design and artistic creation is improved when the level of emotional arousal is low.

The product design process needs to be combined with design psychology, so as to bring people a "medium intensity" positive emotional experience and make people feel relaxed and happy. Design psychology points out that emotional design should pay attention to people's practical functions and emotional experience of products, and distinguish the key points. People's perception depends on the stimulation of the external environment. New and different stimuli include harmony, novelty and complexity. People need to have the following characteristics to experience the positive area pole emotional process: a certain degree of familiarity, coordinated color system, distribution law, orderly arrangement of elements, symmetrical and balanced shape, and overall and concise shape. Emotional design includes the particularity, hierarchy and sensuality of emotion. Particularity specifically refers to the practical art of design, integration into the design process, the combination of sensibility and rational emotion, and the expression of emotional diversity. Emotional hierarchy refers to the emotion of instinct level, behavior level and reflection level. For the sensory level, design products include tragic stimulation, terrorist stimulation, erotic stimulation and shape and color stimulation. Emotional product design will have a positive impact on people's emotions and play a role in pleasing the body and mind and relaxing the mind.

**Objective:** This paper analyzes the effect of product design combined with design psychology on staff anxiety, in order to improve the mental health level of staff.

**Subjects and methods:** 100 employees with different degrees of anxiety were selected as the research object to analyze the impact of product design combined with design psychology on staff anxiety. The State Trait Anxiety Inventory (ATAI) was used to analyze staff anxiety, and using the algorithm of ordering points to identify the clustering structure (options) to classify the improvement effect of college students' anxiety. As a standard of anxiety assessment, ATAI can measure state anxiety and trait anxiety. In the study, the design psychology is divided into four types: tragic stimulation, terrorist stimulation, erotic stimulation and shape and color stimulation. According to different degrees of stimulation, it is divided into four levels: weak stimulation, medium strong stimulation and very strong stimulation. In order to avoid the influence of subjective factors on the research results, the data of all subjects were taken for analysis.

**Methods:** The correlation between designers' emotional psychology and anxiety in the process of product design is analyzed by Pearson product moment correlation coefficient. When P < 0.05, the difference has significant statistical difference, and P < 0.01, the difference has very significant statistical difference.

**Results:** Table 1 refers to the correlation between designers' emotional psychology and anxiety in the process of product design. It can be seen from Table 1 that the correlations between the four types of stimulation and anxiety are 0.586, 0.786, -0.532, -0.486 respectively. This shows that the psychological anxiety of the staff is negatively correlated with the tragic and terrorist stimuli. It is positively correlated with erotic stimulation and shape and color stimulation.

Stimulation	Relevance	Significance
Tragic stimulation	0.586	<0.05
Terrorist stimulation	0.786	<0.01
Erotic stimulation	-0.532	<0.05
Color stimulus	-0.486	<0.01

Table 1. Correlation between designers' emotional psychology and anxiety in the process of product design

**Conclusions:** The psychological anxiety of the staff was negatively correlated with the sad stimulation and terrorist stimulation. It is positively correlated with erotic stimulation and shape and color stimulation. Follow-up research can help workers alleviate anxiety and improve their mental health by enhancing erotic stimulation and form stimulation in the process of product design.

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# RESEARCH ON RESIDENTIAL LANDSCAPE DESIGN BASED ON ARTISTIC DESIGN TECHNIQUES FROM THE PERSPECTIVE OF PSYCHOLOGY

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Background: Psychological theory is a discipline to analyze the law of human behavior and psychological

activities. It is a science to analyze the integration form of human brain to external psychology, as well as the reflection, occurrence and development of implicit and explicit behavior. Art design psychology is the analysis of psychological phenomena in the process of art design and product design. It is an important branch of design art. The main analysis contents are designer thinking and designer psychology, environment and design art psychology, the application of design art psychology individual psychology in design art, methodology of design art psychology, etc. Design art psychology has the dual attributes of Humanities and natural sciences. The development process of art design psychology is accompanied by the development of psychological aesthetics, psychology of art historians, consumer psychology, advertising psychology include consumer needs and motives, behavior theory and consumer behavior, consumer attitude and design persuasion, consumer attitude and design persuasion. Environment and design art psychology include environment and psychological environment, physical environment and social environment. Design thinking and designer psychology include thinking, designer individual psychology and designer stress response.

Design psychology is closely related to people's behavior. From the perspective of behavior theory, people's psychological emotional reaction will produce corresponding behavior, which will produce adverse emotions such as anxiety for fear or disliked affairs, and then make people avoid and shrink back. On the contrary, people will show caring and approaching behavior. Under the background of the continuous development of the theory of art design psychology, residents have higher requirements for the landscape design of residential areas, which requires both practicality and artistic beauty. The feelings conveyed by the texture, color and shape in the environment are consistent with people's emotions. People will have corresponding behaviors through the stimulation of the environment. Under different enclosure and space conditions, according to different needs such as interpersonal space, psychological space, action domain and scale, landscape design can meet people's different safety needs such as rest, viewing and activities. Under the background of art design psychology, landscape construction design includes landscape space construction, landscape terrain construction, architectural sketch construction, plant landscape construction and so on. In the process of plant landscape construction, according to the principle of psychology, it is necessary to meet people's emotional communication in space, including communication emotion, safety emotion and private emotion. The size of architectural sketch should first consider human comfort, and then consider aesthetic function.

