

collision of geometry, and issuing instructions, to reduce a lot of time consumed in detection. The intelligent detection system of dynamic collision between multi robots under 3D vision technology is to collect the three-dimensional coordinate information of spatial points in the field of view with the help of a 3D camera head, and obtain the three-dimensional imaging of the information with the help of an algorithm intelligence, to enable multi robots to carry out collision detection with a certain relationship distribution and movement in a specific range. Then improve the accuracy of intelligent system detection and the application efficiency of related products. The design of a multi-robot dynamic collision intelligent detection system will affect the performance and demand satisfaction of consumers.

Objective: In order to meet the cognitive needs of patients with cognitive impairment and improve their cognitive level and ability, the intelligent detection system for dynamic collision between multiple robots is optimized and improved, such as information extraction, technical function satisfaction and so on. The improved system model is used to test its impact on patients with cognitive impairment and product use.

Research objects and methods: Some patients with cognitive impairment were selected as the research object. At the same time, the design of the detection system was optimized when the multi-robot dynamic collision intelligent detection designer understood the psychological demands and cognitive degree of patients with cognitive impairment, such as information extraction, instruction discrimination, etc. The optimized model was applied to patients with cognitive impairment to test the application effect of the model and the cognitive improvement mechanism of patients.

Method design: Learning the background knowledge of cognitive impairment for intelligent detection designers, making them optimize and improve the detection system model on the basis of understanding the cognitive situation of patients with cognitive impairment, and applying the improved system model to patients with cognitive impairment, collecting the remission of cognitive impairment of the subjects before and after the experiment, and obtaining the experimental results.

Methods: The association rule algorithm was used to explore the relationship between the background of cognitive impairment and system optimization, and the data before and after the experiment were sorted and analyzed with statistical analysis tools.

Results: The application of computer systems and the development of data technology can effectively improve the cognitive level of patients with cognitive impairment. The design optimization and improvement of 3D vision multi-robot dynamic collision intelligent detection system from the perspective of cognitive impairment are studied. The results show that the improved system model can reduce the error of information extraction of patients with cognitive impairment. Improve their cognitive level and mental health. Table 1 shows the satisfaction scores of people with cognitive impairment on the intelligent detection system for dynamic collision between multiple robots before and after the experiment.

Table 1. Before and after the experiment, the satisfaction scores of people with cognitive impairment on the intelligent detection system of the multi-robot dynamic collision were statistically analyzed

Index	Product satisfaction	Convenience of information extraction	Language comprehension
Before the experiment	9.25±2.17	7.25±2.13	11.35±1.67
After the experiment	15.23±2.05	19.23±1.43	15.24±1.12

Conclusions: Reducing the area requiring dynamic collision detection between multiple robots can effectively realize the accuracy and efficiency of dynamic collision detection between multiple robots. At the same time, the introduction of cognitive impairment learning background to designers deepens the grasp of the depth of people's needs, realizes the optimization and improvement of the detection system model, and effectively improves the cognitive level and product satisfaction of patients with cognitive impairment.

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THE RELATIONSHIP BETWEEN TECHNOLOGICAL INNOVATION AND INDUSTRIAL ECONOMIC DEVELOPMENT BASED ON SOCIAL PSYCHOLOGY

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Background: Social psychology is a science that studies people's social behavior and psychological basis in social communication. Different individuals and groups usually show different psychological and

behavioral changes in society. Therefore, the main research objects of social psychology are divided into individual level and group level. Individual social psychological phenomenon refers to individual thoughts, feelings and behaviors restricted by others and groups, that is, individual socialization process and speech development. The group level covers a wide range, including the communication structure of the group and racial prejudice. It is a conscious consensus and criterion jointly expressed by individuals. Social psychology includes micro level, meso level and macro level. Looking at individual development and social changes from the perspective of social psychology can effectively link the close relationship between individuals and social groups. Individual person is an important part of society, with the dual attributes of "individual person" and "social person". Using social psychology to guide individual behavior and decision-making can significantly enhance people's cognition of their own ability and the importance evaluation of their social status, realize individual development, and then promote social progress. The relationship between technological innovation and industrial economic development is the relationship between individual behavior and social organization. The improvement of unit technological capacity can reduce social production time and accelerate the technological innovation and economic development of the whole industry at the social level. Technological innovation is the embodiment of individual "economic" behavior. It is an innovation aimed at creating new technology in order to improve economic benefits and reduce production time, or an innovation based on scientific and technological knowledge and its created resources. The individual's behavior will have "agglomeration effect" and "scale effect" on society and collective. Individual technological innovation can effectively promote industrial innovation, improve production efficiency, and then accelerate the economic development of the whole industry. Therefore, analyzing the correlation between technological innovation and industrial economic development from the perspective of social psychology can effectively explore the chain effect between individual behavior and social behavior, and then help enterprise operators better grasp the correlation between technological innovation and industrial economic development, break through the limitations of traditional inherent thinking, avoid emotional difficulties and negative psychological problems, and promote economic development.

