

improve students' learning mood and achieve the purpose of cultural inheritance.

**Objective:** To explore the psychological changes of students in ideological and political education in colleges and universities is to analyze the impact of the innovative scheme of ideological and political education on students' psychology, analyze the application mode of traditional culture in the construction of the innovative scheme of ideological and political education, and explore its impact on students' psychology.

**Study design:** Taking a university as an example, two ideological and political majors in colleges and universities were randomly selected for a control experiment. The analytic hierarchy process is used to select the traditional cultural content that has a significant impact on students' thought, and it is applied to different parts of the ideological and political education program according to the weight of each cultural content index. The class with innovative teaching scheme will be positioned as the experimental class, and the class under traditional teaching will be positioned as the control class. The number of students with positive psychology will be evaluated before and after teaching, and the comparison between classes will be made. The teaching time is 12 months. SPSS22.0 statistical analysis of student evaluation data, with  $P < 0.05$  as statistically significant.

**Results:** The changes and comparison of the number of students with positive psychology in the experimental class and the control class before and after teaching are shown in Table 1. Table 1 shows that after teaching, the number of students with positive psychology in both classes increased, but it can also be seen that the growth rate of the number of students in the experimental class before and after teaching was significantly higher than that in the control class.

**Table 1.** Changes in the number of students with positive psychology in two classes

	Group	Before teaching	After teaching	<i>P</i>
Positive psychology	Experimental class ( <i>n</i> =102)	27	91	<0.05
	Control class ( <i>n</i> =100)	25	59	<0.05
	<i>P</i>	>0.05	<0.05	-

**Conclusions:** Ideological and political education in colleges and universities is the main course to cultivate students' correct values. The focus of ideological and political teaching is to awaken students' positive psychology to promote students' learning. Traditional culture is introduced to improve the ideological and political education program in colleges and universities, and the feasibility of the program is evaluated by comparing the number of students with positive psychology in the classes before and after teaching. The results show that after teaching, the number of positive psychology students in the ideological and political teaching experimental class introducing traditional culture increases rapidly, which is significantly higher than that in the control class. Therefore, in the ideological and political teaching in colleges and universities, we can appropriately consider taking Chinese traditional culture as the teaching content to help students expand their ideas, protect the cultural inheritance and improve students' positive psychology of learning.

**Acknowledgement:** The research is supported by the Key Scientific Research Project of Shaanxi Provincial Department of Education: Modern Value Interpretation of Zhou People's "ceremony" Spirit (No. 20JZ008).

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## THE DEVELOPMENT DIRECTION AND ENERGY SUPPLY MODE OF PURE ELECTRIC VEHICLE UNDER THE BACKGROUND OF COGNITIVE IMPAIRMENT

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**Background:** With the development of economy and the rapid consumption of resources, the problem of environmental protection is becoming more and more serious. In this context, green, clean and environmentally friendly pure electric vehicles began to rise and develop rapidly. However, limited to the technical level, the energy supply and development of pure electric vehicles in China are not ideal. Due to the inability to accurately predict the market, some pure electric vehicle enterprises have suffered losses all year round, resulting in the management of some pure electric vehicle enterprises falling into anxiety and depression for a long time, which leads to cognitive impairment. Cognition refers to the process that

the brain processes the acquired information and skills intelligently. In the process of cognition, it will involve a series of complex social behaviors and activities such as learning, memory, emotion, thinking and so on. When the human cerebral cortex is damaged by various factors, the brain's intelligent processing process will be limited and abnormal, which will lead to cognitive impairment. The learning, memory and life of patients with cognitive impairment will be affected, which reduces the quality of life of patients and is not conducive to the harmonious development of society. Therefore, finding appropriate methods to treat cognitive impairment is of great significance to patients themselves and social development.

Cognitive psychology is a branch of psychology that began to rise in 1950. It mainly studies human advanced psychological processes, such as attention, perception and so on. The orientation of cognitive psychology focuses on the mode of thinking and reasoning by using cognition. Cognitive psychology is an important school of contemporary psychological research. It explains how people deal with information in cognitive activities. The basic principles of cognitive psychology mainly include five points: emphasizing the structural and organizational principles in the process of cognition; Emphasize the internal process, that is, the processing of symbol information; Emphasize the driving role of ideas; Emphasize the role of cognitive feedback; Emphasize the individual differences of cognitive style. Based on cognitive psychology, this study studies the cognitive and psychological process of the management of pure electric vehicle enterprises, in order to analyze the development direction and energy supply mode of pure electric vehicles, and the factors leading to the cognitive impairment of the management of pure electric vehicle enterprises. The Apriori algorithm is used to build a data mining model to mine valuable information from a large amount of data, so as to improve the utilization efficiency of information, accurately predict the market, improve the sales volume of pure electric vehicles, and then alleviate the cognitive barrier of management.

**Objective:** Limited to the technical level, the energy supply and development of pure electric vehicles in China are not ideal. Some pure electric vehicle enterprises have suffered losses all year round, resulting in the management of some pure electric vehicle enterprises falling into anxiety and depression for a long time, which leads to cognitive impairment. Based on cognitive psychology, this study studies the cognition and psychological process of the management of pure electric vehicle enterprises, in order to analyze the development direction and energy supply mode of pure electric vehicles, the factors leading to the cognitive impairment of the management of pure electric vehicle enterprises, and then carry out targeted intervention treatment to alleviate the cognitive impairment of the management.