**Objective:** This paper analyzes the effect of residential landscape design combined with art design psychology on residents' psychology, in order to improve residents' mental health level.

**Subjects and methods:** Residents in four areas 100 were selected as the research object through C4 5 decision tree algorithm analysis combined with art design psychology of residential landscape design on Residents' psychology. The whole experimental cycle lasts for 3 months. The mental health of residents passed the Symptom Checklist 90 (SCL-90), which includes 90 items and 10 sub scales, of which sub scale 10 is not used for these statistics. The 10 factor subscales were somatization, obsessive-compulsive disorder, interpersonal sensitivity, depression, anxiety, hostility, phobia, paranoia and psychosis. The maximum score of each item in each sub scale is 4 points. The higher the self-score 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 determine the degree of moderate and above. The improvement rate is the ratio of the number of people with less than 3 points to the total number of people. The research takes the index as the evaluation standard. In order to avoid the influence of subjective factors on the research results, the data of all subjects were taken for analysis.

Mental health indicators	After 1 month	After 2 months	After 3 months
Somatization	72.0	81.0	86.0
Obsession	72.0	82.0	87.0
Interpersonal sensitivity	71.0	82.0	84.0
Depressed	74.0	82.0	89.0
Anxious	73.0	82.0	86.0
Hostile	75.0	82.0	86.0
Terror	74.0	82.0	87.0
Paranoid	73.0	83.0	84.0
Psychotic	74.0	83.0	83.0

Table 1. Improvement rate of residents' mental health level during the experiment

**Methods:** Through Epinfo data statistical analysis software, this paper analyzes the effect of residential landscape design combined with art design psychology on residents' psychology.

**Results:** Table 1 refers to the improvement rate of residents' mental health level during the experiment. It can be seen from Table 1 that after applying the residential landscape design scheme combined with art design psychology, the mental health level of residents has been significantly improved.

**Conclusions:** The residential landscape design scheme combined with art design psychology proposed by the research institute can improve the mental health level of residents. The scheme can be further used in the residential landscape design of other residents to improve the psychological problems of residents.

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# ANALYSIS ON THE INFLUENCE OF COLLEGE PHYSICAL EDUCATION CURRICULUM REFORM INTEGRATING SOCIAL PSYCHOLOGY ON STUDENTS' PSYCHOLOGICAL QUALITY

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Background: From the perspective of the development of college physical education, China's major colleges and universities have implemented corresponding measures to realize the effective reform of college physical education curriculum. The teaching goal of college physical education course is to implement a reliable guarantee for the physical and mental health of college students, and cultivate all-round development talents with high physical and psychological quality on the basis of cultivating college students' positive and sunny life attitude and thinking concept. As the key position of school physical education curriculum education, colleges and universities can improve the knowledge of college physical education students under the influence of relevant measures of physical education, and play a certain role in promoting the development of students' health quality. Colleges and universities should not only pay attention to students' professional theoretical knowledge and practical operation ability, but also attach great importance to physical education and implement physical education in colleges and universities into the actual teaching process of physical education curriculum. For the public physical education curriculum in colleges and universities, it should be integrated with the physical education in colleges and universities, optimize the teaching methods of physical education curriculum, improve the level of teaching and educating people in colleges and universities, guide students to establish correct social values, cultivate college students' good physical literacy, improve students' personal ideological education while strengthening physical fitness, and realize the coordinated development of physical education and public physical education curriculum. Social psychology plays an important role in the field of psychology. Its main research object is the occurrence and change law of psychology and behavior of social individuals and groups. In the process of social interaction, different social individuals and groups often show significantly different psychological and behavioral changes. Therefore, social psychology usually explores from two different levels: individual level and group level. At the social individual level, social psychology mainly focuses on the process of individual socialization, speech development and the impact of environment on individuals. At the social group level, it mainly includes the research focus of group communication structure, racial prejudice and so on. In order to fully integrate the changes of physical education curriculum and psychology into the teaching methods of colleges and universities according to the changes of physical education curriculum or psychology.

**Objective:** College physical education curriculum is oriented to all students, hoping to improve students' physical and psychological quality through reform and optimization, and finally achieve the purpose of promoting the all-round development of college students. The purpose of this study is to explore the impact of different college physical education curriculum reform on students' psychological quality, especially the college physical education curriculum reform integrating social psychology.

**Subjects and methods:** 162 college students were selected as the research objects by stratified cluster random sampling in a university. Three different groups were set up: control group, experimental group A and experimental group B. The college students in the control group accepted the conventional physical education curriculum teaching mode, the college students in the experimental group a accepted the