

improvement rate in five aspects: language ability, attention, memory ability, memory ability and orientation. The follow-up research can apply the proposed English translation skills to college students' English teaching.

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## **ANALYSIS OF PSYCHOLOGICAL STATUS OF MARITIME WIRELESS COMMUNICATION TECHNICIANS UNDER THE BACKGROUND OF COGNITIVE IMPAIRMENT**

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**Background:** Cognitive impairment is an abnormal manifestation in the process of brain advanced intelligent processing. Cognitive impairment has a great influence on patients, mainly including learning impairment, memory impairment, executive dysfunction, visuospatial disorder, agnosia, apraxia and other related symptoms. The causes of cognitive impairment are diverse, including craniocerebral trauma, cerebrovascular disease, chronic systemic disease, environmental factors, mental and psychological state and so on. Maritime wireless communication technology depends on the technical support of maritime wireless communication technicians. However, this kind of people are very vulnerable to the negative impact of external factors in the process of maritime operation, such as working at sea for a long time and breaking away from normal society, resulting in negative psychological emotions, and the difficult and dangerous working environment is very likely to lead to the injury or physical function problems of maritime wireless communication technicians, Various external factors may lead to cognitive impairment of maritime wireless communication technicians.

Since the 20th century, land communication technology has shown earth shaking changes, realizing the breakthrough and renewal from wired to wireless and from 1G to 5G. However, due to the limitations of geographical conditions and natural environment, the advantages and characteristics of land communication technology are difficult to be applied to maritime wireless communication. The ocean is vast and the environment is complex and changeable. It is very difficult to establish the signal base station required for communication in the vast sea. Therefore, compared with land communication technology, maritime wireless communication technology shows an obvious lag phenomenon. Different from terrestrial wireless communication technology and base station system, maritime communication nodes are relatively few and scattered. Each node has a very long communication distance and is very sparse in space. Moreover, the marine meteorological conditions are harsh and changeable, and the overall environment presents the characteristics of high humidity and salt fog, great temperature difference between day and night and so on. In this environment, the marine wireless transmission medium presents obvious non-uniform distribution and complex electromagnetic environment, which have a great negative impact on the design and application of high-performance and reliable marine wireless communication system. In terms of cost, it is difficult for the maritime wireless communication system to build a centralized information management network similar to the terrestrial cellular network, and the diversified business needs of different types of communication nodes are difficult to be managed efficiently and uniformly. Therefore, the maritime wireless communication faces challenges such as complex and changeable space media, long communication distance and large differences in business needs. When there are problems in the application of maritime wireless communication technology, maritime wireless communication technicians will bear great work pressure and psychological burden, and even produce certain cognitive impairment symptoms. In order to eliminate the cognitive impairment of maritime wireless communication technicians and ensure the smooth development of their maritime wireless communication work, it is bound to thoroughly analyze the causes and effects of their cognitive impairment.

**Objective:** The existing maritime wireless communication system has some problems, such as backward technical means, complex communication equipment and unstable communication link, which has a certain negative impact on the normal work and positive psychological state of marine wireless communication technicians, making them suffer from cognitive impairment. From the perspective of cognitive impairment, this study will explore the potential disadvantages of maritime wireless communication technology and its impact on maritime wireless communication technicians, in order to optimize maritime wireless communication technology and eliminate the cognitive impairment of maritime wireless communication technicians.

**Research objects and methods:** Taking 85 maritime wireless communication technicians with cognitive impairment as the research object, this paper uses Support Vector Machine (SVM) to explore their influence

under the challenge of maritime wireless communication technology, and compares and analyzes the severity of cognitive impairment of staff after the optimization of maritime wireless communication technology.

**Research design:** SVM is used to classify the challenges faced by maritime wireless communication technology, and the influence of maritime wireless communication technicians under different technical challenges is compared and analyzed. Optimize and upgrade the maritime wireless communication technology, use the Mini Mental State Examination (MMSE) to evaluate the degree of cognitive impairment of maritime wireless communication technicians, and explore their changes before and after the optimization of maritime wireless communication technology. MMSE mainly includes five levels: orientation, memory, attention and calculation, memory and language ability. The scores of each level are 10, 3, 5, 3 and 9 respectively, with a total of 30 points. In MMSE's judgment criteria for cognitive impairment, if the score is less than 27, it indicates cognitive impairment, and the smaller the score, the more serious the cognitive impairment; If the score is in the range of 27-30 points, it means normal.

**Methods:** The relevant data of maritime wireless communication technicians with cognitive impairment are counted and analyzed by MATLAB software.

**Results:** Table 1 shows the comparison of MMSE scores of relevant technicians before and after the optimization of offshore wireless communication technology. According to Table 1, the scores of MMSE evaluation items of maritime wireless communication technicians before optimization are low, indicating that they have serious cognitive impairment. After optimization, all MMSE scores were improved, and the growth rate of memory ability MMSE reached 245.21%. This shows that the cognitive impairment of maritime wireless communication technicians has been significantly improved.

**Table 1.** Comparison of MMSE scores of wireless communication technicians with cognitive impairment before and after optimization of maritime wireless communication technology

Evaluation time	Directional force	Memory	Attention and computational power	Recall ability	Language ability	Total score
Before optimization	5.19	0.73	2.47	1.13	4.79	14.37
After optimization	9.23	2.52	4.92	2.89	8.25	27.64
Growth rate (%)	77.84	245.21	99.19	155.75	72.23	92.35

**Conclusions:** From the background of cognitive impairment, the optimization of maritime wireless communication technology based on the relevant knowledge theory of cognitive psychology can effectively alleviate the cognitive impairment of maritime wireless communication technicians and improve their mental health level.

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## STUDY ON COGNITIVE BARRIERS AND MOTIVATIONAL FACTORS OF TOURISM DEVELOPMENT OF CHINESE EXCELLENT TRADITIONAL CULTURE - TAKING HORSE CULTURE IN INNER MONGOLIA AS AN EXAMPLE

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**Background:** Cognition is a kind of human psychological activity, which refers to the psychological process of individual cognition and understanding of things. The normal functions of the brain are mainly to perceive and process information, process and store processing results, that is, memory, maintain a normal state of consciousness and control emotions. Cognitive function belongs to the high-level activity category of cerebral cortex, including attention, memory, orientation, language ability, visual space orientation, executive function, organization and management ability, etc. In short, cognition is a complex process with multiple factors, levels and dimensions. Cognitive disorder is a psychological disorder developed from the perspective of cognitive psychological disorder. Psychological cognitive disorder can be called a neurocognitive disorder. Patients mainly have psychological disorders in problem solving, perception, memory, learning and so on. In the field of medicine, psychological cognitive impairment is defined as six cognitive impairments: social cognition, complex attention, language, perceptual motor function, learning