

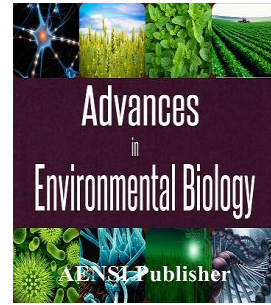


AENSI Journals

Advances in Environmental Biology

ISSN-1995-0756 EISSN-1998-1066

Journal home page: <http://www.aensiweb.com/AEB/>



An introduction to the Environmental Psychology

Kamali Zarch Mahmoud

Assistant Professor, Department of Psychology, Payam Noor University Iran

ARTICLE INFO

Article history:

Received 12 October 2014

Received in revised form 26 December 2014

Accepted 1 January 2015

Available online 18 February 2015

Keywords:

psychology, environment.

ABSTRACT

The purpose of this paper is introducing the new field of Environmental Psychology and investigating the role of the environment on the physical and mental health care in humans. What is usually being neglected due to the difficulties of the urban life and the development of civilization is paying attention to the influence of environmental factors and elements of psychological traits and the mood of people. Unfortunately, the idea of making for making and not making for living, doesn't give us the opportunity to address these issue. Environmental Psychology deals with the Psychology behaviors associated with environmental and aesthetic preferences in space. The study methods are mostly, library and analytical. Therefore with an emphasis on balance and interdependence between human physiological aspects and components of the space, we have studied the behavior of organisms as part of the ecosystem and demonstrated the environment in the form of behavioral plans. Therefore, the study of cognitive plans in relation to the environment and examining the values, meanings and priorities of human peripheral are the areas of the study of this knowledge. In general, as a result, environmental psychology is the interdisciplinary knowledge that is focused on the interaction between man and his surrounding environment and examines the effects of this relationship. That includes efforts to provide measures to better manage the environment and development of the character of the individual. The importance of this filed has been increased in recent years because of concerns that the problems of population, pollution, depletion of natural resources and the need to conserve wildlife, the environment.

© 2015 AENSI Publisher All rights reserved.

To Cite This Article: Kamali Zarch Mahmoud, An introduction to the Environmental Psychology. *Adv. Environ. Biol.*, 9(2), 500-505, 2015

INTRODUCTION

There are two aspects of humans; physical and human nature. The dynamics of human life depends on considering these two issues simultaneously. In the system of a city, in addition to the structure and texture of the city's major urban development, town planning and considering the social living organisms is important. The identification of the city is in terms of geography, behavioral and environmental behavior of people who live in the city that identify the city. Thus, urban sociology Emphasizes on its geographical context as a dynamic system of roles for men and women were more or less coherent thoughts, interests and real and lasting human relationships within the city. Thus, attending the status of various fields of human life is of great importance [6].

The character of people of a country is shaped by the environment in which they live. The stress caused by artificial and unnatural features of urban population, mainly, is the reason of an increase in crime and mental disorders among people. In the broad definitions of the environment, the distinction between the physical, social, psychological and behavioral is mentioned. The main point of this classification is the difference between the real, actual and concrete world around people and the phenomenological world, that affect humans' conscious or unconscious behavior patterns. On one hand the environment is the space which includes humans and other organisms, and on the other hand it could be known as a limited and perceptible space for humans. An important element in the environment definition that should not be neglected is the laws that play a role in shaping the environment, and its sustainability and definition and human perception. Thus the environment the material components (physical and quantitative) and spiritual (non-physical and qualitative) that appears in the form of natural elements, made by humans, and their interaction. [11]

The environment consist geographical features, artificial and cultural elements that has innate potential conditions for human behavior. All these features cannot be perceived by the public and does not use the full

Corresponding Author: Kamali Zarch Mahmoud, Assistant Professor, Department of Psychology, Payam Noor University.
E-mail: Mkamaliz@yahoo.com

perceived capabilities. Processes of perception, spatial cognition and behavior are affected by individual and collective competence and the environment. Human is a reconcilable creature but his perception of the environment is affected by the things that he is familiar with. Moreover, people adapt to conditions that threaten to destroy the human values [6;11].

The importance and urgency of the problem:

Many studies show the damaging effects of urbanization on human behavior. Human instinctive behavior patterns also change in crowded cities. Also, the occurrence of psychiatric disorders is increased by urbanization. The highest prevalence of schizophrenia is in the city center. Only a fifth of the population in large cities remained relatively free of symptoms or pathology. Crime rates in big cities have reached alarming levels, and many of the world's major cities are known as a city of crime. Mothers' Violence toward their children and increasingly growing rate of divorce and illegitimate birth indicates the change and decay in human instinctive behavior patterns [5].

