

The Design Analysis of Contemporary Chinese Elderly Living Environment from the Perspective of Design Psychology

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Abstract:

China's rapid economic development and rapid entry into the digital era have led to great changes in the demographic structure, and in the rapidly expanding society, aging has increasingly become a social problem that China and even the world need to actively pay attention to and strive to solve. When paying attention to the healthy life of the elderly, it is more important to pay attention to the mental health of the elderly. From the perspective of design psychology, the methods and steps of design psychology are used to carry out research and analysis of the design of the elderly home environment, effectively pay attention to the mental health of the elderly, create a living environment that meets the psychological needs of the elderly, and put forward corresponding implementable ideas for the real environment of the group according to the psychological needs of all aspects.

Keywords:

Design Psychology, Contemporary Chinese Seniors, Psychological Needs, Living Environment Design, Emotional Design

1. Introduction

In China, the proportion of the elderly is on the rise year by year, which makes China one of the countries with the fastest aging population. According to statistics, on January 17, 2020, Ji Zhe, director of the National Bureau of Statistics, introduced that China's population aged 60 and above has reached about 254 million, accounting for 18.2% of the country's total population. Among them, 178 million people will be over 65 years old. According to the analysis of past data, China's population over 60 years old will reach more than 410 million in 2033, and it is expected to reach a peak of population aging in 2054, and the proportion of the elderly population will increase from the original 10% to 35%, so the life problem of the elderly has become an urgent problem to be solved. From the perspective of the elderly, suitable for their use or experience of the items need to meet their physiological needs while also meeting their psychological needs, the elderly this special group is different from other social groups, their psychology and emotions will be affected by their own physiological

irreversible factors and external social environment factors, there is a strong sense of loneliness, emptiness, loss and inferiority, etc., while the sense of security is low, some elderly people due to physiological and psychological factors will also produce old age anxiety, old age depression, Alzheimer's disease and other diseases. These psychological and emotional characteristics first of all because the body of the elderly with the increase of age for the rapid changes in the outside world will greatly reduce their ability to accept, can not keep up with the rhythm of social development, and gradually disconnect from society, so their sense of psychological security will be greatly reduced, secondly, retirement syndrome is also a problem faced by many elderly people, sudden long rest will cause the elderly to feel more empty. The increase of age will also greatly weaken the memory ability and logical thinking ability of the elderly, which also seriously causes the sense of loss and inferiority of the elderly. Finally, with the continuous development of society, most young people cannot accompany the elderly due to work reasons, resulting in a large number of empty nesters, which also aggravates the loneliness and emptiness of the elderly. The long-term entrenchment of these problems has led to an increase in psychological depression and psychological anxiety among the elderly, bringing double physical and mental harm to the elderly. The reason why the elderly at this stage in China have experienced decades of rapid development in China, most of them have not received a good education in their youth, which makes it more difficult for them to accept new things, so the old age problems presented by most of the elderly in China are more obvious.

2. An Overview of the Psychology of Design

This design psychology is an interdisciplinary marginal discipline between industrial design and psychology, which belongs to the category of applied psychology, and is the theory, method and research results of applied psychology to solve design problems related to human "behavior" and "consciousness" in the field of design art [1]. From the perspective of designers, the role of design psychology is often used as an auxiliary tool to design a more suitable for people to use or experience. Starting from the special group of the elderly, we need to consider their feelings when designing the objects or environmental experiences they use, so we need to understand their psychological, physiological and other influencing factors. Through the behavior and psychological feelings of the elderly in daily life, design the equipment or living environment experience that is truly suitable for their use. Among the group of elderly people, we target the contemporary elderly living in China. Due to the influence of region, culture, living habits and other aspects, China's contemporary elderly are a group different from the elderly in other regions, through their analysis combined with their own design knowledge and thinking, fully consider their psychological factors and needs, design a truly suitable living environment for them, so that they can spend their old age healthy and secure.

3. The Living Situation of the Elderly in Contemporary China

The living situation of China's contemporary elderly mainly has the following characteristics, first of all, after these elderly people enter the age of 60, some people enter retirement life, some people reduce the work of physical labor because of frailty, and at the same time, as they grow older, their physical functions are constantly decreasing, unable to travel long distances, and the opportunity to receive education in school when they are young is relatively small, and there is no opportunity to contact

new people or things, making their social circle smaller. The lifestyle has also changed over time, from the original compound collective living to today's single-family family, and the lifestyle has become single and closed. For the elderly, the lack of communication for a long time and the inability to talk to their inner emotions exacerbate the loneliness and emptiness in the hearts of the elderly. In the current 21st century, is the era of data information, for the current elderly, intelligent products have become over-intelligent, many basic simple products can not be used normally, they are gradually out of touch with the life of the times, therefore, how to make the elderly happy in such an era to spend their old age has become a question worth pondering.

