

Study on the Interactive Design of Outdoor Fitness and Entertainment Facilities in Chengdu

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Abstract: With the development of the society, people's living standard improves and lifestyle has also changed, they have higher pursuit for the quality of life and pay more attention to the health; therefore, people spend more time in taking exercise. For ordinary family, due to the time, economic ability and other elements, indoor fitness activities are restrained in many aspects, and more people tend to outdoor fitness, especially some of the elderly and children like outdoor fitness equipment more.

I. Background of interactive design of outdoor fitness and entertainment facilities

With the improvement of people's living standard, they pay more attention to their health and spend more time in taking exercises. For the general family, due to the time, economic ability and other aspects of the impact, indoor fitness exercise is restricted, more people tend to outdoor fitness. Through the investigation of existing outdoor fitness facilities in Chengdu, it is found that there are still many problems in outdoor fitness facilities. For example, a lack of notice and eye-catching warning signs on fitness facilities, unreasonable setting of fitness facilities, few varieties of fitness facilities, rough craft of facilities, mixing use of facilities by adults and children, risk of danger on the elderly or children, and so on. Through questionnaire and observation, it was found that when people were in outdoor fitness facilities, one person was exercising while several others were standing nearby, chatting or silent. Two people exercise while others stand and wait or check their phones. Or a couple of people were using different fitness facilities and not communicating. If there is such a fitness facility, people can not only use it at the same time, operate and complete a fitness activity together, and enhance communication in the process of joint participation and interaction; it meet people's emotional demands. For this reason, the research on this topic is carried out.

The working and living environment of modern society makes people seldom communicate naturally as before, and the communication between people is gradually replaced by the communication mode of "person-object-person". Human beings begin to live in an endless technological space. Helplessness and panic are the most profound feelings of this era. People are eager for natural emotional communication, and they are eager to make the interaction and communication closer and more natural through product design, and they are eager for emotional expression. On this basis, the interactive design of outdoor fitness and entertainment facilities not only makes people's fitness interesting, but also promotes communication.

People's demand for fitness facilities is not only on the appearance and function, but also the emotional appeal and the realization of self-value, which have become the focus of people's attention. As far as outdoor fitness and entertainment facilities are concerned, people are no longer satisfied with the simple fitness function, but they hope that outdoor fitness and entertainment facilities can naturally integrate into the surrounding environment more, and they wish to bring beautiful emotional experience and obtain the greatest degree of spiritual comfort through operational interaction.

II. Significance of the interactive design of outdoor fitness and entertainment facilities

Social progress can bring mankind a lot of convenience and meet the human needs for exercise and entertainment, but it also bring negative effects, such as becoming agitated, obesity, depression or physical inactivity, which make people faced with more health troubles. Thus, modern people take health more seriously than before any time, and the development and popularization of fitness equipment in this area is inevitable. Due to the working and living environment in modern society, people seldom have natural communication as before, so the communication between people has been gradually replaced by the communication mode of “person-object-person”. The research on the interactive design of outdoor fitness and entertainment facilities can meet people’s emotional needs and make the interaction and communication between people closer and more natural.

The design of outdoor fitness facilities uses the design concept of interaction to create a possibility of “dialogue” between people, so as to achieve the purpose of heart communication and emotional catharsis. In the process of fitness, through information exchange and emotional communication, people can achieve benign interaction and create a good atmosphere, which can jointly promote the development of fitness activities. At the same time, through the joint use of fitness facilities, the previously lifeless fitness exercises become rich and interesting, reflecting the humanization of the design.

III Analysis of interactive characteristics of outdoor fitness and entertainment facilities

The interaction emphasized in this topic is different from the interaction in the general sense. The interaction in the general sense is man-machine interaction and coordination, which also refers to the interaction between users and the interface. The interactive design of outdoor fitness facilities emphasizes the interaction between people and whether the product can promote the interaction between people. Through the design of the function of fitness facilities, people can cooperate with each other in the process of fitness exercise; through the design of the product, fitness exercise has the feature of interactivity, so that users enhance communication through the interaction in the operation.

(1) Individuality and commonality

From the perspective of philosophy, individuality and generality have existed for a long time. Individuality reflects the particularity and typicality of contradiction, while generality reflects the universality of contradiction. Everything is the product of both individuality and generality, but differences exist as a result of the proportion of each factor.

The interactive subject of outdoor fitness and entertainment facilities is people. It refers to the interaction between people, and thus, it not only emphasizes the social attribute of people, but also respects the self-attribute of people. Therefore, in interactive design, personalized and generic elements are essential. The common factors in this design originate from the group factors, including some common interests or benefit or needs; individualized factors originate from individual differences. This design concept of mutual integration of individuality and commonness has become an important guiding ideology of interpersonal interaction design.

(2) Participation

Participatory design was originally developed by Scandinavian Participatory Design. In the design of interactive system, participatory design emphasizes that users play an important role in design. Generally speaking, participation is to further ignite users’ emotions and trigger their psychological response through their interactive behaviors. Only in the process of creative participation, can people’s natural interests and natural needs in the instinct be fully satisfied; in this way, personality can be fully demonstrated, thoughts can be fully free, and people will get the greatest satisfaction of emotion.

Since everyone has the potential to create, they will subconsciously place their hope in some product, and this desire to create is more likely to enjoy the process of creation than the result of creation. As Norman said in His book Emotional Design, the best design is not necessarily an object, space or structure: it is a process --- a dynamic and modifiable process. This design is in harmony with our personal life style. Let the user recreate the design. Deliberately weakening the functional

definition of the product and increasing the adjustability of the product shape can stimulate the human initiative in the interaction process.

As described in the book of Immaterial Society, in the immaterial society to come, the process of designing and using products will undergo qualitative changes, and product design will move from a one-time molding and basically unchanged model mode to a creation principle and mode of “initial form + transformation field”. Participation method can make use of some characteristics of materials (color, elasticity, features, etc.) or some structural characteristics (folding, multi-degree of freedom rotation, combination, inflation, etc.) to actually participate in the reconstruction activities and realize the emotional needs of users. For example, modular design also belongs to the category of participating in combination in the design.

The participation of outdoor fitness facilities means that two or more people can use the facilities at the same time. Emphasis is on simultaneous participation and use. In the process of simultaneous participation, it ignites their emotions and triggers their psychological response.

(3)Resonance

Resonance is a high-level psychological phenomenon in the process of human interaction. It is a kind of psychological and emotional response that occurs after the accumulation of human emotions to a certain extent. The Chinese online dictionary explains resonance as follows: ①the phenomenon of objects sounding in resonating, such as two tuning forks of the same frequency approaching, when one of them vibrates, the other also sounds. ②the same emotion caused by a certain emotion in another person. Specifically, there is resonance when there is a harmonious relationship between people and objects (objects or people). On the one hand, the object of interaction must have a charm of touching the heart; on the other hand, the subject of interaction must have life experience and thoughts and emotions similar to those of the characters in life or art, so as to create resonance.

The research on the interactive design of outdoor fitness and entertainment facilities in this paper hopes that people can achieve emotional resonance through the joint participation and use of fitness facilities and the mutual coordination and cooperation in behavior.

IV. Conclusion

In the process of product design, people should be the basic starting point, and the relationship between people and individuals should be taken into account. Through more interesting, playful, experiential interactive fitness entertainment facilities, people can enhance communication in the outdoor exercises at the same time, so that the previous lifeless fitness exercise become rich and interesting, which reflects the humanization of the design.

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