ISSN: 2538-3019, EISSN: 2676-4806
DOI: 10.30479/at.2020.12657.1441
Journal of Architectural Thought, Volume 5, Issue 9, Spring and Summer 2021

Investigating the Effect of Daylight in Residential Spaces on Depression of Housewives (Maskan-e-Mehr. Khorramabad)

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Submitted: 2020-02-09

Accepted: 2020-09-27

Abstract

Research Problem: The design of the environment affects our health and well-being, and can have long-term implications for quality of life. To truly enhance human well-being, building design needs to move beyond optimizing single parameters such as daylight, to more holistic approaches that take their cues in health-supporting human behaviors. The emphasis has been on ill-health as a result of the effects of environmental characteristics such as overcrowding, noise, air quality, and light. Natural light has a range of advantages over electric light, including its variability and efficiency, and creating awareness and link to the outside conditions. Apart from being a free source of light within a home, and thus part of an energy-efficient strategy, it will animate spaces and can create drama and diversity. One of the opportunities of architecture is that, through the design of form, space, and materiality, it can order our relationships with each other and our environment by creating interactive settings for life. It can do this in such a way as to provide opportunities to improve our sense of well-being, enrich our lives, make our lives healthier and more pleasurable. For example, the shaft of sunlight in a recessed window seat creates a moment of warmth and calm, combined with a glimpse of nature, soft and acoustically absorbent seat materials, and the tactile delight of the smooth grip to adjust a wooden shutter. Our well-being is intimately linked with such moments of delight. To an extent, such stimuli happen all the time, often without being recognized or designed, but when they are orchestrated throughout a building the effect is cumulative. A poor building has few such moments and leaves our lives impoverished, whereas a successful piece of architecture is one where there is an accumulation of many moments of delight that support the five ways of well-being. Depression is a prevalent and impairing psychiatric disorder that affects how we feel and how we think about ourselves and the world around us. Cognitive theories of depression have long posited that various thought processes are involved in the development, maintenance, and recurrence of depressive episodes. Depression and neurological disease often coexist but sometimes are difficult to distinguish. An essential part of an indoor environment design is to deliver both the visual task needed as well as a healthy lighting system. In this article, a healthy residential environment is discussed as an architectural field of light. Eyesight is one of the most important human senses to interact with the physical environment ،plays a major role in conveying emotional environment to the brain. Light is very important in this transmission. Light deficiency impairs the chemical composition of brain neurotransmitters ،especially serotonin. Serotonin quantity is one of the causes of depression. In this article ،the authors tried to investigate daylight as an important factor in house design and creating a favorable environment for improving the quality of human life. The aim of this study is the effect of natural light in the residential environment due to human physical and mental influence on housewives.

Research Question: What is the effect of the type and amount of light in residential complexes on the rate of depression in housewives?

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Research Method: To address the review questions, an electronic search was conducted of magiran, ScienceDirect, sid.ir, PsychINFO, PubMed, MEDLINE, and Google Scholar for relevant English-language peer-reviewed journals published between 1990 and 2013. An initial list of publications was generated via a database search using the keyword terms “gender,” treatment”, “Depression”, “therapy,” “psychotherapy,” and “treatment.” A secondary search was conducted by manually reviewing reference sections of works returned from the initial database search. The study is based on the Beck Depression Inventory (BDI-II) and based on the assumption to define the relationship between housewives living in its residential environment with depression, on 60 women (in two groups of 30 people) living in Khorramabad. The results of the T-test statistical method assume that the accuracy is acceptable. It can be assumed that there is a significant relationship between the amount of house sustainability and housewives’ depression amount. Housewives have been selected from among the women living in the maskan-e-mehr. The reason for choosing this complex is its size and population. Also in this complex, some units do not have proper lighting. People living in these housing units have the same economic and social conditions. The architectural features of the houses in these complexes such as the color of the walls, the texture, the architectural plan, the height of the houses, etc. are the same.
The Most Important Results and Conclusion: The results show that in these case studies (maskan-e-Mehr Khorramabad) due to the variables of space depth, the distance between buildings and its orientation, the amount of daylight and its effect has been neglected. The results obtained from Student's T-distribution show that the research hypothesis is correct. It is also inferred that there is a significant relationship between the amount and type of light in a residential house and the depression of housewives living in them in maskan-e-Mehr Khorramabad.

Keywords: Residential Building, Daylight, Depression, Mental health, women, Khoramabad.

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