

Overcoming Dental Phobia Using Environmental Control Systems for the Interior Design of Dental Clinics

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Abstract:

Visiting a dental clinic can be an anxiety-inducing and intimidating experience for many patients. The clinic has a unique internal environment in terms of its interior design and environmental control systems, including lighting, acoustics, and ventilation. This research aims to provide design solutions that contribute to creating a comfortable and soothing therapeutic environment for patients. Lighting is one of the most important elements responsible for clear visibility in the treatment room without causing shadows, while studying ventilation, which is responsible for purifying the air within treatment rooms, is equally important. Regarding acoustics, a thorough study is necessary to create a space free from frightening sounds produced by treatment tools. Thus, the research problem arises from the impact of these factors on the creation of a suitable and safe environment for receiving treatment. This research aims to highlight the importance of the role that environmental control systems can play in the interior design of dental clinics in overcoming dental treatment phobia. The significance of this research lies in employing environmental control systems in the interior design of dental clinics as an effective tool to alleviate dental treatment anxiety.

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References:

- 1- Hatem Khalaf Mohamed , study and evaluation of sound reduction index of different partition stutures using sound pressure and vibration methaods , Thesis (M.Sc.), Faculty of Science, Cairo University, 2019
- 2- Mojarad. Massum, H. Samavat, Noise Levels in Dental Offices and Laboratories in Hamedan, Iran, Journal of Dentistry, Tehran University of Medical Sciences, Tehran, Iran (2009; Vol. 6, No.4)
- 3- Ritter, axel .Smart Materials in Architecture, Interior Architecture and Design .Berlin: Birkhäuser Basel, 2006., Addington, D .Michelle and Daniel L .Schodek .Smart Materials and New Technologies. Burlington :Architectural Press.
- 4- http://fliphtml5.com/mdrt/slar/basic/51-89
- 5- https://www.researchgate.net/publication/6393029_Indoor_air_quality_in_a_dentistry_clinic
- 6- https://www.slideshare.net/Elmasuri1/health-and-safety-in-the-dental-health-care
- 7- https://www.slideshare.net/FtoonMatuni/noise-pollution-in-dental-office

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