

studies the different manifestations and severity of college students' psychological anxiety symptoms, and carries out targeted reform of college mathematics curriculum in order to improve their mental health level and alleviate their psychological anxiety.

**Research objects and methods:** 70 college students with psychological anxiety symptoms were selected from the four grades of colleges and universities, a total of 280, as the research object. Using Support Vector Machine (SVM) algorithm, this paper classifies the psychological anxiety level of college students before and after the college mathematics curriculum reform, and explores the impact of college mathematics curriculum reform on alleviating college students' psychological anxiety.

**Research design:** Taking Hamilton Anxiety Scale (HAMA) as the evaluation standard, this paper evaluates and analyzes the psychological anxiety of college students in college mathematics course learning. HAMA adopts grade 5 evaluation standard, and 0-4 respectively represent asymptomatic, light, medium, heavy and extremely heavy. Taking the college mathematics curriculum reform as an intervention means, SVM is used to classify the anxiety degree of college students before and after the intervention.

**Methods:** Organically combine SVM and HAMA, compare and analyze the anxiety of college students before and after the intervention, and explore the improvement effect of college mathematics curriculum reform on their psychological anxiety. All data are counted and analyzed by Excel software.

**Results:** Before the application of the intervention model of mathematics curriculum reform in colleges and universities, the HAMA rating results of the tested college students showed that there were more students with moderate, severe and extremely severe psychological anxiety, accounting for 28.21%, 55.36% and 9.64% respectively. The number of students with asymptomatic and mild anxiety is very small, accounting for 6.79%. After the intervention, the number of asymptomatic and mild anxiety increased significantly, and the total proportion increased to 56.79%. The proportion of students with moderate, severe and extremely severe psychological anxiety decreased to 33.93%, 8.21% and 1.07% respectively. This shows that the efficient mathematics curriculum reform can effectively reduce the number of students with psychological anxiety and effectively alleviate their anxiety. See Table 1 for details.

**Table 1.** Comparison results of college students' anxiety before and after the intervention of mathematics curriculum reform in colleges and universities [n (%)]

HAMA rating	Before intervention (%)	After intervention (%)
0	4 (1.43)	42 (15.00)
1	15 (5.36)	117 (41.79)
2	79 (28.21)	95 (33.93)
3	155 (55.36)	23 (8.21)
4	27 (9.64)	3 (1.07)

**Conclusions:** College students' psychological anxiety will not only have a significant negative impact on their learning progress, but also affect their normal life and interpersonal communication, making anxiety symptoms seriously endanger their mental health. After the reform of the college mathematics curriculum, it can effectively alleviate the psychological anxiety of college students and improve their mathematics learning ability and mental health level.

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## THE POSITIVE INFLUENCE OF ETHNIC AND MODERN FUSION MUSIC ON THE CONDITION OF PATIENTS WITH COGNITIVE IMPAIRMENT

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**Background:** Music is an international art. Music can express some ideas that are difficult to express in language. As a classic part of music culture, national music has been included in China's cultural heritage. In China's thousands of years of cultural development, there is countless national music. With the increasing attention of the state to traditional culture, how to effectively inherit traditional national music is a problem that needs to be solved at present. With the development of society, pop music has become prominent in the torrent of the times. Inspired by the inspiration, some music creators began to try to combine national music and pop music to create more novel music. As far as the current music development is concerned, a large number of products of the combination of national music and pop music have made

remarkable achievements. According to the survey results, the known combined music includes the combination of modern musical instruments and classical operas, the combination of ethnic minority music and modern music, and the use of modern music to play traditional music. From the perspective of the development of music, music was originally used to express personal feelings, and gradually evolved into art for the public to enjoy. With the combination of folk music and pop music, music can endow more and more abilities. Some studies have even applied music to the treatment of patients with cognitive impairment.

From the existing research, we can know that music does have a certain impact on patients with cognitive impairment. In the music environment, patients with cognitive impairment will gradually return to calm, and the research found that different music combinations have different effects. When gentle songs are combined, it is easier to alleviate the mood of patients with cognitive impairment, but the efficiency of gentle music in the treatment of cognitive impairment is slow. The fusion of fast-paced songs can have a great impact on the hearts of patients with cognitive impairment and contribute to the cultivation of patients' cognitive ability, but the anxiety of patients cannot be avoided in the process of treatment. According to the basic theory of cognitive impairment, people with cognitive impairment will have a cognitive bias in learning, which is also reflected in their understanding of music. Therefore, people with cognitive impairment will have a great difference in their perception of music from ordinary people. China's national music is the product of millennium inheritance, which contains extremely rich core ideas. Therefore, we can try to combine national music and pop music and treat patients with cognitive impairment with the help of the core ideas of national music and the texture and melody of pop music, so as to alleviate the cognitive impairment of patients, promote the development of music and the inheritance of traditional national music.

**Objective:** Explore the possibility of the combination of national music elements and modern music, analyze the therapeutic effect of the integration of the two on people with cognitive impairment, and analyze the promoting effect of cognitive impairment on the integration of national music elements and modern music, in order to provide theoretical support for the development of music and the inheritance of traditional national music elements in China.

