

communication, whether the information conveyed in advertising can be recognized and accepted by the audience psychologically is often related to the success or failure of advertising planning and advertising activities to a great extent. In order to make the audience recognize and accept the information in the advertising communication, it is necessary to guide the audience to pay attention to the information in the advertising first. In such a “attention” psychological state, consumers will be able to carry out psychological processing at the level of consciousness. Therefore, in the process of formulating advertising strategies and implementing advertising planning, relevant advertisers should take the differences in consumer psychology as the basis, and then effectively achieve the advertising purpose, influence the audience’s own consumption psychology and purchase decision, and then achieve the marketing plan goal and effectively achieve the ultimate goal of sales. Therefore, the research explores the guiding mechanism of accurate positioning of advertising planning on consumer demand and consumer psychology, aiming to effectively help designers improve consumers’ purchase desire on the basis of grasping their consumer psychology, and reduce the negative emotions generated in the process of advertising design.

**Subjects and methods:** First, the scale of consumer psychology is compiled to collect the basic information about consumers’ consumption habits, consumption psychology, consumption choice preference method and so on. The study randomly selected 60 advertising planning designers as the research objects. First, the data on their design ideas and design ideas were collected. Then the research objects were randomly divided into design intervention group and design routine group. The design intervention group learned relevant consumer psychology theories in the experiment and carried out advertising planning design in combination with the results of the consumer psychology scale, while the design routine group did not learn any theories. The experiment lasted for three weeks. After the experiment, the design results of the research object were evaluated with the help of the consumption scale and the planning and design test of the advertising scheme, and the design results were distributed to consumers to collect the change data of consumer behavior preferences and consumer psychology. The experimental data were processed, counted and analyzed with the help of statistical analysis tools.

**Results:** The experimental results show that, based on the guidance of consumer psychology theory and the grasp of consumers’ psychological status, advertising designers can better understand consumers’ consumption preferences and promote the consumption choice tendency of advertising planning. Table 1 shows the scoring statistics of consumers’ psychological preferences for advertising planning and design schemes of different research objects after the experiment. 5 is the full score. The higher the score, the higher the degree of preference.

**Table 1.** The score statistics of consumers’ psychological preferences for advertising planning and design schemes of different research objects after the experiment

Grouping	Pertinence of product scheme	Satisfaction of product requirements	Aesthetics of product planning
Design intervention group	4	3	4
Design general group	1	1	2

**Conclusions:** The object and foothold of advertising is consumers. To be successful, advertising should conform to consumers’ own behavior and psychological characteristics. Only by timely guiding consumers’ consumption psychology, analyzing and studying the advertising audience, and achieving accurate positioning, can we formulate advertising strategies and planning products that meet the needs of the audience. The accurate positioning of advertising planning means that it can optimize the advertising planning scheme on the basis of considering consumer demand and consumer psychology, effectively comprehensively consider the audience demand, consumer psychological preference and consumer considerations of consumer groups, make full use of advertising psychological strategies on the basis of highlighting advertising themes, and achieve active intervention in consumer behavior.

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## VALUE ANALYSIS OF ECOLOGICAL ECONOMIC COUPLING AND COORDINATION ON RESIDENTS’ COGNITIVE BARRIERS - A CASE STUDY OF NINGXIA REGION IN THE YELLOW RIVER BASIN

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**Background:** Cognitive impairment refers to the impairment of one or more aspects of cognitive process, including memory, calculation, orientation, structural ability, executive ability, language understanding, expression and application process. Different degrees of cognitive impairment have different effects on people's overall function and survival function, and then cause abnormal processing in learning, memory and thinking judgment, showing different characteristics of the main symptoms. When patients with cognitive impairment perceive information, they are prone to have cognitive and receptive biases in the form and content of information, resulting in functional imbalance of neural information in the process of activity, resulting in the conflict between the information person's sense of information and the original cognition, making judgments and behaviors inconsistent with the actual situation, which increases the difficulty of information extraction. Moreover, it is difficult for individuals with cognitive impairment to rely on their own experience to adjust their emotions and psychological conditions. The acceptance and reaction speed of new things are slower than ordinary people, and the ability of value judgment will also be limited. At present, the treatment of cognitive impairment symptoms is mainly based on the combination of professional psychological guidance and medical intervention. With the acceleration of China's economic development, the imbalance of regional development is still difficult, and the ecological environment in some areas has been damaged to a certain extent. Due to the particularity of terrain and climate in Ningxia region of the Yellow River basin, its economic development is often limited by various factors and conditions. In addition, the Yellow River basin has serious soil erosion, so it is difficult to achieve coordination and unity between economic development and ecological protection. The limited level of regional economic development will affect the degree of private development of people in the region, and easily lead to the conflict of values, which is not conducive to the healthy development of individual psychology and the coordinated development of regional ecological economy.

