

3rd Euro Nursing & Medicare Summit

July 27-29, 2015 Valencia, Spain

Can architectural space be healing? A virtual stress experiment

Lars Brorson Fich

Aalborg University, Denmark

In this study, we wanted to examine whether it was thinkable, that architectural space could influence healing processes. Part of the field of Evidence Based Design, which has gained increasing influence within hospital design, has been to promote patient healing by the manipulation of environmental factors. Perhaps the most well-known study is still the study by Ulrich (1984) in which it is shown, that views to nature versus a view to another hospital block can reduce the length of hospitalization. However, these studies all have some environmental factor as the variable, and the space e.g. identical wards as the constant. As a consequence, the results offer no or very little information for hospital designers about the design of the space itself. Our aim was therefor to make space the variable and furthermore, we wanted to have physiological measures to help understanding the underlying physiological mechanisms. Our focus was on stress because of the long established connection between stress and the immune system. As a stressor, we used a virtual version of the so called Trier Social Stress Test, a much used laboratory test for research in psychosocial stress. Because a virtual version was used, the architecture of the space could be systematically varied. Our result shows, that the design of the space influenced the release of cortisol, and thereby potentially has an immune regulatory effect.

Biography

Lars Brorson Fich is educated as an architect, graduating from the School of Architecture Aarhus, Denmark, in 1984. He has worked for 24 years in an architectural office part wise specialized in hospital design, the last 10 years as a partner, before turning to research at the Department of Architecture and Media Technology at Aalborg University, Denmark, in 2008. He completed his PhD entitled "Towards a Neuroaffective Approach to Healing Architecture" in 2014. His research is concentrated on how architectural space might influence health, concentrating on how space might influence physiological stress reactions.

lbf@create.aau.dk

Notes: