

## THE TRANSFORMATION OF AESTHETIC MENTAL OF ANIMATION AUDIENCE IN THE DIGITAL AGE

Gaofeng Mi, Chuanzhi Chen, Wenwen Wang, Ke Zhou & Hui Qi

*College of Art and Design, Shaanxi University of Science & Technology, Xi'an, 710021, Shaanxi, China*

**Background:** With the advent of the digital age, digital technologies centered on sensory perception are being further applied in animation creation, such as three-dimensional image, holographic projection, virtual reality and motion capture, which has highlighted the digital characteristics of animation images. With regard to the way of acceptance and experience, particularly, there have been notable differences from traditional animation. Obviously, the intervention of digital technology has greatly affected the audience's aesthetic psychological activities in the stages of cognition, emotion and experience of animation works. The core issues of this paper are to clarify the new characteristics of animation aesthetic experience brought by digital technology and the transformation process of audience's aesthetic mental in the digital age.

**Subjects and methods:** With the animation audience as the subject and aesthetic mental as a research tool, this paper mainly analyzes the aesthetic psychological structure in animation art from two aspects, i.e., audience physiological perception and psychological experience, and comparing the differences between traditional animation and digital animation in physiological perception such as vision, hearing and touch, emotional experience and image association, and focusing on the main characteristics of the aesthetic psychological transformation of animation audience from traditional animation to digital animation.

**Results:** The aesthetic value of animation derives from the psychological satisfaction obtained by the audience in the process of watching the film, which produces a wonderful aesthetic pleasure. Unlike the real image, the role of animation is composed of lines, colors, shapes and space. It is a virtual abstract visual modeling, which interprets humans' perceptual cognition and emotional association of life. With the development of society, the audience's aesthetic psychological construction of animation has undergone a long process. In the period of traditional animation, the audience formed a relatively mature and stable aesthetic sub consciousness for animation images. In the period of digital animation, digital technology has brought about a wholly new aesthetic experience involving more interactivity and immersion for animation.

**Conclusions:** The aesthetic psychological transformation of animation audience in the digital age is reflected in the following aspects, First, animation represents a combination of art and technology. The iterative upgrading of computer software and hardware technology has changed the creative mode of traditional animation. Emerging digital animation technologies such as paperless animation, three-dimensional animation and interactive animation have become the main tools of animation production, which has greatly promoted the rapid development of animation art.

Second, digital technology reshapes the perception form of traditional animation aesthetics, expands the multi-dimensional space of audience aesthetic experience from vision, hearing and touch, deconstructs the audience's aesthetic experience of traditional animation art by aesthetic perception, understanding and imagination with greater audio-visual impact and emotional explosiveness, and reconstructs aesthetic psychological sub consciousness toward digital animation.

Third, the aesthetic experience of digital animation pays more attention to the existence of audience groups. In meeting the appreciation habits, aesthetic interests, interests and emotional needs, it constantly adjusts and matches the emotional changes and psychological needs of different audience groups by means of diversified, intelligent, digital and accurate sensory simulation, so as to strengthen the emotional experience of audiences in animation aesthetic activities, making it more diversified and personalized.

Finally, as the core driving force of innovative animation aesthetic experience, the support of digital animation technology platform improves the construction of audience's aesthetic mental such as cognition, emotion and association toward animation. Meanwhile, the aesthetic ability and appreciation level of the audience have also been continuously improved. The rapid development of digital technology has created infinite space for further realizing the audience's ultimate pursuit of the aesthetic value of animation art.

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## APPLICATION OF IMPROVED APRIORI ALGORITHM IN MENTAL HEALTH MONITORING

Ping Huang & Wei Deng

*Shenzhen Power Supply Bureau Co., Ltd, Shenzhen, Guangdong, 518000, China*

Apriori algorithm is a classic algorithm in data mining that can mine the frequent set of items required for association rules. A classic example of its application is supermarket shopping analytics. Aiming at the current mental health evaluation system of colleges and universities, it proposes to apply the improved Apriori algorithm to analyze the mental health of students of different grades and different genders, and then provide a decision-making basis for the construction of the mental health evaluation system of colleges and universities, and provide some suggestions for the mental health guidance of college students. In this paper, the health information of college students is extracted by using data mining technology, and the correlation rules related to psychological symptoms are mined, and then embedded in the mental health management system to predict the psychological changes of college students. As one of the most frequently used algorithms in data mining, the Apriori algorithm still has the disadvantages of repeated searching databases and candidate datasets, resulting in high algorithm complexity and low data mining efficiency. Based on the CM\_Apriori algorithm and the PM\_Apriori algorithm, the scanning process of the Apriori algorithm is improved in combination with the genetic algorithm. The multi-threaded scanning transaction data set is used to split into data blocks to establish correlation rules. The data test results show that the efficiency of the improved algorithm is about 8.9-18.7% higher than that of the PM\_Apriori algorithm, which verifies the effectiveness of the system. This paper combines the improved Apriori algorithm with the established psychological correlation analysis system for college students, based on the collected psychological assessment data and basic information of college students, uses the improved mining algorithm, and analyzes some laws and characteristics of college students' psychological related factors from the results, providing new ideas for college students' mental health education.

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## APPLICATION OF DECISION TREE ALGORITHM IN ADOLESCENT MENTAL HEALTH ASSESSMENT

Ping Huang & Xinlin Liu

*Shenzhen Power Supply Bureau Co., Ltd, Shenzhen, Guangdong, 518000, China*

Knowledge discovery in databases is currently a fairly active research field involving disciplines such as artificial intelligence, databases, statistics, etc. Decision trees are one of the common techniques for discovering classification models and have been extensively studied and made great progress. However, due to the use of greedy algorithms in the construction process of decision trees, the decision tree is easy to overfit, the scale is too large, and the length of the resulting rules is too long. This paper uses decision trees and association rules to data mine the mental health files of students in colleges and universities, and obtains valuable information. The core of data mining is to build a model, commonly used modeling methods are decision trees, neural networks, rough sets, association rules, etc., this study uses the decision tree and association rules method. Through the selection of C4.5 classification algorithm after evaluation, the significant characteristic attributes that may cause psychological crises are analyzed, and the students are judged whether there may be mental health problems according to the different values of the feature attributes. In the selection process of feature attributes, this paper draws on the opinions of student management experts and performs regression analysis on some attributes, and finally selects the most significant feature attributes such as personality characteristics, family composition, family economics, family relationships, leave situations, and failure situations for decision tree modeling, and extracts the 10 rules with red lines of early warning results to describe the model. The results show that the system in the paper avoids the defects of the current mental health intelligent evaluation system, improves the accuracy of mental health intelligent evaluation, improves the efficiency of mental health intelligent evaluation, and the system stability is better, which can be better applied to the actual work of mental health intelligent evaluation.

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