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**Background:** Due to the impact of the epidemic, employees have anxiety and other psychological problems, which lead to a series of negative emotions of self-blame, anxiety and regret, which directly affect the promotion of economic investment and the decline of global foreign direct investment. However, Turkmenistan has implemented a policy of political stability, isolation and openness, which has effectively eased investment anxiety and made the country an ideal place for international investment.

**Subjects and Methods:** This paper uses literature analysis methods and qualitative analysis methods to systematically summarize the investment situation and the negative emotions of investors in Turkmenistan in 2022, and analyzes the investment environment, investment status, investment policy, and investment field and investment trends in Turkmenistan affected by the epidemic.

**Results:** The government formulated policies and takes measures to reduce the psychological impact of the epidemic, alleviate the negative sentiment of investors, improve the business environment, and support the sustainable development of enterprises. The government has implemented an anti-crisis plan to mitigate the economic impact of psychological problems arising from the pandemic. The government continued to implement policies to attract foreign investment. Special attention was paid to relations with religious countries, such as strengthening economic, social and political relations with Turkey, Iran, and Afghanistan. The government increasingly wanted to help people live happy lives, protect their mental and physical health, increase their average life expectancy and improve their welfare. Country attached great importance to the spread and development of Islam. National leaders and the Congress approved requests to build mosques across the country. The leader proposed to create international transport and transit corridors within Turkmenistan and to create cross-border access to Europe, the Middle East, Central Asia, South Asia and Southeast Asia. Finally, this paper pointed out that Turkmenistan especially hoped to introduce foreign investment to promote the development of the energy field, chemical industry field, agriculture field, textile industry and other fields.

**Conclusions:** In 2022, the political situation in Turkmenistan remained stable, the epidemic control was relatively stable, the negative emotions of investors were alleviated, the psychological impact on investment was gradually weakened, and the economic development will be sound. The state continued to implement the opening-up policy, and the government issued policies to encourage foreign investment. Turkmenistan has become an ideal investment country.

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## **SOCIAL ANXIETY CAUSED BY COVID-19, TECHNOLOGICAL INNOVATION AND THE QUALITY OF ECONOMIC DEVELOPMENT: AN EMPIRICAL ANALYSIS BASED ON CHINA**

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**Background:** The psychological problems such as fear, depression and somatization caused by the large-scale spread of novel coronavirus since 2020 have led to serious social anxiety and greatly reduce people's happiness in China during the special transition period. Social anxiety also affects social order, stability and harmony, and affects the quality of economic development. Therefore, it is necessary to study how to achieve high-quality economic development through technological innovation to offset the negative impact of social anxiety.

**Subjects and Methods:** Mental health diseases and social anxiety have seriously affected the effective supply of the labor and reduced labor productivity, thus affecting total factor productivity. This study uses the contribution rate of total factor productivity to economic growth as a measure of the quality of economic growth development, and takes the number of invention patents, utility model patents, and design patents granted to measure the level of technological and scientific innovation in China. This study uses the ARDL model which widely used in field of mental health economics to empirically investigate the long-term and short-term effects of different patent types on the quality of China's economic development in the context of social anxiety.

**Results:** Mental health problems, social anxiety and other problems cause serious personality disorder and lead to the loss of human capital and the reduction of marginal efficiency of labor force, which have a huge negative effect on the quality of China's economic development. Different types of patents have significantly different effects on the quality of China's economic development. Invention patents improve the quality of economic development in both short and long terms, and utility model patents improve the quality of economic development in the short term, while restrain the improvement of economic development quality in the long term. The impact of design patents on the quality of economic development in the short term or long term is insignificant.

**Conclusions:** In order to effectively cope with the negative effects of social anxiety and other phenomena on the quality of China's economic development, it is necessary to make full use of the positive impact of invention patents, while taking effective measures to reduce the patent bubble phenomenon existing in the utility model patents and design patents. In particular, we should give full play to the positive role of technological innovation in mental health related fields to reduce anxiety, improve happiness and economic quality.

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## RESEARCH ON REDUCING THE PSYCHOLOGICAL ANXIETY OF UAV DRIVERS BY COGNITION BASED ON SITUATION AWARENESS MODEL

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**Background:** Based on cognitive psychology, situation awareness is of great value to individual or group decision-making and action. In the field of aerospace psychology, situation awareness is the main factor to maintain security and has been widely concerned at home and abroad for a long time. UAV operators perform various flight tasks on the ground in a completely different way from pilots. They have no flight experience in the physical sense, and it is difficult to give early warning and operation in time during UAV flight, thus improving their driving anxiety. Therefore, the introduction of situation awareness model into the training of UAV operators, especially the training of UAV aerial camera operators in colleges and universities, can effectively reduce the anxiety caused by flight experience without physical significance.

**Subjects and Methods:** Based on cognitive psychology, situation awareness is one of the research directions of human factors, which first appeared in aviation psychology. It is an important problem to deal with uncertain and inaccurate multi-source heterogeneous information in the process of situation awareness. In order to correctly handle these information, improve the understanding of situation awareness, and make situation awareness more correct, timely and global, the research on situation awareness mechanism can theoretically clarify its mechanism, study the auxiliary role of situation awareness in students' learning, provide certainty and global sense for UAV drivers, lay the foundation for making correct judgments, and effectively reduce the psychological anxiety caused by their driving uncertainty. From the perspective of situation awareness theory model, this paper summarizes the research of situation awareness theory and modeling methods, puts forward the concept and framework of UAV driver situation awareness, and looks forward to the application of situation awareness training in UAV driving training in colleges and universities.

**Results:** Immersive virtual teaching mode is gradually applied in UAV teaching activities in colleges and universities. This technology can realize the integration of multiple disciplines, effectively cultivate students' ability to learn independently, and cultivate students' creativity. Through multidisciplinary integration, students have a deeper understanding and grasp of the knowledge they have learned. Effectively improve the classroom teaching effect and students' SA ability.

**Conclusions:** The core purpose of immersive virtual teaching is to cultivate students' situational awareness and enhance their flight safety awareness. UAV operators are very different from pilots when performing various flight missions on the ground. Without flight experience in the physical sense, it is difficult for them to send out early warning and operation in time during UAV flight. They can only slowly accumulate experience through a lot of practice, which is also a big problem in UAV teaching. Combining VR and AR technologies, we will build an immersive virtual teaching mode and a highly interactive and scene based classroom teaching scene, which will have a good highly interactive classroom teaching effect, improve the training effect of situation awareness and reduce students' psychological anxiety.

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## PSYCHOLOGICAL ANXIETY AND DEBUGGING OF MATHEMATICS LEARNING BASED ON BIG DATA ENVIRONMENT MONITORING

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**Background:** In today's era of rapid development of information technology, big data almost occupies everyone's life. It can capture a large amount of information data that people want, which provides great convenience for people's production and life. At the same time, it can also be applied in the field of education and teaching. The application of big data plays an important role in teaching. Because mathematics has the characteristics of abstractness, rigor and extensiveness, mathematics learning psychology cannot be simply compared with general learning psychology research, which increases the psychological burden of students learning mathematics.

**Subjects and Methods:** The use of big data monitoring students' mathematical learning psychological disorders, some students suffer from mental illness and disorders, such as anxiety and depression, often manifested as emotional instability, nervous tension, endocrine disorders, muscle tightness, listlessness, and no motivation. Specific learning