

The Relationship between Physical Characteristics of the Architectural Education and Creativity

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Abstract

The main purpose of Designing Architecture School is to foster the creativity of its users and physical features prominently play an important role in development of creativity. Since Rafsanjan city has no college specifically for the architecture, this research investigated the impact of the physical components on creativity by using a questionnaire and by using the study results has tried to take an important step towards the creation of the Architecture School in this city. The population of study consists of a number of experts in the field of architecture were chosen to complete the questionnaire. The study has evaluated the correlational relationship between physical features and operating environment of creativity. The results indicate the high impact of physical features on the creativity.

Keywords: physical features, creativity, School of Architecture

Introduction

There are available insights about building school based on behavioral patterns and in general, the importance of quality of place on behavior has been emphasized. But the matter with an approach to educational spaces and the architectural education is analyzed less. In addition to the mental process of architectural education of students of architecture, the role of the physical environment training should be considered because if the physical environment has had the potential to facilitate the needs of its users, this could influence their learning and personality.

Living environment of man (Natural Environment and manmade Environment) contains meanings and implications that influence the behaviors and in some cases it causes transition. According to most of developers and thinkers, what architects have in their own imagination, have created pictures that they have seen. Therefore, factors of visual and physical features play the greatest role in the process of designing.

The definition of creativity

Creativity is defined at the beginning of this subject and it is described as a subjective process. This process would have two requirements essentially in mind of creative architect, first, the imagination and then specter. Imagination is pictures and specters that architects develop in their mind to create the architectural dream free and thoroughly. Due to this freedom, imagination causes the architecture impressive. Therefore, the architect can create the thousands of architecture that had been initially sparked in his mind. But the specter of architecture is as a subjective image that has been built by the use of master guidance even it is possible that he has ever seen it, but it exist in fact.

Architect should make reality by using his imagination of an architecture effects for entering it to the real world. Comprehensively, specter is a factor that accelerates the imagination whereas imagination is a filter that specter should cross it for joining reality and thoroughly, the process of creativity makes objectivity.

In fact, we can claim that creativity is a vague term that its accurate definition is difficult to present. But totally it can be said that creativity is a mental process that includes invention power and flexibility which aims to produce a valuable, useful and fresh product.

Methodology

The research method of this study is solidarity because it is done to learn the relationship between variables and to explore the relationship between the two groups of information. According to the research hypothesis the communication, physical characteristics such as light, color, materials and space-based architecture approach to creativity are checked. The questionnaire as the main data collection tool is used that is analyzed by architecture experts.

Results and discussion

Full questionnaire designed for this purpose, the following areas have been classified.

Table 1. Classification of questionnaire for analysis (source: authors)

1	Spatial organization	Types of organization	A) linear organization B) central organization C) network organization D) molecular organization
2	Form	Forms	A soft form (B) broken form
		A combination of volume	A combination of simple volume A combination of complex volume
3	Functional features	A combination of spaces in designing studios of School of Architecture. B) The use of green spaces in designing of Architecture School C) The use of open spaces in Architecture School designing. D) Creating spaces for interaction of other people with the School of Architecture.	
4	Environmental Psychology	An environmental understanding (requirement of one to start) A) the seat of behavior (using the connecting spaces (spaces static)) B) specifying physical (the impact of the physical environment in facilitating or intercepting behaviors)	

Based on the analysis of the questions of questionnaires, the obtained results are discussed in following.

■ linear organization ■ central organization
■ network organization ■ molecular organization

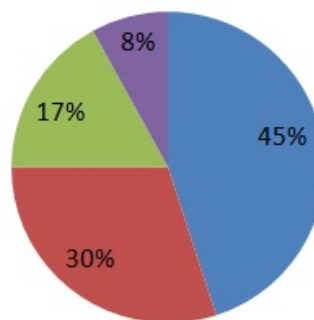


Figure 1. Diagram of preference of spatial organization

Organization: what kind of organization is selected by School of Architecture to design and what do you prefer?

According to the analysis of questionnaires linear organization is preferred by 45% of participants.

Form: what kind of form is suggested in designing an architectural school and what do you prefer?

By looking at the analysis of the questionnaires the application form is preferred by 65% of participants.

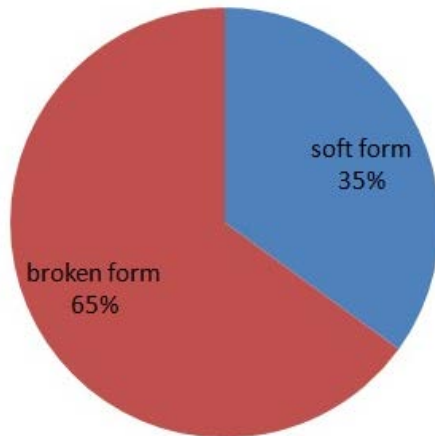


Figure 2. Diagram of preferred forms

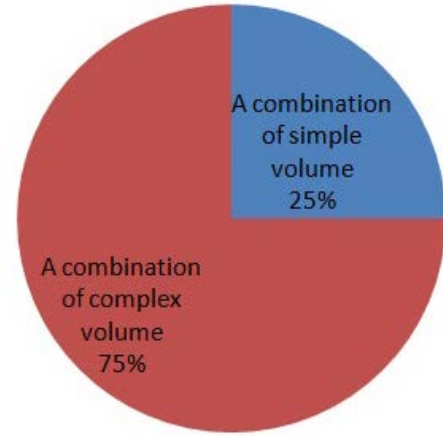


Figure 3. Diagram of preference of Size

Form: what kind of combination volume of the School of Architecture is suggested to design and what extent is preferred?

