

health by promoting mental resilience; on the other hand, ecological films cannot directly improve mental health by using reevaluation strategies. There is a path of “ecological film - reevaluation - mental resilience - mental health”.

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THE APPLICATION OF AESTHETIC PSYCHOLOGY IN THE INTERPRETATION OF VOCAL MUSIC WORKS

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Background: Aesthetic psychology is a unique higher cognitive function of human beings, which has been explored by modern researchers using various methods and neurophysiological measurement tools. fMRI experiments found that some vocal music works in line with the participants' aesthetic taste resulted in stronger activation of medial and left frontal regions. ERP studies showed that aesthetic stimuli could induce a larger P3 amplitude. In addition to nerve activity, biochemical reactions almost all over the body, including blood circulation system, respiratory system, glandular secretion system and even digestive system, are obviously involved in this emotional process. In fact, the heart rate, skin electricity can not only reflect people's aesthetic psychology, aesthetic experience, and often distinguish experience strong degree of sensitive indicators: a study for some music, men's and women's preferences, wake up, such as there is no significant difference of subjective evaluation, but in the heart rate, skin conductance level and mean temperature can present different indicators, Women are more sensitive. In recent years, Silvia evaluation theory has further subdivided aesthetic psychological emotions, and therefore requires the sensitivity of corresponding neurophysiological indicators.

Two kinds of stimuli were used to induce fear and disgust respectively. The results showed that the disgust evoked by facial pictures activated the anterior insula and caudate putamen, but the disgust evoked by sound stimulation did not activate these two regions. Studies of positive emotions have found similar results: PET scans have found that aesthetically pleasing vocal music elicits increased regional cerebral blood flow in the left orbitofrontal cortex, temporal pole and superior frontal gyrus. Usually if there is a consistency across the channel to explore the emotional response is to determine the emotional types and the corresponding psychological physiological mechanism is an effective way, so in this study, using the different types of vocal music testing aesthetic experience, to the heart rate (HR) and skin conductance (GSR) as an index, through the experiment measured the autonomous physiological responses under different aesthetic psychology state, revealing the different Physiological reaction characteristics of aesthetic experience types of vocal music works; Compared with the physiological reactions of positive and negative emotions, this paper verifies the recursive relationship between aesthetic experience and positive emotions in vocal music works from the perspective of physiological reactions.

Subjects and methods: A total of 106 undergraduates were recruited from A certain university, and 76 subjects were left after eliminating those inconsistent with the purpose of inducing vocal music works, including 31 in group A. 45 people in group B; The average age was 21. Through the subjects' selection of music vocal music works to determine whether to induce their corresponding different styles of vocal music works aesthetic experience.

Study design: First of all, according to the principle that can best reflect the characteristics of the four aesthetic psychological styles, the doctor of music major selected four classical pieces: “The Imprint of rain” (beautiful style), piano Concerto No. 1 in B flat minor (magnificent style); “Wanderer Song” (tragic style), “Gavot Dance” (comedy style), and according to the experimental requirements using metronome control speed for editing, each segment lasted 2 minutes. Forty-five undergraduates were invited to evaluate again. After each song was played, the subjects were asked to immediately choose a word from the glossary of vocal music works to describe their aesthetic experience after listening to it. The next segment was played at an interval of 15 minutes. After listening to the music, 93.3% of the subjects chose words in the category of beauty to describe the aesthetic experience of “Imprint of Rain”. 84.5% chose magnificent words to describe piano Concerto No. 1 in B Flat Minor; 86.7% chose comedy words to describe the Gavot Dance; 73.3% chose tragic words to describe the aesthetic experience of the passage in The Song of the Wanderer. This shows that the emotional aesthetic experience triggered by each piece of music is also typical: beautiful music brings soothing emotions; Magnificent music brings sonorous aesthetic experience; Tragic music brings tragic experience; Comedy music brings happy aesthetic experience.

