



## **IC - (20908) - 'BLUE' COASTS: PSYCHOLOGICAL RESTORATION CHANGES WITH LANDSCAPE TYPE AND CONTENT**

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### **Background and objectives**

Living in a coastal area and spending time at the coast has been shown to benefit psychological health and well-being. However, the amount of psychological restoration may be highly location-specific, and depend on the physical constituents of the environment. Therefore, this study aimed to quantify the inter- and intra-environment variation in the experienced psychological restoration along the Belgian coast, and to determine the influence of the physical constituents of the environment hereon.

### **Process and methods (for empirical research)**

Ten coastal environments were identified represented by 52 pictures, in which beach environments were subdivided into five types. The pictures were rated by 102 students on a five-item perceived restorativeness scale (PRS). The type and relative proportion of the physical constituents of the environment were quantified by manually drawing polygons on the pictures, calculating their surface area, and classifying them hierarchically under natural/urban/people and lower-level constituents. The analyses included general linear mixed modelling, standardized for individual and study-design-related covariates.

### **Main results (or main arguments in the case of critical reviews)**

The PRS-scores varied gradually across the ten coastal environments: salt marshes > dunes > beaches > green parks > piers > historical sites > dikes > docks > recreational harbors > towns. Average PRS-scores differed up to 30% between very high and neutral, and no detrimental effects were detected. Additional intra-environment variation occurred at the beach with lower PRS for 'in a beach bar' and 'between beach cabins' compared to 'on a breakwater'. Lastly, the PRS associated positively with the relative proportion of natural components (i.e. vegetation, sky, and natural underground) and negatively with the relative proportion of urban components (i.e. buildings, vehicles and hardened underground).

### **Implications for research and practice/policy | Importance and originality of the contribution**

The results of this study allow to refine the current perspectives about the restorative potential of coastal environments, and to propose recommendations for future research, therapeutic applications, and spatial planning.