evaluation index is set to four evaluation levels: no obvious innovation effect, a certain degree of innovation effect, innovation effect and obvious innovation effect. The innovation rate is the proportion of the number of people with a certain degree of innovation, innovation and obvious innovation to the total number of people. In order to ensure the reliability of the research results, the selected subjects have more than five years of working experience in blue dyeing process, so as to eliminate the influence of subjective factors on the research results.

**Results:** The inheritors of blue dyeing technology in four regions are selected as the research object. 50 people in each region, a total of 200 people, will participate in the intangible cultural heritage blue dyeing art innovation experiment based on aesthetic psychology. The experiment will be divided into two groups. The first group is the traditional blue dyeing technology innovation, and the second group is the blue dyeing innovation under the theory of aesthetic psychology. The experimental period is 4 months. The innovation effect of blue dyeing process is classified by Support Vector Machine (SVM), and the evaluation index is set to four evaluation levels: no obvious innovation effect, a certain degree of innovation effect, innovation effect. The innovation rate is the proportion of the number of people with a certain degree of innovation, innovation and obvious innovation to the total number of people. In order to ensure the reliability of the research results, the selected subjects have more than five years of working experience in blue dyeing process, so as to eliminate the influence of subjective factors on the research results.

**Table 1.** Innovation and change table of intangible cultural heritage blue dye art based on aesthetic psychology

Experience group	Innovation rate in the first month (%)	Innovation rate in the second month (%)	Innovation rate in the third month (%)	Innovation rate in the fourth month (%)
Group 1	6	9	10	10
Group 2	27	45	62	77

**Conclusions:** At present, the blue dye culture of intangible cultural heritage has not been integrated with the elements of the new era for a long time, resulting in frequent obstacles in the innovation and inheritance of blue dye culture. The research has played an important role in the innovation of blue dyeing process by using the relevant theories of aesthetic psychology, and has positive significance in inheriting and disseminating the excellent culture of intangible cultural heritage and developing the mode of cultural innovation.

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## RESEARCH ON THE AUDIENCE'S "VISUAL" PSYCHOLOGY IN BAOSHAN XIANGTONG OPERA PERFORMANCE

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**Background:** The field of visual art has opened a new stage of development with the research of visual psychology. Visual psychology refers to the psychological mechanism reaction caused by external images through visual organs. It is a process from outside to inside. The external images are rich and the internal psychological functions relate to each other, and countless connections are established in the transformation. Different people have different psychological reactions to different images, the same image of the same person, the same image of different people, and different images of the same person. At present, the research of visual psychology mainly includes physical optics, anatomy and physiology of eyes and brain, visual physiology, visual learning, vision and art. Visual psychology is the thinking and communication of visual form. Part of human's imaginary world is separated from the real world, and this part of the form has the opposite effect with the form of the real world, which makes us see the magical power of art. In the context of the continuous improvement of people's material living standards, artistic performance has become one of the entertainment and relaxation programs that people like, and its various effects on the visual and psychological stimulation of the audience are more obvious.

Baoshan Xiangtong opera is an ancient opera in Longyang district, Baoshan city, Yunnan province. It is called Yunnan Nuo opera together with Chengjiang Guansuo opera, Wenshan Zitong opera and Zhaotong

Duangong opera. Consistent with other intangible cultural heritage projects, Baoshan Xiangtong opera is not fixed. In terms of scientific ceremonies, Baoshan Xiangtong opera was integrated into Confucianism to form a religious and cultural system of the integration of three religions. In terms of drama music, Dongjing music has a great influence on Baoshan Xiangtong opera. Bright color environments such as red and orange can effectively stimulate the psychological activities of the audience, which can not only stimulate the psychology of the audience, but also significantly improve the creativity and sensitivity of the audience. Research data show that using similar colors in the environment increases the average IQ of kindergarten audience by about 10%. However, there are also data points out that the kindergarten audience will always be in a nervous state when they face the stimulation of bright colors for a long time, which can not only cause the kindergarten audience to lack a sense of security for a long time, but also lead to violence. Blue and other cool colors can make children have quiet characteristics, but if children are exposed to cool colors for a long time, kindergarten audiences will be introverted and depressed. White can reflect all light, with a sense of cleanliness and expansion. The smaller the space, white will have a regulating effect on people who are easy to stimulate. Green is a color that makes people feel stable and comfortable and makes people feel comfortable. Yellow is the first color that people see naturally. It is a color that symbolizes health. It looks healthy and bright because it is the most easily absorbed color in the spectrum. Black gives people a feeling of silence, mystery, terror and purity.

**Objective:** Analyze the effect of Baoshan Xiangtong opera on the audience's visual psychology, relax the audience's tension, depression and other bad emotions, and improve the audience's sense of well-being.

**Subjects and methods:** 200 spectators from different regions were selected as the research object and randomly divided into control group and experimental group A-D, with 100 in each group. The control group did not watch any performances. Experimental group A watched Baoshan Xiangtong opera, and experimental group B-D watched Chengjiang Guansuo opera, Wenshan Zitong opera and Zhaotong Duangong opera respectively. The experimental period was 6 months. After that, the visual and psychological effects of the two groups of patients were measured through the two dimensions of positive emotion and relaxation, and the improvement effects were classified by random forest algorithm and the latest version of SPLM data statistical analysis software. Set the improvement effect evaluation index as no improvement, improvement and obvious improvement, and the corresponding values are 1, 2 and 3. The improvement rate is the ratio of the number of people and the total number of people at the two levels of improvement and obvious improvement. In order to ensure the credibility of the research results, the average value of each group of research objects is taken as the result.

**Results:** Table 1 shows the visual and psychological effects of the four groups of subjects after the experiment. The two dimensions of the audience in the control group were not improved, while the two dimensions of positive emotion and relaxation of the audience in the experimental group were significantly improved, and the improvement effect of the two dimensions of the audience in the experimental group A was better. Therefore, the experimental group has a significant effect on the audience's emotion through performance programs.

Table 1. After the experiment, the visual and psychological effects of the four groups of subjects (%)							
Index	Control group ( <i>n</i> =100)	Experience group A ( <i>n</i> =100)	Experience group B (n=100)	Experience group C ( <i>n</i> =100)	Experience group D ( <i>n</i> =100)		
Positive emotions	45.0	89.0	88.0	83.0	85.0		
Relax	43.0	89.0	87.0	86.0	87.0		

 Table 1. After the experiment, the visual and psychological effects of the four groups of subjects (%)

**Conclusions:** The effect of Baoshan Xiangtong opera on the audience's visual psychology shows that the scheme has obvious advantages in improving the audience's mood, and is worthy of popularization and application in high-pressure people. The overall color of the performance program meets the characteristics of simplicity and lightness. Most of them use the main colors such as green, blue and red, or the harmonious colors such as green and yellow, which can give the audience positive psychological hints, including pleasing the body and mind, relaxing the mood and enhancing the thinking ability.

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## ANALYSIS ON THE EFFECT OF COLLEGE PHYSICAL EDUCATION COMBINED WITH MENTAL HEALTH EDUCATION ON STUDENTS' PSYCHOLOGICAL PRESSURE ADJUSTMENT