Methods of statistical analysis: The physiological responses of the subjects were recorded by multitude

instrument. Heart rate was measured by the corresponding N lead. The positive pole of the cable was connected to the left lower limb, the negative pole to the right upper limb, and the reference pole to the right lower limb (experimental parameters: filter frequency LKHZ, sensitivity LMV, time constant.2s). The skin electrical measurement electrode was positioned at the positive and negative poles of the inner acupoint and The Lao Gong acupoint, and the reference electrode was attached to the inner side of the right calf (experimental parameters: filter frequency LKHZ, sensitivity 500UV, time constant 1s).

Results: Comparison of heart rate and skin electricity under different aesthetic experiences in aesthetic psychology. The response values of subjects under different musical backgrounds were compared and analyzed with baseline values. The results showed that under the background of music, the heart rate of all styles of vocal music was decreased, comedy and magnificence were significantly lower than the original baseline value (comedy response value = 74.67 ± 4.78 , $P = 0.00$; Splendor = 74.57 ± 2.76 , $P = 0.01$), tragedy was close to significant (response = $76.751.16$, $P = 0.07$). Under the visual stimulation, the heart rate of the subjects decreased when they watched the vocal music works of different aesthetic psychology styles. The heart rate was significantly lower in comedy (response value = 74.68 ± 7.36 , $P = 0.009$) and sublime (response value = 75.66 ± 5.13 , $P = 0.02$). The heart rate changes of comedy and grand style were more significant than that of tragedy (77.23 ± 6.71 , $P = 0.541$) and grace (77.59 ± 7.88 , $P = 0.58$). In contrast, negative vocal music significantly increased the heart rate of the subjects (baseline value: heart rate = 78.89 ± 0.70 , response value = 83.85 ± 0.16 , $t = -2.18$, $P < 0.05$), and there was also a significant difference between negative vocal music and other aesthetic psychological conditions, $F(4,27) = 8.64$, $P < 0.05$. The statistical results are shown in Table 1.

Music, regardless of aesthetic type, showed a decrease in response to electro dermatitis compared with baseline (comedy = -16.02 ± 50.95 ; Tragic response = -1.34 ± 12.65 , graceful response = -2.23 ± 14.94 , magnificent response = -3.59 ± 23.54), among which, light and cheerful music induced significant difference ($P = 0.03$). When visual vocal music was presented (baseline = 0.98 ± 6.54), electrodermal response values also decreased (comedy response = -10.45 ± 48.17 ; Tragedy response value = 2.53 ± 10.81 , beautiful = 1.97 ± 8.81 , grandeur response value = 0.73 ± 20.09), but the difference is not significant. However, the electrodermal level of negative vocal music was significantly higher than that of other vocal music ($F(4,27) = 20.81$, $P = 0.000$).

Table 1. Main effect analysis of heart rate and skin electricity by different vocal work styles and channel types.

Source of variants	SS	Df	MS	F	Error n^2	Statistical test force
HR vocal work style	353.81	3	117.94	6.01	0.078	0.956
Vroral work vocal errors	4178.14	213	19.62	-	-	-
Channel type	317.85	1	317.85	0.84	0.012	0.147
Channel type error	27006.9	71	380.38	-	-	-
Vocal works style x channel type	58.47	3	19.49	0.99	0.014	0.269
GSR vocal work style	6418.38	3	2139.46	3.06	0.042	0.712
Vroral work vocal errors	146706.32	210	698.6	-	-	-
Channel type	9.77	1	9.77	0.01	0	0.051
Channel type error	82436.32	70	1177.66	-	-	-
Vocal works style x channel type	410.43	3	136.81	0.19	0.006	0.1

Conclusions: The aesthetic experience of vocal music, which is divided into four categories of beauty, beauty, tragedy and comedy, belongs to the category of positive emotions. The autonomic physiological response induced by them is similar to that of positive emotions, and the heart rate and skin electrical response induced by them are significantly lower than that of negative emotions. The aesthetic experience of vocal music works is different from the positive emotion. The aesthetic experience of vocal music works makes the heart rate and skin electricity decrease, and has a higher physiological relaxation effect, while the positive emotion does not necessarily have this reaction. The relaxation effect of comedy vocal music works is the most significant.

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AN ANALYSIS OF THE EFFECT OF FOOTBALL ON THE MENTAL AND EMOTIONAL