4. Analysis of the Living Environment of the Elderly in China

According to relevant international regulations, developing countries are recognized as elderly persons over the age of 60. From the perspective of time, people born after 1950 are considered to be elderly. Since 1950, China's elderly group has experienced special poverty, collective production, reform and opening up, decades of rapid economic development, with the changes of the times, China's living environment has also undergone earth-shaking changes, the initial living environment mainly presents the north to courtyards, small courtyard bungalows, the south to the alley tube building, it is not difficult to see that such a living environment belongs to collective life, neighbors communicate with each other more, now the living environment has become based on community buildings, Most of them belong to single-family households, and there is less communication between neighbors. Most of the communities where the elderly live are also old communities, with poor public facilities and more problems of mobility when going up and down the stairs.

5. From the Perspective of Design Psychology, the Living Environment Suitable for Contemporary Chinese Elderly People is Analyzed

5.1. Analysis of psychological needs based on psychological factors of Chinese elderly

Through the specific description of the above psychological and emotional characteristics of contemporary Chinese elderly, the side reflects the corresponding psychological needs that may occur in contemporary Chinese elderly, which are specifically manifested in the following aspects according to Maslow's need theory: safety needs, respect needs, privacy needs, comfort needs, mental and emotional ability needs and self-realization ability needs [2]. a. Security needs. With the continuous degradation of the physical functions of the elderly, the physiological manifestations are mainly reflected in the deterioration of limb movements and trembling phenomenon, and the memory is seriously deteriorated, so there will be operational safety problems and improper operation problems for fresh products produced now, and over time and the surrounding environment will not be integrated into it will produce serious psychological problems such as loss of psychological security. b. Respect needs. The respect needs of the elderly are mainly reflected in two aspects, one is self-identification, the elderly due to the advanced age of the modern mainstream intelligent products learning degradation, self-confidence will be gradually lost due to disconnection, self-identity is reduced, so the improvement of the sense of achievement is important. Another aspect is social identity, the

contribution of the elderly to society is greatly reduced compared to young adults, and they need more care from others, and the sense of social identity of the outside world is also particularly important for them. c. Privacy needs. For China's traditional concept of life, most of the elderly will live with their children and take care of their children, then the corresponding will produce that the privacy of the elderly will be greatly reduced, and they themselves also need personal privacy, which will make their lives more comfortable, so the elderly also need personal privacy needs. d. Mental and emotional capacity needs. As the labor of the elderly can gradually decrease, their leisure time increases, and most of the entertainment venues and entertainment products on the market today tend to be young and intelligent and serious, the practicality of the elderly products is seriously insufficient and other problems, which leads to their lack of entertainment life, coupled with the small number of friends, aggravating their inner loneliness, as a designer in the elderly related products or environment to fully consider the applicability of the elderly, to fully consider their emotional needs. e. Self-actualization needs. Self-realization is the highest level of Maslow's needs theory, after meeting the needs of the previous stages, self-realization is also a problem that designers need to fully consider when designing, how to make the elderly fully reflect personal value after meeting basic psychological needs is also particularly critical. [3]

5.2. Analysis of living environment design factors based on psychological factors of Chinese elderly

For the living environment of the elderly today, there are two main aspects to consider, the first is the indoor environment, the indoor environment should be reasonably arranged according to the indoor area, the area of each functional area can not be too empty or too narrow, from the reasonable allocation of the indoor environment to alleviate the psychological loneliness of the elderly, followed by indoor household products to fully consider the living habits of the elderly to equip, suitable equipment, appropriate size furniture and appropriate intelligence, etc., while considering the design of barrier-free facilities, Ensure the safety of daily use of the elderly, so that the elderly always live in their own comfort zone. Secondly, the consideration of the outdoor community environment, the current high-rise environment and the life of the elderly mismatch, can be solved by creating an elderly bungalow housing group, so that the elderly live in a community, there is no barrier of high-rise buildings can expand their entertainment life, similar to growing vegetables, raising flowers, etc., to meet the needs of self-realization, and at the same time the same age group will be greatly improved, emotionally satisfied. For the elderly districted medical conditions also need to be improved, the elderly no longer rely on the care of their children, have their own privacy, community entertainment facilities can also fully consider the psychological needs of the elderly to build, from the indoor environment and community environment to create an elderly environment that makes the elderly have a sense of dependence and security.

