In operation theatres, hospital personnel has to visualize every structure to ensure precision during operations. Light is an important factor in achieving this, but it also affects how the personnel feels in various ways. For example, stress levels can be influenced by variations in the amount and type of light they receive. However, through which pathways daylight specifically influences stress is not yet completely clear. Biological pathways through which these effects may be explained exist, but our inherent preference for natural environment may also be a valid explanation. In this graduation project, I aimed to study these pathways amongst nurses working in operation theatres.

A method was developed to quantify the light exposure of nurses and measure their emotional experiences and feelings of stress. The methods had to be adapted for the irregular schedules that the nurses have and the sterile environment in which they operate. This method was then tested in a pilot study in the operation theatres in the Maastricht Academic Medical Centre and evaluated through interviews.

Based on the combination of objective and subjective measurements, we concluded that our preference for natural environments is most likely to be able to explain the positive indoor effects of daylight.