**Research objects and methods:** 60 management personnel from 18 pure electric vehicle enterprises are selected as the research object, and the Apriori algorithm is used to mine the database of the above enterprises. Self-rating Anxiety Scale (SAS) was used to evaluate the anxiety level of the subjects, and Mini-Mental State Examination (MMSE) and mental health part of 36-Item Short Form Survey (SF-36) were used to evaluate the degree of cognitive impairment.

**Research design:** Using random number table method, 60 subjects were randomly divided into study group and control group, with 30 people in each group. The research group adopts the data mining model based on Apriori algorithm for data mining, and then carries out market analysis; The control group used the traditional market analysis method. After a period of time, the cognitive impairment and anxiety levels of the two groups were compared.

**Methods:** The software SPSS17.0 and excel were used to count and analyze the relevant data.

**Results:** The degree of cognitive impairment decreased significantly after 4 months in the study group ( $P < 0.05$ ). There was no significant change in the control group ( $P > 0.05$ ), and it was significantly lower than that in the study group ( $P < 0.05$ ), as shown in Table 1.

**Table 1.** Changes in the degree of cognitive impairment between the two groups

Timing	MMSE Score		<i>t</i>	<i>P</i>
	Research group	Control group		
Before work	11.4±5.5	11.3±5.2	0.254	0.671
After work	26.4±2.4	12.2±4.0	6.673	0.035
<i>t</i>	7.643	0.361	-	-
<i>P</i>	0.001	0.412	-	-

**Conclusions:** The pure electric vehicle with clean and environmental protection power resources as fuel instead of traditional fossil fuel can effectively solve the pollution problem of automobile exhaust, so it has attracted the attention of people from all walks of life. Limited to the technical level, the energy supply and development of pure electric vehicles in China are not ideal. Some pure electric vehicle enterprises have suffered losses all year round, resulting in the management of some pure electric vehicle enterprises falling into anxiety and depression for a long time, which leads to cognitive impairment. Based on cognitive psychology, the research uses Apriori algorithm to mine the data of pure electric vehicle enterprises, and

then analyzes the development direction and energy supply mode of pure electric vehicles, the factors that lead to the cognitive impairment of the management of pure electric vehicle enterprises, and then carries out targeted intervention to alleviate the cognitive impairment of the management.

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## OBSTACLES AND COUNTERMEASURES IN ORAL ENGLISH COMMUNICATION UNDER THE BACKGROUND OF HAINAN FREE TRADE ZONE

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**Background:** Free trade zones, or free trade zones, refer to the free flow of goods between member states that have signed free trade agreements without tax and quantitative restrictions, which can greatly promote economic development. In 2018, China's Hainan Province began to build a pilot Free Trade Zone in an all-round way. In this context, Hainan has frequented economic and cultural exchanges with foreign countries, and oral English communication is also very common. Therefore, the demand for talents who master English skills in the UK has also increased greatly, and more and more attention has been paid to the English level of students. However, due to the problems of low teaching quality, limited English level, low psychological quality and limited thinking logic, students often have communication obstacles in oral English communication. Oral English communication disorder will lead to the impairment of students' self-confidence, resulting in negative emotions such as anxiety, resulting in students' learning weariness and affecting students' personal development and growth. Moderate anxiety can help students concentrate, so that they can study more attentively and hard, and then improve their academic performance. However, when the degree of anxiety is too high and lasts too long, students' physical and mental health will be damaged, students' interest in learning will decline, and even weariness will appear, which will greatly affect students' normal study and life. Therefore, it is necessary to put forward strategies based on educational psychology to solve the problem of students' oral English communication obstacles, so as to alleviate students' anxiety.

Educational psychology is a branch of psychology. Its main research direction is the learning effect of students, the effect of teaching intervention, the teaching psychology of teachers and the social psychology of school organization under the educational situation. Educational psychology is to apply psychological theory to education, so as to improve teaching methods, improve students' learning enthusiasm, and help students solve various problems in the process of learning and growth. Educational psychology has important applications in teaching design, teaching mode improvement, promoting students' learning motivation and helping students overcome psychological problems. Through educational psychology, teachers can have a deeper understanding of students, improve the pertinence of teaching, adjust teaching methods and teaching methods, and improve teaching quality. Based on educational psychology, this study analyzes the psychological changes of students in English learning and oral English communication, and then improves oral English teaching methods, helps students overcome psychological obstacles, overcome oral English communication obstacles, and improves students' self-confidence, so as to alleviate students' anxiety.

**Objective:** Due to the problems of low teaching quality, limited English level, low psychological quality and limited thinking logic, students often have communication obstacles in oral English communication, resulting in anxiety. The research puts forward strategies based on educational psychology to improve the oral English teaching model, hoping to improve students' English level and self-confidence and alleviate students' anxiety.

**Research objects and methods:** Two classes were randomly selected from a university as the research objects. The oral English test results of the two classes were used to evaluate the oral English teaching effect of the two classes, and the Self-rating Anxiety Scale (SAS), Self-rating Depression Scale (SDS) and Hospital Anxiety and Depression Scale (HADS) were used to evaluate the anxiety degree of students.

**Research design:** One of the two classes is class A, with 73 people. The other class is class B, with 71 people. Class a adopts the improved oral English teaching mode based on educational psychology. Class B adopts the traditional oral English teaching mode. Three months later, the teaching effect and anxiety level of the two classes were compared.

**Methods:** The relevant data were processed and analyzed by software SPSS17.0.

**Results:** After teaching, the anxiety level of students in the research group was significantly lower than that of students in the control group ( $P < 0.05$ ), as shown in Table 1.