The difference in color can bring people different feelings, for the elderly, the color of the environment brings them more intuitive feelings, different color tendency, different brightness, different brightness give people different feelings, such as orange gives people the feeling of warmth but also has a strong vitality sunshine comfort, so the color matching of the elderly living environment is also very important. First of all, according to the different colors corresponding to different functional areas, through the color to distinguish the function is more intuitive, secondly, according to the love

of the elderly to their living environment suitable color matching, the rich experience of the elderly leads to them than bright colors more like more calm colors, in the indoor living environment warm wood color or other warm low saturation color system is more suitable for the visual experience of the elderly, comfortable visual environment can effectively alleviate the loneliness of the elderly. In addition to color matching, in the interior decoration, familiar things are more reassuring and comfortable for the elderly than new things, the ability of the elderly to adapt to the new environment is poor, nostalgic things can also make the elderly have a sense of belonging, so the environment decoration can choose some nostalgic things to create a familiar space.

The layout and color decoration of the living environment is to improve the life and psychology of the elderly with external materials as an auxiliary way, and how to improve the internal psychological feelings, the use of the digital era of innovative pension model is one of the good ways, first of all, China's current pension model is mainly based on the traditional home care, gradually transition to community pension services as a basis, institutional pension as a supplement of the pension model, the development of the latter two is currently in the exploration stage, the main reason is that pension institutions rely on service fees to generate income is not considerable, The market for the pension industry regulations are not perfect, the current elderly people and their children for the community pension, the cognitive trust problem of the pension institution is more serious, in response to such a problem, the first is to enter the elderly group of people to carry out relevant knowledge publicity and promotion, especially in the 3, 4th tier cities, let them understand the country's current pension policy, as well as the advantages and disadvantages of community pension and pension institutions, followed by the introduction of "combination of care and education" in the pension center to make the elderly and elderly education at the same time, Let the elderly learn what they like, find their own sense of achievement, organize more elderly groups and youth groups to communicate with each other, let young people drive the elderly to find enthusiasm for life, and at the same time can record their lives through the Internet to find the highlights of elderly life, so that pension institutions can complete income generation from other angles to reduce the fees that the elderly need to pay, and finally the government's support, reduce the burden of the elderly in the community and institutional pension, so that they are willing to choose this way to retire. Material satisfaction is the basis for the elderly to live a good old age, and spiritual prosperity is the quality of life for the elderly.

5.3. Analysis of living environment design principles based on psychological factors of Chinese elderly

As the elderly grow older, memory deteriorates significantly, and logical thinking ability is gradually dull, so when designing the elderly use utensils and living environment, it is necessary to consider whether the use is convenient and whether the operation process is simple, which is mainly reflected in the use of indoor household items, indoor household products need to be functional, preferably in one step, simple structure, etc. In line with the usage habits of the elderly, reduce the learning process and reduce their memory burden.

After people get older, the function of physiological organs will gradually decline, the eyesight and hearing of the elderly will decline, so in the visual orientation recognition to fully consider the actual situation of the elderly, font design size is larger than normal size and easy to identify, different prompts accompanied by color

form should also be distinguished, so that the elderly in the community activities will also be much more convenient. The decline of the auditory system has reduced the recognition of external sounds by the elderly, so the sound should be amplified on the product with sound prompts, and the words should be clearly spoken to provide the elderly with the greatest convenience of life.

In the development of the digital era, intelligence is full of our daily life, for example, most of our current payment methods use online payment, home intelligence, buy things from physical stores to online shopping, such intelligent development is good for young people and society, but for the elderly who can not keep up with the times is over-intelligent, so for the elderly product design or environmental experience design, intelligence is simple and easy to learn, moderate can be. [4]

For the design and use of products or environments for the elderly to be integrated into digitalization, the purpose of digitalization is to make people feel the efficiency of using the product conveniently rather than to become a burden to the user, which is particularly important in the relevant design of the elderly. The premise of designing products for the elderly is to respect their habits, such as the elderly like to read paper books, then we consider their viewing experience when designing tablet computers, how to make digital products realize the feeling brought by paper, and other products are the same. Nowadays, the products of digitalization have taken root in our lives, in order to alleviate the fear of high-tech products caused by the elderly who do not adapt to the rapid rate of social development, so that they can also enjoy the convenience and comfort brought by digitalization, from an emotional perspective to consider the products they use, is the goal of the elderly product, the elderly living environment in the digital era.

6. Conclusion:

With the continuous intensification of social aging, the livable life of the elderly is a problem worthy of attention, and the influence of the psychology and needs of the elderly should be fully considered in the design of the home environment of the elderly, which is a problem to be fully considered as a designer, and it is also an inevitable consideration when building a livable environment for the elderly in the future. Designers should pay attention to the mental health of the elderly group, maximize the analysis of the psychological and emotional needs of the elderly, and intelligently integrate the principles and methods of design psychology into the design of the elderly home environment to achieve comprehensive physical and psychological health, so as to improve the happiness of the elderly in their later life.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

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