APPLICATION OF EMOTIONAL TENSION AND EMOTIONAL COLOR IN OFFICE SPACE DESIGN

Chen Su¹, Dongzhe Wei¹, Haiqiang Wang¹ & Junjun Shan²

¹School of Industrial Design, Hubei University of Technology, Wuhan, 430068, China
²Department of Medical, Luinyi University, Luinyi, Shanxi, 276000, China

Emotional experience has become a new trend in the development of space design. The main ways to realize the emotional experience in space are: first, to bring users sensory experience through the basic form of space; second, to enhance users' emotional experience through spatial context; third, to improve the user experience by influencing the user's behavior. Some nervous mood color designs are very common in various scenes. However, some of them give the audience a glimpse, which makes us think deeply about the factors behind their differences. This paper aims to study the relationship between the color of simulated office space based on non-contact eye tracker and the mental preference of the audience, and its application in the works of display space. With the research and development of color theory in psychology, the color psychology of tension and emotion has gradually formed. The emotion and symbolic meaning expressed by the psychology of tension, emotion and color is an important expression of artistic creation. Applying it to design teaching can make the viewer feel directly, produce different emotional and mental effects, and trigger mental activities at the same time.

Key words: color design - mental activities - emotional symbols - nervous mental emotion

MODELING DESIGN OF FITNESS BICYCLE FOR THE ELDERLY TO ALLEVIATE TENSION

Senlin Yu & Yu Han

School of Industrial Design, Hubei University of Technology, Wuhan, 430000, China

With the rapid development of China's economy and the continuous improvement of people's quality of life and medical technology, aging has become a common social phenomenon. As a special group, the elderly are plagued by the degradation of physical function and the transformation of mental state for a long time. How to care for the elderly has become a social topic that needs attention. Based on this, through the analysis of the significance, development status and mechanism of the scientific modeling of the elderly fitness bike under the emotional and mental needs, this paper studies and puts forward the development path of the elderly scientific fitness from the perspective of emotional and mental needs, so as to realize the high-quality development of the integration of sports and medicine, and explore the problems of healthy China and population aging. As a kind of fitness bike shape design for screening and evaluating human dynamic balance function, it is applied to evaluate the exercise ability of the elderly and the effect of clinical rehabilitation treatment, in order to provide reference for the research and application of sports health promotion of the elderly at high altitude.

Key words: emotional and mental needs - aging - sports and medicine - ease tension

ENVIRONMENTAL LANDSCAPE DESIGN OF RESIDENTIAL AREA BASED ON THE PRINCIPLE OF ALLEVIATING EMOTION MENTAL

Meng Wang

Changexin International College of Art, Yunnan University, Kunming, 650500, China

With the development of modern society and economy, people's living standard is higher and higher, and higher requirements are put forward for the living environment, such as emotional factors and releasing pressure. With the acceleration of housing consumption process, the internal and external design of residential buildings and landscape planning have been greatly improved from the aspects of mental health and vision. This has prompted more and more residential district planning and design from monotonous plane layout to three-dimensional development. The planning and design of environmental
landscape in residential areas should reflect the psychological senses, take ecological coordination as the guidance, and put humanized psychological care through every design detail. It is emphasized that the planning and design of environmental landscape should be artistic and cultural, and its use function should be brought into play. The development of residential area environment must keep up with the rhythm of the development of the times, dare to innovate and experiment. To alleviate the objective problems, we must actively broaden our thinking, absorb knowledge in multiple fields and disciplines, and adopt comprehensive methods. According to the principle of psychological environment, this paper studies various influencing factors of environmental landscape design in residential areas. In landscape planning, people's psychological needs should be the center.

**Key words:** mental environment - residential quarters - ecological theory

---

DESIGN OF MUSEUM CULTURAL AND CREATIVE PRODUCTS BASED ON PERCEPTUAL CONSUMPTION INTENTION

Junjun Shan¹, Lisha Ma¹, Xiongbo Lu¹ & Ao Luo²

¹Wuhan University of technology, Wuhan, 430070, China
²Beijing City University, Beijing, 100162, China

With the development of social economy and the improvement of people's living standards, a variety of products are piled up in the museum culture market, and consumer demand and intentions are becoming more and more personalized. Businesses are developing market segments and constantly carrying out innovative design to meet the needs of consumers. In the process of creative product design, designers are not only required to fully understand the meaning of the product, but also to master whether the specific composition of the product is in line with humanities and history, and fully master the knowledge of product marketing, after-sales and other service contents. In the process of design, we should also consider the specific perceptual consumption demand and intentions of consumers, combine the consumption psychology and the use habits of consumers, and combine the humanistic philosophy to design more humane and reasonable products. Through the cognition of different levels of consumer psychology, we can further analyze users. Divide products by analyzing users' implicit needs. For different groups, so that the product can better meet the demand and intentions of users, and make the product further guide users' use behavior and values.

**Key words:** perceptual consumption - product marketing - innovative design

---

SIMULATION EXPERIMENT ON UNCERTAINTY AND STRATEGY OF MENTAL DECISION-MAKING IN ENTERPRISE NEW PRODUCT DEVELOPMENT

Shanliang Yao & Yang Chen

Wuhan Institute of Technology, Wuhan, 430070, China

In order to solve the problem of new product development and supply, this paper mainly studies the comprehensive evaluation of mental strategy simulation scheduling of this kind of structure. First, considering the factors such as economy, environment protection, technology and reliability, a set of evaluation index system for enterprise's new product development is proposed. Secondly, using the improved combination weighting model, the subjective weight of intuitionistic fuzzy analytic hierarchy process and the objective weight of improved entropy weight method are fused into the optimal weight. Finally, a combined evaluation model of grey correlation analysis successive approximation ideal solution based on mental cooperative game and improved cumulative prospect theory is constructed. From the actual operation, the influence of multiple decision-making mental on the evaluation results is considered. The feasibility and effectiveness of the evaluation model are verified, which has guiding significance for the engineering practice of mental decision-making of enterprise new product development.

**Key words:** enterprise new product development - evaluation model - weighting model - mental strategy

---