Architecture and the environment essay

Literature, Russian Literature

Most often, the quality of life and one's health is attributed to factors such a healthy diet, one's activity level, lifestyle, and even genetic predisposition. Seldom mentioned is architecture as responsible for one's well-being. However, herein lies a mistake because how and where one lives does affect the way one feels and behaves.

Architecture is something surrounding the human population every day. Be it at home, at work, or anywhere else, architecture is always there. Affects of Physical Structure on Human Behavior.

Architectural design always played a significant aspect in one's comfort and health. It is a different form of art surrounding one every day. Unfortunately, for years, it has not been considered this way and its benefits have not been recognized.

However with the increasing research and interest in environmental conditions, greater interest in healthier living and the involvement of environmental psychology, the importance of architecture is finally being acknowledged for what it is. Today research is aware of the benefits and downsides that can come from physical structures. A person's well-being and health is associated with structural design. One's mood and productivity are related to the kind of architecture by which one is surrounded.

The amount and size of windows in a room, openness, shape/form and size of a room, the type and amount of light, specific colors, air quality, noise, and toxic materials implemented in buildings have been related to the specific outcome of behaviors and certain health-related issues (Architecture and health, 2007). For instance, dark and cramped rooms, small or no

windows at all, and the wrong type or too much bright light have been associated with mood swings, a decrease in productivity, stress, boredom, anemia, and the slowing down of one's healing process (Mroczek, Mikitarian, Vieira & Rotarius, 2005). Understanding the importance of structural design, the ultimate goal today is to construct buildings that will accommodate not only the needs of an individual but also suit the purpose of its intended use. The design and dimension of a space differs enormously between work and private living. Therefore, it is vital to meet these specific needs for each of the purposes and pay extra attention to variables such as the perception of density, privacy, and control, which can have an adverse effect on one's mood and health.

For example, space limitations may influence physical conditions by making one work more intensely for his or her right of privacy. Clearly, it is significant to construct buildings that are sensitive to the needs of a user and should also compensate for one's inability to spend time outside. Certain human populations spend more time indoors than outdoors, which can have an unpropitious effect one's well-being, health, and even comfort. This is why it is so important to create indoor environments that suit and meet one's basic needs (Tiwari, Pandey, & Sharma, 2010). Human Behavior Directed by Architecture Besides influencing human actions, architecture can also control and at times direct human behavior. Research concluded that one's way of living could affect his or her social interactions with others.

A study conducted on corridor residents found that those living under these conditions displayed reduced thresholds when it came to crowding, were less

interested in social interaction with others outside dormitory surroundings, and possessed less control over his or her living space. Concurrently, he or she was less aware of others surrounding him or herself, nor did they like to share personal information with others (Evans, Lercher, & Kofler, 2002). How architecture directs human behavior also is seen in schools and work environment. Schools implement specific designs and the use of particular materials, furniture, programs, and equipment when building or renovating schools. By doing so the entire learning experience becomes more exciting, and learners become more effective and more willing stay in school (Rydeen, Erickson & Lange, 2008). At work, individuals given more power in how to make his or her work place more comfortable, expressed high levels of happiness, worked more efficiently, and were even willing to work longer hours. There is a correlation between smart work design that tends to the needs of employees and the behavior expressed at work. An increase in positive social interactions at work has been associated with the layout of a well-organized office.

Providing the right kind of environment, such as enough room for groups to brainstorm or to resolve dilemmas are just few of the various features that will bolster work mentality and promote job satisfaction. Space is very significant to an individual at work because it permits enough privacy if needed and a feeling of control while working. Creating a friendly and comfortable architectural environment at home, school, or work will increase one's productivity, happiness, and prosperity (Elsbach & Bechky, 2007). Environmental Psychological Implications of Design Everyone is impacted to some degree by building design, so it is to no one's surprise that the

involvement of environmental psychology in design is enormous. The way one's surroundings are arranged can provide either possibilities or limitations. Therefore, when creating any kind of space, it is very significant to know for what and by whom it will be used. It is important to know where to build, how much space will be needed, and its purpose. The building needs to be matched with his or her user so that the best functionality can be established while meeting certain criteria such as quality, safety, and performance.

