

thinking activities. In general, design and development thinking are the result of highly distributed processing involving multiple brain regions at the same time.

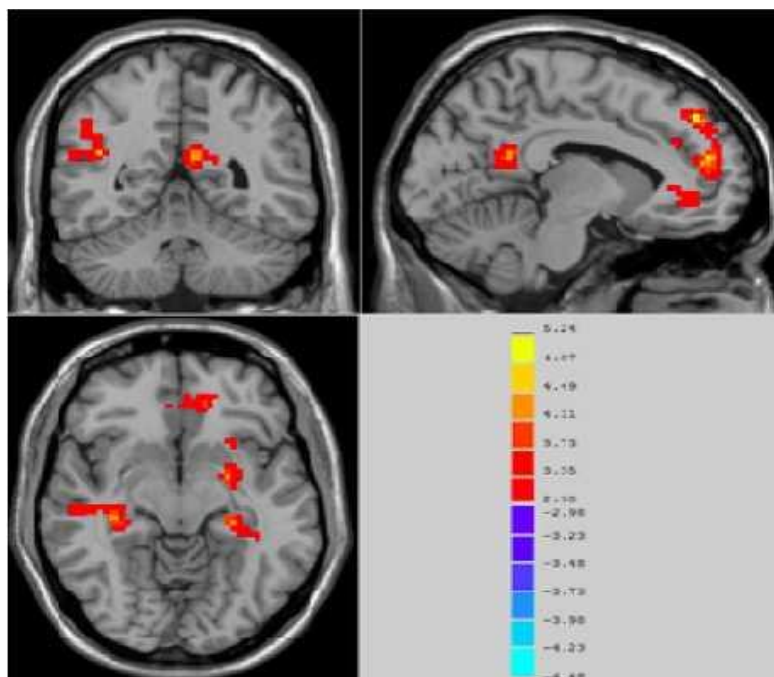


Figure 1. Statistics of cultural product creation on brain region activation data.

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## THE REFORM AND EXPLORATION OF HIGHER MATHEMATICS TEACHING FROM THE PERSPECTIVE OF PSYCHOLOGY

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**Background:** Many educational theoretical researches at home and abroad praise the implementation effect of performance evaluation, and at the same time, it basically stays at the stage of theoretical research, and normative empirical research is extremely lacking. There have been very few experimental studies, and cognitive abilities such as teaching reforms are often treated as the research as a whole, and most of them are completed in situational experiments. The researchers believe that only practical, traceable and analytical research can better reflect the impact of performance evaluation on the ability of teaching reform, and provide more valuable information and suggestions for teaching.

Based on the above research, the purpose of this research is to combine the background of my country's current curriculum reform, with the implementation of performance evaluation as the independent variable, the higher mathematics subject as the carrier, the higher mathematics teaching reform ability as the dependent variable, and the use of tracking research. In a relatively long period of time, it examines the influence of performance evaluation on the ability of higher mathematics teaching reform and its development. Here, the reform of higher mathematics teaching is defined as "the task-solving process without knowing the reform method in advance". The theoretical model framework of advanced mathematics teaching reform believes that advanced mathematics teaching reform mainly includes steps such as understanding teaching, formulating reform plans, implementing plans and inspections; for decades, due to the completeness of the Polya model and its closeness to the reform process of advanced mathematics, It has always been a hotspot in advanced mathematics teaching research; Mayer's framework is known for focusing on the psychological mechanism of teaching reform. The influence of the model of higher mathematics teaching reform represented by it continues to expand.

According to the existing research data of performance evaluation and higher mathematics teaching reform, combined with the research purpose, the specific teaching of this research is whether the

implementation of performance evaluation has a certain impact on the reform of higher mathematics teaching and its development and changes; the impact is mainly reflected in higher mathematics. What are the specific processes or aspects of mathematics teaching reform? Whether the impact is affected by school type factors, gender factors, and students' original academic level factors.

