

# The Regulatory Effect of the Art of Singing on Depression of College Students

Yang Dong\*

Wuhan Institute of Design and Sciences, Wuhan 430205, China

\*Corresponding author: Yang Dong, dongyang860214@126.com

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**Abstract:** The art of singing can not only improve the emotional state of college students, but also effectively relieve their depressive symptoms. As a kind of non-drug therapy, the pleasantness, sociability and expressiveness of singing art provide a new way of emotional catharsis and mental health maintenance for college students. When universities organize college students to participate in singing art activities regularly, they will show lower levels of depression, stronger psychological resilience, and good interpersonal relationships. This paper introduces the principle of psychological and emotional regulation of singing art and the main reasons for college students' depression and discusses the specific forms and methods of singing art's regulation of college students' depression.

**Keywords:** Art of singing; College students; Depression; Moderating effect

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## 1. Introduction

With the continuous expansion of college enrollment and the deterioration of the social employment situation, the mental health problems faced by college students are more significant, and depression has become a public health challenge that cannot be ignored. Based on this background, the art of singing, as a low-cost, easy, and effective psychological intervention means, has gradually attracted the attention of academic and practical fields. As a non-invasive and side-effect-free healing method, singing art can not only help college students relieve pressure, improve mood, and enhance mental toughness but also stimulate their emotional resonance and promote their emotional expression. It can be seen that the art of singing is very important to promote the mental health of college students. This paper focuses on the concerns of universities and society and explores how singing art interferes with the depression of college students.

## 2. The psychological emotional regulation principles of vocal art

Musical emotion is an important and complex research direction in the field of music psychology, which refers to the emotional changes perceived by individuals in the process of participating in musical activities

(performance, listening, etc.). Epistemologists hold that musical emotions emphasize the cognitive processing of the content of music by the listener during the process of listening, and what is perceived is the emotions conveyed by the composer to the audience through music <sup>[1]</sup>. Emotional theorists contend that musical emotion is the emotion aroused in listeners during the appreciation of music and is a kind of emotional musical experience independently induced by music <sup>[2]</sup>.

In the structure of the ear, the basement membrane constitutes the hub for recognizing the vibration frequency of sound. The intensity of the sound will respectively trigger resonance of corresponding position frequencies, and these resonances of different position frequencies will activate the orderly arranged hair cells to produce different electrical shock (voltage or current) signals that briefly fluctuate like pulses. Subsequently, these signals are ultimately input into various parts of the auditory system of the brain by various nerve fibers via complex circuits. This serves to exchange and integrate the information received from the two ears, ultimately affording people a wide variety of musical experiences. Human emotional and physiological responses primarily rely on certain activities of the autonomic nervous system. The hypothalamus, as the integration center of the autonomic nervous system, is responsible for converting sounds into emotions and classifying emotions. Different vocal signals can generate distinct emotional patterns. Based on variations in the density of electrical impulses in nerve fibers, signals can be classified into three stimulus-level patterns: increasing, maintaining, and decreasing electrical signals. Rapid increases in density induce surprises; slower increases lead to fear; a slow increase produces attention and interest; a sudden decrease in density brings about happiness; steady decreases in density give rise to positive emotions such as pleasure, while prolonged periods of high levels result in stressful experiences <sup>[3]</sup>.

The main components of a song are lyrics, harmony, power, rhythm, melody, speed, etc. Lyrics are made by the lyricist according to some event or mood. The emotion it expresses needs to match the melody written by the composer, to achieve the effect of empathy with the singer and the audience. Harmony mainly appears in the accompaniment of the song or the melody of multi-voice singing, its setting and appearance can make the singing effect of the song more colorful (according to the change of nerve fiber discharge density can make people feel different emotional experiences). Major chords are usually thought of as sounds that produce positive emotions, while minor chords are thought of as sounds that produce negative emotions <sup>[4]</sup>. For example, a change from a concord major chord to a dissonant minor chord in a melody can cause a sudden feeling of tension, fear, mystery, and conversely, a relief from the tension. When the level of concord in the harmony steadily increases, it will produce a cheerful emotional experience. The force of music is also known in physics as the magnitude of sound. When an effect in a song suddenly increases or decreases, the hypothalamus triggers a feeling of surprise, tension, or relief.

Rhythm is constituted by regular variations in intensity, thereby forming a musical sense of rhythm and movement. Different types of rhythms in music can embody multiple emotions such as joy, anger, and sorrow within a song. When the rhythm in the music is very obvious, the emotional response generated by the hypothalamus will cause the behavioral motivation of various parts of the body movements, and people use the expression of the body to show their emotions. Melody cannot directly affect the emotional experience of music, but the indirect musical emotional experience generated by people's evaluation of music according to their cultural literacy and musical accomplishment, because the analysis and integration of pitch is completed around the human cerebral cortex, and cannot go deep into the deep analysis system such as the hypothalamus. The singing speed of a song directly affects the frequency of the electrical signal received by the hypothalamus. The musical emotional experience generated by the song at each stage is the same as the

intensity change mentioned above.

### **3. Analysis of the main causes of depression formed among college students**

The causes of depression in college students are complex and diverse, often involving multiple levels such as academic, social environment and family background. The following is a detailed analysis of the main causes of depression in college students from these three perspectives.

#### **3.1. Academic factors**

According to the relevant survey and research, 41% of students believe that there is study pressure, but it is light; 27% think it is similar to high school; 27% said they feel more pressure to study now. Only 5% said they felt no pressure to study <sup>[5]</sup>. In essence, study pressure is an abnormal emotional and physical reaction produced by individuals in the face of study. It is the result of the interaction between people and the environment, and the internal state of the body. It is a strong emotional and physiological awakening <sup>[6]</sup>. The long-term pressure from all aspects of study will eventually bring a heavy mental burden to college students, and it is easy to put them in a state of anxiety and depression.

