**Objective:** As we all known early childhood is the golden age for young children to lay the foundation for learning knowledge all their life. In order to cultivate high-quality talents to meet the needs of the society in the new era, enriching teaching methods in early childhood education is a good means to improve teaching quality. Learning in early childhood is very different from that in adulthood. The most prominent feature is the lack of active learning ability, because children's knowledge base is very weak in early childhood, and they often need adult guidance to correctly understand some knowledge. Therefore, teachers have a great impact on children at this stage. In order to enrich the education of children at this stage, they use psychological education methods and interactive games to make the classroom lively and interesting, so that children can gradually learn a series of abilities that play an important role in the future, such as knowledge, aesthetics and creativity, in line with their lively nature, so as to better lay the foundation for children to learn knowledge in the future.

Subjects and methods: 50 children were randomly divided into experimental group and control group. There was no significant difference between the two groups in their usual performance and self-care before the experiment. Choose the same preschool teacher to teach the same preschool education course and use two different teaching modes. In the teaching process of the experimental group, the teachers applied the knowledge of educational psychology to guide the children to complete the teaching and complete the hierarchical teaching. The control group only used the general teaching mode in the preschool education curriculum. The teaching process was accompanied by parents and videotaped. In the experimental group, children are required to feel the interest of the course through music and watching videos according to their psychological changes and interests. And provide children with the props they need in the game, encourage children more, and tolerate children's imagination that is sometimes too wild. Encourage them, and then teach them according to their aptitude from the perspective of teachers. After the course is accepted, it will be evaluated according to the teaching status of children and the reflection of parents, and the impact of the application of educational psychology in preschool education courses will be counted.

**Results:** In this survey, the influence values of specific factors are quantified in five grades of 0-4. 0 means irrelevant, 1 means slight influence, 2 means general influence, 3 means obvious influence and 4 means full influence. In order to reduce the large error caused by personal subjectivity in the evaluation, the evaluation values of 50 children are adopted and averaged to obtain the results, which are rounded, the specific statistical table is shown in Table 1.

Table 1. Influence of the application of educational psychology in preschool education curriculum

Factor	Learning interest	Learning ability	Observation power	Creative ability
Control group	2	2	1	1
Experience group	4	3	4	4

Conclusions: Through the study of children's psychology, the main purpose of implementing education by means of interactive games in the early childhood stage is to cultivate children's optimistic attitude and aggressive outlook on life. Taking the application of interactive games in the classroom as an example, this paper discusses how to use flexible interactive games in early childhood education to stimulate children's imagination, creativity and observation. This is beneficial to promote the healthy growth of children, give full play to their potential and promote the growth of intelligence. I hope it can give some reference to early childhood educators.

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## CANCER RISK PREDICTION BASED ON PERSONALIZED MEDICAL CONCEPT AND RELATED SUB-PATHWAY IDENTIFICATION IN COGNITIVE PSYCHOLOGY

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**Background:** Cancer and other complex diseases have always been important factors that seriously endanger human health. With the opening and development of human post genome era, a large number of high-throughput sequencing technologies have been continuously developed, which makes biomedical research gradually get rid of the constraints of traditional research methods. On this basis, research methods relying on big data have also been proposed, which has accelerated the research process of various complex diseases such as cancer in the biomedical field, and its research method has gradually changed from single

gene analysis to finding genes or biological pathways dysregulated in the cellular process. Biological pathway plays an important role in human life activities, and its small changes may lead to the occurrence of some cancer to a certain extent. Biological pathway analysis has become an important direction of cancer research. At present, the commonly used cancer pathway recognition technologies are mainly divided into two categories: Gene enrichment analysis and network-based pathway recognition methods. These two methods find the relationship between cancer and pathway according to the gene function and network structure of pathway respectively. Biological pathway expansion is also an important cancer pathway analysis method. It mainly studies the genes closely related to the pathway in the human gene network to find the emerging possible pathogenic genes, which is of great significance for exploring the mechanism of cancer, finding drug targets and early prediction of cancer. Personalized medicine refers to a customized medical model based on personal genome information and combined with proteome, metabolome and other relevant internal environment information to design the best treatment scheme for patients in order to maximize the treatment effect and minimize the side effects. Based on the concept of personalized medicine, with the progress of a large number of biological experiments, biological pathway data is also accumulating, which makes the demand for visualization increasing.

Cognitive psychology, a psychological trend of thought and research direction rising in the West in the mid-1950s. In a broad sense, it refers to the study of human advanced psychological processes, mainly cognitive processes, such as attention, perception, representation, memory, creativity, problem solving, speech and thinking. Using the knowledge of cognitive psychology, through the identification of cancer pathways and based on the concept of personalized medical treatment, the cancer risk is predicted.

