

testing, the selected professionals were invited to take part in the outdoor natural scenery photography for one month.

**Study design:** The State-trait Anxiety Scale was developed by Spielberger et al. The scale consists of two subscales and 40 descriptive items. The first 20 items were state anxiety scale, and the last 20 items were trait anxiety scale. The status anxiety scale is used to assess immediate or recent experiences of fear, tension, anxiety, and neuroticism in a particular time or situation. It can be used to assess stress state anxiety. Each question is given a grade of 1 - 4, the higher the total score, the higher the degree of anxiety.

Beck depression self-rating questionnaire was used to test the degree of depression in occupational population. There were 13 questions in total. Each question was scored from 0 to 3 scores in 4 grades. The total score could differentiate the degree and severity of depression symptoms, 0 to 4 depression symptoms, 5 to 7 mild depression, 8 to 15 moderate depression and more than 16 severe depressions.

**Methods:** Using the above questionnaire, with the cooperation of various professional groups, adopt unified guidance, answer the questionnaire in a secret manner, explain in detail the purpose, method and confidentiality principle of the test, take back the questionnaire on the spot, use SPSS 20.0 software to conduct statistical treatment, and adopt general descriptive statistics and correlation analysis.

**Results:** The questionnaire results of anxiety and depression before and after natural scenery photography were statistically analyzed, and the statistical results were shown in Table 1. Before the test, most of the professionals had different degrees of anxiety and depression, and moderate depression accounted for a larger proportion. Both anxiety and depression were relieved to some extent.

**Table 1.** Statistical results/average score

Factor	Anxiety	Depressed mood
Before testing	3	2
After testing	12	5

**Conclusions:** The psychological status of depression and anxiety in occupational population is very serious, and the phenomenon of associated emotional disorder is very common, especially in occupational population, which is closely related to their own personality characteristics and defense methods. Because of the low threshold of photography, natural scenery itself can relieve people's negative emotions. The investigation shows that natural scenery photography can alleviate the anxiety and depression of occupational groups to some extent.

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## THE THERAPEUTIC EFFECT OF REGULAR PHYSICAL TRAINING AND SWIMMING ON COGNITIVE IMPAIRMENT

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**Background:** Cognitive impairment refers to the pathological process of abnormal brain advanced intelligent processing related to the above learning, memory and thinking judgment, resulting in serious learning and memory impairment, accompanied by aphasia or apraxia, or agnosia or disability. A variety of cognitive disorders are related to neurotransmitter abnormalities. For example, dopaminergic neuron injury plays an important role in the pathogenesis of PD. Various strategies for improving dopaminergic nerve function have been produced, including drug supplementation of its precursor L-dopamine, various cell transplantation to replace dopaminergic neurons, gene therapy and implantation of enzyme genes promoting dopamine synthesis, to promote the production of dopamine in striatum or implant neurotrophic factor gene, so as to prevent the death of dopaminergic neurons or stimulate the regeneration and functional recovery of damaged substantia nigra striatum system. In addition, in view of the degeneration of cholinergic neurons in patients with AD, blocking the degradation of acetylcholine in synaptic space of nerve cells with cholinesterase inhibitors to improve the content of acetylcholine in nervous system is the only effective strategy for clinical treatment of AD. But we all know that any drug has certain toxic and side effects, so long-term medication also has an impact on health. This requires us to find another treatment method, based on the psychological understanding and analysis of cognitive impairment, and many studies show that moderate physical exercise and swimming can be used as aerobic exercise treatment. Aerobic exercise can not only improve physical and psychological quality, but also the best way to resist and control physical and

psychological diseases. In will activities, the behavior dominated and controlled by will is called volitional movement. Unlike impulsive behavior, it has the characteristics of being regulated and controlled by conscious initiative, having definite goals, overcoming difficulties and based on random movement. The behavior caused by external stimulation and driven by passion is called impulse. It has the characteristics of blindness, affected by emotion, lack of conscious initiative regulation, short duration and generally negative and destructive. Based on cognitive impairment, a large number of studies have found that aerobic exercise can widely improve the speed of fat decomposition, and its mechanism is to improve the activities of lipoprotein lipase, liver lipase and other key enzymes of fat decomposition in muscle, liver and other tissues. Aerobic exercise can also reduce the blood lipid index causing arteriosclerosis and increase the level of protective factors against arteriosclerosis. Aerobic exercise can also reduce lipid peroxidation, increase free radical scavenging ability and reduce the harm of free radicals to human body. In the methods of increasing bone calcium absorption and reducing bone loss, aerobic exercise can also significantly increase bone mineral density. Aerobic exercise can also enhance self-confidence, reflect self-worth, improve personality, enhance happy experience, reduce depression and reduce the occurrence of mental diseases. In addition, aerobic exercise plays an important role in the prevention and treatment of aging, obesity, cardiovascular disease, diabetes and respiratory diseases. Aerobic exercise can improve the mood and subjective well-being of patients with substance use disorders, improve the excessive anxiety of patients with eating disorders about weight and body shape, effectively divert the attention of patients with internet addiction and reduce Internet dependence.

**Objective:** Neuropsychological test is one of the re diagnosis methods of MCI. In this study, a variety of neuropsychological tests and quality of life evaluation tables were used to score the indexes of the two groups of patients who participated in and did not participate in regular physical exercise before and after treatment. The results showed that the language ability, behavior ability the scores of memory function and health status were more significantly improved than those in the control group.

