

Design and Research on Growing Children's Furniture

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Abstract

Household products occupy a very important position in children's life, which is inseparable from children's life. With the release of the national two child policy, the recent publication of the three child policy and the highly respected sustainable design concept, children's daily necessities with growth have attracted much social attention. This paper summarizes the growing children's furniture from six aspects: research background, significance, research status at home and abroad, current development, existing problems and suggestions. In the design of growing children's furniture, we hope to realize multi-purpose and repeated use of one thing, increase the service life and expand the scope of use of children's furniture as much as possible, make full use of social resources, design products to meet children's psychological and physiological development needs, and help children grow healthily and safely.

Keywords

Children's Furniture; Growth Type; Humanized Design.

1. Research Background

Household products occupy a very important position in children's life and are inseparable from children's life. With the release of the national two child policy and the recent publication of the three child policy, the sustainable design concept and scientific parenting concept have been deeply rooted in people's hearts in life. Children's daily necessities with growth have attracted social attention. This industry is a huge industry related to hundreds of millions of consumers. At present, there are various forms of appliances in the children's market, but there are still a series of problems such as short use time, lack of function and novel style, which still can not meet the needs of children's growth and development. In the design of children's furniture in the future, one thing can be used for multiple purposes and one thing can be used repeatedly, so as to increase the service life and expand the scope of use of children's furniture as much as possible, so as to make full use of social resources, design products to meet children's psychological and physiological development needs, and help children's health and safety grow.

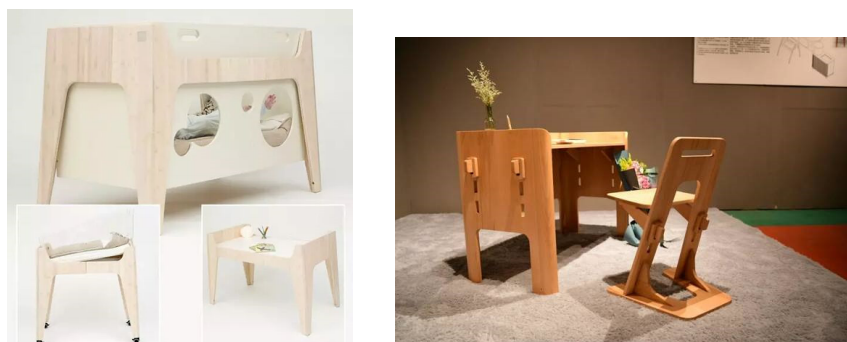


Fig 1. Growing children's furniture

2. Significance of Research

The research of this project is mainly from the current situation of children's home products, the characteristic behavior and needs of children of different ages, and the growth of children's home products. Deeply investigate the current situation and demand of children's household products: understand and analyze the whole process of product design, production, packaging, transportation, sales, use and waste recycling. Investigate the new technologies and materials at home and abroad, especially the growth furniture products. Deeply study the behavioral characteristics and needs of children of different ages.

The significance of studying the current situation and demand of children's home products is to understand the relevant advanced design concepts and forward-looking technologies at home and abroad, avoid making cars behind closed doors, gain insight into the needs of children of different ages for home products, prolong the service cycle of products as far as possible, and fully consider the safety, ease of use, continuity, education and interest of children's home.

The significance of studying the idiosyncratic behavior and needs of children of different ages is to make the design comply with the people-oriented concept. According to the characteristics of children's physical and mental development, we divide the development of children under the age of 12 into the following three stages: 0-2-year-old newborn infants, 2-6-year-old infants and 6-12-year-old children. The average height of children in infancy increased from 50cm to about 90cm, the average height of children in early childhood increased from 90cm to about 120cm, and the average height of children in childhood increased from 120cm to about 160cm. There are at least 30-40cm great changes in each stage. Only furniture products that adapt to the idiosyncratic behavior of children of different ages can meet people's needs.

The significance of studying the growth of children's home products is to increase the service life and expand the scope of use of children's home products as much as possible, so that the children's home products in the growth process can meet the needs of children at all stages, make full use of social resources, and realize the humanized design concept of common growth with children.

Finally, the research on the current situation and needs of children's home products and the research results of growable children's home products are comprehensively applied to design home products that conform to their psychological structure, wisdom and different development stages for children of different ages, so as to realize the common growth of home products and children. And make them carry out quality communication and interaction as much as possible, improve the safety, ease of use, continuity, interest and education of children's home products, and create environmental and scientific modern children's home products.

3. Research Status at Home and Abroad

3.1. Children's Furniture Products

The development of foreign youth furniture is much earlier than that in China. The relevant design concepts and design technologies are relatively advanced. The designed products are forward-looking, so they are more popular in the market. For example, IKEA in Sweden, whose design of youth furniture not only conforms to the body size of teenagers in ergonomics, but also has more in-depth research in modeling and color matching, which gives the product more connotation value, but also pays more attention to the diversification and humanization of details and functions, and the rational utilization of space.

Some domestic brands have also formed a certain scale. For example, colorful life furniture, DUOXI, ximengbao and I love my family are all enterprises focusing on the design of children's home products. Ximengbao, as the first furniture brand in China to enter the youth and

children's segment market, regarded each user as an equal individual with independent aesthetic ability and independent voice intention at the beginning of its establishment, Give every young child the same respect as adults. Ximengbao strives to improve quality through high requirements for material and technology; By paying attention to teenagers' growth, learning and living habits, the designed products have good quality, but the price is relatively expensive.

