

## **User – Based Approach in the Planning and Configuration of Living Spaces**

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**ABSTRACT:** - In the contemporary world the lack of living spaces – environments of dormitory facilities and proper accommodation for students is more than evident. Worldwide migrations of university students is triggering a huge market that is offering various opportunities of accommodations, and it is more than often that the offered accommodation is not satisfying the living requirements of students as individuals, which is directly influencing their success in educational process. One of potential reasons for unsuccessful accommodation condition lies in the fact that in most of the countries the dormitory facilities are not the buildings originally designed with the function of dormitories, but they are adaptation of the buildings that were constructed with other primary functions and purposes. Another reason might be hidden in the sorrow reality that architects in the planning and configuration approach might be making some intentional (omissions that are justified by market demands) an unintentional mistakes that are based on the lack of knowledge and understanding of the way of living of students, and their priorities and living requirements. In this study the aim is to determine the significance of user based approach in the process of configuration of living spaces in the case of dormitory facilities and priorities among the principles that are adding the essential meaning of living environment for students in the frame of dormitory facilities and it has been done through evaluation of several examples of dormitories of contemporary world, as well as through the revision of standards and principles related to planning and configuration of living spaces of dormitory facilities.

**Keywords:** - Dormitory, privacy, habituation, belongingness, motivational needs, basic needs

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### **I. INTRODUCTION**

In the Western world dormitory facilities spread their roots until the first Monastery buildings, while in the Eastern World the existence of dormitory buildings is derived from the educational system of the early beginnings of the establishment of Religious Islamic Schools – (Medrese – Turkish language) (Kaya, 2003). The birth of the first dorm rooms is completely proportional with the birth and early stages of standardised and systematized education, which without no doubt, started within the religious schools and their educational environment. In the contemporary context, the attempt to organise dormitory facility living spaces completely independently from educational institutions in which users are spending most of their daily lives is easily observable. This kind of approach has its own advantages and disadvantages. One of the main advantages would be the fact that these dormitory facilities may serve to all individuals who intend to live a life in independence, not just only for students. Despite to the existence of these kind of logic of accommodation, dormitory facilities are expected to provide the opportunity for realisation of basic human needs – requirements for living for each student. The dormitory facilities are more than anything else the shelters for students and their individual needs. From the aspect of living as an individual – in independence, as well as from the aspect of living in a collective, dormitory facilities are in the most of the cases planned to be the nests for individuals that are taking part in the educational processes. As such, Dormitories are expected to be the type of student residences that provide proper environment in order to support the process of education and individual development of inhabitants.

The essential meaning of dormitory facilities, especially for those who superficially approach to this matter, is hidden in the purposes of dormitories in general – To whom and to what these facilities are supposed to serve? There are at least two recognisable aspects (Novalić, 2012) that must be taken into consideration in the process of planning and configuration of living spaces under the frame of dormitory facilities and they are as following:

- User Related Factors
- Dormitory Building Planning Principles

## **II. USER RELATED FACTORS**

User related factors are covering all the meanings that are directly related to physical and sensory dimensions of humans as individuals. According to Hall (1990) human / user related factors in the process of planning and configuration of living space may be treated as “hidden dimensions” or “hidden functions”. Users, as individuals, when they are found in a collective within single space, they must be able to survive and coexist in that environment. Any kind of increase in the capacity of one space (increase in a number of inhabitants) should not influence the prosperity of each individual within that space. According to this it is possible to conclude that the certain amount of privacy must be satisfied. According to Novalić (2012) in order to achieve the mentioned conditions the following architectural terms and meanings may be grouped under the term of “Motivational needs” and as such it is essential that they are included into planning and design process. Humans as individuals possess the natural needs and aspects:

- The need for areal amount of space
- The need for volumetric amount of space
- The need for Privacy: The configuration of individual area / volume – space
- The need for natural light resource.
- Density / Capacity issue and protection of own Cultural Identity (Capacity of one space must be calculated according to the satisfaction of basic requirements of each individual, otherwise the frustrations may occur due to the disturbance of sensory (hidden) dimensions of human nature.
- Sharing (sharing of space and resources within dormitory facilities must be based on equality and sufficiency of each user / inhabitant).
- Feeling of Belongingness (Identification of individuals with the certain condition of living – acceptance of the certain conditions and consideration of those as satisfying)
- Feeling of Habituation (Getting used to the environment)

## **III. DORMITORY BUILDING PLANNING PRINCIPLES**

In the process of planning and configuring the living spaces of dormitory buildings it is of the essential importance that user based approach is in use, otherwise the successful solution might be in risk. In order to do the mentioned, the understanding of purpose of dormitory building is essential. Dormitory buildings are supposed to accommodate human individuals and provide them the healthy environment for living for individuals - in certain amount of independence, as well as situations of socialization or any kind of gathering in a collective. In order to achieve the mentioned value, it is important to take in to consideration the following aspects:

- Main living unit in dormitory building is dormitory room, and by repetition of the mentioned living unit, it is important to avoid monotony and to achieve the compactness in flexibility and diversity.
- Main living unit within one dormitory room is the amount of private space within which the individual may accomplish and achieve all sensory aspects of his/her existence – Motivational needs: Privacy, Belongingness, and Habituation etc.
- Within the building scale of dormitory facilities reasonable amount of private areas are required.
- The need for spaces for socialisation between inhabitants is required.
- The functional solution of building must be as flexible as possible from the aspect of use due to the fact that new students will inhabit and leave the facility every certain period of time.
- Dormitory buildings are the building that are expected to be planned for collective way of living, based on the special attention to the individual rights and needs of users, and existence of properly functionally articulated spaces for socialisation.
- It is strongly advised for dormitory building blocks and floors to be separated into smaller functional groups that should give an impression of small neighbourhoods. (Students should live in small groups)
- Dormitories could be an important place to enhance sociability and community.
- The possible impression of “institution” of collective living should be avoided, and they should be configured as environments that provide safety, and spatial opportunities that would make possible the activities that would contribute to impression of living environment that is more than a shelter.
- Dormitories should provide the opportunities for study activities, depending on diversity of students that vary from the field of their education. According to Heilweil (1973) proposed that space for study activities should be organised for solitary study, or study with a minimum of others, and he considered this need as crucial / essential.
- Long corridors should be avoided from the aspect of functional solution of areas of horizontal circulation.
- Materials used in a construction of a dormitory building must be suitable for use of students, and easy to maintain.

#### **IV. DISCUSSION AND CONCLUSION**

The significance of user based approach in architecture and architectural planning and design is more than evident due to the possibility of experiencing the growing gap between built environment and human as a user. Nowadays it seems that in practice the influential domination has been established by something that might be referred as ‘market based approach’ or ‘investor based approach’. According to architectural theory, not all what is being built may be referred as architectural product, although the regular users (everyone except architects and persons from building sector) assume that everything what is built is architecture. When it comes to the planning and configuration of living spaces of dormitory facilities, due to the complexity of task, and diversities among users, the user based approach seems to be the only possible guidance for the successful result, and successful functional solution that may positively respond to the demands of students – users and their contemporary lifestyle under the status of “university students”. In the frame of the user based approach, physical and sensory needs of users, since these are considered as their ultimate motivational needs, must be carefully evaluated and taken into consideration in the process of architectural planning and design, since, after the project is constructed and if any kind of omission in planning and conceptual solving of the project was done, it might give a reason for personal frustration(s) of users, which may even lead into different levels of verbal or physical conflicts among inhabitants – consumers of all what was supposed to be the living environment of dormitory facility. The planning principles and standards that belong to the aspects of planning and configuration of dormitory buildings must be derived directly from the scale of aspects of users as individuals, and their physical and sensory dimensions – from the aspects of their ‘motivational needs’.

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\*Adnan Novalić1. “User – Based Approach in the Planning and Configuration of Living Spaces.” *International Journal of Engineering Research and Development*, vol. 13, no. 09, 2017, pp. 43–45.