Based on the analysis of the questionnaires, complex volume is preferable with 75%.

Height

With respect to the analysis of questionnaires, with 45% the average height is preferable.

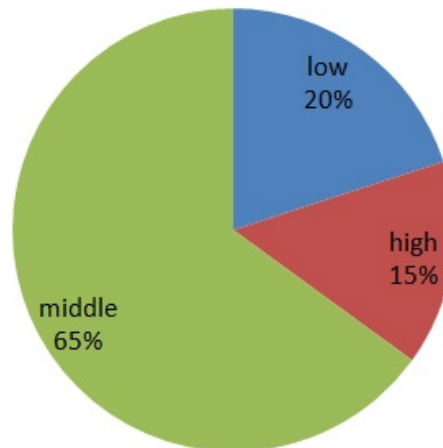


Figure 4. Diagram of preference of height

Functional features: the use of synthetic environments design studio for School of Architecture and to what extent do you prefer?

Based on the analysis of questionnaires, participants tend to create hybrid spaces in the School of Architecture and the average was 35%.

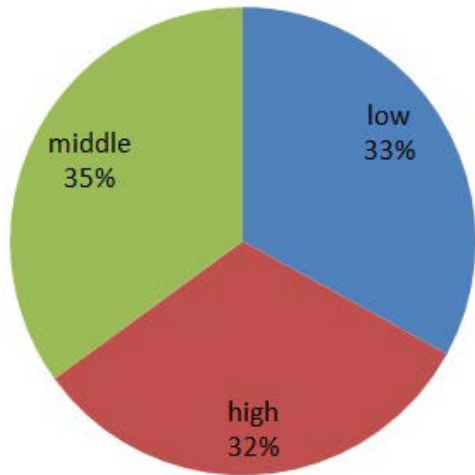


Figure 5. Diagram of the layout of creating hybrid spaces in the School of Architecture

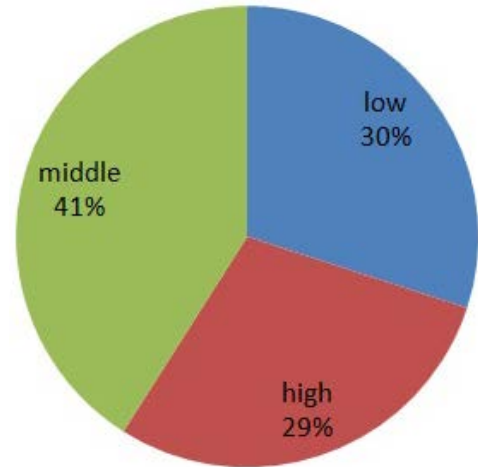


Figure 6. Diagram of the trend to create open spaces in the School of Architecture

Functional features: Creating open spaces in interior design of School of Architecture and to what extent do you prefer?

By analyzing the questionnaires, the average rate of tendency to create open spaces in the School of Architecture was 41%.

Functional features: creating indoor green spaces in the School of Architecture in order to foster creativity and to what extent it is necessary?

Regarding the analysis of questionnaires, the average rate tendency to create green spaces in the School of Architecture was 61%.

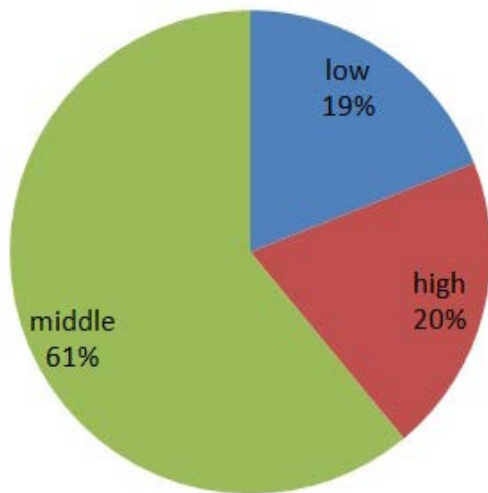


Figure 7. Diagram of the trend to create green spaces in the School of Architecture