**Subjects and methods:** 50 patients were randomly selected, and the purpose, method and expected effect of this study were explained to the patients. With the consent of 50 patients, they were randomly divided into two groups, 25 cases in each group, control group and experimental group. The patients in the experimental group were intervened with regular physical exercise, and the patients in the control group were treated with MCI routine treatment. There was no significant difference in the data and condition between the two groups, which was comparable. The patients in the control group were treated with MCI routine treatment, and the observation group were treated with regular physical exercise intervention. The specific methods are as follows: take aerobic training such as fast walking, swimming and cycling every week, exercise  $\geq 3$  times/W,  $\geq 30$  mins/time, and give guidance and supervision during physical exercise. The related indexes of the two groups before and after treatment were evaluated and compared by concise mental state scale (MMSE), auditory word memory scale (AVMT), complex graphic recall test (CFR), speech fluency test (V no), connection test (TMT), ability of daily living scale (ADL), quality of life assessment scale (quality). Nonparametric Friedman test was performed by SPSS 17.0 statistical software.

**Results:** MMSE, AVMT, ADL, TMT and CFT in the observation group were significantly different from those before treatment, while the above indexes in the control group had no significant difference before and after intervention. See Table 1.

**Table 1.** Comparison of evaluation results of cognitive impairment between the two groups before and after intervention ( $n=68$ )

Group		MMSE	AVMT	ADL	TMT	CFT
Observation group	$X^2$	2.113	26.31	26.18	22.4	15.512
	Progressive significance	0.354	0.025	0.003	0.001	0.002
Control group	$X^2$	4.215	7.365	12.338	6.763	4.498
	Progressive significance	0.106	0.039	0.019	0.031	0.071

**Conclusions:** Regular physical training and swimming are aerobic exercise, and its impact on adult behavior disorder is mainly reflected in that aerobic exercise plays a positive role in adult material use disorder, eating disorder and Internet addiction. Aerobic exercise can promote some students with behavior disorder to change their behavior way of thinking and dealing with problems, so as to eliminate inferiority Depression shows confidence, strength and vitality. Physical exercise is one of the effective means to treat mental diseases. Aerobic exercise has a positive impact on the health of adults. Regular participation in aerobic exercise can improve physical quality, enhance the body's resistance to diseases, and make people energetically invest in daily study, work and life, so as to shape the healthy physique of adults and lay a solid physiological foundation for their mental health.

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## THE EXPRESSION AND COUNTERMEASURE OF INTERNATIONAL COLLEGE STUDENTS' DEPRESSION TENDENCY IN CHINA

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**Background:** In recent years, the trend of studying in China has gradually increased, and more and more foreigners are eager to study in China. More and more foreign students from different countries come to study in China year by year, which poses a new challenge to the teaching management department of foreign students. In the cross-cultural context, in addition to the problems that may be encountered in study and life, the psychological problems of foreign students living in China are becoming increasingly apparent due to language differences and cultural conflicts. Whether foreign students can successfully complete their studies in China depends not only on whether Chinese universities can provide them with necessary materials and study conditions, but also, to a great extent, on whether they can successfully complete the psychological adaptation process during their studies. If we do not adjust the psychology of the students, the students will have more or less depression, will not only fail to study abroad, but also affect their physical and mental health, and even self-mutilation, suicide and harm to others. Therefore, it is very important to explore the psychological depression of Chinese students in the cross-cultural context of the vigorous development of education of Chinese students. This study will explore the prevalence and distribution of foreign students' depression tendency. The relationship between negative life events, self-esteem and depression tendency was also discussed. According to the results of the study, the intervention measures were put forward to improve the depression tendency of foreign students and provide theoretical basis for the management and education of foreign students.

**Objective:** With more and more overseas students coming to China to study, the psychological problems of overseas students are gradually revealed. International students' study pressure, difficult graduation, expensive tuition, as well as language and cultural differences and other reasons make the mental and physical health problems of international students. If not, it will not only lead to study abroad is not smooth, worse is not conducive to the physical and mental health of students, and may even produce some malignant incidents, such as self-inflicted, suicide and harm to others. Therefore, through the study on the expression of depression tendency and countermeasures, it can effectively alleviate the anxiety and improve the quality of life of foreign students.

**Subjects and methods:** The present study investigated the cross-cultural depression of 50 college students in China by using the Statistical Scale of Basic Situation and the Scale of Mental Adaptation (Zung's Depression Self Rating Scale). In order to understand the basic characteristics and influencing factors of high depression group, the researcher also interviewed the international students with the highest depression index.

**Study design:** A survey was conducted among 50 overseas students from colleges and universities. Randomly selected 5 universities, each university randomly selected 10 foreign students, a total of 50 foreign students to conduct a questionnaire survey, a total of 50, 49 recovered, the number of effective copies 49.

**Methods:** Using Excel statistics of foreign students nearly a week's feeling and mental health status.

**Results:** Through the analysis of the main conclusions are as follows: the overall psychological depression of the students transferred abroad is good, belonging to the non-depressed group. Gender, student category, time of studying abroad, cross-cultural experience, family economic conditions have significant effects on the psychology of foreign students. Homesickness is an important factor causing psychological depression of overseas students. Family, relatives and friends are the important social support to alleviate the psychological depression of students coming to China, but the school support from Chinese teachers and administrators is not significant. Foreign students' preferred hobby is coping with bad mood. It is also found that the improper attitude of teachers in teaching Chinese as a foreign language can easily affect the psychology of foreign students. The researchers conducted in-depth interviews with foreign students with higher levels of depression, to gain a basic understanding of the factors that contribute to their higher levels of depression. The conclusion of this study can be used as a reference for the management of foreign students in the tested schools, and has a direct reference for daily management.

The results of this survey use 1 to 5 grades to quantify the influence values of specific factors, 1 to