In environment psychology, the human reaction to the environment and environment reactions to humans is studied. Application of environmental psychology helps the architect design, so that what he has in his mind is achieved. In other words, environment psychology is a branch of psychology that deals with the relationship of humans with the environment and methodology of designing buildings and cities better, by taking people's needs and behavioral actions in different environmental situations into account [18].

In psychology, cognitive relation belongs to a place or a particular space refers to an environment, and in terms of identity, an accrual place, relation of belonging and the identity of the individual to the social environment in which it lives. Attachment to place is a basis for understanding an individual and group towards environment and usually occurs in cultural environment. So, belonging to a place, is something more than emotional and cognitive experience and includes cultural beliefs of individuals. In this sense, those places are related to cultural attributes, so that a place can trigger the human experience and is reminiscent of the cultural concepts and meanings.

Thus, psychology has many uses in urban planning. The study of Social Performance, Psychological needs and interests of the people, includes in the planning and designing the cities. Since environment shapes and limits behaviors, proper planning to ensure maximum satisfaction, performance and development of individuals is necessary.

Environment and environmental psychology:

Environment is a complex concept that consists of: Architectural, spatial, cultural, social, symbolic, physical, geographical, historical and biological. In addition to physical elements, environment Includes messages, meanings and codes that people decode and understand them based on roles, expectations, motives and other factors and judge about them. Environmental psychology is one of the sub branches of general psychology. According to "Graman" in traditional psychology, not enough attention has been paid to cultural and environmental aspects and these results in the emergence of "environmental psychology". Recently, attempts for connecting the Environmental priorities the personality characteristics, racial and national character has been made. This course was developed during the 1960s and "environmental psychology and population" is accepted as an independent part of the America Psychological Association [10].

One of the definitions of environmental psychology, is the space evaluation which is made and that whether the space will meet the design goals or not. After preliminary concepts environmental psychology were interposed by Barks and Hall (1970), this knowledge was also interposed by entering the fields of design, in areas such as architecture, interior design, home decoration, urban furniture, and city-building. By providing knowledge, research and theories in the field of environmental impacts on human behavior, this filed reminds designers to consider "physical bases" in terms of the quality of human interaction with the environment and it's mutual impacts, Prior to proceeding with the design and construction, so in organizational and functional terms it has the greatest effect on the psyche and efficiency of people. [12].

Knowledge of environmental psychology was introduced first, by Willie Hellpach (1968). He expressed his opinions with projecting the fact that the sun and the moon affect human activity, and the impact of the external environment, color and form on human expressions. Development of social psychology after World War II, and especially communities being in the terms of "change", caused psychologists to apply psychological theories the desired field. Since these proceedings were, in vitro, the validity of their results was doubted in the real world. Therefore, environmental psychologists became willing to do their studies outside the laboratory environment [16].

Environmental psychologists also study the effects of different neighborhoods of human life, such as low-lying neighborhoods and villas, flats, slums, etc. on the emergence of behavioral patterns. Characteristics of various institutions and organizations on employee behavior, is other topics of research in environmental psychology. Research on the effects of isolation and monotonous and exhausting environments can also be placed in this section. Ergonomics or study various aspects of the work environment, such as heat, light, etc., in

connection with the performance and productivity is also part of the psychology of the environment [9]. Nowadays, environmental psychology has usage in various fields such as architecture and design, television and advertising. The broad definition of the word environment includes natural environment, social, built environment and learning environment. The purpose of applied environmental psychology is better management and better living environment for more psychological growth. This field, studies the effective ways to preserve natural environment and the design of cities and neighborhoods, introducing and identifying tools to promote environmental awareness [2].

The impact of the environment on human behavior:

Human changes the environment according to his needs, values and goals, and is, mutually affected by the changed environment. Advanced technology makes the human impact on the environment, intense and fast. Impulsiveness, are subject to situation in which they occur. For example, the arrangement of furniture in a room, will affect the way people interact in the room. The character of people of a country is formed by nature and the environment in which they live for a long period of time. Racial differences in personality to a great extent, depends on different environments that people live in [17]. For example, it is assumed that the climate has an effect on human mood. Cold weather makes people "active" and "hard working". The possibility of freezing may lead to a sense of insecurity and in a cold environment; one must constantly work to keep the body warm. People who live in cold areas should make plans to live, store food and thermal devices and provide appropriate clothes and shoes for winter. Unfavorable and difficult environment makes people aggressive and bold. The people of these areas are pragmatic people and their approach to the environment is, aggressive, competitive, or exploitative. It is said that science and technology, are the result of this approach to the environment [8].

