

experimental time was three weeks. After the experiment, the data of the management level and mental health changes of the subjects were statistically analyzed, and the experimental results were obtained.

**Methods:** SPSS22.0 analysis tool to process the experimental data, extract the influencing factors and test the regression coefficient with principal component analysis, and actively intervene and guide the managers' psychological problems and emotions with the laboratory management mode. After that, the open and effective teaching mode of laboratory management can be adjusted according to the psychological needs of laboratory personnel, and then the psychological management mode can be improved more effectively. Table 1 shows the statistics of anxiety scores of teaching managers in the open laboratory before the experiment. Grades 1-5 indicate the degree of anxiety from light to heavy.

**Table 1.** Statistics of anxiety scores of teaching managers in open laboratory before the experiment

Dimension	Mean	S.D.
Work anxiety	4.325	0.647
Management anxiety	4.897	0.843

**Conclusions:** Applied psychology can combine the psychological theory with the application field, so as to improve the information degree of system optimization and the university nature of resource management, so as to reduce the problems of information managers dealing with things and improve their mental health level. At the same time, students majoring in applied psychology have a wide range of employment, and their practicality and applicability are good.

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## PROMOTING EFFECT OF TEACHING, RESEARCH AND CREATIVE COMPETITION INTEGRATION OF CHEMICAL MARKETING PRACTICE COURSE ON COLLEGE STUDENTS' MENTAL HEALTH

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**Background:** Mental health means that all aspects of psychology and its activity process are in a continuous and positive psychological state, and in this state, the subject can make a good adaptive response and give full play to its physical and mental potential. The factors affecting mental health include the influence of the objective environment, the level of psychological quality, self-cognition and psychological conflict. Whether we can correctly deal with the changes and stimulation of the surrounding environment and whether we can have good psychological tolerance and quality is an important aspect to evaluate the level of mental health. At the same time, the emotional value and psychological attitude of different individuals will affect the normal development of their mental health. Paying attention to students' mental health is of great significance in the current educational environment and the background of teaching reform. The change of teaching environment, the handling of interpersonal relationships, the pressure of academic courses and the influence of other internal and external environments have an impact on students' cognitive habits and psychological differences, leading to the generation of negative emotions, affecting their mental health level, and making them have psychological problems such as anxiety, anxiety, depression, fear and mental disorders. If these psychological problems are not intervened and solved in time, it will damage and hinder their normal study and life and even their physical health. As the main body in the teaching mode, students' psychological status has not been fully developed, and they are very vulnerable to the influence of the surrounding environment and others, and will produce psychological depression due to professional learning problems. Appropriate positive psychological emotions will stimulate students' learning initiative and enthusiasm, while negative psychological emotions will cause learning conflict. The goal of chemical engineering education is to promote people's all-round development, adhere to the educational thought of teaching in one, and cultivate the ability of professional knowledge and better practical operation ability. However, in the current chemical marketing practice course, the teaching process ignores the importance and cultivation of students' professional practical ability, and uses theoretical teaching to guide them to memorize and learn knowledge, rather than using practical training, which makes the learning effect deviate greatly from students' psychological expectation, and then leads to a series of psychological problems.

**Objective:** In view of the students' psychological problems and negative emotions in the chemical

marketing practice course, from the perspective of psychology, grasp the students' dominant position, innovate and enrich the teaching courses and modes, and explore the guidance and intervention mechanism of the integration of teaching, research and creative competition on students' mental health.

**Research objects and methods:** This paper takes the students majoring in chemical marketing in a university as the research object, evaluates their psychological status, optimizes the curriculum learning mode based on the analysis of the current situation of the marketing practice curriculum, and actively intervenes the students' psychological problems with the realization of the integration of teaching, research and creative competition, in order to improve the mental health level of the students majoring in chemical marketing.

**Method design:** According to the different psychological problems of the research objects, they are divided into different groups, such as anxiety group, depression group, emotion regulation disorder group, etc. then, in the integration of teaching and research, we pay attention to the intervention of students' negative emotions and psychological problems. The experiment lasted for six weeks. After the experiment, the mental health status of the research object was re-evaluated in order to explore the promoting effect of the integration of teaching, research and creative competition of chemical marketing practice course on the mental health of college students.

**Methods:** The psychological status and psychological problems of the subjects before and after the experiment were collected and evaluated with the help of mental health test scale, and SPSS23.0 statistical analysis tools to sort out and analyze data differences.

**Results:** Different teaching modes, teaching means, teaching contents and teaching resources will affect the learning effect and psychological emotion of students in teaching practice. The integration of teaching, research and creation of chemical marketing practice courses can effectively mobilize students' enthusiasm to participate in the classroom, alleviate their negative psychological emotion and improve their mental health level. Table 1 shows the statistics of students' psychological anxiety scores in classroom teaching before and after the experiment.

**Table 1.** Statistics of students' psychological anxiety scores in classroom teaching before and after the experiment

Anxiety dimension	Before the experiment		After the experiment	
	Average value	Standard deviation	Average value	Standard deviation
Academic difficulty anxiety	3.74	2.32	2.15	1.96
Curriculum goal anxiety	3.04	1.41	2.76	1.19
Anxiety of professional operation ability	4.59	2.06	1.15	1.98

**Conclusions:** Students are easy to have psychological problems in the complex social and learning environment, and different degrees of psychological problems will have a great negative impact on their study, life and even society. Exploring the psychological intervention and influence of the integration of teaching, research and creative competition on students in the chemical marketing practice course from the perspective of psychology is helpful to help teachers grasp the dominant position of students in curriculum learning and promote the improvement of their mental health level.

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## THE INFLUENCING FACTORS OF COMMUNICATION ADAPTATION BARRIERS ON COLLEGE STUDENTS' EMPLOYABILITY

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**Background:** Communication adaptation disorder is manifested in the difficulties of opinion exchange and information transmission between people and teams. It often includes language barrier, concept barrier and temperament barrier, and different types of obstacles are caused by different information senders, information receivers and information transmission channels. In the adaptive state of language communication, the emotional tendency, expression ability and judgment of the sender of information will