

comprehensive talents of morality, intelligence, physique, art and labor for the society. The main points of the construction of sports dance ideological and political course combined with the online and offline mixed teaching mode are as follows: strengthen the subject consciousness of physical education teachers and improve their initiative. Constantly improve the ideological and political quality of physical education teachers. Physical education teachers should actively look for appropriate ways to implement ideological and political education.

**Objective:** In order to analyze the influence of Ideological and political construction of sports dance course on college students' mental health under the mixed teaching mode, and to contribute to the improvement of students' mental health.

**Subjects and methods:** 100 college students were randomly divided into blank group and observation group. The blank group adopted the education mode of ordinary sports dance course, and the observation group adopted the ideological and political construction of sports dance course under the mixed teaching mode. The experimental period was 6 months. After the experiment, the statistical data were analyzed by BMDP data analysis software. The mental health status of college students passed the Symptom Checklist 90 (SCL-90), which includes 90 items and 10 sub scales, of which 10 sub scales are not used for statistics. The 9 factors were divided into somatization, obsessive-compulsive disorder, interpersonal sensitivity, depression, anxiety, hostility, terror, paranoia and psychosis. The maximum score of each item in each sub scale is 4 points. The higher the self-evaluation of each item, the more serious the symptoms. The subjects' self-evaluation of each item is equal to or greater than 3 points, which is used as the standard to judge the degree of moderate or above.

**Results:** Table 1 refers to the mitigation effect of ideological and political construction path of sports dance course on college students' mental health under the mixed teaching mode. Somatization, obsessive-compulsive disorder, interpersonal sensitivity, depression, anxiety, hostility, phobia, paranoia and psychosis were the nine quantitative factors. With the increase of time cycle, the anxiety symptoms gradually relieved. Therefore, the educational model proposed in this study can alleviate the mental health problems of college students.

**Table 1.** The alleviating effect of ideological and political construction path of sports dance course on college students' mental health under the mixed teaching mode

Mental health indicators	After 1 month	After 2 months	After 3 months
Somatization	3	2	1
Obsession	3	3	2
Interpersonal sensitivity	2	2	1
Depressed	3	2	2
Anxious	2	2	1
Hostile	3	3	2
Terror	2	2	1
Paranoid	3	2	2
Psychotic	3	2	1

**Conclusions:** Under the multiple pressures of study, life, emotion and employment, the mental health problems of college students are imminent. The bloody facts constantly remind people from all walks of life to pay attention to the mental health of college students. The mental health of college students has gradually become the focus of social attention. The educational model proposed in this study can alleviate the mental health problems of college students and help them improve their mental health.

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## ARTIFICIAL INTELLIGENCE BASED FACE IMAGE RECOGNITION RESEARCH ON THE IMPACT OF CAMPUS SECURITY SYSTEM DESIGN ON AUDIENCE PSYCHOLOGY

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**Background:** Audience refers to the receivers of information dissemination, involving movie audiences,

Internet users, radio listeners, book listeners, ordinary residents, etc. From the macro level, the audience is a huge aggregate. From the micro level, the audience is people with rich social diversity. Audience psychology theory is a study of audience psychology. It is an important branch of psychology, mainly including mass media audience psychology. The research scope of this theory mainly includes aggression psychology, empathy psychology, performance psychology, conformity psychology, curiosity psychology, cognitive psychology and so on. Different scenes and environments have different audiences, but audience psychology is the needs and requirements of the object. With the continuous development of artificial intelligence technology and image processing technology, intelligent technologies such as image recognition have been applied to factories, campuses and other areas in order to enhance the regional security capability.

Face recognition can also be called portrait recognition. This technology is to analyze the data of human facial features and judge according to the computer face recognition algorithm. Face recognition includes face feature, face detection and face recognition. First, the face image recognition is completed by the camera, and then the existence of face in the image is evaluated by data analysis. If a face is detected in the image, the face features will be further analyzed, and morphological analysis will be carried out on the image based on the information such as the size of each organ, so as to make sufficient preparation for subsequent feature extraction. Finally, train the detected features, compare the face information to be recognized with the face information in the database, and finally evaluate each identity. Face acquisition needs to establish a face database in the computer, and then obtain the face feature information in the photographic equipment and video photos, extract the features of the face area and save them in the computer. For the campus security system, the way to obtain face information is to obtain facial features through photographic equipment. In face detection, the main information is the location and size of the face. At present, there are many face recognition algorithm models, among which the algorithm based on deep learning has very high accuracy, and it is also the most accurate algorithm at present. This algorithm takes convolution neural network as the basis and extracts image features through convolution. Face recognition includes holistic analysis and feature analysis. The hardware module design includes industrial camera, industrial lens, light source and main hardware parameters. The security system processing flow includes system processing flow design and processing interface design.

**Objective:** This paper analyzes the effect of the design of campus security system based on face image recognition combined with artificial intelligence on the psychology of the audience, in order to ensure the life safety of students and teachers.

