USE OF KINEMATIC BEHAVIOR PATTERN IN DESIGNING NURSING HOMES BASED ON ENVIRONMENTAL PSYCHOLOGY

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ABSTRACT
The kinematic poverty and stress can be a major problem for the seniors. Right kinematic behavior, is a valuable tool to maintain a close relationship with the physical, psychological and especially the prevention of various disorders. Nursing home can be an especial place that would improve seniors the socialization, skills, dating and healthy relationships with their peer's seniors. This study determines the motion portrayal of the seniors in their social environment and tries to identify the needs and recommendation to the side of them.

KEYWORDS: Behavioral pattern, elderly, social space, environmental psychology.

INTRODUCTION
Today, increasing life expectancy and reduction of fertility increase the number of elderly people compared to total population and this increasing growth continues in elderly people. By increasing age, people vulnerability is higher in mental issues. The goal of environmental psychology is better management of environment for life and better mental growth. The designers should know that before achieving an acceptable design, the exact investigation of cultural, social, personal and mental needs of residents is necessary. An effective design should consider the behavior, mobility and flexibility. The lack of these features can lead to inability or non-empowerment and it can lead to strong self-confidence and non-dependence in elderly. To modify the common attitudes to promote sustainable behaviors, we can consider this issue in two main levels. To design the buildings, architects based on the definitions of architecture can provide the needs of human being and the goal of designers is creating the environments fulfilling human being needs. On the other hand, the behaviors are used to meet the needs and the recognition of human needs is of great importance for environmental designers (Matlabi, 2001). The first level in architecture design process is based on designer attitude and as it was mentioned in behavioral needs, the design should consider a model of mental needs, users’ behavior based on environmental psychology issues and promoting sustainable behaviors can be used in all steps of design process. If we should what had better performance in the past, we can be most prepared for better design in future.

By control theories, we can observe that environment has basic role in formation of values and empowerment for various groups and people. Based on the image in our mind, we can see. To show the effect to of environmental conditions on human being we can refer to the behavioral disorders of people and the groups that have problems in terms of consistency with environment conditions namely human artifact can encounter physical-mental challenges.

Statement of problem
Using a correct kinetic behavior model reduces anxiety and depression and increases self-confidence and it is required to explain the complexities of behavior “human needs” for formation of theoretical basics of architecture and design frameworks to a model of human being as systematic. It is required to recognize the mental and physical needs as correctly. The physical needs of human being can be met based on the performance of building by designers and recognizing the regulations, standards and similar performances but in mental needs, the designer can use psychological model of human needs for his activity. It is important to know what the real mental need of people is.

Buildings are designed to improve human behavior, social and psychological needs and their success in achieving these goals depends upon the point that the design can detect well and predict which activity can be performed and how environmental psychology knowledge is used to create space and facilities for their prediction. Indeed, people perception of type of space is dependent considerably by the organizing of their physical environment. This perception is different in various cultures. A collective place as welcomed by many people shows that it is consistent with the behavior and culture of the place and this means that the existing condition is investigated well and in the second case, the fact is not considered that what is the ideal thing?
MATERIALS AND METHODS

Study questions
1-How can we use kinetic behavior features to create suitable space in Nursing home?
2- How the nursing homes should be planned to consider the mental health and life quality of elderly as appropriately?

Environment and Environmental psychology
One of the important factors on personality features of people is environment. The experiences of a person of the environment, the relation and interaction with environment, the feedbacks and the effects receiving from environment affect their personality formation and growth. Although people are born with a series of inherent features with genetic and hereditary aspect, environment and its various aspects have considerable effect on these features or their latent feature of them. The concept of space and imagination of space as a system for places to find an existing reliance is the necessary condition (Schultz, 2009). Environment psychology, ecological psychology or eco-behavioral sciences are specialized branches of general psychology. According to Graman, in traditional psychology, environmental or cultural dimensions are not considered adequately and this creates environment psychology or ecology. Environmental psychology is the complex study between people and their surrounding environment. According to Gifford, environmental psychology is different from the main field of psychology as environmental psychology deals with the relevant behaviors with environment. The concepts of environment and aesthetic priorities are studied and are shown in the form of behavioral maps. Human environment affects his behavior in various levels. Immediate behaviors are based on the condition they occur. The personality of people in a country is formed by nature and the type of environment they live in. When animals are kept in non-natural environment or inside cage, their behavior is changed. Population stress and artificial features, urban conditions are the major reasons of increasing crime rate and mental disorder among people living in cities. Applied environmental psychology provides some criteria for better management of environment for better life and personality growth of people. Different environments are: Physical environment (land and geographical places with non-social and non-cultural aspects), psychological environment (including images of people), social environment (including the institutions composed of people and groups) and behavioral environment referring the set of factors to which human being can show behavioral reaction.

