

## Title

How do coastal landscapes impact stress, coping strategies, and pro-environmental attitudes?

## Authors

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## Abstract

Recent studies have demonstrated salutogenic and restorative effects of being exposed to the coast on various mental health indicators. Contact with the coast has also been found to increase pro-environmental attitudes. The question remains of why that is and whether elements of pollution (e.g., plastic) potentially disrupt or weaken the benefits of the coastal experience.

The present study has two aims: (1) assess the effect of exposure to coastal landscapes on stress, coping strategies, and pro-environmental attitudes; (2) evaluate the emotional experience of awe, nostalgia, and nature connectedness as potential mediators of these effects, and plastic as a potential moderator.

We will conduct an online experimental study in which participants will be randomly assigned to one of six conditions in which they will watch a video-clip of a particular landscape that either contains plastic or not: “beach with a sunset”, “coastal dunes”, and “urban street”. Before the video-clip, participants will be asked to recall a stressful moment and report their stress level. After the video-clip, they will once more report their stress level as well as their emotions, coping strategies, and pro-environmental attitudes.

We expect that coastal landscapes will lead to a higher decrease of stress and a higher increase in meaning-focused coping strategies and pro-environmental attitudes compared to the urban landscape. We also expect that awe, nostalgia, and nature connectedness will act as mediators and that plastic moderates the impact of coastal landscapes by weakening it.

Understanding how the coast impacts wellbeing and pro-environmental attitudes is essential to help optimize the coastal experience to benefit human health and protect ocean health. Pre-registration of the study can be found here: <https://osf.io/x2aqv>.