**Subjects and methods:** 200 students and teachers from two universities in a city are selected as the research objects. The effect of campus security system design on audience psychology is analyzed by particle swarm optimization algorithm combined with artificial intelligence. The duration of the experiment period is 6 months. After that, data analysis and statistics are carried out through PEMS data analysis software. In order to ensure the authenticity and reliability of the results, the results of all subjects were averaged and taken as the final results. The design of the campus security system for face image recognition combined with artificial intelligence includes two levels: processing flow design and processing interface design. The audience psychology includes two indicators: fear and worry. The evaluation indicator is the improvement rate.

**Results:** Table 1 refers to the effect of the design of campus security system for face image recognition combined with artificial intelligence on the psychology of the audience. On the whole, both the process design and the process interface design can help teachers and students' fear and worry. Therefore, the constructed artificial intelligence-based face image recognition campus security system can largely avoid teachers and students falling into a long-term panic about campus security.

**Table 1.** Face image recognition combined with artificial intelligence the effect of campus security system design on audience psychology

Design type	Fear		Worry	
	Teacher	Student	Teacher	Student
Process design	87.0	88.0	89.0	92.0
Processing interface design	89.0	90.0	91.0	92.0

**Conclusions:** The design of campus security system based on face image recognition combined with artificial intelligence has a certain degree of alleviation effect on the fear and worry of students and teachers. It is necessary to install campus security system in most colleges and universities, which not only helps to ensure the safety of the school, but also helps to resolve the negative psychology of teachers and students, such as worry and fear.

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## AN ANALYSIS OF THE ECONOMIC AND CULTURAL CONNOTATION OF POPULAR ADVERTISING LANGUAGE UNDER THE BACKGROUND OF SOCIAL PSYCHOLOGY

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**Background:** The research content of social psychology is the law and psychology of behavior occurrence and change of groups and individuals in social communication. Social psychology is an important science closely related to people's daily life. It can not only cover the advantages of all disciplines, but also add vitality to the long-term development of all disciplines. Social psychology explores interpersonal relationships from the social group level and the individual level. The individual level includes the influence of school, living environment, family, partner, language development, communication and individual socialization process on individuals. Social group level refers to culture, customs, racial prejudice, aggressive behavior, attitude, group communication structure, etc. Based on the interaction between individual and society, social psychology analyzes the development and changes of individual psychological activities under certain social living conditions. Social psychology not only attaches importance to the interaction between individuals and society, but also attaches importance to the analysis of individual internal psychological factors and social situations. The research scope of social psychology covers applied psychology, group psychology, social communication psychology and behavior, individual social psychology and social behavior, including the application of social psychology, social influence, attitude and behavior, social individuals, theories and methods, etc.

Under the background of social psychology, popular advertising language, as a language widely spread in a specific period and region, is a hot topic in many fields, such as social life, education, science and technology, culture, economy, politics and so on. From the perspective of popular advertising language, it can be found that Chinese brand cultural value is closely related to economic growth, consumer values, enterprise marketing strategy, brand strategy, social trends and so on. Brand culture is shaped by enterprises to meet the requirements of social trends and consumer values. It should follow the brand strategy of the enterprise. At the early stage of reform and opening up, the brand awareness of the enterprise has just sprouted, and the enterprise has not yet formulated a mature brand strategy. Although some people dare to be the first, they are still in a state of ignorance, so they do not show mature brand cultural value. The brand cultural values of popular advertising language are divided into traditionalism, modernism, competitive value, moral value, social value and personal value. Among them, social values include a sense of achievement, world peace, a beautiful world, fairness, national security, social recognition, family security, true friendship and mature love.

**Objective:** In order to analyze the economic and cultural connotation of popular advertising language in social psychology, this paper aims to provide new ideas for the sustainable development of society.

**Subjects and methods:** The study selected 308 popular advertising words collected in international advertising from 2003 to 2021 as the research data, of which the number of popular advertising words of Chinese and foreign brands were 210 and 98 respectively. The research invited ordinary consumers of different ages, practical staff of enterprises and advertising companies, and marketing theory experts to analyze and determine the final brand cultural value of each popular advertising language. Brand cultural values include traditionalism, modernism, competitive value, moral value, social value and personal value. The evolution of contemporary Chinese brand values can be divided into four stages: ignorance, clarity, development and redevelopment. Each stage is the development and innovation of the previous stage. When more than 2/3 of the selected evaluators choose the same brand cultural value, the final result will be determined. Otherwise, the final brand cultural value cannot be determined.

**Table 1.** Category statistics of cultural values of popular advertising brands in four stages (%)

Stage	Traditionalism	Modernism	Competitive value	Moral value	Social value	Individual values
Ignorant	13	87	56	44	69	31
To make clear	26	74	56	44	63	37
Development	9	91	71	29	38	62
Redevelopment	10	90	40	60	60	40