

Figure 1. Analysis of psychological causes of depression

Conclusions: With the gradual and rapid pace of urban life, the mental health level of urban residents has decreased year by year. As a typical representative of sub-health psychology, depression has become one of the main psychological problems of urban residents. In order to solve this problem, this study will combine support vector machine with relevance analysis method to analyze the impact of characteristic urban planning thinking innovation on people's depression psychology in the form of correlation factor analysis, so as to form relevant suggestions on the characteristic psychological intervention path of urban planning. The results show that characteristic urban innovation planning can have a significant positive impact on the people with depression caused by social support psychology and individual psychological cognition. Mass psychological intervention through characteristic urban planning can not only improve the mental health level of urban residents, but also promote the construction of humanistic city in the new era, and form an urban planning mode with urban residents' quality of life and living experience as the main dimension.

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RESEARCH ON THE INFLUENCE OF PHYSICAL EDUCATION IN HIGHER VOCATIONAL COLLEGES ON THE CULTIVATION OF STUDENTS' PSYCHOLOGICAL QUALITY

Yanfeng Shang¹ & Yanxia Shang^{2*}

¹Physical Education and Health Teaching Department, Wuxi Vocational Institute of Commerce, Wuxi 214153, China

²Affiliated Sport Polytechnic, Shanghai University of Sport, Shanghai 200237, China

Background: Psychological quality was initially defined as an individual's subjective and true reflection of the social objective environment. This psychological response is based on the innate genetic psychological characteristics and developed under the influence of the acquired social environment. On the premise of the stability of the social environment, the individual's psychological quality is also relatively stable. With the development of relevant psychological theories, the concept of psychological quality has also been improved to some extent. Different from the early theories, the recent theories believe that psychological quality is a basic and stable psychological quality closely related to individual social behavior after internalizing the elements of the external environment based on physiological conditions. The improved psychological quality theory connects the individual's physiological conditions with psychological quality, that is, the individual's psychological state does not only depend on psychological factors, but also on physiological factors. Therefore, when cultivating the individual's psychological quality, it is necessary to

cultivate the individual's physical quality. On this basis, the individual's psychological quality can be described as a stable psychological mechanism expressed in a multi-level structure, which is composed of two main factors, one is the core factor and the other is the special factor. The core factor mainly highlights the basic connotation and characteristics of individual psychological quality, which will be fully reflected in individual different psychological states and behavior patterns. Another special factor is composed of three main dimensions: individual cognitive quality, personality quality and adaptability. These three dimensions mainly reflect a series of processes in which individuals constantly adjust their state in the process of interaction with the external environment and then match with the external environment. The cultivation of psychological quality of higher vocational college students through physical education is an external environment that can fully mobilize students' environment and match their psychological behavior based on the cultivation of physiological quality. In this way, an effective way can be provided for the cultivation of students' psychological quality.

Objective: By analyzing the impact of physical education in higher vocational colleges on the cultivation of students' psychological quality, this study provides a campus activity strategy that can effectively cultivate students' physical and mental quality for higher vocational colleges, and helps contemporary higher vocational college students improve their physical and mental health level.

Subjects and methods: The experiment takes 200 college students as the main research object. This study combines the K-means clustering algorithm with the experimental method. The experimental method is the main framework supporting the research and the main source of research data. The K-means clustering algorithm is mainly used to classify elements on the basis of experiments and analyze the influence path of elements through classification.

Study design: The experiment set in this study is an intervention experiment. The researchers will still record the changes of students' psychological state during the experiment. On this basis, this study uses K-means clustering algorithm to classify the types of changes in students' psychological quality. This study adopts a double classification method. The two classifications are horizontal experimental classification for different application types in the experimental process. The other is to use k-means clustering algorithm to classify students' psychology, and analyze the influence of factors in the form of double classification.

Methods: SPSS was used for data statistics and analysis.

Results: The impact of physical education in higher vocational colleges on students' different psychological quality dimensions is shown in Figure 1.