**Study design:** 60 patients with cognitive impairment were selected to evaluate the cognitive impairment of all patients, and the evaluation results were quantified to evaluate the changes of cognitive level of patients with cognitive impairment under the combination of modern music and classical opera, the combination of ethnic minority music and modern music, and the use of modern musical instruments to play traditional music. And the first evaluation results, to determine the impact of cognitive impairment on the integration of national music elements and modern music.

**Results:** The results of this survey use 1 to 4 levels to quantify the impact of specific factors. 1 means irrelevant, 2 means slight impact, 3 means general impact, and 4 means obvious impact. In order to reduce the large error caused by personal subjectivity in the evaluation, 60 patients were rounded to determine the results. The influence of the cognitive level of patients with cognitive impairment on the integration of national music elements and modern music is shown in Table 1, where "+" indicates positive influence and "-" indicates negative influence.

**Table 1.** Effects of cognitive impairment and music integration

Project	Modern music - classical opera	Minority music - modern music	Modern musical instruments - traditional music
High cognitive level	+4	+4	+3
Low cognitive level	-4	-4	-4

**Conclusions:** The musical elements of traditional ethnic elements can be integrated into pop music, and the combination of the two has a high degree of coordination. Under cognitive impairment, the integration of music elements and music elements in traditional national elements is affected. At the same time, the integration of music elements and music elements in traditional national elements also affects the cognitive level of patients with cognitive impairment. Therefore, in the treatment of patients with cognitive impairment, the combination of traditional music elements in pop music can effectively alleviate the cognitive impairment of patients, and patients can effectively promote the development of music and promote the protection of traditional culture in China.

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## CRIMINAL PSYCHOLOGICAL MOTIVATION OF MINORS IN CRIMINAL LAW UNDER THE BACKGROUND OF COGNITIVE IMPAIRMENT

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**Background:** Juvenile delinquency is a social problem that will be faced all over the world. Whether it is campus violence or social homicide, juvenile delinquency has begun to appear frequently in social information. In the modern society with growing economy, the phenomenon of juvenile delinquency shows a trend of continuous growth, which has caused great harm to the society and seriously hindered the harmonious development of the society. According to the viewpoint of materialist dialectics, the emergence and change of any event are the result of the joint action of multiple factors, in which the juvenile's criminal behavior is caused by the interaction of internal and external factors. From the previous research results, it can be found that minors are often affected by their psychological effects when they commit crimes. The immature mental health system of minors leads to their wrong judgment, which leads to more serious consequences. However, it is undeniable that the incomplete construction of minors' mental health system is not only caused by its own reasons, but also affected by the surrounding environment to a certain extent. At the same time, the research points out that the root cause of minors' mental health problems is their poor cognitive ability. After being affected by both internal and external environment, their cognitive ability has growth deviation, which eventually leads to their cognitive impairment.

The theory of cognitive impairment holds that minors are in the stage of physical and mental development. In this stage, the minors' brain is in a state of extreme thirst for information. Once it is impacted, the brain changes back to the state of cognitive detachment, and some brain regions are damaged after stimulation, resulting in cognitive impairment of minors. Therefore, in the final analysis, the juvenile's crime is caused by their limited cognition. From the perspective of dialectics, the juvenile's cognitive plasticity leads to the loss of their subjective consciousness and criminal psychology in their behavior. Therefore, it is imperative to carry out cognitive protection for minors. Through the analysis of minors' cognitive impairment, understanding their criminal psychological motivation under their cognitive defects will be an important means to provide them with cognitive protection and a key step to promote the harmonious development of society. In addition, the study of minors' criminal psychological motivation can find the temptation source to stimulate minors' crime and effectively prevent and control minors' crime.

**Objective:** Investigate the current situation of juvenile delinquency, estimate the changes of juvenile delinquency psychology, analyze the characteristics of juvenile delinquency, and understand the impact of juvenile cognitive impairment on their criminal psychology, in order to provide theoretical support for the prevention and control of juvenile delinquency and guarantee the harmonious development of society.

**Study design:** Using the literature method to search the juvenile delinquency cases in China in recent 10 years, estimate the criminal psychology of the minors, understand the cognitive level of the minors through data query, evaluate the cognitive impairment level of the research objects, and finally get the psychological motivation of the juvenile delinquency under the cognitive impairment.

**Results:** Through the literature method, a total of 21 juvenile delinquency events were searched, and documents were established to count the criminal process and means of 21 minors, evaluate the criminal psychological characteristics of all objects, score their cognitive impairment, and then analyze the influencing factors of cognitive impairment on juvenile delinquency. The 0-4 score system is used to evaluate the impact degree, in which 0 means no impact, 1 means slight impact, 2 means general impact, 3 means obvious impact and 4 means complete impact. The final impact degree evaluation is shown in Table 1.

**Table 1.** The influence of cognitive impairment on juvenile delinquency

Project	Social cognitive impairment	Self cognitive impairment	Cognitive impairment of others' evaluation
Criminal psychology	4	4	3

**Conclusions:** The criminal motivation of minors is mainly family factors, school factors and social factors. With the change of students' cognitive ability, the criminal psychological motivation of minors will also change. The more obvious the cognitive impairment of minors, the more obvious their criminal psychological motivation is. In the analysis of cognitive impairment, social cognitive impairment and self cognitive impairment can completely affect the criminal psychology of minors, and the impact of others' evaluation of cognitive impairment on their criminal psychology is also significant. Therefore, in the face of