

\* \* \* \* \*

## STUDY ON THE EFFECT OF URBAN ELEVATED ROAD GREENING ON ALLEVIATING DRIVERS' MENTAL ANXIETY

Hong Luo

*Academy of Fine Arts, Henan Vocational Institute of Arts, Zhengzhou 450043, China*

**Background:** With the continuous improvement of China's social and economic level, the traffic pressure in major cities shows a significant growth trend. In order to reduce the negative impact of urban traffic congestion, major cities choose to build elevated roads to enrich driving routes, realize vehicle diversion, and finally alleviate urban traffic pressure. As the core component of urban viaduct, the greening of urban viaduct is very important. Different from the greening of ordinary roads, the greening of urban elevated roads has a more complex site environment. Under the influence of huge changes in space or drop, the ecological factors of greening plants of urban elevated roads have changed accordingly, including lighting conditions, rainwater resources, etc. To promote the realization of viaduct greening function, it is necessary to ensure the rationality of greening design. At present, the greening of urban viaduct has attracted more and more attention for its diversified functions. The common functions of urban elevated road greening include maintaining traffic safety, beautifying road environment, noise reduction and dust prevention. In addition, reasonable urban elevated road greening can also accurately guide and predict the driver's driving sight, so as to eliminate the tension or visual fatigue in the driving process, and then effectively alleviate the driver's mental anxiety.

**Objective:** In the current traffic environment, drivers may face traffic jams, congestion and other external factors, so as to keep them in the state of driving for a long time, which will lead to visual fatigue and psychological anxiety during driving, which has a great impact on their driving safety. The greening of urban viaduct can reduce the driver's visual fatigue to a certain extent, and then effectively control the driver's mental anxiety level. This study will explore the mitigation effect of urban elevated road greening on drivers' mental anxiety, in order to explore a more reasonable urban elevated road greening design scheme, eliminate drivers' mental anxiety and ensure their driving safety.

**Research objects and methods:** This study will take the form of questionnaire to explore the improvement of drivers' mental anxiety under the greening of urban elevated roads. Set up a questionnaire survey point near the entrance and exit of the urban viaduct, randomly select 420 drivers to complete the questionnaire within 10 minutes, and then immediately recycle the questionnaire. Through the contents of the questionnaire, we can analyze the improvement of driver's mental anxiety under the greening of urban viaduct.

**Research design:** The main content of the questionnaire is Self-rating Anxiety Scale (SAS), which enables drivers to score their own anxiety level before and after driving into the elevated road. In this project, 420 questionnaires were distributed, and 417 valid questionnaires were recovered, with a recovery rate of 99.29%.

**Methods:** SAS was used to score the mental anxiety level of drivers, and the SAS standard score of drivers could be obtained by expanding the score results by 1.25 times. The SAS standard score is 50, and a score lower than 50 indicates that there is no mental anxiety disorder, otherwise there is mental anxiety disorder. Using Excel and SPSS 19.0 software for statistics and analysis, and comparing the SAS standard scores of drivers before and after driving into the urban viaduct, we can get the impact of urban viaduct greening on alleviating drivers' mental anxiety.

**Results:** The results of the questionnaire showed that before driving into the urban viaduct, the average SAS standard score of drivers was 61.07, indicating that the average level was mental anxiety. After driving out of the urban viaduct, the average SAS standard score decreased significantly. At the two time points before and after driving into the urban viaduct, the number of drivers whose SAS standard score is lower than 50, which measures the anxiety level, increased significantly, and the number of drivers whose SAS standard score is higher than 50 decreased significantly.

