

design. With the rise of traditional national fashion elements, adding traditional Han clothing accessories to women's clothing brand design is more likely to awaken women's deep sense of national identity and pride, so as to manifest this part of psychological needs and add power to women's clothing design and sales.

Objective: By analyzing the psychological characteristics of women's clothing consumers, this study integrates the traditional Han clothing accessories and characteristics into women's clothing brand design, so as to awaken the national identity needs of women's consumers and urge women's clothing design innovation.

Subjects and methods: This study uses the method of assigning perceptual elements to quantitative evaluation, uses the k-means method to analyze the data of traditional Chinese clothing accessories and elements, studies the contribution of traditional Chinese clothing accessories and elements to national style in women's clothing brand design, and further associates them with women's consumer psychology.

Study design: This study will number the elements of Han clothing decoration, traditional materials and colors such as embroidery, buttons, step shaking and earrings, and finally gather them into data groups with different characteristics. Cluster analysis is carried out by K-means method to study the influence of different characteristics of traditional Han clothing accessories on the degree of national style in women's clothing design. Then, the correlation analysis is carried out by investigating women's preference for traditional elements.

Methods: The data were analyzed by SPSS.

Results: According to the five main factors of pattern, color, style, detail and fabric in the process of dress design, this study carries out grouping and style analysis. The results of different clustering centers of K-means algorithm are shown in Table 1. Table 1 shows the design combinations of six groups of ethnic styles, among which the groups with "*" are more popular with women. It can be seen that moderate ethnic styles are more popular with women.

Table 1. Cluster center results

| Essential factor | Group 1 | Group 2 | Group 3* | Group 4* | Group 5 | Group 6 |
|----------------------------|---------|---------|-----------|-----------|---------|---------|
| Pattern | 3.61 | 4.01 | 3.44 | 0.36 | 0.65 | 0.25 |
| Color | 3.32 | 3.72 | 2.62 | 2.84 | 2.93 | 0.71 |
| Style | 3.62 | 3.41 | 3.16 | 3.91 | 3.02 | 3.52 |
| Details | 3.53 | 0.75 | 3.82 | 3.52 | 3.62 | 3.56 |
| Fabric | 3.51 | 4.12 | 0.95 | 3.33 | 0.63 | 1.91 |
| Total score | 17.59 | 16.01 | 13.99 | 13.96 | 10.85 | 9.95 |
| Strength of national style | Strong | Strong | Secondary | Secondary | Weak | Weak |

Conclusions: Consumers' consumption behavior is greatly influenced by their consumption psychology. By adding traditional Han costume accessories and elements to women's clothing design, we can arouse contemporary women's deep sense of national identity, and then promote the consumption demand at the psychological level. Traditional Han clothing accessories and elements can affect the overall national style of clothing from five aspects: pattern, color, style, detail and fabric, and then affect the preferences of female consumers. By controlling different elements in the design process, we can achieve the effect of improving the national style of clothing and the love of female consumers, and provide a new path for the innovative design of female clothing.

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THE DEVELOPMENT TREND OF NEW MEDIA IN 5G ERA BASED ON SOCIAL PSYCHOLOGY

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Background: 5G (5th generation) is the abbreviation of "the fifth-generation mobile communication technology". It is a new generation of broadband mobile communication technology with the characteristics of high rate and low time delay. This technology can interconnect people, machines and things, and provides great convenience for people's daily life and work. Since the release of the first 5G standard in 2018 and the subsequent networking construction, and then the combination of 5G technology with the

Internet of vehicles and the Internet, 5G technology has been integrated into all aspects of our life and greatly improved the quality of life and scientific and technological well-being. The 5G era not only represents the progress and innovation of information technology, but also accelerates people's cognitive level of innovative ways of information dissemination. Technology is an important driving force to promote information dissemination and media integration. Media integration is a new trend of media development in the digital era, and gradually presents the characteristics of media form, media pattern, communication channel, communication content, communication scope and user experience. VR technology, micro-video and artificial intelligence synthetic anchor are the products of the combination of 5G technology and new media. The innovation of forms and contents such as county-level financial media and cross-border cooperation has also greatly improved the user audience's sense of experience and satisfaction. 5G technology integrates the emerging products and forms under the development of new media, accelerates the deconstruction and reconstruction of the traditional media pattern, and connects the relationship among media, products, users and industries. However, there are still some restrictions on the popularization of its application scope, the guarantee of content emotion and the connection with the audience. The reason is that 5G new media technology takes less consideration of people's acceptance of technical products in the development process, and technology takes less comprehensive consideration of people's "individuality" and "sociality". While technology changes our way of life, we should also pay attention to the "temperature" between technology and humanities. The use of social psychology can effectively feedback people's feelings and needs to the society, so as to enable technical managers to create products and artistic presentation effects with more life, service and emotion. As a marginal science between psychology and sociology, social psychology is not only a branch of psychology, but also a branch of sociology. Its research content is a series of effects brought by the changes of individual psychological activities and their changes under specific social living conditions. The research scope of social psychology involves the individual level, group level and social level. In the process of socialization, the interaction and communication between individuals, groups and groups, individuals and groups have certain objective laws, which can better allocate resources on the basis of measuring the changes of people's psychological characteristics in society. With the help of social psychology, we can better deal with the relationship between individuals and group society, and speed up the growth and improvement of new things such as technology, so that it can provide more humanized services on the premise of conforming to the objective law. Scientific restraint of human behavior and continuous improvement of social security mechanism can effectively promote the social cycle, realize benign development, and ensure the normal promotion of social management and the vigorous development of technical media.

