

cognitive psychological state is taken into account when applying digital technology, it is possible to further improve the teaching quality of ceramic technology specialty.

**Objective:** Based on the analysis of the current application status and main application forms of digital technology in the teaching of ceramic technology specialty in colleges and universities, this paper studies how to integrate the methods and theories of cognitive psychology into these application processes, so as to more accurately understand the psychological situation of educates and alleviate the cognitive obstacles and employment anxiety of students in the specialty. So as to improve the inheritance stability and security of China's ceramics and other intangible cultural heritage.

**Objects and methods:** Four universities with sufficient representation in teaching scale, teaching content, teaching staff and teaching auxiliary facilities of ceramic specialty were selected from domestic universities for nationalities and arts, and then 200 college students majoring in ceramic specialty were selected as the research objects. They were divided into experimental group and control group, with 100 people in each group. Firstly, the basic data of the two groups of students are statistically compared. After confirming that there is no significant difference in the basic information of the two groups of students, the ceramic technology teaching experiment is carried out for the two groups of students. The teaching contents of the two groups are the same, but various digital technology teaching methods are integrated into the teaching process of the experimental group, such as obtaining and disclosing the digital form files of teaching materials and making ceramic technology teaching animation using digital animation technology. Teach students to use 3D software to design ceramic works, etc. Before and after the experiment, teachers are required to interview the subjects to understand their cognitive impairment and employment anxiety. The degree of the two problems is scored by teachers. 1, 2, 3, 4 and 5 represent "asymptomatic", "mild", "moderate", "severe" and "extremely serious" respectively.

**Results:** The statistical results obtained after the experiment are shown in Table 1.

**Table 1.** Scores of students' cognitive impairment and employment anxiety after teaching

Statistical items	Experience group	Control group	Change value (%)	P
Cognitive impairment	2.28±0.11	2.67±0.12	-14.61	0.012
Employment anxiety	2.47±0.25	3.19±0.24	-22.57	0.007

Note that all measurement data in the experiment are displayed in the form of mean ± standard deviation, and *t*-test is conducted. The significance level of the difference is taken as 0.05. The column of "change value" in the table shows the change range of the mean value of each score of the experimental group relative to the control group. According to Table 1, the average scores of cognitive impairment and employment anxiety in the experimental group after teaching are 14.61% and 22.57% lower than those in the control group respectively, and the differences are statistically significant.

**Conclusions:** In order to alleviate the cognitive impairment and employment anxiety of ceramic students in colleges and universities in China, this study attempts to integrate various digital technology teaching methods into ceramic courses, so that teachers can consider students' educational psychology and cognitive level as much as possible when using digital teaching aids, and adjust the use mode and frequency of digital teaching tools on this basis. Then a teaching experiment is designed and carried out according to this idea. The experimental results show that the average scores of cognitive impairment and employment anxiety in the experimental group after teaching are 14.61% and 22.57% lower than those in the control group respectively, and the differences are statistically significant. Therefore, it can be seen that the use of digital teaching technology tools in accordance with the principles of cognitive psychology can improve the learning effect of ceramic students.

**Acknowledgement:** This paper is the research result of "Ceramic Capital" Yixing Traditional Ceramic Intangible Cultural Heritage Technology Digital Protection Research", 2020 Humanities, Social Sciences and Arts Youth Fund Project of Ministry of Education, No. 20YJC760014.

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## RESEARCH ON SAFETY MANAGEMENT OF COLLEGE STUDENTS' CHEMICAL LABORATORY FROM THE PERSPECTIVE OF PSYCHOLOGY

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**Background:** Safety psychology is a subject that studies the psychological state and psychological activity law of producers from the perspective of preventing accidents, reducing personal and property damage and ensuring production safety. Different people may have different psychological states even in the same work and production. The research purpose of safety psychology is to find and summarize the behavior mode of producers from this complex and diverse psychological and behavioral performance, so as to effectively reduce safety accidents and reduce the loss of safety accidents. As a place with high frequency of safety accidents, college chemical laboratory should be given more attention. Moreover, by observing the safety accidents of college chemical laboratory at home and abroad in history, it can be seen that most of the accidents are closely related to human factors. Therefore, if the safety psychology analysis is not carried out for the personnel who use the university chemistry laboratory, they cannot accurately grasp and understand their psychological activities and behavior reasons, which is not conducive to the safety work of the domestic university chemistry laboratory.

**Objective:** This paper explores the occurrence process of college chemical laboratory safety accidents in China in recent years, and analyzes the direct and root causes from the psychological perspective of the responsible person, so as to provide suggestions for improving the safety management of college chemicals laboratories in China.

**Objects and methods:** Collect the accident data of university chemistry laboratories in China in recent 20 years from the relevant domestic public databases, analyze the direct and root causes of the accidents from the perspective of the relevant responsible persons, and then select 20 experts in the field of laboratory safety management and safety psychology from China to consult the expert group on the psychological causes of the responsible persons of university chemistry laboratory safety accidents in recent decades, and evaluate the impact of various reasons on the accident. After taking back the expert feedback, sort out the opinions and send them to the members of the expert group again for feedback until the members of the expert group reach an agreement. In addition, the impact degree is divided into five levels: no impact, slight impact, general impact, obvious impact and full impact. In order to further improve the accuracy of statistics, these levels are given to integers 1, 2, 3, 4 and 5 in turn.

**Results:** Combined with the accident data of chemical laboratories in colleges and universities in China in the recent 20 years and the final results of expert group consultation, Table 1 is obtained.