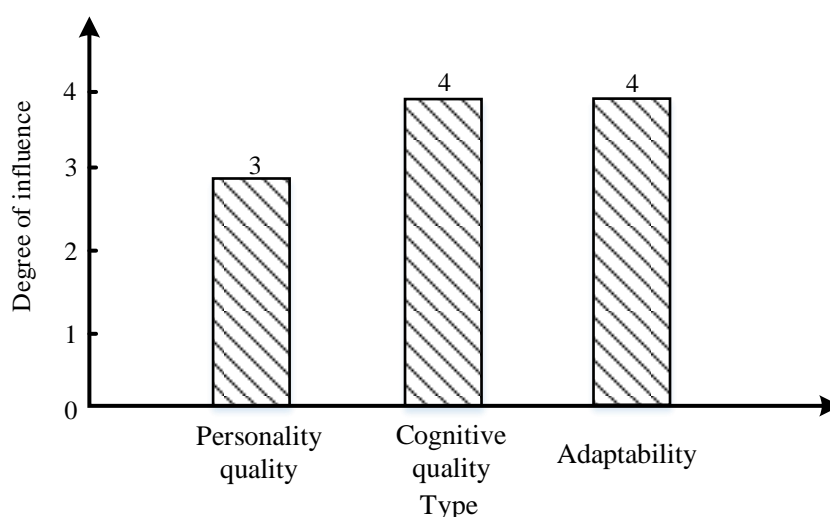


Figure 1. Dimension analysis of psychological quality

It can be seen from Figure 1 that the impact of physical education in higher vocational colleges on the cognitive quality and adaptability of students' psychological quality reaches level 4, which is a significant impact level. The influence of physical education in higher vocational colleges on the personality dimension of students' psychological quality reaches level 3, which is an obvious influence level. It can be seen that physical education in higher vocational colleges mainly affects students' psychological quality from the perspectives of cognitive quality and adaptability.

Conclusions: College is an important period for students' psychological growth, which is very necessary for the cultivation of students' psychological quality. Because the individual's psychological quality is closely related to their physiological quality, this study starts with the characteristics of students' psychological

growth, applies the physiological intervention method of campus physical exercise to students' psychological intervention, and helps students improve their psychological quality by creating the external environment of group sports. The results show that physical education in higher vocational colleges has the most significant impact on the two dimensions of students' psychological quality: cognitive quality and adaptive ability. It can be seen that physical education in higher vocational colleges mainly intervenes students' psychology from two aspects of cognitive quality and adaptive ability, so as to help students improve the level of psychological quality and promote the all-round development of students' body and mind.

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STUDY ON THE INFLUENCE OF SINGER'S PSYCHOLOGICAL ANXIETY ON MUSIC EXPRESSION

Rui Shao

Yan'an University, Yan'an 716000, China

Background: Anxiety, as an emotional response to inner anxiety and anxiety caused by external objective factors, is usually manifested in the form of persistent tension, panic attack, neurological dysfunction and so on. Due to the different external influencing factors and social individual occasions, psychological anxiety presents different forms, among which the anxiety state of singers on the stage belongs to a type of performance anxiety. Performance anxiety, also known as "stage tension", is a psychological anxiety symptom related to the stage performance situation. The performance effect of performance anxiety before and during performance is different. Individuals mainly feel psychological anxiety, which is often accompanied by autonomic nerve dysfunction, reduced memory, dry mouth color, panic, inattention and so on. During the performance, these physiological phenomena caused by anxiety may cause the singer's breath and voice to lose control, resulting in stage mistakes that should not have been made. The anxiety psychology of singers is mainly affected by two aspects. On the one hand, it is subjective psychological suggestion. For example, the singer has characteristic anxiety psychology, which shows inferiority complex and fear psychology in stage performance. These psychological characteristics may cause negative psychological suggestion, and then lead to the formation of fear and retreat psychology before the singer's miscellaneous performance. Similar psychology will lead to the loss of performance state, and then affect the performance quality. In addition, the external social environment pressure and their own social pressure faced by singers may also lead to psychological anxiety. This kind of anxiety often comes from the importance of singers for their own reputation, or the harsh requirements of the external environment for singers, which leads to serious psychological burden on singers before or during performance, and affects the expressiveness of stage music while forming physiological effects. Therefore, in the process of intervention on relevant psychological anxiety, we should focus on the factors that form singer anxiety, and reduce the adverse impact of psychological anxiety on singers through factor intervention.

Objective: Based on the psychological theory of performance anxiety, this study analyzes the possible psychological anxiety states of singers in the process of stage performance and the possible impact of these psychological anxiety states on the singer's physiology and musical expression, so as to provide a perspective for singers to carry out pre stage self-intervention and help singers overcome the anxiety of stage performance. Enhance the singer's stage performance experience and comprehensive stage performance effect.

Subjects and methods: Taking 20 singers as the main research object. Analyze the influence of different types of music performance factors through the combination of methods and support machines. In this way, the study makes a series analysis of the variables of singers in the process of psychological anxiety, and clarifies the research chain of psychological anxiety caused by external environment or their own factors, which then affects music expressiveness by using factor analysis.

Study design: In this study, the support vector machine is used as a classification tool to classify the singers with different psychological anxiety performance types in the process of stage performance, and on this basis, the element analysis is carried out. In the element analysis, the singer's psychological anxiety state is connected with the singer's stage music performance for element force analysis.

Methods: In this study, excel is used to make statistics on the data, and on this basis, computer algorithm is used for classification analysis.

Results: The influence of different psychological anxiety generating factors of singers on their anxiety