

Emotional mechanisms underlying the beneficial impact of coastal environments on mental well-being



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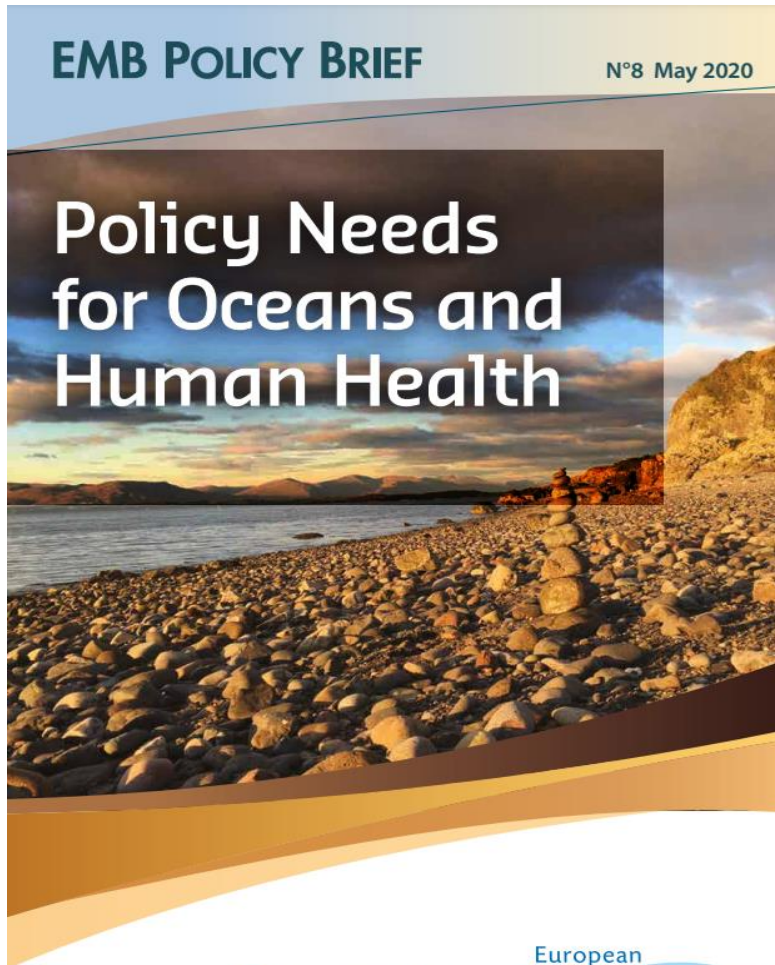


Vlaams Instituut voor de Zee vzw
Flanders Marine Institute





Oceans and Human Health





What is “well-being”?



Hedonic well-being

- Happiness
- Life satisfaction
- Absence of stress and negative affect

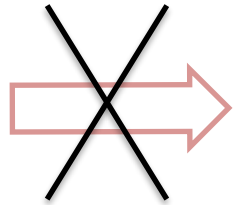
Eudaimonic well-being

- Personal growth
- Positive relationships
- Purpose in life
- Self-acceptance





Well-being in marine policy



How to promote well-being?

