

go to the Grand Canal National Park with theme landscape and count the overall behavioral psychological state. The psychological measurement tool used in the study was Symptom Checklist 90 (SCL-90) as the scale of comprehensive psychological state.

**Results:** Table 1 describes the SCL-90 test results before and after the experiment. It can be seen from Table 1 that after the experiment, the total score, total average score and the number of positive items of SCL-90 of tourists have decreased significantly, indicating that the psychological state of tourists has changed significantly. After statistical analysis, it was found that the three indexes showed significant differences after the experiment ( $P < 0.05$ ).

**Table 1.** SCL-90 self-test results of tourists

	Before the experiment	After the experiment
Total score	157.43	130.36
Total average	1.75	1.45
Number of positive items	29.64	18.81

**Conclusions:** Behavioral psychology is a branch of psychology that studies the behavior of individuals and groups for psychological analysis. For tourists, their behavioral psychology is mainly reflected in the transformation of their psychological state in the process of tourism. When the psychological state of tourists is positively affected by their behavior, their psychological state will also change in a positive direction. According to the behavioral psychology of tourists, the theme landscape design of Grand Canal National Park is carried out, and the psychological state of tourists is studied based on time, so as to analyze the effect of theme landscape design on tourists' behavioral psychology. The experimental results show that the theme landscape design of the Grand Canal National Park has a significant positive effect on the comprehensive psychological state of tourists, and can effectively improve the overall negative emotional state.

**Acknowledgement:** The research is supported by: 2021 Jiangsu Provincial Social Science Fund Project: Phased results of the National Park Design Research based on the Reproduction of the Excellent Cultural Scene in the Jiangsu Section of the Grand Canal (Project No. 21YSB011); 2020 Jiangsu Provincial Department of Education's Philosophy and Social Science Research Project in Colleges and Universities: Phased Achievements of Research on Protection and Utilization Strategies of Industrial Building Remains in Zhenjiang Section of the Grand Canal (Project No. 2020SJA2066).

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## THE INTEGRATION AND DEVELOPMENT OF TRADITIONAL RADIO PROGRAMS AND NEW MEDIA IN THE ERA OF INTEGRATED MEDIA HAS A VISUAL CURE FOR PEOPLE'S MENTAL ANXIETY

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**Background:** With the rapid development of national economy and the increasingly fierce market competition, people's mental health problems are becoming more and more serious. This phenomenon has been widely concerned by experts and scholars at home and abroad. At this stage, the psychological problems of urban and rural residents take various forms. Different from the psychological problems caused by urban residents' insomnia, high-intensity work and fast-paced life, the mental anxiety of rural residents is mainly manifested in neighborhood relations, cadre mass relations, mother-in-law and daughter-in-law relations, which are often hidden and long-term. Although it seems that the masses will not have particularly big problems, if their psychological problems exist for a long time and cannot be effectively solved, these problems will further develop into malignant events. In the process of social differentiation and market competition, the rural people usually have frustrated and vulnerable people, which will make these groups feel anxiety, helplessness, resentment and other negative emotions. Usually, if they are in a state of emotional tension, they will have physical and emotional diseases. At this stage, the most common intervention methods can alleviate mental tension, but the scope of application is greatly limited, and the implementation is difficult, the effect is poor, and the real-time performance is low. Therefore, their promotion value is not particularly great.

Under the background of the new media era, the integrated development of traditional broadcasting and

new media is of positive significance, which is conducive to the sustainable development of broadcasting, which can be reflected in the significant impact on the audience through auditory information; Strong economic effect. It has a relatively fast propagation speed. Different from urban areas, rural areas are more backward in culture and education, consumption level, life concept, transportation convenience and so on. The vast majority of rural areas are not particularly perfect in the effective integration of new media and traditional radio programs. In view of the mental pressure of rural residents and the problems existing in the current stage of the integrated development of traditional radio and new media, this paper studies and puts forward the integrated development strategies of traditional radio programs and new media in the era of integrated media, which are to improve the professional ability of editors and actively promote radio ideas. The hosting and editing of theoretical radio programs need to have higher standards, specifically to improve their theoretical literacy, professional level and political literacy, so as to ensure that the transmitted programs have higher quality. In the era of integrated media, the integrated development of traditional radio programs and new media needs a multimedia digital platform, which can realize the integration of pictures, words, audio and other resources.

**Objective:** This paper analyzes the visual healing effect of the integrated development strategy of traditional radio programs and new media on people's mental anxiety in the era of integrated media, so as to provide new research directions and ideas for the harmony and stability of residents in rural areas.

**Subjects and methods:** 100 people in rural areas were selected as the research object to analyze the visual healing effect of the integrated development strategy of traditional radio programs and new media on people's mental anxiety in the era of integrated media. The experimental period lasted for 6 months. The study used expectation maximization algorithm (EM) and SASD data statistical analysis software to classify the improvement effect of mental focus. The evaluation indexes are depression, anxiety, fear and depression, and the evaluation indexes of improvement effect are no improvement, slight improvement, improvement and obvious improvement. The corresponding score values are 0-25, 26-50, 51-75 and 76-100 respectively. The improvement rate is the ratio of the number of people with slight improvement, improvement and obvious improvement to the total number of people. In order to avoid the influence of subjective factors on the research results, the data of all subjects were taken for analysis. The integrated development strategy of traditional radio programs and new media in the era of integrated media includes two aspects: improving the professional ability of editors and actively promoting the concept of broadcasting, which are expressed by strategy 1-strategy 2 respectively.