**Subjects and methods:** 335 junior middle school students in a certain city, from the key districts of the city and ordinary middle schools. There are 165 students in 4 experimental classes, 170 students in 4 control classes; 188 boys and 147 girls.

There is no significant difference in the results of the experimental class and the control class in the same school in the preliminary examination after entering junior high school, and there is no significant difference in the final advanced mathematics examination results in January 2020. There was no significant difference in the number of male and female students in the experimental class and the control class.

**Study design:** Compile the performance evaluation plan of higher mathematics: the teachers of higher mathematics subject of junior high school and higher mathematics subject and the researcher of education evaluation shall follow the requirements of the new curriculum standard of higher mathematics subject of full-time compulsory education. Using the expert judgment method, using the "Higher Mathematics Performance Evaluation Task Content Validity Evaluation Table" as a tool, the content validity of the task plan is evaluated. The comprehensive evaluation results of 19 junior high school and advanced mathematics experts on the content validity of the performance evaluation task plan reached 6.55, with a standard deviation of 1.60, which was at a higher level in the ten-level evaluation table including 0-9. The results of the one-way analysis of variance show that the ten tasks have no significant differences in the comprehensive rating ( $F(9,180) = 0.50, P > 0.05$ )

**Methods of statistical analysis:** The research results were analyzed using software SPSS10.0 and AMOS4.0. According to the types of data studied in each part, the analysis is mainly carried out by using repeated measures multi-factor analysis of variance and non-parametric test path analysis methods.

**Results:** The results of repeated measures multivariate analysis of variance showed that the main-effects MPS experiment dealt with genders at statistically significant levels ( $F(2,608) = 19.33, P < 0.001; F < 1,304) = 9.51, P < 0.01; F < 2,302) = 4.63, P < 0.01$ ), the main effect test of gender showed that the MPS of girls was significantly higher than that of boys ( $< 42.39$ ). The two interactions MPSX gender reached a marginal significance level ( $F(2,604) = 2.87, P = 0.057$ ), indicating that there may be significant differences in the differences between genders in the three MPS measurements. In-depth analysis shows that although in each measurement, the MPS of all girls is higher than that of boys, but the difference between the three times is different. As shown in Figure 1, in the first measurement, the MPS of girls and boys were basically the same, but in the second and third measurements, the MPS gap between boys and girls increased, and girls were higher than boys.

At the same time, the two interaction experiments X sex did not reach the significant level ( $F < 1,304) = 0.04, P > 0.05$ ), indicating that the difference between male and female students was not significantly different between the experimental class and the control class. The three MPS X experiment X gender did not reach a significant level ( $F(2,604) = 0.44$ ), indicating that the difference between boys and girls in the three MPS measurements was not significantly different between the experimental class and the control class.

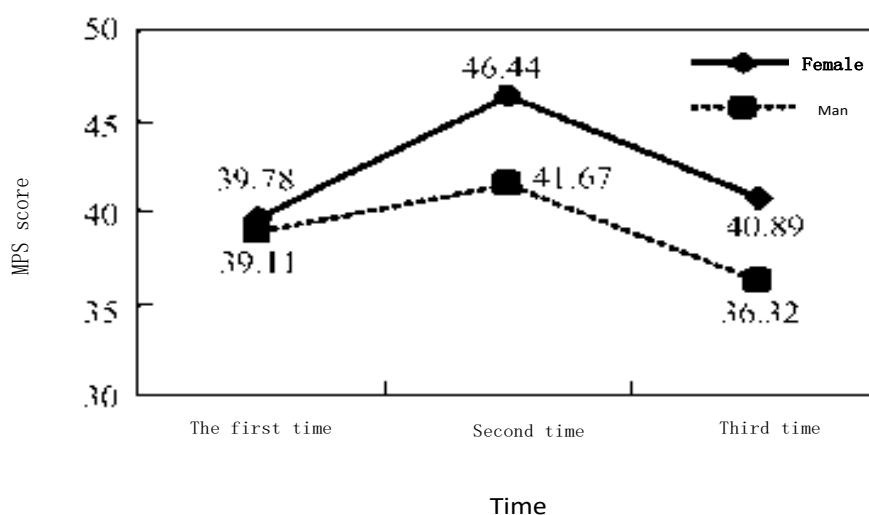


Figure 1. Interaction analysis plot of MPSX sex.