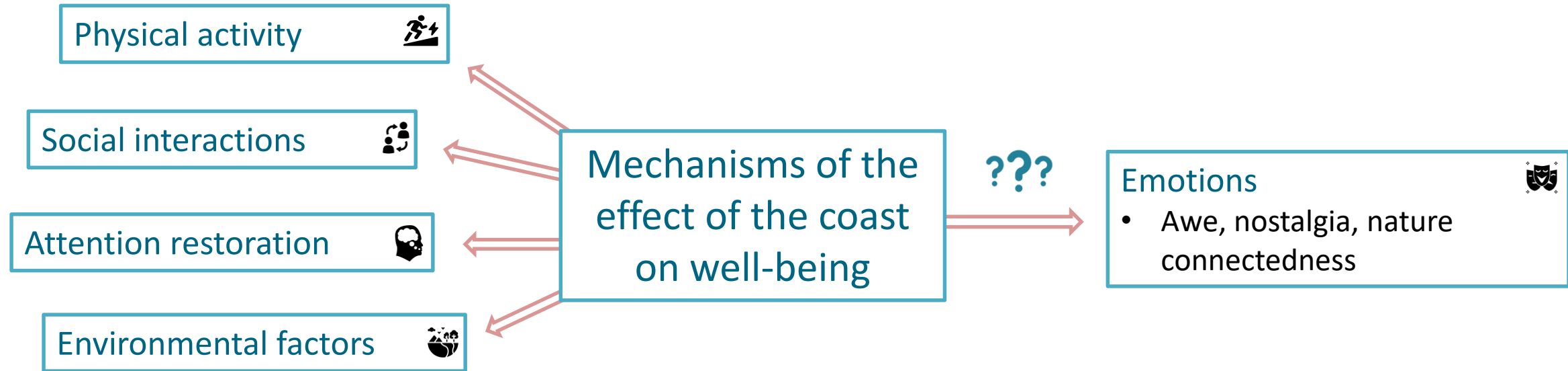


McMeel, et al. (2019) Human health and EU maritime policy: Closing the loop. *H2020 SOPHIE Project*. Brussels, Belgium. DOI 10.5281/zenodo.3663620





Aim of my PhD



What emotions are triggered by the coast and to what extent do they explain the coast's positive impact on well-being?



Emotional pathways

- **Awe:** perception of something bigger than oneself and need for accommodation
⇒ *aesthetic beauty and vastness*
- **Nostalgia:** sentimental yearning for the past
⇒ *timelessness and unchanging nature*
- **Nature connectedness:** subjective sense of one's relationship with the natural world
⇒ *increases during visits to the coast*





Emotional pathways

Emotions



- Awe
- Nostalgia
- Nature connectedness



Well-being



- Life satisfaction
- Stress
- Meaning in life
- ...

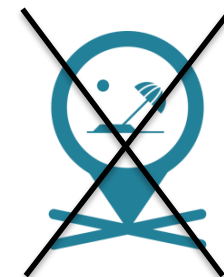
⇒ these emotions might partly explain why the coast benefits well-being





Coronasurvey

Effect of access and visits of the coast on well-being



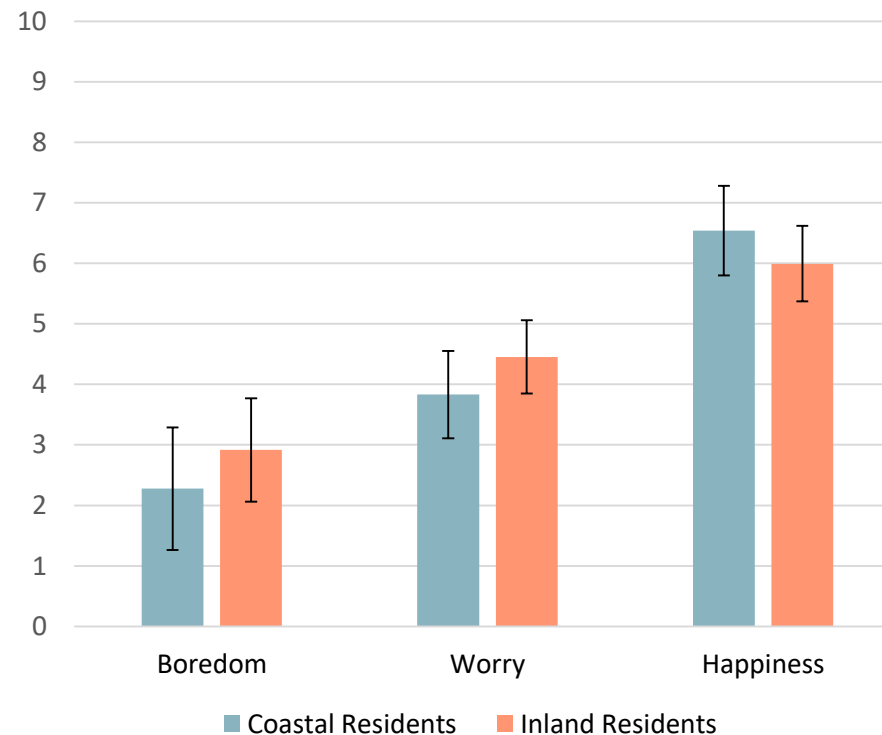


Coronasurvey

Effect of access and visits of the coast on well-being



Estimated Marginal Means of Well-Being Indicators



- Access to the coast associated with higher well-being during lockdown
 - Coast-induced awe negatively correlated with boredom
- ⇒ **Utilize coastal exposure to protect well-being for future crises**





Qualitative study

Emotions experienced at the coast and their influence on well-being

- How do coastal residents make sense of the emotions they experience at the coast?
- What role do these emotions play on their well-being?