**Subjects and methods:** First, by consulting the relevant literature on cognitive impairment, psychology and regional ecological economy, the author summarizes the influencing factors of China's ecological and economic coupling and coordinated development, and takes Ningxia region in the Yellow River basin as an example to communicate with the farmers with cognitive impairment in Ningxia region through visits, telephone exchanges and other means, so as to understand the status quo and etiology of their cognitive impairment, which is the basic material. This paper analyzes and puts forward some countermeasures and methods that may help to improve their cognitive barriers and promote the coupling and coordinated development of ecological regions and economic development. Then the method was handed over to the expert group of psychology, cognitive impairment research experts and clinical psychologists for rationality evaluation, including the feasibility, implementation conditions and scientificity of the improvement measures. And the countermeasures and suggestions put forward in the study will be evaluated on the impact of groups with cognitive impairment in Ningxia region. The impact degree shall be evaluated according to five categories: no impact, slight impact, general impact, obvious impact and full impact, and shall be given five integer numbers of 1, 2, 3, 4 and 5 respectively for quantification. After the members of the expert group return the evaluation opinions, the research team will integrate the opinions, and then send the sorting results to the members of the expert group again, and ask them to give evaluation again. The cycle will continue until the members of the expert group reach an agreement on the evaluation of the evaluation content. In order to improve the authenticity of the inquiry results, it is not allowed to conduct any form of communication between expert members during the inquiry.

**Results:** After the experts finished the last round of evaluation information feedback, they counted their feedback information and got Table 1.

The numbers in the cells in Table 1 represent the proportion of the expert group whose ecological and economic coupling coordination has an impact on Residents' cognitive impairment. Analysis of Table 1 shows that the expert group believes that the countermeasures proposed in the study have the most significant impact on the "psychological adjustment of cognitive impairment" and the "acceptable range of safety psychology" of the audience. "Ecological environment protection" and "feasibility assessment of economic development" have a significant impact, and more than 25% of the professionals think it is feasible.

**Conclusions:** The degree of ecological and economic coupling and coordinated development will not only affect the development level and degree of the region, but also give psychological hints to the people in the region. A good momentum of economic development will increase the confidence of the people in the region and improve their depth and breadth of looking at things. Cognitive impairment, as a psychological disease, will cause great damage to the physical and mental health of individuals, and the research puts forward countermeasures that can effectively reduce their symptoms and promote the healthy development of their psychological level and status.

**Table 1.** Statistics of feedback information of expert group members on research issues

Countermeasure	No impact (%)	Minor impact (%)	General impact (%)	Significant impact (%)	Full impact (%)
Psychological adjustment of cognitive impairment	0	14.35	21.73	49.87	14.05
Feasibility assessment of economic development	5.13	14.38	32.69	25.67	27.21
Protection of ecological environment	1.47	5.69	22.44	39.56	32.3
Acceptable range of safety psychology	2.82	6.33	36.81	42.38	14.46

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## A STUDY ON THE POSITIVE EFFECT OF THE IMPROVEMENT OF PIANO PERFORMANCE ON COLLEGE STUDENTS' MENTAL HEALTH AND PSYCHOLOGICAL QUALITY

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**Background:** With the continuous development of China's education, higher education has paid more attention to the quality education and mental health education of college students, and it has added the relevant content of psychological education to the corresponding curriculum, in order to realize the dynamic management of students' mental health and the timely guidance of psychological problems. College students are in a critical period of physical and mental development. The change of teaching form and social environment makes students have to consider the individual in the society and the collective, requiring them to have better adaptability and adaptability. The standard of mental health refers to that individuals can still maintain a relatively stable and benign mental state when dealing with setbacks and difficult events. Mental health is an important aspect of individual health and plays an important role in individual growth and development and future planning. There are many factors that affect mental health, including individual differences in cognitive structure, psychological endurance, social experience, way of thinking, etc. once individuals are difficult to rely on themselves for emotional transformation and emotional regulation, they are prone to psychological problems such as anxiety, depression, psychosis and long-term negative emotions. At the same time, psychological quality is one of the important indicators to evaluate mental health. To a certain extent, the level of psychological quality can reflect the individual's ability to withstand external pressure and threats. There is a positive correlation between psychological quality and mental health. Therefore, strengthening the exercise and improvement of individual psychological quality can effectively help individuals realize the correct evaluation of their own emotions and internal values, and then promote mental health. At present, in the piano performance major of colleges and universities, the "Inflexibility" of the teaching mode makes the teaching forms have no great difference in essence. The liveliness and creativity of the art classroom are poor, which makes it difficult to actively intervene in the students' mental health and quality. The expressive force of piano performing art is to effectively convey the psychological status of performers and exert certain emotional guidance on the audience. Therefore, the research explores the positive effect of the improvement of piano performance art expression on college students' mental health and psychological quality, in order to better provide psychological health guarantee for students' growth and development on the basis of paying attention to students' psychological dynamic information, and reduce the generation of psychological problems and negative emotions.

**Subjects and methods:** The research take the students majoring in piano performance in a university as the research object. First, it evaluates the students' mental health and piano performance ability before