

RESEARCH ON THE INFLUENCE OF EDUCATIONAL MANAGEMENT SYSTEM REFORM ON STUDENTS' MENTAL HEALTH PROBLEMS FROM THE PERSPECTIVE OF COGNITIVE PSYCHOLOGY

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Background: Cognitive psychology is a discipline used to study the processing of information collected by human senses in the brain and the impact of such information on subsequent individual behavior. In short, the research object of cognitive psychology is the high-level thinking process of the human brain. Contrary to the traditional psychological theory, the research scope of cognitive psychology includes both the behavior and language that can be observed directly, as well as the psychological process that cannot be observed directly, such as the deduction logic based on the observed information, the storage and extraction of information, etc. Cognitive psychology pays more attention to the basic psychological causes of human behavior. In the process of research, scholars often infer and verify the psychological status of the object by observing the information it receives and the behavior it produces. Therefore, the research process in the field of cognitive psychology often needs to use various social experiments to provide data support for speculation. The commonly used social experiment methods include interview, questionnaire, Delphi, analytic hierarchy process and so on. Relevant studies have shown that the management system of colleges and universities has an important impact on the mental health of students. However, there is no detailed discussion on which type of management system is more beneficial to cultivate the mental health of students, which is one of the purposes of this study.

Subjects and methods: Cooperate with a domestic third-party data service provider to purchase a copy of social experiment data conducted by other teams in the past. This social experiment is to comprehensively manage students selected from several universities with comparative significance by adopting different reformed teaching management systems, and compare the SCL-90 (Symptom Checklist 90) factor scores of students participating in the study before and after the experiment. After obtaining this data, use python programming language to clean out the invalid samples and samples with missing values, and then build a prediction model of students' post experiment mental health score based on linear regression algorithm. Adjust the model parameters for many times to obtain the model with the optimal regression prediction effect, and output the importance coefficient of the corresponding input characteristics of the optimal model (that is, various reform measures of the education management system). Finally, we use the theory of cognitive psychology to analyze the internal causes of the impact of various strategies on students' mental health. Note that all measurement type features in the study are displayed in the form of mean \pm standard deviation for *t*-test, and count type features are displayed in the form of number or proportion of number for chi-square test. The significance level of difference is taken as 0.05.

Results: Output the corresponding characteristic importance coefficient of the optimal regression model, as shown in Table 1.

Table 1. Statistical table of importance coefficient of reform measures of optimal regression model

Number	Reform measures	Option	<i>B</i>	Standard deviation	<i>P</i>	OR	95% CI
01	Set up special psychological counseling institutions	Yes	-1.433	0.561	0.004	0.381	0.024-1.502
		No	-	-	0.013	-	-
02	Integrating psychological knowledge teaching into humanities courses	Yes	-1.561	0.419	0.008	0.449	0.141-1.359
		No	-	-	0.005	-	-
03	Provide students with more opportunities for social practice	Yes	-0.748	0.352	0.016	0.507	0.034-1.510
		No	-	-	0.009	-	-

It can be seen from Table 1 that the output results of the optimal regression model show that “setting up a special psychological counseling institution”, “integrating psychological knowledge teaching into humanities courses” and “providing students with more opportunities for social experiments” are the protective factors for the average score of SCL-90 factors after students' experiments, indicating that these three reform measures of university education management system have positive value for improving

students' mental health, among them, "integrating psychological knowledge teaching into humanities courses" has the most significant impact. According to the theory of cognitive psychology, this is because the integration of psychological knowledge teaching into humanities courses can enable students to imperceptibly receive various basic and useful psychological knowledge in their daily learning process, so as to improve their ability to manage negative emotions and psychology. Special psychological counseling institutions can provide professional treatment services for some students who have had psychological problems, but this way cannot prevent the occurrence of students' mental health problems. Some students may refuse to accept psychological counseling services because they are ashamed to disclose their psychological problems.

Conclusions: With the increasing pressure of contemporary college students' life and study, more and more college students suffer from psychological diseases such as anxiety, depression, communication disorders, emotional disorders and so on. In order to alleviate the symptoms of college students' psychological diseases and improve their mental health level. This study collected a relevant social experiment data, and built a linear model to find more helpful measures to improve college students' mental health. The experimental results show that the three reform methods of college education management system, namely, "setting up special psychological counseling institutions", "integrating psychological knowledge teaching into humanities courses" and "providing students with more opportunities for social experiments", are the protection factors for the average score of SCL-90 factors after students' experiments, which can play a role in improving students' mental health.

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REFORM AND PRACTICE OF TEACHING METHODS OF GARDEN ART PRINCIPLES UNDER THE BACKGROUND OF EDUCATIONAL PSYCHOLOGY

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Background: Educational psychology is an important branch of psychological research. Educational psychology is mainly a subject that discusses the relationship between the changes of human psychological activities and teaching in the process of school education. Through the intervention of educational psychology, the basic characteristics of students' and teachers' psychological activities in the teaching environment will be excavated. At the same time, through the psychological characteristics of teachers and students and psychological emotional demands, the purpose of optimizing teaching content, improving teaching forms, enhancing teaching quality and improving students' interest can be achieved. As early as more than 2000 years ago, China's classical works on Confucius and Mencius mentioned educational psychology, especially some classical educational thoughts have become an important foundation of modern educational theory. As the educational psychology system is gradually valued by more and more scholars, the relevant theories and ideas of educational psychology are more perfect, covering all aspects of the field of education, and has made remarkable achievements. In the research of educational psychology, the research contents of educational psychology include moral education psychology, learning psychology, teaching psychology, students' psychology and teachers' psychology. The relationship between the changes of characters' psychological activities in the educational environment and the development of teaching will be more conducive to solving difficult problems in the teaching process and the development of curriculum teaching. The application in the teaching of garden art principles in colleges and universities is of great significance to the teaching innovation of the course and to enhance the students' sense of classroom experience.

The course of principles of landscape art is a compulsory professional course for landscape architecture majors. The course covers many interdisciplinary knowledge of landscape architecture majors. It is a comprehensive course integrating science, art and technology. The whole course will systematically explain the basic process and design idea of landscape design. At the same time, it will continuously improve the artistic quality of landscape design by means of landscape creation, improve the visual effect and artistic rendering of landscape in terms of space design, waterscape modeling, landscape layout, etc., and ensure the integration and completion of landscape space in the environment. The course of garden art principle is a key discipline of the principle major. The whole teaching process should enable students to understand the composition principle of garden scenery and the requirements of garden space layout, so as to ensure that the principle design has good artistic appeal. In the research of educational psychology, we will innovate the teaching of landscape art through the relevant theories of educational psychology, and