Participant pseudonym	Sex	Age	Living situation
Arne	M	NA	Grew up and lives near the coast
Emma	F	22	Grew up near the coast and lives inland in student room
Justine	F	22	Grew up near the coast and lives inland in student room
Noa	F	22	Grew up and lives near the coast
Anna	F	22	Grew up near the coast and lives inland in student room
Louis	M	22	Grew up near the coast and lives inland in student room
Laura	F	25	Grew up inland and lives near the coast
Victor	M	21	Grew up and lives near the coast



Qualitative study

Emotions experienced at the coast and their influence on well-being

- Semi-structured interviews



- How would you describe your relationship with the sea throughout your life?
- What specific emotions do you feel when you are at the coast?
- What effect does experiencing these emotions have on you?





Qualitative study

Emotions experienced at the coast and their influence on well-being

Interpretative
Phenomenological
Analysis



1. Read transcript of interview and make descriptive, linguistic, and conceptual notes.
2. Develop emergent themes based on the notes and the transcript.
3. Cluster themes together to create a table of overarching themes.
4. Repeat steps 1-3 for each participant.
5. Compare the individual table of themes with each other.
6. Construct a **final table of superordinate themes** that stems from all participants and includes individual exceptions.





Qualitative study

Emotions experienced at the coast and their influence on well-being

Emotional restoration

Nostalgia

Coast as a safe haven

Awe

Emotion regulation





Qualitative study

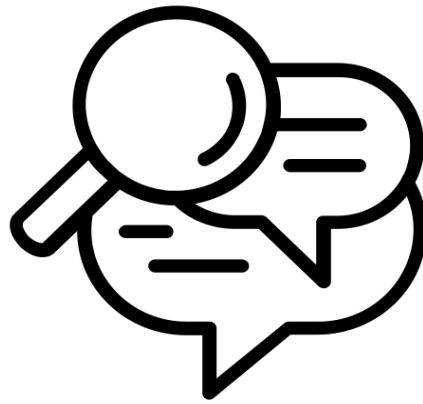
Emotions experienced at the coast and their influence on well-being

- Coast's multisensory and symbolic qualities => complex emotions and adaptive emotion regulating processes
- Beneficial impact on the well-being of young coastal residents
- Possible contributors to the coast's therapeutic potential





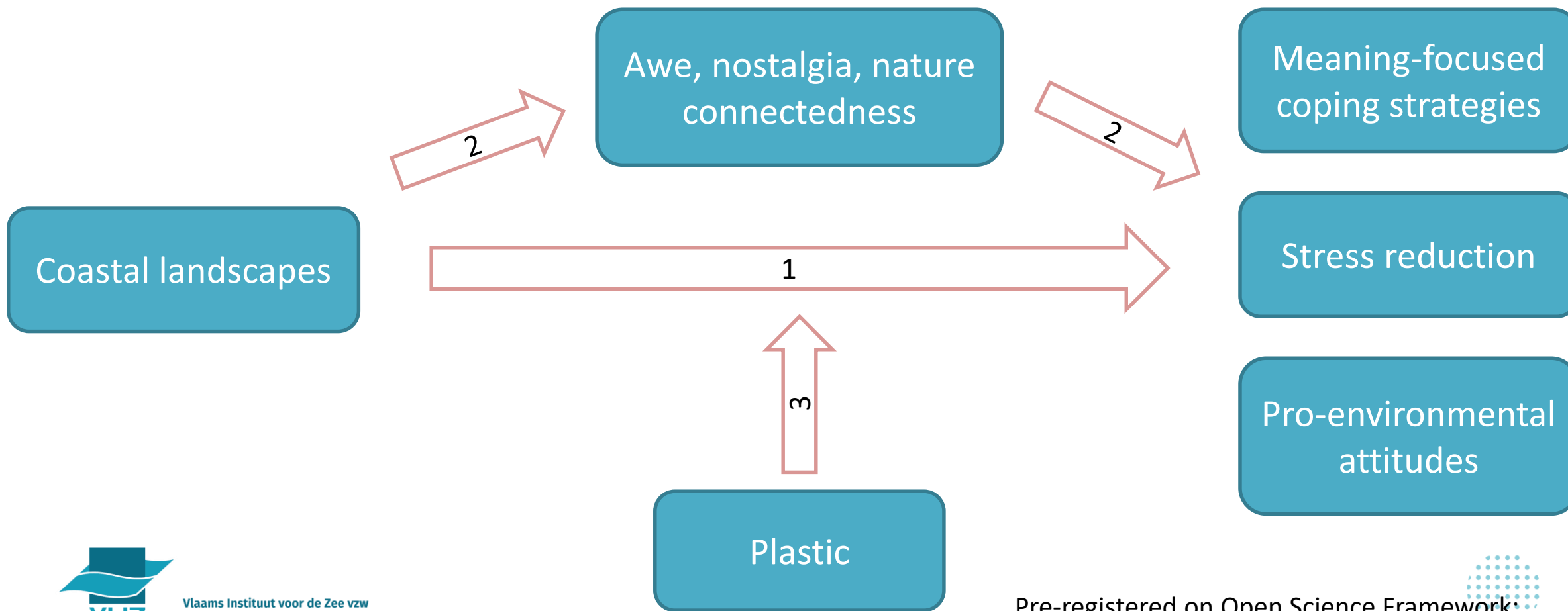
From the qualitative to the quantitative...