Environmental Psychological Implications of Commercial Design How commercial buildings are being designed these days very often depends on public demands. Without the involvement of the user, a designer will be unable to construct a building that will meet everyone's needs and will pay attention to aspects such as safety and flexibility. For instance, there are several intentions of a hospital. A hospital must first provide the right kind of care to its patients but at the same time, it needs to consider the needs of its employees by providing a sufficient work environment. One of many concerns when designing a hospital is providing the most efficient care for patients without sacrificing effective care. Therefore, the layout of a hospital contributes greatly the care of a patient. It has been researched that the distance between a nurse's station and a patient's room plays a vital role in the kind of care the patient receives and the speed with which he or she receives it.

Besides space, another concern existing in a work environment, such as a hospital, is privacy. Privacy is very difficult to be maintained in such an

environment and is important for the well-being of a patient and staff. It has been acknowledged that short periods of privacy improved the productivity of nurses. At the same time, allowing privacy for patients contributes to more interactions that are social. In addition, the amount of noise, the kind and quantity of light, facility (indoor) colors, more indows and nicer views, and availability of gardens are just few of the many features that can improve the well-being of a patient and contribute to better employee productivity (Mroczek, et al. , 2005). Environmental Psychological Implications of Residential Design When constructing a residential property, it is very important that the design will encourage acclimatization and best performance to those using this living place.

The user is vital in the process of creating a residential layout because he or she will be spending a lot of time in this property. Therefore, it is very important that a residential property meets one's needs, is well made, safe, functional, and cost efficient. Recent research concluded that it is important to create a unity between the built environment and a user because the design of a home can affect one's way of living (Lytal, 2007).

When designing a residential area, one must be aware that he or she is not only creating a building for space but he or she is also producing a place, which must provide residential satisfaction and will help express identity. Space supplies the user with dimensions for living, the needed amount for privacy, and room for others. Place is personal, individually influenced, and makes one feel at home. Creating a life space requires various implementations and considerations such as where, for whom, and for what

purpose the house is built, how to organize the support spaces like the kitchen and bathrooms, and how many and where to place the support systems (lightning, windows, and others). In addition, when organizing a living space, one should decide between an open or closed plan. A closed plan means more divided rooms allowing for more privacy, whereas an open plan allows for more flexibility within a living space but less privacy. In the end, providing a home that is functional and meaningful at the same time will allow the owner to become attached to it (Eshelman & Evans, 1999). Whatever the decision one makes in his or her residential area, this chance of doing so will most likely change over time.

With the increase in population on this planet, one is either looking at giving up more of his or her private living space or alternatives like space housing will become a reality rather than fiction (Richards, 2008). Importance of Architectural Development supporting Sustainable Development Various factors contribute to the importance of architectural development being necessary to support sustainable development. For far too long, this has been not a significant matter because the main focus was to create a higher standard of living, which caused enormous and irreversible damage to the environment. However, with the continuously rising numbers of people on this planet and the increasing shortage of natural supplies and resources, the paradigm shifted to make a change. As stated by Metha (2009) " Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 754). Clearly, when trying to build anything, it is crucial to think about the future and therefore, the environment. As seen in the past,

humanity's decisions have impaired the ability to sustain and in some cases done irreversible damage to the environment.

Continuing on this path is impossible because it will destroy the ecosystem for future generations. The ecosystem will be unable to restore itself and make it impossible for future generations to survive on this planet. According to the U. S. Department of Energy (DOE), constructing and maintaining manmade environment is responsible for " half of all greenhouse gas (GHG) emissions and more than half of annual energy consumption in North America" (Moore, 2009). This news is shocking and definitely requires a major change in the way future architecture develops.

Fortunately, research agrees and it is progressing to implement more environmentally sound aspects when designing architecture. Conclusion It is clear today that humans are responsible for physical structure because it is essential to the survival of human kind. By implementing and considering knowledge coming from environmental psychology, one understands more than ever, what kind of responsibility this is and that without it, there will be no life.