Behavioral environment
Human being behaviors accept some simple reflections dependent upon motivation. In other words, the emergence of human being behavior is not only dependent upon the genetic variables and stimulations and the severity and frequency of interfering intra-organism variables (inside human being) are important in creation of motivational behaviors. Motivational processes determine the direction and severity of purposeful behaviors and people experience these processes in their mind as conscious desires. Behavior is the response the organism gives to external stimulus. The behavior of human being in environment is the result of one’s motivations, environmental capabilities, mental schemas of environment and the relevant meanings. Four theoretical positions are defined regarding environment and behavior.

a) free – will approach
This approach shows that environment has no effect on human behavior. As serious limitations are for human behavior as some environmental features, free will approach cannot be defended.

b) possibility approach
This approach considers the environment as providing human being behavior and more than it. This approach considers environment as a set of behavioral opportunities by which an action is occurred or not. The analysis of human behaviors shows that people have not this freedom.

c) Probabilistic approach
As the environment is full of capabilities for human behavior and environment perception and using it depends upon the needs and individual capabilities and the relations of environment and human behavior are like this. By considering person A with conditions a,b,c as located in environment E with features d,c,f and for motivation for action M, this is probable that A repeats behavior B.

d) Deterministic approach
When people are free to act they are under the control of hereditary and environment. Deterministic environment as a branch of evolution theory considers the environment as the main factor of human behavior. The Table of the position of environment and behavior is shown in the following table, environment is assumed as geographical environment or land. The followers of deterministic approach assume the function of the made environment as this.
RESULTS

Table 1-Theoretical positions of environment and behavior

<table>
<thead>
<tr>
<th>Environment type</th>
<th>Nature of environment</th>
<th>Deterministic environmental schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social environment (physical,</td>
<td>Macro</td>
<td>(Environmental Determinism)</td>
</tr>
<tr>
<td>non-physical, humanistic)</td>
<td></td>
<td></td>
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<tr>
<td>Geographical environment (Physical)</td>
<td>Micro and macro</td>
<td>(Physical Determinism)</td>
</tr>
<tr>
<td>Artificial environment (physical)</td>
<td>Micro</td>
<td>(Architectural Determinism)</td>
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The behavioral investigation of elderly based on their mental needs

All of us have various concerns of self-assessment in various times of our age and we feel various needs. There are mental needs making use busy. The need of elderly people is not materialistic and based on the view of the experts, those reaching elderly age from emotional, social, security, recreational and living aspects, and need different issues. The elderly adaptability with surrounding environment is done hardly and self-assessment chart is shown based on mental needs of age as shown in Figure. They are faced with mental and emotional problems. Loneliness, the tendency to attracting others attention and ownership, for self-expression and reduction of these mental pressures, they can control the environment and others can obey them.

Chart 1-Self-assessment based on mental needs at various ages

The internal changes in elderly include the changes in emotional states, thoughts and self-restraint (Rafizade, 2010).