But people of warm areas are usually "passive" and "inattentive". Characteristics of this type of temperament, is laziness and lethargy. Working in very hot places, is inconvenient because of the sweating and getting exhausted. In the tropical regions, the seasons are not much different and resource extraction is easy over the year. This weather tends to surrendering, giving up and accepting the conditions and the approach to environment, is along with fear and superstition [7]. Temperate climates, makes people with "pure" and "moderate" moods. Characteristics of This type of mood, is awareness of self and relationship with the environment.

These people's lives in harmony with the environment and their insight in the role of the environment in their lives, makes them feel the need to protect the environment. Holism, being intuitive and balanced is the other main features of this group [1].

Over the past few decades, a significant number of urban designers in have discussed understanding environmental issues and its various ways. Donald Apple Yard divides human perceptual responses to the environment to the three modes [3]:

- 1- The reaction, emotional mode: This mode includes emotional reactions to the environment where the environment is considered as emotion stimulator and association.
- 2- Operational mode: A mode that is often used by people in everyday life, like traveling from one place to another to perform certain functions, such as work or meetings.
- 3-The inference mode: In inference mode, to support operational and action-emotional activities, people are in search of information about environment and finally understanding the meaning of it. In this situation, the inferred information leads to the revelation of individual and collective identity and the environment associated with it, and ultimately define the sense of place.

Different types of machination in perspective of environmental psychology:

The impact that environment has on humans is formed form quality of the human perception of his surroundings. Perception of environment based on the knowledge and information that a human has about the shapes, spaces, function and their internal and external meaning, is one of the first results related to human contact with the environment. This perception, causes humans to feel different degrees of attachment, including the sense of identity (identity), joy and a happiness, a feeling of sadness, pride, inferiority, superiority, and many feelings of alienation and psychic communication with environment sensed and cultural values and principles latent or manifest understanding of the environment and understand the latent or manifest cultural values and principles of the environment. The concept of distance is conceptualized in physical and human categories, classified details are below [11]:

A) Distances in physical space:

1. Space with a fixed feature: Spaces that have been organized with perception and have tiny spaces for different functions and supporting. The established spaces and people's personality can interfere. Size, shape, and location of the items that are in space and communicate with the audience in the space and the knowledge of the details of the feature architect and designer and show the manner and extent of knowledge of the architect and designer. In these spaces, if the respondent has a correct orientation, he becomes distressed.

2-space with semi-fixed feature: Multi-functional spaces that have a lot of space and behavioral capacity, so multifunctional spaces are not stabilized. Spaces that their quality can be changed by changing factors such as changing the layout of furniture, this change will lead to changes in user behavior in the space. Therefore, we can extract the appropriate behavior patterns and organize the space in order to achieve it.

B) Distances in the human realm:

This distances have been classified as the flight distance, crisis distance, and personal and social distance. Flight distance and crisis distance, except in a few cases, have been eliminated from human responses. But later new distances in the field of environmental psychology has been proposed:

1) The intimate distance:

At this distance the presence of another person is irrefragable and may be often uncomfortable due to the predominance of sensuous perception. Vision (often distorted), the other person's body heat, smell, sound, smell and feeling the breath of the other person are all other symbols of having contact with another person. This distance is divided into a more detailed variety:

A) The intimate distance (close state):

Conditions relating to compliance with distance are extremely reduced and on contrary the sense of smell and feel of the heat generated in body are both raised. At this distance you can observe the details.

B) The intimate distance (Distant state, six to eighteen inches):

- Clear vision (up to 15 ° C): the upper or lower face is included which seem larger.
- Peripheral vision (-180 to 30 ° C) includes peripheral parts of the head and shoulders, and often hands. Most physical discomfort is when outsiders come in private space inappropriately (deviation of visual system).

2) Personal distance:

It is used to determine the fixed distance that separates the different types of non-contact members. It can be assumed as a living environment or a small bubble of protection that a living creature keeps between itself and other creatures.

3) Social distance:

Specifies the boundary line between distant and close states of social space (proficiency level). Meaningful visual details of the face are not visible and can it not be expected to contact someone at this distance. There are very little changes between near and far state at this distance. Conversations can be heard clearly from a distance of more than twenty feet. Screaming or increasing volume can reduce the social distance to personal distance.

