

# Research on Design and Development of Elder-Friendly Furniture in Chinese Residential Situation

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## Abstract

**Purpose:** In order to actively respond to the social pressure brought by the aging of the population in China, to respond to the smooth operation of the national “multi-level elderly care service system based on home, supported by community and supplemented by institutions”, to help the elderly with declining physical and mental functions to adapt to current living environment, to extend their time of independent and safe life.

**Methodology:** Based on characteristics of China’s aging situation and the current market of elderly-friendly furniture in China, the article started from the characteristics, behavioral habits and demands of the elderly,

**Conclusion:** Proposed design ideas and development strategies of elderly-friendly furniture in residential situation, including elderly-friendly design methods for basic furniture such as sitting and lying furniture, storage and operation furniture, as well as emotional, applicable and standardized development strategies. It is suggested that the furniture categories should be refined when the market is mature, so as to activate the elderly-friendly furniture market and promote it step by step, and guide the steady development of the furniture industry.

**Keywords:** the elderly, elder-friendly furniture (EF), furniture, design

## 1. Introduction

At present, China is the only country in the world with an elderly population of more than 200 million. It is expected that the elderly population will reach 300 million by 2025 and reach its peak in 2040. China’s aging is characterized by fast speed, large base and “getting old before getting rich”, accompanied by advanced aging, empty-nest and small family structure. China’s elderly care system basically presents “9073 model”, which means 90% of the elderly stay at home, 7% enjoy community care services and 3% enjoy nursing institutions (Sohu, 2021). With the improvement of living conditions and concepts upgrading, 80% of the elderly are willing to live separately from their adult children (Shan Luo, 2016). It can be seen that “home care” and “self-care” have become the key words for most of the elderly in China.

Furniture is necessary instrument for home life, the elderly stay at home for long time, furniture and life are more relevant. It is an urgent livelihood issue to deal with and implement elder-friendly furniture from the aspects of policy, design and market, which can help the elderly realize self-care easily, compensate for their gradually declining physiological function, extend their self-care time, and improve their life quality in old age.

Throughout survey of China’s elder-friendly furniture (EF) market, there is few professional manufacturers, whose research and development ability are not strong, showing a situation with big market, few products, low level of development. Secondly, the lack of corresponding national standards and norms also restricts the healthy development of elder-friendly furniture. Data show that the elderly are not satisfied with the current furniture they have, as much as 89% of total old people (Deyu Luo, 2014). First, both the elder and designer do not have