

# People- Oriented - Age-Friendly Home Design

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**Abstract:** Nowadays, with the increasing of the aging problem, it has become the focus of the society to pay attention to the quality of life and safety of the elderly. I follow the people-oriented guiding ideology and study the safety and comfort of the furniture. Based on the analysis of the current furniture for the elderly is unreasonable, such as security, scale, single function, such problems as lack of personality, according to the "people-oriented" design concept, put forward a more humanized design principles and ideas, to build conform to adapt to the elderly use provide theoretical basis for the furniture.

**Keywords:** *humanized; The elderly; Security; Comfort*

With the development of social economy and technology, the age structure of China's population began to turn to the aged. With the coming of the age of population aging, home-based care has become the retirement plan of choice for many families at present. However, if the houses and facilities are not suitable for old age, the elderly are likely to face the risk of falling down and being hit by furniture edges and corners. So what kind of furniture establishment just suits old people to live? When it comes to this question, "people first" is the most straightforward answer. So that's the aging furniture design.

The design of age-friendly furniture contains all the principles of caring design, which is not only beneficial to the aged, but also beneficial to the disabled and normal people. It truly reflects the idea of "people-oriented" and reflects the ethical and social responsibility of the design. But "people-oriented" in design means much more than that. "People-oriented" has been one of the basic guiding principles of all kinds of design since modern design. It emphasizes the focus of people, starting from the needs of people, taking full consideration of people's physiology and psychology, and designing products for people. Based on the basic concept of "people-oriented", and the results of constant changes and evolution in accordance with human needs, various design ideas have also been deduced. According to the differences of human needs and the different ways to meet human needs, various design processes and design methods are produced. Therefore, it can be said that "people-oriented" design ideas will never be outdated. The purpose of this paper is to study the furniture design suitable for the elderly.

## I. SUITABLE FOR AGING FURNITURE

In conservative idea idea majority person can think, old person likes plain color, simple woodiness household suits old person most. Actually this is a misunderstanding to a certain extent, the "people-oriented" design in the aging furniture design is mainly reflected in functional design, convenience in use process and comfortable experience of furniture. How to adapt to the "people" related to furniture is mainly reflected in how to adapt to the posture, size of human body, human behavior and human feelings and other specific issues.

## II. THE STATUS QUO OF FURNITURE SUITABLE FOR AGING

The elderly furniture market has a certain particularity, and has health, environmental protection, functions and security of the elderly furniture products are very rare in the market at present. Some experts point out that the aged furniture will become a blue sea in the future furniture market. Current old people has traditional also have fashionable avant-courier, the development of the functional household that suits old people to live a habit also met obstacle naturally, so tomorrow comfortable ageing household also is estimated also can present a kind of diversity circumstance. Will tell at present, market of our country furniture is not very perfect, comfortable ageing furniture still is quite absent.

## III. NECESSARY CONDITIONS FOR AGING FURNITURE DESIGN

The concept of age-appropriate design refers to the design method that is guided by the idea of "human-oriented", based on the premise of meeting the material, spiritual, physiological and psychological requirements of human beings, with aesthetics, man-machine engineering and artificial intelligence as the means and aimed at creating safe, comfortable and pleasant products.

### A. Safety and environmental protection -- the basis of age-friendly design

When people get old, the functions of all parts of the body will deteriorate (for example, the decline of motor ability, cognitive ability, cognitive ability, etc.), which may bring unexpected difficulties to the daily life of the elderly. Therefore, in the process of life, it is vulnerable to some obvious or potential injuries. Therefore, the design of furniture suitable for aging should meet the safety first, which is the most basic requirement and necessary condition.

Suitable ageing furniture base material and adornment material basically use environmental protection, avirulent, pollution-free green material. Furniture base material chooses as far as possible with natural real wood or green new material is given priority to, if at present market chooses pine for the furniture material that makes more. Man-made boards and other materials will inevitably release harmful gas, and the release period of several years, should be used as little as possible. Avoid using glass, ceramics and other materials as far as possible. These fragile materials can easily harm the elderly. For special needs, plexiglass can be used instead of ordinary glass.

### B. Comfort and practicability -- purpose of the aging design

Comfortable is relatively shallow, be the sense sense that suits old person on the design commonly, look comfortable not only appearance, use also had better not soft not hard, suit old person's physique bone. The design of furniture suitable for aging is to provide the elderly with a higher quality of life, which is the basis to guarantee the stability of the elderly's life.

The design of furniture suitable for aging is related to the simple and easy daily use of the elderly, safe and comfortable, which is an important condition to enjoy a higher quality of life.

The effect of colour to its fitful ageing furniture is also crucial. Suit ageing furniture color to use contrast color, take care of the old person with poor eyesight or use below dim light, but the harmony that should notice to maintain furniture colour, downy, lively, quietly elegant, colour should show with comfortable means, coating taboo highlights, do not stimulate excessively, lest cause dizzy, produce visual fatigue.

Practicality basically considers the functional sex that old people USES household, below the premise that satisfies basic function, also can do a few other small design. For example, elderly people are not convenient to sleep up and down, and smart buttons can be installed to help them more convenient to sleep up and down.

#### IV. THE DESIGN CASE OF AGE-FRIENDLY FURNITURE DESIGN CAN BE USED FOR REFERENCE



As a result of limb strength abate, old person often needs to borrow force when changing body condition, stand up after sitting down for instance, lie down sit back to sit up, or standing time is longer when, often need to rely on armrest to come as support, so sit implement two side try armrest design. Sit implement height also should compare normally sit implement slightly taller, convenient old person rises, perhaps add tall sit implement seat circle to undertake adjusting. The side of sitting toilet armrest can add urgent call device, in order to prevent old people to forget to change paper towel or encounter emergency circumstance. Add armrest to stage of

wash gargle is to prevent stand time is too long, leg foot is powerless, reduce the bearing strength of the leg to wait.



This series of furniture is specially designed for the elderly. They can help the elderly to solve some difficulties in their daily life. The series has three different designs: a crutch holder, a thoughtful chair and a moonlight light. Designers combine the crutches used by the elderly with the shelves, and pulley is provided below to avoid the inconvenience of standing and carrying furniture. The chairs used by the old man are flanked by handle arms and foot stands. What makes people feel warm is the LED reading lamp used by the elderly, which is also equipped with a magnifying glass, so that the elderly can also feel the fun of reading.

#### CONCLUSION

Design concept is the guide of design behavior. In the process of design practice of age-friendly furniture, we must adhere to the idea of "people-oriented" and establish the basic starting point and design criteria of "taking the physical and mental health of the aged as the basis". In the design process, the safety design is taken as the premise to deeply study how to meet the personalized needs of the elderly with the study of safety, modularization, intelligence and practicality. People-oriented design has profound connotation and is constantly developing and improving with the progress of social economy. Designers' understanding of the human-oriented design concept also needs to keep pace with The Times. They should view it from the perspective of change and development, optimize their thinking structure and values, correctly grasp the design method and process, and practice the higher-level people-oriented design.

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