

dance course matching condition (1279 ms) and the perceptual dance course matching condition (1287 ms) are significantly greater than the response time of the subjects under the control condition (1220 ms); $t(28) = 2.81, P = 0.008 < 0.01, d = 0.43$; $t(28) = 2.60, P = 0.015 < 0.05, d = 0.37$; $t(28) = 2.77, P = 0.010 < 0.05, d = 0.43$. However, there is no significant difference between the perceptual matching condition and the dance course under the matching condition.

Conclusions: Using the reaction time distribution method to test the hypothesis of the content setting phenomenon in the early stage, the results support the existence of the content setting of the dance course in the early stage, not only in the visual dance course, but also in the accompaniment of the auditory dance course, more the important thing is that there is an early-stage content setting for both the perceptual level and the dance course. But it is worth the content that the stimulus of the sound content presented by the auditory in the dance course is not affected by the sensory channel, and the content can still be set. This shows that the guidance process of sound in the dance course is not entirely based on the perceptual level. The content of the dance course at the perceptual level and the content guidance process of the dance course can be separated in the rapid response stage.

Visually presented dance courses can set content at both the perceptual level and the level of dance courses that match the stimulus, and can also set content at the stage of rapid response to visual settings.

Acknowledgement: The research is supported by: Xinyang City Philosophy and Social Science Planning Project: Research on the Development and Utilization of Colorful Umbrella Dance from Shang City in Local College Dance Teaching, (NO. 2019WX010).

* * * * *

RESEARCH ON MODERN ART DESIGN DRIVEN BY COLOR PSYCHOLOGY

Aiju Han

College of Communication and Management, Sichuan University of Media and Communications, Chengdu 610000, China

Background: “The love of beauty, everyone has it”. Need is a high-level spiritual pursuit of human beings. Maslow (1908-1970) once said, “In the strictest biological sense, humans need beauty just like humans need calcium, and beauty makes humans healthier. “Since ancient times, philosophers, writers, artists, color psychologists, etc., have been thinking and discussing the issue of beauty.

Regarding the study of beauty, we first used speculative methods to discuss what is beauty and the process of judgment. Later, with the experimental aesthetics founded by G T. Fechner in 1876, researchers began to conduct empirical research on beauty, mainly around Research on the influencing factors of color psychology. Previous empirical studies on the influencing factors have shown that they are not only affected by stimulus objective factors, such as symmetry, typicality, novelty, complexity, contrast, and clarity, etc., but also affected by the subjective experience of the individual, such as familiarity. Processing fluency, professional background knowledge, etc.

This study uses color psychology research methods and fMRI technology to explore the influence of dynamic color on the judgment of modern art design by comparing the similarities and differences of dynamic color stimulus and static color stimulus in behavior and brain mechanism. At the same time, in the study of color psychology mechanism, the experimental materials are divided into beautiful and unsightly, respectively, when the degree of aesthetics is different, the similarities and differences between the color psychology mechanism of dynamic color stimulation and the color psychology mechanism of static color stimulation are discussed.

Subjects and methods: 20 college students participated in the experiment as paid subjects, 11 of whom were female; subjects were 19-29 years old (average age 22.75 ± 2.65 years), normal or corrected vision, no color blindness and weak color, and all the subjects have not received professional art training. The experimental materials are divided into two categories, one is the modern art design pictures with strong dynamic sense, and the other is the corresponding modern art design pictures with weak dynamic sense. In this study, for the convenience of description, the design pictures with strong dynamic sense are equated with “dynamic color design”, and the design pictures with weak dynamic sense are equated with “static color design”.

Study design: Let 2 art students who are proficient in modern art draw 210 modern art designs according to the requirements without knowing the purpose of the experiment. They are required to draw a pair of modern art designs, that is, the same design has both a dynamic picture and a weak dynamic picture. The only difference between a dynamic picture and a weak dynamic picture is the dynamic difference, and other

aspects are the same. Then crop all the pictures into 500 x 400-pixel size pictures.

Twenty subjects who did not participate in the formal experiment made 7 comments on 105 of the dynamics of modern art design pictures. The degree of dynamic refers to the intensity of the design activities in the modern art picture (such as flying, running, jumping and other activities). 1 means that the design in the picture has basically no activity or the activity is very weak, and 7 means the design activity in the picture is very strong.