#### **3.2. Social factors**

With the increase in the popularization rate of higher education, the employment situation of college students is becoming increasingly severe. Facing the fierce employment competition, many college students feel confused and anxious about the future, and this long-term psychological pressure is easy to cause depression. The popularity of the Internet provides college students with convenient access to information and entertainment, but at the same time, it also brings problems such as network dependence and information overload <sup>[7]</sup>. Since most students have been growing up, their parents attach great importance to their studies, and most of them live in the school, without too much social experience, nor do they have the necessary interpersonal skills, so they will inevitably show certain deficiencies in interpersonal communication <sup>[8]</sup>. Because some college students are excessively addicted to the virtual world on the Internet and ignore interpersonal communication and emotional communication in real life, loneliness and depression increase.

#### **3.3. Family factors**

On the one hand, the tense family atmosphere, the tension and disharmony of the family atmosphere and the conflicts between family members will hurt the mental health of college students. In this kind of environment for a long time, college students are easy to form a negative mental state and increase the risk of depression <sup>[9]</sup>. On the other hand, parents' expectations are too high, and high parental expectations often bring huge psychological pressure to college students. When these expectations are not in line with their abilities or interests, college students will feel frustrated and depressed, which will lead to depression.

### **4. The specific forms and approaches of regulating depression among college students by the art of singing**

#### **4.1. The specific forms of regulating depression among college students through the art of singing**

The art of singing regulates the depression of college students and belongs to the category of music therapy.

The form of adjustment is individual and group therapy. The therapist chooses the form of adjustment according to the goal, object condition and treatment environment. Individual music therapy is a one-to-one mode between the therapist and the treated, based on equal cooperation, involving empathy, empathy and other interactions. In a private music environment, the therapist guides the treated to express themselves through songs, discover problems, and deeply communicate and understand their subconscious conflicts. In a positive mood, the client tried a variety of songs to enhance positive emotions and self-evaluation. Group music therapy is more suitable for the intervention of college students than other therapeutic methods. Through listening to music, singing, playing, creating music, and a series of favorite activities of college students, they can vent their emotions, feel their true feelings, and improve their hearts in participation and feeling<sup>[10]</sup>. Group therapy creates a small “social” environment through the form of groups. It is recommended to group 6–12 people, and each group contains one-third of the members with positive emotions. In the singing interaction, members enhance understanding, adjust themselves, enhance positive emotions, and control negative emotions.

## **4.2. The specific approaches for regulating depression among university students by singing art**

The techniques of music therapy can presently be classified into three types: receptive music therapy, improvisational music therapy, and re-creative music therapy<sup>[11]</sup>. This study believes that singing therapy is mainly used in receptive music therapy and re-creative music therapy.

### **4.2.1. Regulatory approaches of receptive music therapy**

Song discussion, music synchronization, music recall, and music imagination are four effective methods in receptive music therapy.

Song discussion refers to the group mode of therapy. After listening to or singing a certain song, group members discuss the lyrics, melody, singing skills, and other aspects with each other, to increase the emotional communication between each other. In the whole process, it can also help the treated object to correct some negative emotions and behaviors. Music synchronization technology means that the therapist sings a song with the original or impromptu singing so that the treated object has a kind of “security” of being supported and accompanied. Applying singing therapy to synchronization techniques can increase the richness of the music, enhance the appeal of emotional expression, and enhance empathy with the patient. In the course of therapy, the psychologist should communicate with the patient and choose the appropriate form of music for the patient according to different situations<sup>[12,13]</sup>. Musical recall is also a commonly used music therapy technique, that is, through the singing of previous songs, the client can recall the past events or emotions corresponding to the songs<sup>[14]</sup>. In this way, the treated can release their emotions, and promote the effect of mutual comfort through discussion and support in the group. The therapist can explore the life history and personal emotions of the treated through music recall in individual or group therapy. Musical imagination means that the treated person imagines the picture of the song according to the song played or sung by the therapist. In this process, the therapist gives positive guidance. After the imagination is over, the treated person can communicate with the therapist effectively, to help the treated person have a deeper understanding of himself.

### **4.2.2. Regulatory approaches of receptive music therapy**

As a deep psychological intervention, re-creative music therapy has shown unique advantages in regulating

depression among college students. The method usually includes singing, playing, and music skills learning classes. The performance or singing of music does not require any musical training or musical skills. Conversely, re-creative music therapy is precisely designed for those treated individuals who possess no musical skills<sup>[15]</sup>. When the focus of the music activity is on the process experience, the key is not the performance of singing skills shown by the treated in the activity, but the behavior and emotional response displayed in the process of learning and singing. They can express and release their inner depression to the audience and group members through solo singing, duet singing, chorus and other ways. When the goal of the music activity is to show the achievements of singing skills, the treated subjects will try to overcome the psychological obstacles, concentrate on learning singing skills, and enhance communication and cooperation with others in a pleasant mood during the process. They interact with each other through singing, gradually reduce their avoidance of group activities, and finally achieve success in singing can significantly improve their self-evaluation and enhance self-esteem.

## 5. Conclusion

In general, the art of singing therapy is one of the important forms of music therapy, in which the mood and emotion of college students can be affected by the pitch, rhythm, melody, intensity and timbre of songs. This rich form of expression and unique way of healing can bring different experiences to college students suffering from depression. The study believes that receptive music therapy and re-creative music therapy can be mainly adopted to regulate the depression of college students, help them get out of the dilemma and meet the light, and finally promote the development of college student's mental health and promote the high-quality development of colleges and universities.

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## Disclosure statement

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