Some of the common feelings of elderly include:

1. Suffering due to the lack of attention from children and relatives
2. Loneliness due to rejection
3. Hopelessness namely in the elderly with financial problems.
4. Anxiety and concerns
5. Being an extra creature
6. Being dependent on others

Thus, the mental needs include as follows:

a. The need to others attention

No person is a deserted Island. Without continuous and suitable relations with others, mental conditions, emotional and behavioral conditions are damaged considerably. This is considered well among the elderly living alone. After many years of loneliness, the first person they meet is their doctor for 10min of appointment. They seem “strange” in this short time as the unmet need of “being taken into attention by others” is shown as relations manifestation. If the doctor considers this as the unsuitable mental condition, and various drugs can be given. If there was a person to listen to him
for house, he had no need to drugs. This is also seen in some free classrooms as some students try to attract the attention of the teacher, even by raising foolish questions without responding to the answer.

b. The need to purposefulness and significance of life
A person not having the satisfaction of achieving a goal is like a mentally ill person. The need to the significance of life is a comprehensive term. Victor Frankel in the famous book “human being searching for meaning” referred to the effects of the lack of meaning in prisoners’ hard working in camps.

c. The need to control feeling
The outcomes of losing control on surrounding environment, relations with others or our body can be imagined well.

d. The need to validity and position
This is important we feel we are important person. All of us know people that this need is important for them! It is enough for some people to be recognized as kind grandmother or grandfather.

e. The need to social participation
This basic need with the needs of significance of life, content and texture of one’s life. The participation is a social behavior based on personal or group beliefs and benefits. Participation is the interference of members of system in decision making process. Indeed, the nature of participation is common sources of group in society and one’s common benefits in group (Lahsayizad, 2004). Participation in the first meaning is the belonging to specific group and having a role in its existence and in second meaning is having active participation in group and it refers to the social activity (Biro, 1991). Social participation is referred to those free will activities by which the members participate directly or indirectly in formation of social life as shown in the following Figure (Mohseni Tabrizi, 1996)

![Chart 2- The mean of the number of social partners](image)

Nursing home as a behavioral center
Behavioral center is an analyzing element and is used to analyze environment as used in explanation of main functions of architecture space, urban design or their design. A behavioral center is a small social unit resulting from the sustainable combination of an activity and a place as in regular process can fulfill the necessary performances of the behavioral environment. In environment psychology, behavior is investigated in the framework of physical center. In this center, we fulfill the elderly needs by physical response in architecture space form.

a. Considering the privacy of elderly
The term privacy, domain searching and personal space have close relation. Ervin Altman proposed a conceptual model in which personal space are the main mechanisms of achieving privacy. Vestin considered four types of privacies as: Isolation, being free from being observed by others, closeness, talking with another one and being released of outside environment, unknown among the group, compromise, using psychological barriers to control unknown disturbances. Vestin determined four destinations as provided by privacy.

Privacy provides individual independence, emotions are reduced and self-assessment is increased and the relations are limited and protected. Using curtain, wall and symbolic and real signs to determine spatial domain and distances are all some methods for providing as controlled by environment designers. Daniel Kapen believes that extrovert people like the contact with environment, introvert people prefer the houses with yard. People fearing from human being prefer the buildings with complex internal relations and bright external domain. The social people are interested in a house with strong central map.

b. Avoiding over crowdedness
Much privacy leads to social isolation, low privacy to crowd mental feeling. Congestion for limiting the autonomy and personal expression leads to neural pressure and it makes the relations difficult. Congestion is with the lack of control on environment and is affected by one’s perception of the control others have on their disturbances. Congestion due to direct relation with social pressure leads to negative behaviors. To avoid congestion we can do the followings:
- The opening of windows should be as besides light, the view is also possible.
- Tall ceilings in crowded places reduce congestion.
- The suitable number of doors in space division and the controlled entrance and exit can help the reduction of congestion feeling.
- Square form compared to rectangular forms is suitable to reduce this feeling.
- Using partition in work places and offices is useful in creating personal space and dividing the space.

C. Creating a personal space

Providing personal space is one of the main mechanisms of achieving privacy. Personalization is signing or integration and similarity of the objects of a place as leading to the ownership feeling of the place. Personalization process can be self-awareness but it is unconscious mostly. For example, as elderly get tired earlier than others, suitable benches should be designed for them in definite intervals. Environment is one of the effective factors on the form of behavior and reactions of human being. The observations in this regard show that some environmental conditions create much possibility for creativity and others create easy processes in terms of practice and social relations.