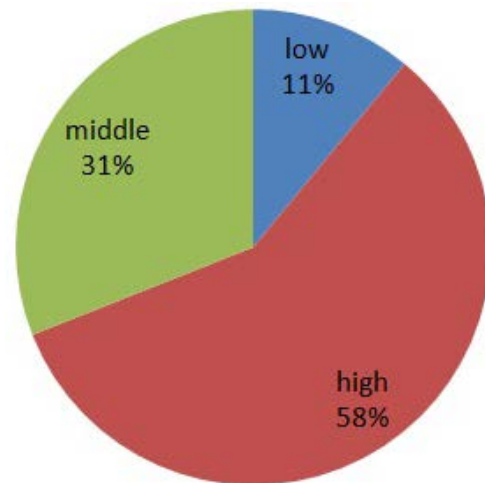


Figure 8. Diagram of the tendency to create the layout of connection between people in the School of Architecture

Functional features: creating spaces for communication of other people with of School of Architecture and to what extent the communicative space would be effective?

Based on the analysis of questionnaires, the trend to create a connection between people in the School of Architecture is too much (58%).

Environmental Psychology: perception of the environment: To what extent the required space for movement could be effective?

Based on the analysis of questionnaires, the effect of requiring space to move on students' perception is at the rate of 53%.

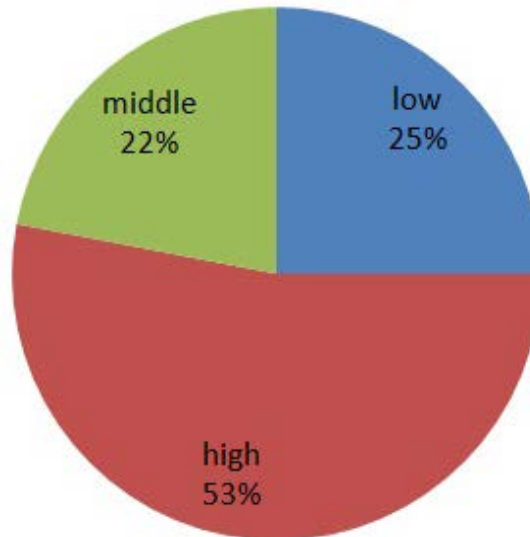


Figure 9. The impact of individual commitment to the environment on the perception of space

Environmental psychology, behavioral headquarters: In your opinion, to what extent connectors spaces (static spaces) are effective in your perception of space?

Based on the analysis of questionnaires, the effect of large areas as connectors on the perception of space was assessed at a rate of 49%.

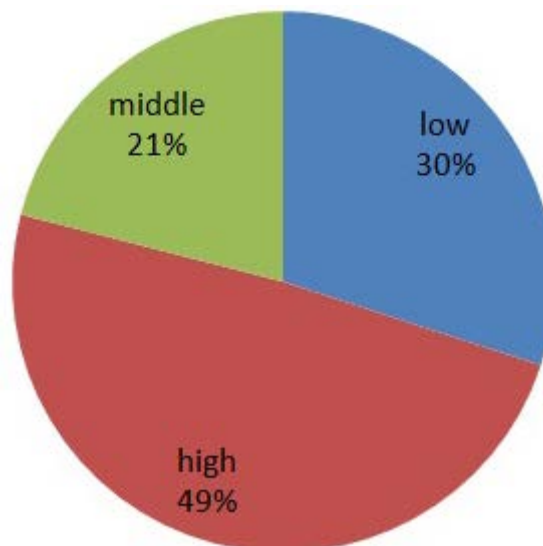


Figure 10. The impact of connecting spaces in the perception of space

Environmental Psychology: physical allocation: In your opinion, to what extent the physical environment would be effective in facilitating or inhibiting behavior in design of students of the School of Architecture?

Considering the analysis of the questionnaire, the impact of the physical environment in facilitating or inhibiting behavior on designing lots of students were assessed 64%.

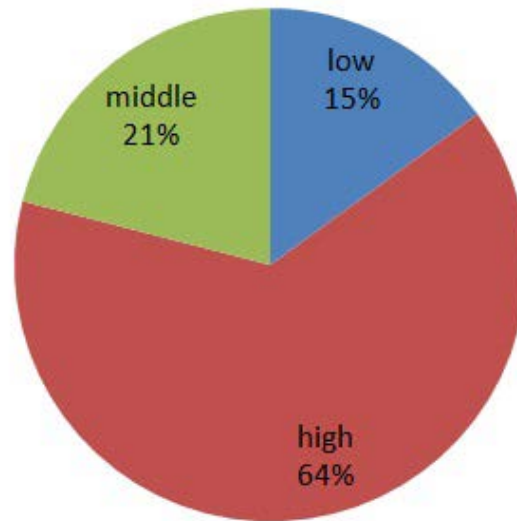


Figure 11. The impact of the physical environment in facilitating or inhibiting behaviors on students' design

Conclusion

Undoubtedly, many factors affect the components of creativity in education and according to what was stated it can be concluded that physical features has undeniable role as one of the most important factors in this regard. Therefore, by improving the physical components such as spatial organization form, functional characteristics, environmental characteristics, and psychology we can provide a context for flourishing of creativity.

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