**Table 1.** Statistics of accident data of university chemistry laboratory and consultation results of expert group

Quantitative score statistics	Fluke mentality	Careless psychology	Weak sense of responsibility	Escape psychology
Mean	4.12	3.93	4.37	4.58
Standard deviation	0.17	0.16	0.20	0.19
Grade range corresponding to the score	Obvious-sufficient	General-obvious	Obvious-sufficient	Obvious-sufficient

In Table 1, “grade range corresponding to scores” means the two influence levels closest to the mean value of quantitative scores. It can be seen from Table 1 that the expert group believes that fluke psychology, carelessness, weak sense of responsibility and avoidance psychology are the main responsible factors affecting the accidents in the university chemistry laboratory. Moreover, the influence caused by evasion psychology is the most significant, followed by weak sense of responsibility and fluke psychology, and the second is carelessness psychology. The average scores of quantitative influence degree of these four psychological factors are 4.58, 4.37, 4.12 and 3.93 respectively, and the corresponding influence degree ranges are obvious-sufficient, obvious-sufficient, obvious-sufficient and general-obvious respectively from the perspective of standard deviation, the expert group has the smallest standard deviation in terms of carelessness psychology, that is, the expert group has the most unified opinions on the impact of this psychology.

**Conclusions:** In view of the problem that university chemistry laboratories are prone to safety accidents in China, the data of university chemistry laboratory safety accidents in recent 20 years are collected from a domestic public database, and the direct and root causes are analyzed from the perspective of the relevant responsible person. And set up an expert group to analyze the impact of various psychological reasons. The consultation results show that the expert group believes that fluke psychology, carelessness psychology, weak sense of responsibility and evasion psychology are the main factors affecting the psychology of the person responsible for the accident in the university chemistry laboratory. Moreover, the influence caused by evasion psychology is the most significant, followed by a weak sense of responsibility and fluke psychology, and the second is carelessness psychology. The average scores of quantitative

influence degree of these four psychological factors were 4.58, 4.37, 4.12 and 3.93 respectively. In view of this common psychological problem of the person in charge of safety management, we can deal with it by strengthening regular safety management education, linking the results of safety management with the salary of personnel, and stimulating the sense of responsibility and responsibility of the person in charge, so as to reduce the probability of accidents and financial losses caused by psychological factors in the university chemistry laboratory.

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## RESEARCH ON THE DEVELOPMENT PATH OF FOREST RESOURCES MANAGEMENT AND ECOLOGICAL FORESTRY FROM THE PERSPECTIVE OF SOCIAL PSYCHOLOGY

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**Background:** Social psychology is a subject that focuses on the psychological status and change law of individuals and organizations in social activities. It is an interdisciplinary subject of sociology and psychology. The research contents of social psychology at the individual level mainly include individual behavior mode, language, social process, etc., while the research contents of social psychology at the organizational level are different, specifically the expression forms of collective thinking such as organizational attitude, organizational behavior mode, organizational values and so on. Social psychology emphasizes the interaction between society and individuals, and also pays attention to the role of social situations and the internal psychological state of individuals.

With the awakening of people's awareness of environmental protection, people's enthusiasm for managing forest resources is higher and higher. Scientific management of forest land, trees, wild animals and plants in forest areas, such as forest cultivation measures, will not only help to maintain the balance of ecosystem, but also help to realize the healthy and sustainable development of forest resources and ecological environment. At the same time, the ecological forestry industry mainly develops forestry products with commercial value through existing natural resources, so as to diversify the functions of the forest, and coordinate the development with the surrounding environment and other industries to ensure that the whole forest ecology is in a balanced state. However, there are some significant problems in the current management of forest resources. For example, some criminals will drill the loopholes of relevant laws and regulations, but the illegal collection of forest resources cannot be punished by the law. Besides, some managers and front-line employees of forestry and forest scenic spots overexploit forest resources in pursuit of short-term commercial interests, resulting in irreparable damage to the forest area. It can be seen that the current forest ecological problems are mainly caused by human excessive demand or improper development. In essence, this problem is closely related to human behavior and psychology. Therefore, in terms of ecological environment improvement, it is more important to study human psychology and behavior from the perspective of social psychology than from the perspective of natural science.

**Objective:** To understand the current situation of China's forest resources management and forestry development path, so as to find the deficiencies in the current forest resources management, and then combined with the method of social psychology to analyze the psychological status of forest managers, workers and tourists, and put forward the countermeasures to improve the effect of forest resources management, so as to provide some references for adjusting and optimizing China's ecological forestry development path and improving the sustainable development ability of ecological industry in the future.

**Objects and methods:** Ten 5A forest scenic spots were randomly selected from China and artificially divided into experimental group and control group according to business scale, forest geographical environment, forest area, number of tourists and management mode, with 5 scenic spots in each group. After ensuring that there is no significant difference in basic information between the two groups of scenic spots, the managers of the experimental group shall be trained in the analysis of tourists' social and psychological state during tourism, and on this basis, the managers shall be required to formulate relevant management measures. However, the control group did not make any management intervention. In addition, the managers of scenic spots are required to randomly select 20 tourists from their respective scenic spots before training and half a year after training to conduct SAS (Self-rating Anxiety Scale) and SDS (Self-rating Depressed Scale) surveys to understand the impact of the reform of management mode combined with social psychology on the psychological experience of tourists.

**Results:** After all the experimental steps are completed, the SAS and SDS data of tourists are shown in Table 1.