\* \* \* \* \*

# RESEARCH ON COLOR MULTI FOCUS IMAGE FUSION METHOD DYNAMIC MONITORING AND ANALYSIS OF ANXIETY PSYCHOLOGY OF COLLEGE STUDENTS

#### Zhifang Cai

#### Beijing Polytechnic, Beijing 100176, China

Background: With the rapid development of microelectronic technology and digital image processing technology, the application scope of various image sensors has gradually expanded, including military positioning, geological science, medical imaging and other fields. Image sensor is mainly divided into two types: multi-channel sensor and single channel sensor. The former can carry out multi-directional data acquisition for the target object, and then obtain rich and accurate image information, but it has high redundancy. The image data collected by the latter only includes part of the information, and cannot be used alone, lack of convenience. Based on this, using image fusion technology can effectively integrate the key information of image data, and finally generate a single composite data with high availability. In the image fusion technology, the color multi-focus image fusion method is a technology optimized based on the gray image fusion method. It can take the brightness component of the color image as the fusion object, and then realize the accurate selection of the pixels of the source image, effectively improve the problem of color distortion, reduce the error of image component fusion, and finally obtain a good image fusion effect. At present, college students are in the key stage of psychological development and social role transformation, their psychological maturity is low, and they are very vulnerable to various external factors, so there are different degrees of anxiety. The severity of anxiety psychology of college students will have different effects on their daily study and life. Anxiety psychology in the normal range will promote students' enthusiasm in study and life. If their anxiety is very serious and even develops to a morbid level, it will be difficult for students' normal learning or life activities to maintain a normal state. Accurate dynamic monitoring and analysis of college students' anxiety psychology is helpful to grasp students' psychological changes and mental health status, so as to take corresponding measures in time to effectively alleviate their anxiety psychology.

**Objective:** In view of the current widespread anxiety psychology of college students, it is extremely necessary to take certain measures. Serious anxiety psychology will lead to psychological or behavioral deviation of students, showing excessive anxiety, panic, fear and other emotions in the face of unknown things, and even difficult to maintain normal study or life. The research will use the color multi-focus image fusion method to dynamically monitor and analyze the anxiety psychology of college students, in order to alleviate the anxiety psychology of college students, improve their mental health level and ensure the normal development of their learning and life activities.

**Subjects and methods:** 83 college students were selected as the research object, and the color multi-focus image fusion method was used to intervene and dynamically monitor and analyze their anxiety psychology. The twenty-four-color hue ring is used to detect the anxiety of college students, especially the four colors of blue, green, pink and purple, which represent four different types of anxiety: tension, irritability, loneliness and depression.

**Research design:** Before and after the intervention experiment, the intervention effect was evaluated and analyzed by Beck Anxiety Inventory (BAI). BAI contains 21 evaluation items. The level 4 score of 0-3 is used to evaluate the subjective anxiety of the evaluation object. The evaluation standard is "0", which means no anxiety. "1" indicates mild anxiety, "2" indicates moderate anxiety, and the degree of anxiety is in a tolerable range, "3" means severe anxiety, that is, the degree of anxiety is extremely serious and unbearable. The BAI score is positively correlated with the anxiety degree of the subject. If the BAI score of the subject is less than 5, it means that the subject has no anxiety. A score between 5 and 25 indicates mild anxiety. A score in the range of 26 to 35 indicates that the subject is accompanied by moderate anxiety. If the score is 36 or above, it indicates that the subject is accompanied by severe anxiety.

**Methods:** For the BAI score of college students, it needs to be multiplied by 1.19 and rounded. The rounded result can be used as the final BAI score. All evaluation data were statistically analyzed by Minitab software and statistical software.

**Results:** 83 college students were intervened and evaluated by using the color multi-focus image fusion method. It was found that before the intervention, there were a large number of students with four different types of anxiety: tension, irritability, loneliness and depression. Most of the students were in mild, moderate and severe anxiety states respectively. After the intervention, the number of students with tension, irritability, loneliness and depression decreased significantly, and the number of students evaluated

### as no anxiety increased to 65.

**Conclusions:** The color multi focus image fusion method has high accuracy in the dynamic monitoring of college students' anxiety psychology. It can effectively monitor the changes of students' anxiety psychology, effectively alleviate their anxiety, reduce their BAI score and improve their mental health level.

Time		Before intervention (%)	After intervention (%)
Hue map appearance	Blue	21 (25.30)	7 (8.43)
	Green	17 (20.48)	4 (4.82)
	Pink	25 (30.12)	6 (7.23)
	Purple	15 (18.07)	2 (2.41)
	Normal 24 colors	5 (6.02)	64 (77.11)
BAI rating	0	8 (9.64)	65 (78.31)
	1	20 (24.10)	11 (13.25)
	2	31 (37.35)	5 (6.02)
	3	24 (28.92)	2 (2.41)

 Table 1. Anxiety changes of college students [n (%)]

\* \* \* \* \*

## STUDY ON THE PSYCHOLOGICAL IMPACT OF NETWORK VISUAL MEDIA ON PEOPLE WITH AFFECTIVE DISORDER

### Xuejin Hu

#### Xiangshan Film and Television College, Ningbo University of Finance and Economics, Ningbo 315010, China

Background: Since the 21st century, with the continuous development of big data technology, media integration has gradually attracted extensive attention. The original intention of media integration mainly refers to the integration of various types of media under the active promotion of digital electronic technology, showing the development trend of multi-functional integration. In the process of practical application and development, the concept of media integration is gradually upgraded from narrow sense to broad sense. The former mainly means that different traditional media forms penetrate and integrate with each other, forming a new media form while producing qualitative change. The latter refers to the integration and alliance of different media elements, including media form, media practice, media technology, media organization and so on. In the environment of media integration, network visual communication media has broken through various limitations of traditional media, showing the advantages of information reconstruction, diversified communication, cross-border integration and Paradigm Innovation. Compared with traditional media, online visual media is no longer limited to non-screen media, such as newspapers, impurities, radio, etc. instead, it takes screen delivery as the leading force, and uses TV, advertising, Internet and other platforms, as well as various mobile terminals such as mobile phones and tablets as communication carriers to form a new communication ecosystem of online visual communication. Network visual communication media has a larger scope of influence and influence, and its audience is large, which can achieve better visual communication effect. In the huge audience, people with affective disorders account for a large proportion. In the current environment of increasingly fierce social competition and increasing life pressure, affective disorders show significant multiple occurrences. Affective disorder is a kind of mental and psychological disease. Its pathogenic causes are mainly divided into three categories: genetic factors, biological factors and psychosocial factors. The clinical manifestations of affective disorder include mania and depression. The former is accompanied by high emotion, high energy, increased speech activity and so on. The latter is characterized by depression, fatigue and dullness, and a significant reduction in speech activities. Different from the general population, people with affective disorders usually have different psychological effects and external manifestations when facing the network visual media.

**Objective:** In the process of continuous updating and optimization of network visual media, the feelings of the audience continue to change and show some differences. The research will focus on the psychological perspective of people with affective disorders and explore the psychological impact of online visual media on people with affective disorders.

Subjects and methods: 248 online audiences with affective disorders were randomly selected as the