Experimental study

Effect of coastal landscapes on stress, coping strategies, and pro-environmental attitudes



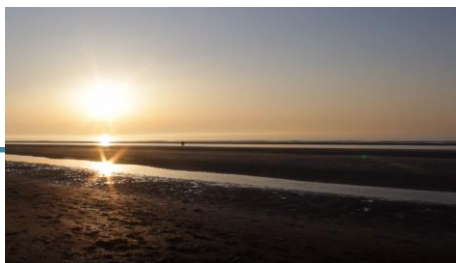


Experimental study

Effect of coastal landscapes on stress, coping strategies, and pro-environmental attitudes



Participants



Plastic

No plastic



Plastic

No plastic



Plastic

No plastic







Experimental study

Effect of coastal landscapes on stress, coping strategies and pro-environmental attitudes

Pre video clip

- Measure control variables
- Mentally visualize a past stressful moment for 1 minute
- Report stress level

Video clip

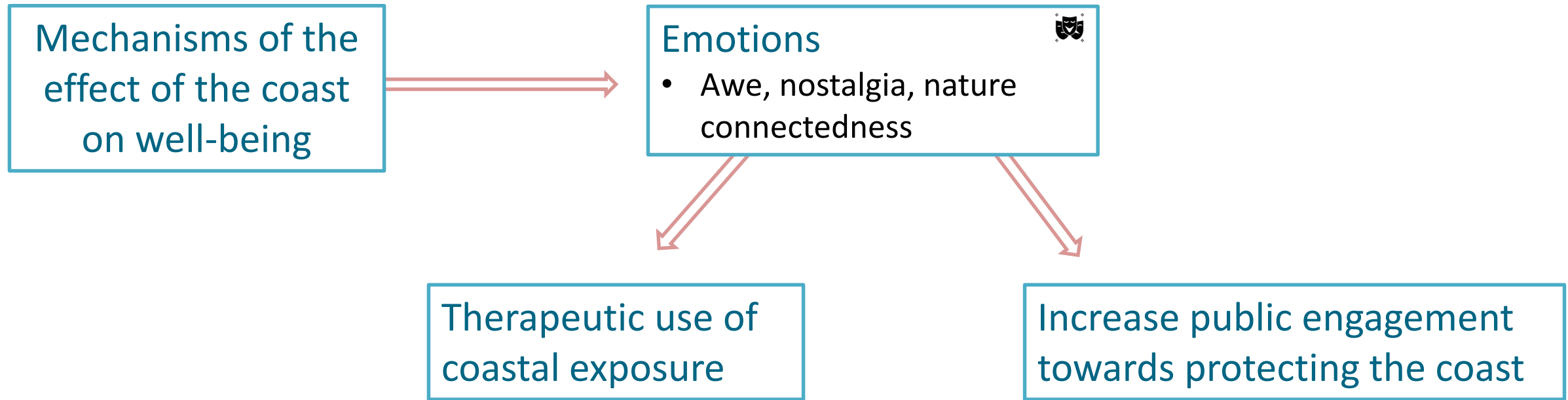
- Watch video clip of either **a beach with a sunset, coastal dunes, or an urban street**, either with or without plastic

Post video clip

- Report stress level
- Measure emotions felt during the video
- Measure coping strategies and pro-environmental attitudes



Conclusion



Thank you for your attention!



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