

Preliminary Research on Interesting Design Method of Aging Furniture

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Abstract. Based on the analyzes the physiological and psychological characteristics of the elderly, the paper expounds the positive effect of interest design on the physical and mental health by combining with the design status of age-appropriate furniture in China. It discusses the interesting characteristics and expression in modeling, materials, functions and colors of furniture design, and summarizes the methods and solutions of interesting design for aging furniture. Through the research on the interesting design, we can explore new methods and provide more possibilities for the age-appropriate furniture design.

1. Introduction

As China gradually entered an aging society, age-appropriate furniture also began to move towards the market. he designs of aging furniture should consider the physiological and psychological factors of the elderly, in order to design furniture that meets the daily needs of the elderly.

With the popularity of entertainment culture and emotional design, interesting design furniture has also begun to be favored by people. It is very necessary for furniture design to make the furniture meet the daily needs of the elderly and feel comfortable and enjoyable.

2. Elderly physical and mental characteristics and aging furniture design

2.1 Physiological and psychological characteristics of the elderly

With the gradual degradation of the motor function of the elderly, it's difficult for elderly to get up, sit down, climb and bend because the arm strength of the elderly will gradually be higher than the leg strength. So, it should be integrated into the barrier-free design, and consider the stability of the furniture design to avoid furniture dumping accident [1].

People-oriented is the basic principle of furniture design, so barrier-free design is especially important for the elderly to ensure that they can perform daily activities in a normal and comfortable manner. The behavior habits and lifestyles of the elderly, including the body size and activity size, will be used as the basis for furniture design [2]. In addition, the behavior habit and lifestyle of the elderly, including the size of the elderly's human body, activity size, will serve as the basis of furniture design in order to ensure their normal and comfortable daily activities [3].

2.2 The design status of age-appropriate furniture in China

As China's aging level continues to deepen, the market demand for older products is bound to rise rapidly, and the development potential of the elderly market is infinite [4]. However, the market is not paying much attention to this huge consumer market. Most elderly people are not satisfied with the existing elderly products in China.

At present, the design trend of suitable furniture on the market can be divided into universal design, multi-functional design, and intelligent design. Through the above trend of age-appropriate furniture design, it can be found that today's age-appropriate furniture is less studied in terms of fun. Interesting furniture design can not only meet the functional needs of the elderly, but also enrich the

social activities, bring pleasant emotional experience, and even help prevent senile dementia to some extent, so it is necessary to have fun in the design of age-appropriate furniture.

3. Interesting characteristics in furniture design

3.1 Novel features

“The abnormal is interesting” is a manifestation of novelty [5]. The novelty features of interesting furniture often have obvious defamiliarization, alienation and surrealism, which can give people more attractive and interesting. But not all kinds of novelty can bring interest to people, the elderly needs a sense of security, so they should grasp the degree of novelty when expressing it.

3.2 Humorous features

Interesting furniture often gives us a sense of pleasure, because it contains humorous features. The movements and game elements in daily life can be incorporated into the design to capture imaginations; or using the funny shape unreasonably in the design [6]. In short, this kind of interesting furniture not only has a variety of use functions, but also gives people a feeling of pleasure, and contains humorous features.

The humorous feature is added in the furniture design can ease the mood that old people depresses and doleful feeling, at the same time, use unconventional modelling and color design to bring old people novel sense stimulation, helping them to accept new things and maintain a positive and optimistic state of mind.

3.3 Playfulness Features

The playful characteristics of modern interesting furniture can be expressed as modular design. The modular design allows consumers to assemble and use furniture according to their own preferences, so that they can get the experience of the game in the process, and truly appreciate the interest of furniture design.

An idle old life will not only make the elderly feel empty, but also accelerates the degradation of various functions of the body. Therefore, the appropriate addition of gameplay features in the furniture accompanying the elderly everyday can not only enrich the daily life of the elderly and enable them to have a sense of pleasure and accomplishment in the game; it can also exercise the flexibility of their mind, facial features and limbs of the elderly, slow down the body aging, and benefit the body and mind.

4. Interesting expressions in furniture design

4.1 Modeling

Do not force too hard on the interesting modelling design of the age-appropriate furniture, too exaggerated shape will cause the discomfort of the elderly, contrary to the original intention of bringing pleasure to them. The thick, wide and square furniture shape not only gives a sense of steady and solidity in the visual sense, but also allows the elderly to have more stretch space. The regular square shape design is more friendly and easy to accept for the elderly. Interesting expressions can be expressed in detailing, such as local shaping on the armrests, backs, etc., or adding fun elements to the surface decoration.

4.2 Material

The performance, texture, and texture of the material convey different emotions in the design of interesting furniture, so they bring different visual and use feelings to people. For the design of furniture for the elderly, simple, intimate, natural and warm materials should be chosen to increase the sense of intimacy between the elderly and the furniture to improve the pleasure of the elderly when using furniture.

4.3 Function

Modern furniture products are not static, they often have many extension functions, that is the expression of the interesting furniture. For the elderly, the most important function of furniture is the practical, which firstly ensures the safety and comfort of the elderly to meet the daily life. Secondly, according to the characteristics of the furniture to add the function of prompts, lighting, goods, lifting, storage and so on, to improve the convenience and quality of the elderly life, help them to live independently.

4.4 Color

With the decline of vision, the sensitivity of the elderly to color is reduced. In the design of furniture and household products with reminders, bold and contrasting colors should be used, such as red and yellow instead of short wavelength colors such as blue, purple, and green. In the choice of daily furniture color, we should try our best to cater to the preferences of the elderly. The simple and calm light colors such as beige, gray and light brown are used to reduce the visual burden of the elderly and create a sense of tranquility and warmth.

5. Interesting design method and practice of Age-appropriate furniture

5.1 Methods for age-appropriate furniture interesting design

5.1.1 Multifunctional design

Studies have shown that the elderly with active circle of friends tend to be healthier and happier, and often interacting with friends can counteract negative emotions caused by decreased physical function. Therefore, we can take this factor into consideration and design a furniture that meets social needs.

5.1.2 Distracting design

People may be accompanied with a lot of pressure in the process of aging. Interesting furniture design can shift their attention and relieve the pressure of the elderly to some extent.

5.2 Design Practice

This is a sofa that can be used with pet (refer with: Fig. 1, Fig. 2), consist of two sofas and a small wooden box. The small wooden box is a small table, which can play chess and drink tea with friends to meet the social needs, and it can also be used by pets to make old age more interesting of the elderly.

Sofa adopted more conventional modelling, downy rice white and warm brown can give the aged comfortable and kind psychology. Wood and linen materials to bring more comfortable touch experience for the elderly.

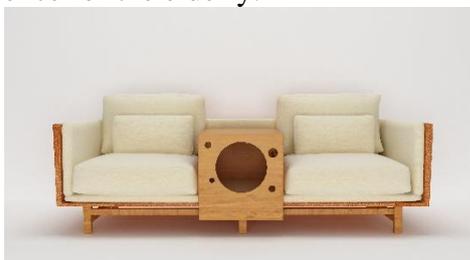


Fig. 1. pet sofa state diagram 1.



Fig. 2. pet sofa state diagram 2

6. Summary

The design of age-appropriate furniture should not only consider the various needs of the elderly, but also the psychological and emotional needs. Interesting design contains many emotional elements that we need to feel at heart. These emotional elements can give people warmth and care, make people feel respected. Only products that make older people feel more convenient, safer, more enjoyable, and more emotionally resonate are excellent age-appropriate products.

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