3.2. Growing Household Products

Foreign countries pay more attention to the humanized design concept of common growth with children in the design of children's home products, and there are also more in-depth studies on growth furniture. In the process of children's continuous growth, they are also constantly putting forward new needs for furniture products. Growth oriented children's furniture products not only save resources, comply with the concept of sustainable development, but also save parents' financial and material resources. In the exploration of children's furniture products that can grow up, a variety of forms and design methods can be adopted to change the shape and function of children's furniture products, so that children's furniture products in the growth process can meet the requirements of each stage. Among them, IKEA of Sweden has launched many growth children's home products. Most of their products can be used for multiple purposes and repeatedly, so as to increase the service life and expand the scope of use as much as possible.

The research on the product design of domestic growth children's furniture is not systematic and perfect, and the design is relatively fragmented. More famous enterprises include colorful life, xibaomeng, good children, etc. Among them, the good children enterprise founded by song Zheng in Kunshan is specialized in the R & D, manufacturing, omni-channel distribution and retail of children, mother and baby products. With the mission of "improving children's living environment and improving children's quality of life", through continuous innovation, we have created many products to create a healthy and happy growth environment for children.

4. Current Developments

At present, with the release of the "three children" policy, the total number of children will increase steadily. The post-80s, 85s and 90s have become the main consumers of children's furniture products. They have higher requirements for the growth of home when purchasing children's home products. The children's furniture market is experiencing explosive growth, but the current children's furniture industry is still in an immature stage, Growing children's furniture needs continuous research and summary.

5. Existing Problems

The research on children's furniture in China started late, especially the growing children's furniture, so there are still many problems.

(1) It's expensive. There are few brands engaged in children's furniture industry in China, and their development is relatively late. At present, they are not mature, and most of their children's furniture are more expensive. For example, the price of children's bed and panel furniture is generally between 4000 and 8000, while the price of solid wood children's furniture is generally more than 10000.

(2) Inconvenient to use. At present, there are all kinds of growing children's furniture in the market, but there are common problems of complex structure and difficult transformation and adjustment.

(3) It does not meet the psychological needs of children. Most children's furniture is a reduced version of adult furniture, which is not liked and accepted by children in terms of structure or color, and does not play an auxiliary role in children's psychological development.

(4) Single function. Most of the existing children's furniture in the market has a single function and can not achieve the function of one thing and multiple uses. After the three child policy comes out, the urban family space of some three child families will be more crowded. If you buy children's furniture with a single function, it is bound to occupy the family space, so the activity space of children at home will be reduced, which is not conducive to the healthy growth of children's body and mind.

(5) Short service life. Children grow up rapidly. The service life of ordinary children's furniture is about 7-12 months. Furniture that is no longer suitable for children is shelved at home, resulting in a waste of space and financial resources. Only by designing growing children's furniture can we solve the problem of short service cycle.

(6) Unsafe material and structure. Children's furniture should first pay attention to the safety of materials and structure, and most businesses in the market choose low-quality materials for processing and production in order to save costs, which will cause serious harm to the healthy growth of children.

6. Proposal

In the design of children's furniture products, we should fully consider the cognitive characteristics and behavioral abilities of children of all ages, and comply with children's actual behavioral status, aesthetic status and intellectual status. Safety is the most basic and important requirement in the design of children's products. In addition to the basic structural safety, there should be no harmful substances or gases harmful to children's health in the use of children's furniture products; Innovation should be made in function and form to increase the interest of the product; In terms of color, moderate lightness and purity, warm and cold colors and neutral colors are used to integrate children's products into their emotions; In terms of design methods, a series of problems such as short service time, lack of function, non novel style and non-compliance with children's growth state of traditional children's furniture products are abandoned, and the service life and scope of children's furniture products are increased as much as possible, so as to make full use of social resources and achieve the common growth of products and children.

The selection of materials for children's household products shall comply with relevant industrial standards for children's products, and shall be processed with non-toxic, harmless and pollution-free materials. Hard materials shall be avoided as far as possible, there shall be no dangerous and sharp tips, and the edges shall be rounded or chamfered. Secondly, the durability of growable children's furniture products shall be considered, and safe, non-toxic and Green environmental protection and durable materials.

With the change of children's physiological characteristics, the product should consider adapting to the height and other changes of children of different ages; With the change of children's psychology, products need to meet children's psychological needs and constantly tap children's internal needs. On the packaging of products, the selected materials shall be clean, safe, non-toxic, pollution-free and recyclable.

7. Summary

This project has two key points, one is the research on the psychology, physiology and living habits of children of all ages, and the other is the research on growing children's furniture. The former emphasizes "people-oriented" and the latter emphasizes "innovative products".

Among them, the research on the psychology, physiology and living habits of children of all ages is mainly the in-depth research of groups. We study the cognitive characteristics and behavior ability of children of all ages. By comparing the actual behavior, aesthetic status and intelligence status of children of different ages, we decided to study and analyze the needs of children of three age groups, they are 0-2 years old 2-6 years old and 6-12 years old.

At present, there are various forms of household products in the children's market, but there are still a series of problems such as short service time, lack of function and novel style, which still can not meet the needs of children's growth and development. When developing such products, children's physiological and psychological states should be taken into account, and products that meet their psychological and physiological development needs should be designed according to the development characteristics of children in different periods. The growing children's furniture product design not only increases the interest of the product, but also prolongs the service life of the product, makes full use of social resources, realizes the humanized design concept of growing up with children, provides children with scientific and safe furniture products, and can help children's all-round development.

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