Objective: The emergence and development of cancer is a very complex process. Traditional cancer research focuses on single gene analysis, such as analyzing the impact of a protein on biological phenotype, and studying the functional role of a single gene or a mutation. Traditional research methods mainly combine the process of human life activities, by comparing the expression of genes in cancer tissues and normal tissues to find the differentially expressed gene set related to cancer, so as to accurately locate the pathological genes that play an important role in the generation and development of cancer cells, and help biomedical scholars better understand the mechanism of cancer generation and development. However, it is found that these cancer markers cannot be well applied to other data sets and do not have good universality. At the same time, with the rapid development of bioinformatics at home and abroad, a large number of biomedical experiments are being carried out in an orderly manner, and various high-throughput technologies have been continuously developed and put into experiments, such as genes, diseases, proteins, drugs, pathways and other biological data. The emergence of massive bioinformatics data provides rich resources for biomedical research. In recent years, it has become more and more important to explore unknown biological information by integrating various existing bioinformatics data and mining the relationship between various biological entities. The analysis of pathway data has gradually become one of the important bioinformatics methods to understand other types of "omics" data. The interest of biomedical scholars in metabonomic and systems biology is also growing, which also increases the demand for pathway analysis, calculation and visualization. On this basis, path visualization tools and systems based on personalized medical concept data have sprung up.

**Subjects and methods:** Using interview analysis, 10 attending oncologists were randomly selected for interview. The access time is 15-25 mins. Interview content: From the perspective of cognitive psychology, this paper discusses the impact of cancer risk prediction based on personalized medical concept and related sub pathway identification by analyzing patients' clinical symptoms, cancer screening results and protein network.

**Methods:** The impact of cancer risk prediction based on personalized medical concept and related sub pathway identification under excel statistical cognitive psychology.

**Results:** According to the survey results, the influence values of specific factors are quantified in five grades of 0-4. 0 means irrelevant, 1 means slight influence, 2 means general influence, 3 means obvious influence and 4 means full influence. The specific statistical table is shown in Table 1.

**Table 1.** Impact of cancer risk prediction based on personalized medical concept and related sub pathway identification under cognitive psychology

Factor	Patient symptoms	Cancer screening	Protein network
Attending physician of oncology department	4	4	4

Conclusions: Modern medical research has found that cellular processes and pathways play a direct or indirect role in the generation of complex human diseases. Finding pathogenic genes and dysregulated pathways that may be related to the mechanism of cancer has become a research hotspot. Whether it is

biomedicine or systems biology, its research results are very important for cancer treatment Prediction and the exploration of drug targets are of great significance.

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## APPLICATION OF SOCIAL PSYCHOLOGY IN IDEOLOGICAL AND POLITICAL EDUCATION AND PSYCHOTHERAPY OF COLLEGE STUDENTS

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Background: Influenced by their own personality characteristics, growth environment and college life experience, contemporary college students are generally irritable and anxious. Although moderate anxiety psychology has certain positive significance to some individual living conditions, in the final analysis, Anxiety Psychology is a negative psychology. It will not only bring positive effects to people, but also bring a series of negative effects. When anxiety develops to an excessive state of anxiety, it is seriously harmful to individual physical and mental health. Therefore, it is urgent to strengthen the ideological and political psychological education of college students and solve the problem of psychological education of college students. The traditional ideological and political theory teaching is the most important and basic carrier in college students' Ideological and political education. However, since entering the 21st century, facing the complex political and ideological development situation at home and abroad, more and more colleges and universities have begun to realize that they can no longer only rely on the traditional ideological and political theory course as a single communication channel for students' Ideological and political education, We must actively broaden and innovate the teaching carrier of students' ideological and political education and enrich the ways for students to receive ideological and political education. On a deeper level, the concept of Ideological and political education in college curriculum can effectively promote the healthy development of students' psychological quality. Colleges and universities not only need to adopt the new educational concept of curriculum ideological and political education to innovate the traditional ideological and political education, but also constantly broaden the vision of ideological and political educators from the perspective of modernization, the world and the future, break through various limitations in the traditional ideological and political education in colleges and universities with innovative spirit, and use the knowledge of social psychology, only by studying the law of psychological and behavioral changes in the interaction between Ideological and political psychological education and psychotherapy in society can we effectively open up a new situation of Ideological and political courses in colleges and universities.

**Objective:** Social psychology plays an important role in college students' ideological and political psychological education and psychotherapy. Mental health education is an important part of Ideological and political education in colleges and universities.

Subjects and methods: With the application of social psychology, the concept of Ideological and political psychological education in college courses plays a positive guiding role in students' psychological development and treatment, can help students establish correct values and learning views, and has a very curative effect on students' psychological diseases. It can be seen that the psychological situation of students needs to be alleviated by the way of Ideological and political education in college courses. Starting from social psychology, this paper studies the concept of Ideological and political psychological education in college courses, and studies students' self-confidence, sense of responsibility, emotional change, personality and personality stability. By issuing questionnaires, the investigators need to be issued twice before and after. The first is the questionnaire survey after the normal ideological and political psychological education for the researchers, and the second is the questionnaire survey after the ideological and political psychological education with the knowledge of social psychology. Through the comparison of the two survey results, this paper statistically analyzes the impact of college curriculum ideological and political psychological education on students from the perspective of social psychology.

**Study design:** A stratified cluster random sampling method was used to investigate 1000 students. Five universities were randomly selected, and 200 students were randomly selected from each university, regardless of gender, age and major. A total of 1000 students were surveyed. 1000 questionnaires were distributed in the first survey, 972 questionnaires were recovered and 963 valid questionnaires. In the second survey, 1000 questionnaires were distributed, 985 were recovered and 979 were valid.

**Methods:** The influence of the application of social psychology in college students' ideological and political psychological education and psychotherapy was analyzed by Excel.