

# Integrating Impacts on the Environment and Visitors: An Interdisciplinary Analysis of Activities on Rocky Shores

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## Introduction

Actual and perceived nature restoration effects have been shown in numerous ways. However, nature is often examined in a very broad way without considering the varying forms of natural environments. One study showed that water is an important element in restorative natural scenes, suggesting that coastal sites may be beneficial to visitors (White, Smith, Humphryes, Pahl, Snelling & Depledge, 2010). However, more research is required to understand the effects of natural water environments, especially research that examines the balance between impacts on visitors and the environment.

Rocky shores – the intertidal area where solid rock predominates – are home to fascinating species and have important biological functions (Thompson, Crowe & Hawkins, 2002). Their characteristics also indicate high restorative potential, in line with the Attention Restoration Theory. This study examined the visitor-environment interplay in this context. This research is unique in that both components of the relationship were examined: the perceived impact on the visitor and the perceived impact on the rocky shore itself. This is necessary to understand which aspects of visits to the coast have beneficial impacts on us and whether these same aspects are negatively impacting the environment thus reducing this resource for future generations.

## Methodology

A short survey was administered to a coastal expert sample (n = 25) and a general public sample (n = 41). These two samples were used to monitor perceptions of people with varying levels of relevant coastal experience. Fifteen activities were explored according to their impact on the environment and on the visitor. Two items examined the perceived frequency and impact of these

activities on the environment, and two items studied their perceived effects on mood and arousal based on the Circumplex Model of Affect. Additional open-ended questions further explored these areas. Order of the two sections was counterbalanced.

## Results & Discussion

It was shown that people perceive different activities to have different effects on the environment and on the visitor, with rock pooling (the exploration of pools of water in the intertidal area) perceived to have the most detrimental effects on the environment. All activities within this environment were seen to improve mood, but they varied in the level of arousal they produced, for example snorkeling was seen to be the most exciting activity and sunbathing/relaxing was the most calming.

These findings emphasise the importance of not looking at both nature and activities too generally and have indicated what activities should be examined in future research. With this information and the use of technological innovations such as the GPS/GIS approach, future methodologies will be discussed that can examine troublesome activities in specific environments whilst examining the actual impact on the visitor.

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## References

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