The selected 80 pairs of dynamic color pictures have a mean value of 5.53 ± 0.32 , and the mean value of static color pictures is 1.93 ± 0.35 . The two types of materials have significant differences in the degree of motion, $F(1,79) = 5963.33$, $P < 0.001$.

Methods of statistical analysis: Using SPSS 22.0 to carry out repeated measurement analysis on the aesthetic score and likeness score of modern art design, two kinds of analysis are carried out, one is the analysis based on the subject, the other is the analysis based on the item.

Results: The result analysis found that, based on the analysis of the subjects, the subjects' aesthetic scores for dynamic color design were significantly higher than their aesthetic scores for static color design, $F(1,19) = 18.60$, $P < 0.001$, $\eta^2 = 0.50$; at the same time, the subjects' liking for dynamic color design is also significantly higher than their liking for static color animals, $F(1,19) = 26.68$, $P < 0.001$, $\eta^2 = 0.58$. Under the project-based analysis, there is a significant difference in the aesthetic scores between the dynamic color form and the static color form of 80 designs, $F(1,79) = 299.47$, $P < 0.001$, $\eta^2 = 0.79$, which means that for the same animal, the aesthetic score is significantly different. The aesthetic score of its dynamic color form is significantly higher than the score of its static form; similarly, there are also differences in the degree of preference for the two types of designs. The degree of preference for the design of the dynamic color form is significantly higher than the preference for the static color design. The degree score, $F(1,79) = 305.59$, the statistical score is shown in Figure 1.

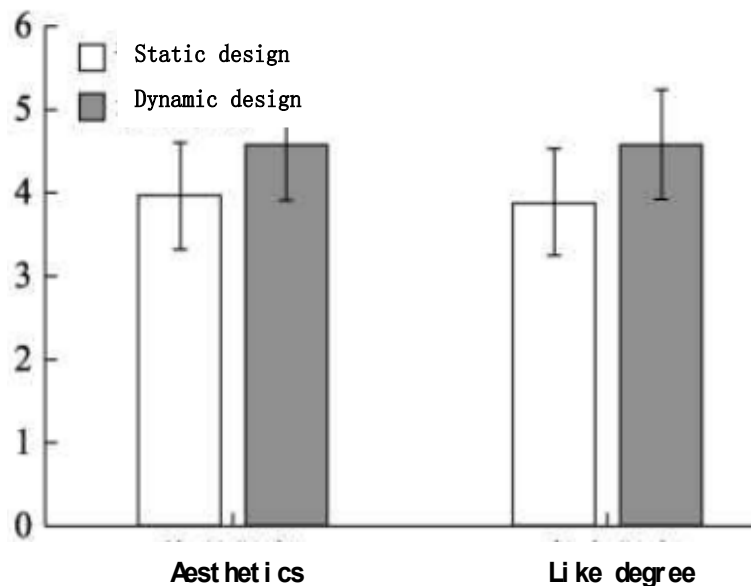


Figure 1. Beauty and liking scores of dynamic color design and static color design.

It can be seen from the above figure that the aesthetic degree score of beautiful dynamic color design pictures is 5.14 ± 0.39 , and the aesthetic degree score of unsightly dynamic color design pictures is 3.81 ± 0.45 . There is a significant difference between beautiful and unsightly materials in dynamic color design pictures. $F(1,46) = 119.51$, $P < 0.001$, $\eta^2 = 0.72$; the aesthetic score of beautiful static color design pictures is 4.61 ± 0.41 , and the aesthetic score of unsightly static color design pictures is 3.15 ± 0.39 , static color design pictures. There is a significant difference between the two types of materials, which are beautiful and unsightly, $F(1,46) = 160.68$, $P < 0.001$, $\eta^2 = 0.78$, indicating that the selected materials are more suitable.

Conclusions: Using color psychology and fMRI technology, to explore the influence of dynamic color on modern art design by comparing the similarities and differences between dynamic color stimulus and static color stimulus judgment in behavior and brain mechanism. The results found that the aesthetic degree and likeness score of dynamic color modern art design are significantly higher than that of static color modern art design. At the same time, the area activated by dynamic color modern art design judgment basically covers the area activated by static color modern art design, both of which activate visual processing areas such as the occipital area, cognitive processing areas such as the frontal area, and the orbitofrontal cortex.