Objective: In order to better grasp the correlation between individual technological innovation and industrial economic development, so as to promote the innovation and reform of social industries and improve the mental health of individual enterprise managers. The technological innovation of individual enterprises will affect the schedule of social, industrial and economic development. Therefore, from the perspective of social psychology, the research helps to improve the overall thinking of individual enterprises, help them better carry out enterprise restructuring and industrial development, improve their thinking mode and emotional control ability in production and operation, and avoid complacency affecting their mental health and the speed of their industrial process.

Research objects and methods: Based on the development relationship theory between individuals and groups in social psychology, this study selects some local enterprises as the research object, and uses multiple regression and VAR model to make an empirical analysis on the relationship between technological innovation and industrial economic development, in order to better strengthen the cultivation of holistic thinking for enterprise operators in industrial layout and strategic planning, timely adjust psychological problems and promote their all-round and healthy development.

Research design: Mainly investigate the individual technological innovation strength based on the share and weight of the tertiary industry in the enterprise, and determine the control variables affecting the industrial economic development. The experimental data are from the regional economic database, and the missing data are supplemented from the statistical yearbook network. By investigating the innovative utilization of resources or the innovation of technical knowledge, this paper explores the relationship between technological innovation and industrial economic development, and it also provides guidance and suggestions for the thinking layout and psychological adjustment ability of enterprise managers. The influence of enterprise technological innovation on macro-economy is graded, and 1-5 respectively represent the influence size and severity of individual psychology.

Methods: Using Excel software and SPSS22.0 software for statistics and analysis of experimental data.

Results: There is a strong correlation between the technological innovation ability of individual enterprises and the technological development of social industries. Social psychology believes that the relationship between individual socio-economic development will affect the social demand and the speed and degree of development and reform. The relationship between explanatory variables and explained variables is tested with the help of a panel model, and the results are shown in Table 1. It can be seen from Table 1 that the coefficient of technological innovation accounting for 10% of the tertiary industry is 0.5146, and the significance is positive, indicating that technological innovation can significantly promote the development of the tertiary industry economy.

Conclusions: There is a significant positive correlation between the technological innovation of individual enterprises and the development of industrial economy. Therefore, regions and individuals should pay attention to the investment in technological innovation and stimulate the vitality of innovation. At the

same time, for individual enterprises, they should deeply understand the connection between individuals and society, pay attention to the improvement of their own ability and the cultivation of holistic thinking, and play a greater scale effect.

Table 1. Panel test results of the relationship between explanatory variables and explained variables

Explained variable	Explanatory variable	Coefficient	Z
Industrial economic development	Industrial economic development	1.0845***	14.13
	Technological innovation	0.5146*	1.82
Technological innovation	Industrial economic development	0.8945***	1.53
	Technological innovation	0.0086***	2.78
Controlling factors	Industrial economic development	1.9128	0.49
	Technological innovation	1.0273***	19.41

Note: “***”, “**” and “*” are significant at 1%, 5% and 10% respectively.

Table 2. Improvement of psychological status of enterprise self-employed managers before and after the experiment

Dimension	Thinking set	Holistic thinking	Emotion regulation level	Negative psychological problems
Before improvement	4	2	1	4
After improvement	2	5	3	2

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NATIONAL CULTURAL CONNOTATION AND POETIC CHARM OF IMAGE OIL PAINTING UNDER THE BACKGROUND OF COLOR COGNITIVE IMPAIRMENT

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Background: Color cognition is a certain color psychological feeling and inner activity formed by people’s perception of the color of objective things through light, combined with people’s own experience and cognition, and acting on people’s psychology through color perception. Through the observation of color, people can form the first impression of oil paintings at the first time, and with the deepening of cognition, people will gradually form aesthetic cognitive feelings. Color cognitive impairment refers to that people are affected by internal and external environmental conditions when recognizing color information, which reduces the efficiency or function of memory, calculation, orientation, structural ability, execution ability, language understanding, expression and application process in brain function, resulting in abnormal brain function processing related to thinking judgment. Different degrees of color cognitive impairment will have a deviation in understanding and perception of the color of things, as well as the form and content of information, which will affect the ability of color information extraction and cognitive level. Patients with color cognitive impairment have great differences and difficulties in grasping the color law, extracting color information and perceiving color emotion. Without timely and effective intervention, the cognitive impairment will have a negative impact on their life and work. Oil painting is an art form based on color presentation. It is the carrier of object form and the author’s emotion. Its color includes solid color, light source color and environmental color. As a product of the integration of Chinese and Western art, image oil painting pays more attention to freehand brushwork in expression form. It is a representation of the metaphysical spiritual image, which requires people to have better perception and understanding. In the process of oil painting appreciation, patients with color cognitive impairment are difficult to get a better understanding of their artistry and value, and then it is difficult to grasp the regularity of color and the visual cognition of works, which will have a direct negative impact on people’s mood and mood. Therefore, under the background of color cognitive impairment, exploring the national cultural connotation and poetic charm of image oil painting will help to improve the perception and understanding of oil paintings, and improve their cognitive ability and judgment ability.

Objective: In order to solve the dilemma of color cognitive impairment patients’ appreciation of image oil paintings, this paper studies how to help cognitive impairment patients better understand the national cultural connotation and poetic charm of image oil paintings, and improve their cognitive level and ability.

Research objects and methods: Patients with color cognitive impairment were selected as the research