**Table 1.** Statistics of drivers before and after driving into urban elevated green roads

Time	Number of drivers		Average
	Less than 50 points	50 points and above	
Before driving in	129	288	61.07
After driving in	292	125	52.37

**Conclusions:** The greening and rationality of urban elevated roads have a significant impact on drivers. If the greening setting of urban elevated roads is not reasonable, such as blocking the line of sight of passing cars and too many kinds of plants, it will be difficult to alleviate drivers' visual fatigue and improve the ornamental function of traffic environment, and will also have a certain negative impact on drivers, such as distracting the driver's attention, interfering with the driver's normal driving, reducing the driver's sensitivity to road information, prolonging the driver's response time to various road conditions, etc. Beautiful and reasonable urban elevated road greening can significantly reduce the SAS standard score of drivers, and can effectively alleviate the mental anxiety of drivers. In the construction of urban viaduct, the setting of road greening is very necessary. Reasonable urban viaduct greening can effectively alleviate the mental anxiety of drivers and ensure traffic safety.

\* \* \* \* \*

## THE INNOVATION OF THINKING MODE IN VISUAL INTERIOR DESIGN AND THE VISUAL CURE OF USERS' MENTAL ANXIETY

Rui Fu

*Industrial Design and Arts Department, Hunan Industry Polytechnic, Changsha 410208, China*

**Background:** With the rapid development of society, people have entered a big data era. Fierce social competition, explosive growth of information and fast-paced life mode make modern people's life more and more stressful, resulting in more and more mental anxiety disorders. Researchers believe that anxiety can be regarded as an emotional reflection of people's serious deterioration of the value characteristics of future things or the value characteristics of real things. Anxiety can be divided into realistic anxiety and pathological intercourse anxiety. Realistic anxiety refers to a basic emotional response of people to adapt to the problems they encounter and solve them. It is a normal emotion of people, which will disappear with the disappearance of realistic threats. Previous studies have confirmed that mild realistic anxiety can make people pay more attention, so as to improve the efficiency of learning and work. However, case anxiety is the continuous feeling of anxiety without reason, or the feeling of threat and disaster without basis. The social function of people suffering from mental anxiety disorder will be impaired, which will seriously affect their daily life. Therefore, reasonable and effective treatment of mental anxiety is of great significance to people's healthy life and the stable development of society.

Visual interior design creates an indoor environment with reasonable functions and meeting the needs of people's material and spiritual life according to the nature and environment of the building. The elements of visual interior design mainly include space elements, color elements, light and shadow elements, decoration elements, furnishing elements and greening elements. The core of modern visual interior design is people-oriented, creating an ideal indoor environment for users, so as to meet the spiritual needs of users and bring pleasant feelings. Therefore, in order to achieve this goal, it is necessary to innovate the current thinking mode of visual interior design. To solve this problem, the research puts forward the following strategies: analyze the user's behavior psychology, carefully and put yourself in the user's shoes; fully understand users' visual feelings and needs; cultivate the divergent thinking of interior visual communication designers; promote the contemporary thinking of visual communication designers; improve the skill level of visual communication designers; deeply study the visual aspects of space organization, color and lighting to set off the indoor environment atmosphere. Through the above strategies, create an indoor living environment to meet the needs of users and realize the emotional communication between users and the indoor environment, which is of positive significance to cure users' mental anxiety and effectively maintain the development of social stability.

Due to the acceleration of social modernization, people's pace of life is becoming faster and faster. The huge pressure of social competition makes mental anxiety more and more common among people. This paper discusses the thinking innovation mode in visual interior design, and puts forward several solutions to alleviate users' mental anxiety and maintain the stable development of society.

**Subjects and methods:** 68 patients with mental anxiety were selected as the research object, and the anxiety and depression of patients with mental anxiety were evaluated with Self-rating Anxiety Scale (SAS) and Self-rating Depression Scale (SDS), so as to evaluate the innovation of thinking mode in visual interior design and the curative effect of users' mental anxiety symptoms.

**Study design:** 68 patients with mental anxiety were randomly divided into control group and study group, with 34 people in each group. The study group used visual interior design works with innovative thinking mode for visual healing. The control group used traditional visual interior design works for visual healing. After 6 months, the anxiety cure of the two groups were compared.