4) General distances:

This distance is defined as two states of far and near distances. Each of these has its own definition and specification:

A) Near state (Distance: twelve to twenty-five feet):

At this distance a person if threatened, can become offensive, defensive or he can escape. It is even possible that traces of a flight reaction however subliminal occur at this distance. Linguists have observed that careful choice of words and the wording as well as grammar and composition changes occur at this distance. Clear viewing angle (one degree) includes the whole face the person. At the distance of six feet the round looking body vanishes gradually and looks flat. The eye colors are Indiscernible. The head looks outstandingly smaller than its actual size. Other people can be seen around.

B) The distant state (distance: twenty-five feet or more):

A state which in humans may look small in their full size (The point where people are seen as small as an ant, human contact with them rapidly pales). Some people never show their public personality and not able to fill public spaces, they are very weak in speaking or mediation. Other people have problems in intimate situations and cannot bear being close to others. Until quite recently it was thought that human's space needs are the same as the air moved by his body. The fact that human has a sign of personality in his surrounding areas, was generally ignored [11].

The intercorrelation of environmental psychology and urban designing:

To better understand the relationship between knowledge of urban design and environmental psychology, it is necessary to point out some concepts used in urban design. Both of these two fields are interdisciplinary knowledge and this leads to expand each of the scopes and the necessary and real connection between them.

1-Ownership:

Ownership is a legally permanent right whereby an individual can own his possession and use all its benefits. Ownership is the main objective right and is the relationship between the person and the thing that gives him the right to all types of occupation and exploitation. The right of ownership and the sense of ownership besides physical well-being, financial well-being, social and emotional well-being, interpersonal relations, personal development and self-determination are considered the factors of the quality of life [4]. Sense of ownership has many effects on the spirit of citizenship and social life, such as: The greater the sense of ownership, the greater citizen participation. On the other hand, all urban spaces need belong to the neighborhood to be protected. This sense of ownership must give a free but healthy and safe access to other classes as well. In most cases inhabitants own the spirit of ownership. According to Shurtrij, to apply this feeling, urban spaces need clear boundaries that give them unity and focus. These areas need to be limited in accordance with their own scale by elements such as doors or gate sense, walls, roads, signs, pattern, texture, scale and flexibility to comply induces a sense of space [2].

2-Individuality:

In the social science literature it is often used as a synonym for the human or person. The meaning of person, is "the existing unit of human" to emphasize his individuality. Thus, in the sense of this word, other aspects of a person's characteristics should be taken into consideration more than things that he has in common with others. In this concept, human unit is considered to be separate from the "other" in the community or the world as a background or texture. Individuality is a process that causes the integrity of the human personality so stress and frustration doesn't affect his physiological and vital processes. The sense of individuality and uniqueness is paraphrased as identity. Those who fail to achieve a coherent identity get an Identity crisis and are deprived of a sense of belonging to a place [13].

3- Belonging to the place:

From the perspective of environmental psychology, humans need an specific sensory, emotional and spiritual experience to the environment. These needs are achievable through intimate interaction and a twin-concept with the place where they live. This general sense which occurs after of perception and judgment to the specific environment In the which the individual is the sense of place is called occurs after perception and judgment about a particular environment, is called a sense of place that as an important factor in coordinating the individual and the environment leads to better utilization of the environment, user satisfaction and finally a sense of belonging to the environment and continuity to the presence In it. The sense of place is also a factor for a feeling safety, enjoyment and emotional understanding for people and in gaining identity and in sense of belonging to a place, helps people. From the phenomenological point of view the most relevant concepts in the sense of location, are location friendliness, location experience and location personality [6].

Conclusion:

Before obtaining an acceptable design, careful consideration of appropriate cultural, social and personal needs of residents is necessary. An effective design must maximize the freedom to act, mobility and flexibility. Other considerations could be the correct or incorrect use of space and often conflicting requirements of privacy and socialization. Educating the public about the efficient use of space and further studies on the effectiveness of different types of designs is necessary. For example, knowledge of new opinions about the function of the office, school or hospital, while being designed is important. So, the impact of urban design quality on control and of inappropriate behavior and correction direction on behaviors, encouraging good behavior, give the quality and identity of the urban environment, precise information on a variety activities and programs and patterns of human interaction that will take place in a building, is necessary for the proper architectural design of the building. It has been shown that being close natural elements such as plants, trees and water, causes most people to be calm. As a result, one of the main concerns of architects and urban planners is how to use natural elements in their designs [14].