**Results:** Table 1 refers to the effect of the integrated development strategy of traditional radio programs and new media on the spiritual pressure of rural residents in the era of integrated media six months later. It can be seen from Table 1 that the four improvement strategies for the construction of public management system in rural areas can improve the mental pressure of rural residents, especially in the two aspects of depression and anxiety. This may be because the construction of public management system in different rural areas can ease the psychological anxiety of residents.

**Table 1.** Six months later, the effect of the construction of public management system in rural areas on the mental pressure of rural residents

Strategy	Depression	Anxiety	Fear	Depression
Strategy 1	86.0	85.0	83.0	84.0
Strategy 2	92.0	88.0	85.0	83.0

**Conclusions:** In the era of integrated media, the integrated development strategy of traditional radio programs and new media can improve the spiritual anxiety of rural people, especially in the two aspects of depression and anxiety. The mental anxiety of rural people can be intervened through the integrated development strategy of traditional radio programs and new media in the era of integrated media. In the era of integrated media, the integrated development of traditional radio programs and new media needs to be based on multimedia digital platform, which not only helps to promote information sharing among the masses, but also breaks the isolation between various media in the radio station.

**Acknowledgement:** The research is supported by: Jiangsu Philosophy and Social Science Research Project: Jiangsu provincial project: Research on new media communication of government affairs in the ear of mobile internet (No. 2021SJA0559).

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## RESEARCH ON THE INFLUENCE OF VIRTUAL REALITY TECHNOLOGY AND GIS TEACHING REFORM ON GEOGRAPHY STUDENTS' COGNITIVE IMPAIRMENT

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**Background:** Clinically, cognitive impairment is a transitional state between normal people and early Alzheimer's disease. Cognitive impairment refers to the abnormal phenomenon in the process of acquiring and recognizing knowledge, which will lead to serious learning and memory impairment, accompanied by the pathological process of disability, agnosia, disuse and so on. Cognitive impairment is caused by the obstacles in executive ability, visual space, language, memory, orientation and other cognitive fields. The main causes of the disease are education, diet, living habits and so on. The behavioral characteristics of cognitive function are mainly manifested in the changes of executive ability, attention, language ability and social cognition. For social cognitive ability, it is mainly manifested in anxiety in social communication, weakening of emotional control ability, decline of resonance ability and reduction of recognition of social clues. For attention, it is mainly manifested in the reduction of information processing speed, selectivity and other types of attention changes. For the executive ability, it is mainly manifested in the decline of organization and decision-making ability and the inability to complete complex tasks. For language ability, it is mainly manifested in grammatical errors, ignoring social etiquette, the phenomenon of words failing to express their meaning in communication with people, and problems in abstract language expression and understanding. With the continuous maturity of virtual reality technology, the teaching reform of virtual reality technology and geographic information system has become a topic discussed by current researchers, and its effect on students' cognitive impairment has also been demonstrated by most scholars.

This paper studies and analyzes a teaching reform strategy combining virtual reality technology and GIS, which is shown as follows. First, design a virtual reality assisted teaching system for the "new curriculum standard" of geography in senior high school. Teachers experience the virtual reality Dream Teacher products in advance, and give valuable suggestions based on many years of teaching experience. Second, through field observation, video images, case study and other forms, let students have the ability of geographical practice, break through the spatial constraints, and realize the field investigation in the virtual environment. Third, teachers let students feel the modeling utilization, space-time diversity, learning process, teaching in fun, multi sensibility, immersion and interaction presented by the combination of virtual reality and GIS teaching. Through the three-dimensional spatial learning environment, students can not only stimulate their enthusiasm for learning geography, but also simulate the objective environment to realize the high integration of actual learning situations, so that students can feel, hear get a new learning experience in visual and other sensory aspects, that is, learn geography in an immersive geographical environment.

**Objective:** To explore the effect of combining virtual reality technology and GIS teaching reform strategy on geography students' cognitive impairment, in order to improve students' cognitive impairment.

**Subjects and methods:** Geography students with different degrees of cognitive impairment are selected as the research object. Through the analysis of representative clustering (cure) algorithm and excel statistical software, this paper analyzes the effect of a combination of virtual reality technology and GIS teaching reform strategy on students with cognitive impairment. Combining virtual reality technology and geographic information system, the teaching reform strategy includes three strategies, which use strategy 1-3 respectively, and the number of relevant people is 50. The evaluation content includes four aspects: language ability, attention, memory ability and memory ability. Evaluate the improvement degree of the research results. The improvement level is divided into three levels: obvious improvement, improvement and no improvement. The improvement rate is the ratio of the number of people in the two levels of obvious improvement and improvement to the total number of people.

**Results:** Table 1 refers to the impact of the combination of virtual reality technology and GIS teaching reform strategy on the cognitive impairment of geography students. It can be seen from Table 1 that the combination of virtual reality technology and GIS teaching reform strategy has a high improvement rate on the four aspects of geography students' language ability, attention, memory ability and memory ability. This shows that the teaching reform strategy combined with virtual reality technology and GIS can be improved to the greatest extent.

**Conclusions:** GIS teaching combined with virtual reality technology provides a new way for front-line teachers' curriculum teaching, which promotes the innovative development of basic education. The teaching reform strategy combining virtual reality technology and geographic information system needs expert guidance and school enterprise alliance, so as to realize formal innovation and truly realize the win-win situation between teachers and students.

**Acknowledgement:** The research is supported by: Industry-University Collaborative Education Project of