Reward areas and other emotional processing areas such as hippocampus, insula, cingulate gyrus, and amygdala. Compared with the static color modern art design, the dynamic color modern art design significantly activates the bilateral lingual gyrus and bilateral MT. The results of this study show that dynamic color affects modern art design, and dynamic color modern art design is judged to be more beautiful than static color modern art design.

* * * * *

THE EFFECT OF PHYSICAL REHABILITATION EXERCISE ON THE REHABILITATION OF PATIENTS WITH CHRONIC SCHIZOPHRENIA

Kaihua Chen, Shuang Wang & Jianjun Cao

School of Humanistic Medicine, Anhui Medical University, Hefei 230032, China

Background: Chronic schizophrenia is a schizophrenia with symptoms such as apathy, lack of motivation, and social withdrawal. The illness lasts for more than 2 years, and the symptoms are mainly lack of thought content, emotional indifference, lack of will, and behavior withdrawal, with mental decline or sequelae. As the patient progresses, symptoms such as hallucinations and delusions are decreasing, and the phenomenon of mental decline is becoming more and more obvious. The patient is divorced from reality, withdraws, and exhibits weird behaviors, such as collecting waste, talking to oneself, loss of personal hygiene habits; emotional indifference or incoordination, digression, vagueness, or repetition, or lack of vocabulary, and no content; basic life cannot take care of yourself, generally require long-term supervision. About 66% of patients with schizophrenia have obvious and persistent psychotic symptoms, with a high recurrence rate and disability rate. Some patients with schizophrenia may suffer from different degrees of mental activity decline and social function impairment, which brings a heavy burden to the patient, family and society.

Physical rehabilitation exercise is a treatment method that combines sports science and rehabilitation medicine. Through the implementation of rehabilitation and health-care physical exercises, people's physical functions are improved, while at the same time the symptoms of chronic complications are alleviated, and the rehabilitation effect in the later stage of treatment is achieved. Physical rehabilitation exercise can effectively eliminate and reduce human dysfunction, make up and rebuild human dysfunction, and try to improve and enhance all aspects of human functions. Sports therapy is an important content and means of modern rehabilitation medicine.

Objective: Schizophrenia is a chronic, complex, and severe brain dysfunction, which is mainly manifested in various abnormalities such as perception, thinking, emotion, and behavior. The disease is characterized by incoordination between mental activities and the surrounding environment. Frequently occurs in young adults. At present, it is believed that the cause of the disease is mainly related to three factors: genetic quality, biology, and social psychology. In order to effectively improve the rehabilitation of patients with chronic schizophrenia, physical rehabilitation exercises are used for rehabilitation training for patients with chronic schizophrenia.

Subjects and methods: 500 patients with chronic schizophrenia were selected as the research subjects, from May 1st to July 30th, 2021, for a period of 12 weeks. Divide them into an experimental group and a control group, and compare and analyze the experimental data before and after the experiment. The questionnaire survey method was used to conduct mental health questionnaire surveys on 500 patients with chronic schizophrenia before and after the experiment. In the survey results, five levels from 0 to 4 are used to quantify the impact of specific factors. 0 means irrelevant, 1 means slight influence, 2 means normal influence, 3 means obvious influence, and 4 means sufficient influence.

Study design: (1) Before the experiment, conduct psychological questionnaire surveys on the experimental group and the control group respectively;

(2) Start the experiment and perform physical rehabilitation exercises on the experimental group, while the control group does not have any physical rehabilitation exercises;

(3) Twelve weeks after the implementation of the experiment, conduct a second questionnaire survey on the rehabilitation status to get to know the status of patients with chronic schizophrenia in the experimental group and the control group;

(4) Compare the data before and after the experiment, and analyze the differences between the subjects before and after the experiment.

Methods of statistical analysis: The SPSS software was used to count and analyze the original data of the two questionnaires to test the rehabilitation of patients in the experimental group and the control group before and after the experiment.