Different patterns in cities cause different feelings in audience. Checkered patterns are legible and predictable, though, if the audience of this pattern enter another scheme it would be impossible for him to a feel comfortable. Each established environment is determined with some signs that vary from culture to culture. These spaces do not necessarily have visible boundaries; some borders are felt when the activity takes place in space; Behaviors and environments affect each other. Examples could be found in changes of Chandigarh members in India, in fact this example is one of the finest examples of the influence of behavior on environment [18]. In the urban environment, people are constantly in a state of pendulum motion between "operational", "reaction-emotional" and inferred states. Therefore, it is necessary that the environmental quality that meets the diverse demands of the environment and the variety of considerations given to it. Therefore, the urban city designers can not only focus on one of the three modes of perception towards the environment, but it is

necessary that they pay attention to qualities that are expected from natural and artificial environment and use a wider range and variety in their design [21].

Summary:

In summary, in order to study human issues (as a matter of psychology), and mutual relationship with the environment; regardless of the a scale of the environment, the effect of environmental conditions on human behavior and habits should be noted, The possibility to design, manage, forecast or recovery of environments will be established to promote the expected or rational behavior, or behaviors that will occur in the absence of the predicted environmental qualities and problematic locations can be identified. Environmental psychology seeks to develop a model of the human personality. The environment's impact on humans is shaped according to human perception of his surroundings. The perception of environment which is based on human Knowledge and information on shapes, spaces, function and their internal and external meaning, is one of the first results applied to human contact with the environment. This perception causes different levels of human communication with environment, such as a sense of identity (identity), joy and happiness a sense of, sense of sadness, pride, inferiority, superiority, and many feelings of alienation and psychic communication. Each of these emotions is a result of the relationship between the principles and values of human culture or latent or manifest values in the environment.

REFERENCES

- [1] Canter, D. and K. Craik, 1981. Environmental Psychology, Journal of Environmental Psychology, 1: 1-11.
- [2] Gruter, Purak, 1995. Aesthetic In the architecture, translated by Pakzad, Tehran, Shahid beheshti.
- [3] Holahan, C.J., 1982. Environmental Psychology. New York: Random House.
- [4] Jakle, A., S. Brunn and C. Roseman, 1987. Human Spatial Behavior. Belmont, California: Wads
- [5] Kamel Nia, H., 2007. Environmental psychology and architecture, settlement journal, year, XVI(51): 73-68.
- [6] Lang, John, 2009. Creation of architectural theory: the role of behavioral sciences, curled objective translator:Eynifar, Alireza, Tehran University Press.
- [7] Madani Pour, A., 2005. Translated by Mortezaei, Frhad- urban space design concept on a social process and spatial and urban planning Processing, Second Edition, Tehran.
- [8] Mc Andrew, T. Francis, 2008. Environmental psychology, Reza Mahmoudi translator, publisher Zrbaf principle, Tehran.
- [9] Moor, A.J., 1985. The behavioral ecology of *Libellula luctosa*, Journal of Ethology, 75: 246-254.
- [10] Mortazavi, Shahrnaz, 1988. Environmental Psychology, Tehran, Tehran University Press.
- [11] Naghizadeh, M., 2009. Analysis is to assess the factors affecting the participation of citizens in urban management, urban and regional studies, first year, second issue, autumn 2009.
- [12] Nuremberg, Schultz, 2001. The roots of modern architecture, translated by Mohammad Jodat, architecture magazine, (5): 169-144.
- [13] Porteous, J.D., 1977. Environment and Behavior: planning and everyday urban life. Reading, MA:Addison-Wesley.
- [14] Proshansky, H.M., 1990. The pursuit of understanding: An intellectual history. In I. Altman and K.Christensen (Eds.) Environment andbehavior studies: Emergence of intellectual traditions.New York: Plenum.
- [15] Qader Marzi, K., 2000. Component manufacturer quality urban design, Journal of platforms, second edition, number 32.
- [16] Rahimi, Feizollah, 2005. Psychology: The environment and work behavior, Journal of secrets, pp: 54-47.
- [17] Rayapurt, Amos, 2005. Meaning of the built environment, translated by Farah Habib publication and urban planning process, Tehran.
- [18] Russell, J., J. Snod grass, 1987. Emotion and the Environment, In Stokols, D. & Sommer, R. (1974). Tight Spaces:Hard Architecture and How to Humanize It, Englewood Cliffs, N.J: Prentice-Hall.
- [19] Russell, J.A. and L.A. Ward, 1982. Environmental Psychology, Annual Review of Psychology, 33: 651-658.
- [20] Scott, W.R., 1964. Theory of Organizations, In R.E.L.Faris. (Ed). Handbook of Modern Sociology. Chicago, Paul McNally.
- [21] Teimuri, Sa'id, 2008. Observing relationship between hardiness and quality of life In the District 9 executives Islamic Azad University Conference on Psychology and its application in society.
- [22] Worth Publishing Co.