THE EFFECT OF PSYCHOLOGICAL INTERVENTION ON THE EXPRESSION OF TPP1 AND POT1 IN HEPATITIS, CIRRHOSIS AND HEPATOCELLULAR CARCINOMA AND ITS CLINICAL SIGNIFICANCE

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Telomere-binding proteins are abnormally expressed in various tumors and are associated with telomere length and telomerase activity. As an important molecule in telomere-binding protein, TPP1 has been studied in a variety of tumors, including glioma, oral squamous cell carcinoma, colon cancer, and non-small cell lung cancer. POT1-TPP1, a subunit of shelterin, binds telomere overhangs, inhibits the ATR-dependent DNA damage response, and recruits telomerase to telomeres for DNA replication. Its interaction with TPP1 is required for POT1 localization to telomeres and chromosome end protection. Therefore, the POT1-TPP1 complex is essential for telomere maintenance and for the ability to synthesize intact telomerase. But the expression of POT1-TPP1 in liver cirrhosis and hepatocellular carcinoma has not been reported yet. In addition, psychological factors are considered to have a moderating role in the progression of cancer, and studies have reported that psychological intervention based on mindfulness group cognitive therapy can improve the psychological status of cancer patients, improve their medication compliance, reduce physical symptoms, and improve their life. However, it has not been reported whether psychological intervention can regulate the progression of cancer by affecting the expression of cancer genes. Therefore, this study intends to investigate the gene expression of TPP1 and POT1 in the process of hepatitis, liver cirrhosis and hepatocellular carcinoma, whether the expression level changes after psychological intervention and its clinical significance.

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DESIGN OF MECHANICAL TEACHING AIDS BASED ON CHILD PSYCHOLOGY AND USER DEMAND

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Background: With the implementation of the three-child policy in China, Chinese parents and teachers are paying more attention to quality of education for children. As such, there is an urgent need to improve the comprehensive ability of children. To cultivate the engineering mindset as well as practical and innovative ability of children aged 7-11, a mechanical teaching aid for children was designed and studied from the perspectives of child psychology and user demand.

Teaching aids for children are products that meet the educational and recreational demands of children at different growth stages and can cultivate their abilities, thereby promoting their perceptual, language, intelligence and personality development. Among them, mechanical teaching aids in particular can cultivate engineering thinking, logical thinking as well as practical and innovative abilities in children. However, the real demands and psychology of children are ignored in most current teaching aid designs for children, leading to a slow improvement in their abilities, low learning interest and difficulty in practical application of their knowledge. Hence, it is important to study the design of mechanical teaching aids for children.

Subjects and methods: This study adopted the theory of cognitive development, the analytic hierarchy process, quality function deployment (QFD) and the theory of inventive problem solving (TRIZ). User demand was obtained via observation, interviews and surveys. The analytic hierarchy process was used to calculate the weights of user demands. A house of quality was constructed to convert user demands into technical parameters for the design. Based on TRIZ, a negative correlation problem in the design technology was converted into a standard problem.

Results: When designing children's mechanical structure teaching aids, the key points of the design are the product size, mechanical parts, graphic introduction instructions, as well as the stability and reliability of connectors and high color saturation.

Conclusions: A mechanical teaching aid for children was innovatively designed in accordance with the psychological features of children, importance of design elements and innovation principles. This expands the application of mechanical principles to the field of teaching aids for children and provides a reference for the design of mechanical teaching aids for children.

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AN EXPLORATORY RESEARCH ON ADVERTISING STRATEGY AND BRAND BUILDING BASED ON USER PSYCHOLOGICAL NEEDS ANALYSIS

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Background: With the constant intensification of market competition and the change of consumer's consumption concept, whether an enterprise can succeed in the market depends not only on products and services with excellent quality, but also on having well-known famous brands. A successful brand is the most powerful weapon and the most valuable asset for enterprises in the market competition. However, in today's increasingly fierce brand competition, there are still many people who are confused or misunderstood about what brand is, what are the basic elements of brand equity, and how to accumulate brand equity, so that they lose their rules in the process of marketing. At present, the "customer-oriented" thinking mode has been widely recognized, and the trend of brand research on consumer psychology in the process of communication has followed. This trend will definitely dominate the brand building, image packaging, advertising strategy formulation and business philosophy of many enterprises and businesses in the future. Psychological analysis of users in advertising and marketing is one of the supporting theories of brand building in recent years.

Subjects and methods: Based on the discussion of consumer psychology, especially consumer insight theory, and the concept and connotation of brand communication, this paper focuses on how to build an all-round brand communication process system. Combining the psychological model of users accepting online advertisements with the hierarchical effect model of online advertisements, the psychological stages of users that affect the effect of online advertisements are obtained. Based on the characteristics of each stage of users' psychology, this paper analyzes the problems that users encounter in each stage of psychology. This paper deeply analyzes the psychological mechanism and research methods of emotional factors in brand building, and puts forward the brand strategy of how to create emotional symbolic significance. So as to guide enterprises to make multi-media image packaging and advertising strategies, and clarify the importance of psychology related theories for effective brand building and communication.

Results: The growth process of brand is the development process of the relationship between brand and consumers. The degree of development of this relationship can be reflected in four aspects: brand awareness, brand association, brand reputation and brand loyalty. With its rich content, strong interactivity, accurate positioning to specific audience groups and low operating cost, Internet has quickly gained the favor of advertisers. However, with the spread of online advertisements on various websites, users become numb to online advertisements, and even actively avoid watching advertisements in the process of browsing websites.

Conclusions: Effective advertising can stimulate the relevant experiences and emotions of target consumers to realize the symbolic significance of the brand. The strategy of self-persuasion and self-imagery focuses on letting consumers imagine and own and experience the consumption process in an emotional way. A little increase in brand loyalty will lead to a substantial increase in brand profits. Therefore, improving brand loyalty is the most effective way for enterprises to achieve sustained profit growth. To create the association of symbolic interests of consumers, we should highlight the quality of enterprise services, and provide personalized products and special services for consumers to meet the psychological needs of different customers, so as to maintain the long-term good relationship between brands and customers and realize brand loyalty.

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EFFECTIVE COLLEGE ENGLISH TEACHING STRATEGIES BASED ON THE PERSPECTIVE OF PRACTICAL PSYCHOLOGY

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Background: Vocabulary is the foundation of language. Vocabulary teaching is the difficulty and focus of English teaching. The current situation of vocabulary teaching is problematic. Front-line teachers have their methods of conducting vocabulary teaching, which lacks systematicity and theory. The relationship between vocabulary learning and memory is particularly close. Cognitive psychology's research on the laws of memory and the results of the processing level theory can be used for reference.

Subjects and methods: The research objects are two liberal arts and art classes in the school's second grade. There are 59 students in Class A (35 boys and 24 girls). Fifty-seven students in class B (30 boys and 27 girls). There are no differences in the statistical data of the sample selected this time in terms of age and