

## **The Impact of Housing Design on the Health and Well-Being of Populations: A Case-Study of Middle-Class Families in the Metropolitan Region of Port- Au-Prince, Haiti**

**Authors :** A. L. Verret, N. Prince, Y. Jerome, A. Bras

**Abstract :** The effects of housing design on the health and well-being of populations are quite intangible. In fact, healthy housing parameters are generally difficult to establish scientifically. It is often unclear the direction of a cause-and-effect relationship between health variables and housing. However, the lack of clear and definite measurements does not entail the absence of relationship between housing, health, and well-being. Research has thus been conducted. It has mostly aimed the physical rather than the psychological or social well-being of a population, given the difficulties to establish cause-effect relationships because of the subjectivity of the psychological symptoms and of the challenge in determining the influence of other factors. That said, a strong relationship has been exposed between light and physiology. Both the nervous and endocrine systems, amongst others, are affected by different wavelengths of natural light within a building. Daylight in the workplace is indeed associated to decreased absenteeism, errors and product defects, fatigue, eyestrain, increased productivity and positive attitude. Similar associations can also be made to residential housing. Lower levels of sunlight within the home have been proven to result in impaired cognition in depressed participants of a cross-sectional case study. Moreover, minimum space (area and volume) has been linked to healthy housing and quality of life, resulting in norms and regulations for such parameters for home constructions. As a matter of fact, it is estimated that people spend the two-thirds of their lives within the home and its immediate environment. Therefore, it is possible to deduct that the health and well-being of the occupants are potentially at risk in an unhealthy housing situation. While the impact of architecture on health and well-being is acknowledged and considered somewhat crucial in various countries of the north and the south, this issue is barely raised in Haiti. In fact, little importance is given to architecture for many reasons (lack of information, lack of means, societal reflex, poverty...). However, the middle-class is known for its residential strategies and trajectories in search of better-quality homes and environments. For this reason, it would be pertinent to use this group and its strategies and trajectories to isolate the impact of housing design on the overall health and well-being. This research aims to analyze the impact of housing architecture on the health and well-being of middle-class families in the metropolitan region of Port-au-Prince. It is a case study which uses semi-structured interviews and observations as research methods. Although at an early stage, this research anticipates that homes affect their occupants both psychologically and physiologically, and consequently, public policies and the population should take into account the architectural design in the planning and construction of housing and, furthermore, cities.

**Keywords :** architectural design, health and well-being, middle-class housing, Port-au-Prince, Haiti

**Conference Title :** ICUH 2018 : International Conference on Urban Health

**Conference Location :** Vienna, Austria

**Conference Dates :** June 14-15, 2018