Individuality is a process leading to integration of human being. Personality integration is organism coordinated function and it means that a person has no internal contradiction. His thought is based on ambiguity and stress and failure of physiological processes don’t affect him (Hosseini, 2008). Individuality and unity are called identity. Those being failed in achieving coherent identity have identity crisis and are deprived of belonging to place (Afsharian, 2008). From legal aspects, ownership is a permanent right by which a person can possess the property based on the rules and use all its benefits. The ownership is the most important objective right and is the relationship between a person and object as he can possess. Ownership right beside physical health, materialistic, social emotional and interpersonal wellbeing, personal growth and autonomy can be considered as consistent factors of life quality (Teimouri, 2008).

Ownership has various effects on people morale and social life as the higher the ownership feeling, the higher participation size (Taghvayi et al., 2010). This ownership feeling can give free access but healthy and safe to other classes. In most cases, the silent population gets the ownership soul. According to Shortrij, to consider this feeling, the spaces need transparent limit giving them unity. These spaces need limitation based on their scale. By some elements as gateway or gateway feeling, wall, way, sign, model and texture, scale and flexibility we can suggest this feeling to the space (Qazizade, 2011).

d) Formation of social spaces

Hall distinguishes between friendly, personal, social, consulting, public contacts and the requireid distances of each of them. The personal distance is the minimum distance for the interaction between non-friendly people, social distance, consulting is the distance between people in society and work positions. In formal work, people have the highest distance from each other. These spaces indicate the spaces in which people get together or get away from each other. He presents a four-stage classification of the main social distances to determine the effect of various arrangements of room furniture or geography of room on the interaction of people ranging from friendly and formal discussion. The higher the distance between people, the lower their visual, smell, heat and kinetic information of each other and they should talk loudly to have contact. The higher the distance, the higher the personal privacy and social interaction privacy is reduced. There is face to face contact in sociable organizing and sitting distance is as social, consulting distance. For example, one of the major issues of elderly people is watching TV as he tries to spend time. Thus, a need is raised here by which a space is created and we can get the people together and improve their social relations.

f. Increasing belonging to place

According to environmental psychology, people need sensory, emotional and spiritual experience to life environment. These needs are fulfilled via friendly interaction and empathy with the place they live. Environment besides physcial elements includes messages, meaning and codes people can decode and perceieve it based on the roles, expectation, motivation and other factors and judge about it. This general feeling is created after perception and judgement to specific environment in a person and is called sense of place as an improtatan factor in a person coordination and
environment can lead to better use of environment, satisfaction of users and their belonging to environment and the continual presence. Sense of place is a factor for security, enjoyment and emotional perception of people and helps the identity of people and their belonging to place. According to phenomenological aspects, the most important concepts in sense of place are the terms loving place, experience of place and personality of place. Belonging to place is higher than emotional and cognitive experience and includes the cultural beliefs relating people to place. We can say people can relate places to cultural feature as a place can stimulate human experience and recall cultural concepts and meaning (Qadermarzi, 2009). It is required that in nursing home, sight, hearing, touch and smell senses are used in open space design to consider the enjoyment and perception of environment as suitable. Also, creating a public green space in which the trees and ornamental flowers are planted by residents, can improve belonging feeling as it leads to participation. Sometimes the cleanliness of a places can make it different from other places and it creates belonging of people to it and residents can be proud of living there.

CONCLUSION
What making environmental psychology from other branches of psychology is the investigation of the relationship between mental-based behaviors and physical environment. Behavior is a reaction to an external action arising from a live creature. The behavior and performance of people in environment is considerably based on the physical-architectural conditions and factors of the environment. By using environmental capabilities, we can consider the behaviors of users to achieve the goals in environmental psychology knowledge. The designers can consider human being in all stages of design to operation and probabilistic renovation and in all mentioned stages, there is a close relation between environmental psychology knowledge and behavioral sciences with architectural field. Thus, the consideration of designers to psychological aspect of designed spaces created a stable link between environmental psychology and design as the architects by their common language between them and psychologists can find and attempt to create new knowledge for making an environment that is familiar with people more. Nursing home is one of the places by its suitable design, we can create the space for various uses and various activities.

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