Objective: To further promote the depth and breadth of the combination of 5G technology and new media, promote the innovation of new media communication media and means, and make it better serve the audience. With the help of social psychology, the research effectively connects individual people with social groups, so as to explore the development trend of new media in the 5G era and make it more diversified, efficient and scientific. The innovation of technological media can effectively realize the accuracy of media products and the "boundlessness" of information dissemination, establish the conscience cycle and effective feedback among society, groups and individuals, and enrich the theoretical knowledge of social psychology.

Research objects and methods: 500 consumers, 5G technicians and media workers in a city were randomly surveyed by stratified cluster sampling, their opinions and feelings on the current development of new media were collected, and the influence of the Likert scale on the experimental data was graded, that is, from level 1-5, it indicates the degree of influence from light to heavy.

Method design: According to the differences of experience media technology products, consumers were randomly divided into experimental group and control group for comparative experimental analysis, that is, the subjects in the experimental group were invited to experience 5G new media product technology, while the control group experienced conventional media technology. The consumption feedback of the two groups before and after the experiment was collected. And feedback the two groups' demand for new media technology to technicians in order to explore the new development trend of new media in the 5G era.

Methods: SPSS statistical analysis tool and excel tool were used to analyze the experimental data as a whole.

Results: The technical products under the development of 5G technology and new media can effectively improve consumers' satisfaction with technical products, and the score data before and after the experiment are quite different, while the experience of consumers brought by conventional new media technology is poor. It is found in the data that the development needs of new media technology in the 5G era are gradually showing diversified and personalized characteristics. Table 1 shows the comparison results of the satisfaction scores of the two groups of subjects on the new media technology before and after the experiment.

Table 1. The two groups of subjects' satisfaction scores of new media technologies before and after the experiment were compared

| Impact indicators | | Satisfaction of basic functions of the product | Product innovation | User friendly design |
|-------------------|--------|--|--------------------|----------------------|
| Experience group | Before | 4.19 | 3.21 | 3.25 |
| | After | 4.27 | 4.85 | 4.79 |
| Control group | Before | 3.92 | 3.46 | 3.18 |
| | After | 3.54 | 3.68 | 3.21 |

Conclusions: The application of 5G technology breaks the gap between virtual reality and the real world. Its integration with media technology enables information to construct a “virtual reality scene” in the process of communication, expands the scope of people’s contact and perception of the world, and gradually becomes a “witness” and “field observer” of news events in a three-dimensional and multi sensory reception situation. With the help of social psychology, it can promote the innovation of 5G media’s new technical means and the improvement of service quality, effectively build a communication bridge between individuals and social groups, and make the new media more humanized and accurate.

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APPLICATION OF INTELLIGENT TECHNOLOGY IN ELECTRICAL AUTOMATION CONTROL UNDER THE BACKGROUND OF COGNITIVE IMPAIRMENT

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Background: As a functional impairment disorder, cognitive impairment often leads to the reduction of the computational efficiency of human brain in calculation, orientation, structure and execution ability, and different degrees of cognitive impairment will have different effects on people’s overall function and survival function, resulting in abnormal information processing processes related to learning, memory and thinking judgment, and behavioral disorders. When patients with cognitive impairment perceive information, such as learning and memory, there is a deviation in understanding and perception of the form and content of information, which makes the functional imbalance of neural information in the process of activity, resulting in the conflict between the information person’s sense of information and the original cognition. The confusion of information increases the difficulty of information extraction. Mild cognitive impairment mainly refers to mild memory or other cognitive impairment beyond the allowable range of their age, with the normal ability of daily living. In the field of epidemiological research, it is found that the proportion of mild cognitive impairment is increasing year by year. Effective early intervention for cognitive impairment can improve the cognitive level of patients and improve their attention and understanding. The performance of the electrical automation control system will affect the group’s extraction of system software operation information, the use performance and evaluation of related products, and then produce different psychological feedback. And intelligent technology not only improves the efficiency of electrical automation control and enterprise efficiency, but also increases the difficulty for technicians to skillfully operate the control system and improves the employment threshold. Intelligent technology puts forward more requirements and standards for the performance of electrical automation control system, but the lack of technical proficiency and relevant working experience make the software designers of automation control system less consider the service needs and cognitive level of cognitive impairment groups in software performance optimization. Thus, this group has certain difficulties and potential safety hazards in the use of technology-related products. Considering the development of electrical technology and automation technology, we can further improve the cognitive ability of electrical professionals, and further improve their ability to adapt to the development of automation technology.

Objective: Starting from the needs of people with cognitive impairment, innovate and optimize the function of electrical automatic control technology, design a barrier-free electrical automatic control application system for patients with cognitive impairment, improve the optimization of electrical automatic control performance, such as the simplicity of calculation instructions and the differentiation of functions, and upgrade the application software of control engineering.