**Conclusion:** Psychological assistance has a significant role in promoting the development of higher mathematics teaching reform ability, and with the implementation of the experiment, this role in promoting has been increasing. The analysis of the oral report data shows that the role of psychology assistance in promoting the ability of higher mathematics teaching reform is mainly reflected in the understanding of teaching metacognition and teaching reform strategies.

Psychological assistance significantly promotes the development of students' higher mathematics teaching reform ability. It is not affected by the type of school or the gender of the student, but it is affected by the original academic level of the student. The higher the original academic level, the greater the promotion of homework.

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## THE INFLUENCE OF DISCOURSE POWER OF NETWORK IDEOLOGICAL AND POLITICAL EDUCATION ON STUDENTS' PSYCHOLOGY AND EMOTION IN THE NEW ERA

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**Background:** The key issue in the field of mainstream ideology in colleges and universities is whether to control the discourse power of mainstream ideology, which essentially reflects the core values of socialism in the new era. General Secretary Xi pointed out that "propaganda and ideological work is to consolidate the guiding position of Marxism in the ideological field, and consolidate the common ideological foundation of the Party and the people". In the Internet age, the mode of ideological transmission has changed. College students express their views fully and freely through the Internet, which is also influenced by the non-mainstream ideology of the West, thus reducing their sense of identification with the mainstream ideology. In the network age, the right of discourse of socialist ideology presents the predicament of "aphasia", "marginalization" and "dilution". In view of the realistic and challenging social problems brought by the network environment, it is an important and urgent task for colleges and universities to study how to construct the dominant ideological discourse in the new era. Ideology is a specific inherent spiritual phenomenon in class society, and "discourse power" is closely related to a pair of related words. The construction of discourse power of the mainstream network ideology in colleges and universities in the new era is to follow the working rules of the mainstream network ideology, set up discourse carriers, guide college students to set up "three perspectives", strengthen the socialist development direction, correctly, accurately and scientifically express the discourse power of the mainstream network ideology, firmly grasp the leadership and management power of the CPC in the mainstream network ideology, safeguard the political nature of the ideological and political education in colleges and universities, and further promote the continuous and healthy development of higher education.

**Objective:** Under the background of the network age, the ideological and political education in colleges and universities must always adhere to the guiding position of Marxism. The construction of mainstream ideological discourse in colleges and universities is facing severe challenges. Colleges and universities should guide students to dialectically and scientifically treat the fragmented information, teach the systematic mainstream ideological discourse system, and establish an effective mechanism to regulate the path of students' network expression so as to consolidate the ideological position of the mainstream ideological discourse in the network, and then create a new form of ideological and political education in the new era.

**Subjects and methods:** Modern higher vocational education in our country has a great influence on the Internet. Therefore, many higher vocational colleges will have the right to speak on the Internet.

**Study design:** Methods: A total of 400 students of different ages, genders and majors were interviewed. The interview time was 25-35 minutes.

**Methods:** Through the research and analysis of the new era of college network ideological and political education discourse on the impact of students' psychological emotions.

**Results:** Strengthens the top-level design, condenses the thought politics education the core value. The school must strengthen the troop construction, the consolidated knowledge training, carries on the social practice, promotes the comprehensive quality. Innovative work ideas, with new media to disseminate the main theme, promote positive energy, with high "value" to abstract theory, boring sermon into simple language, so that ideological and political education as the air soaked in the mind and silent. The ideological and political education in colleges and universities should not only have the authority of theory in content,