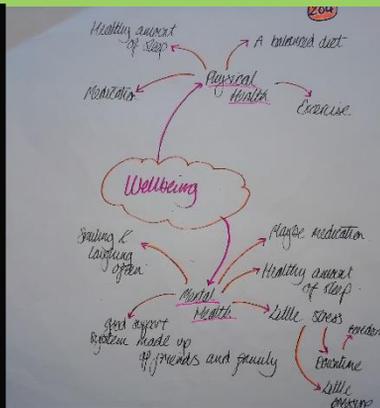


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Thank you for agreeing to take part in this research – please remember that your participation is entirely optional and you can choose not to take part any more at any stage.

I would like to start by asking you some questions. Some of these questions may be quite personal or something that you haven't really thought about before. There is no wrong or right answer to any of these questions, just answer as honestly as possible. If you don't feel comfortable answering a question then just leave it out and move onto the next one.



Monday  
↓  
Happy as usual not at Slapton yet.  
I was starting to numbness so in nature but not in Slapton so I was very happy.

Tuesday  
↓  
Annie's been coming and said what I needed. Said she was happy.

Wednesday  
↓  
Sat & tired. Looking at all the other places.

Thursday  
↓  
Sad & stressed. Wanting to go home.

Friday



**What can we begin  
to look at?**



**Why do you think your teachers bring you on these trips?**

*- to help us pass exams and coursework*

*I - So the first question is what do you think is the purpose of coming on these trips?*

*R1 - to get the data for my NEA*

*R4 - so I can do 20% of my exams*

*I - ok so moving on to a slightly different topic, what do you think is the main purpose of your teachers bringing you here?*

*R2 - to collect our fieldwork for our NEA's, because we have to get it for 20% of our grade, so we sort of need it*

*I - what do you think is the purpose of these environmental education trips?*

*R1 - education*

*R2 - to help us pass our exams*

*R3 - yup purely education*

**What do you want to get from your stay here?**

*- information to help us pass our exams and coursework*

*R1 - yeh it would be nice to have a bit of fun, but really it is primarily to get some data and then go home*

*I - ok so what do you personally want to get out of it*

*R2 - coursework*

*R4 - a good grade*

*P4 - data collection stuff and the coursework*

*R2 - I just want to get a good NEA to be honest, I have come all this way to do it so it would be pointless wasting with anything else, so get as much data and evidence in terms of what I need*

*R1 - for course work, it is good because you don't have any distractions and you can just focus and you can be like in a useful environment*

## Value is placed upon learning and meeting curriculum needs?

The learning environment consists of more than just the physical space, it includes instructional processes, teacher-student relationships, student-student relationships as well as student attitudes (Frenzel et al., 2007).

### How do perceptions of an environment relate to emotional outcome?

#### Capabilities Approach (CA) (Sen, 1980)(Nussbaum, 2004)

Wellbeing is understood in terms of people's functionings and capabilities – opportunities to be and do what they have reason to value. Wellbeing is achieved as a result of freedom and agency to achieve goals related to the setting and context.

CA is underpinned by the notion social arrangements should consider people's capabilities and expand upon them.

*Functionings – various things a person may value being or doing*

*Capabilities – combination of functionings that an individual is able to achieve*

*Agency – the ability the pursue goals that one has reason to value*

**Framing of  
outdoor  
experiences**



**expectations and value**



**emotional  
outcome**

The background features several light gray circles of varying sizes and three green leaves. One large leaf with detailed vein structure is on the left, and two smaller, solid green leaves are on the right. The text "What next?" is centered in a bold, black, sans-serif font.

**What next?**

- **Data collection to finish in November**
  - 250+ students
- **Analysis of data**
  - thematic analysis
- **Consider key emotional theories in relation to data**
  - capabilities approach/control value theory
- **Work with The Field Studies Council to implement findings into practice**

## References

Patel, V., Flisher, A., Hetrick, S., & McGorry, P. (2007). Mental Health of Young People: A Global Public Health Challenge. *The Lancet*, 1302-1313.

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