STUDY ON THE RELIEVING EFFECT OF MUSIC ON PATIENTS WITH ANXIETY DISORDER

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SUMMARY

Background: Since the beginning of human culture, music has been a unique therapeutic tool. Modern music therapy research has further confirmed that music directly or indirectly affects people's mood and body. Music therapy is a kind of anxiety treatment, which uses the influence of music on emotion to change people's psychological state, and then change people's ideological understanding, so as to achieve the goal of alleviating patients' anxiety.

Subjects and methods: In order to observe the effect of music therapy, explore simply listening to music and songs, and discuss whether there are differences in the treatment effect of anxiety disorder and which method will have a better treatment effect. Patients with anxiety disorder were divided into two groups. The two groups were treated with the same drug and assisted with different music therapy. Symptom checklist 90 (SCL-90), Self-rating Anxiety Scale (SAS) and heart rate variability were measured before and after treatment.

Results: Whether using music therapy alone or adding song discussion therapy on this basis can effectively alleviate the anxiety of patients with anxiety disorder, and the treatment effect of song discussion group is better than that of simple music group.

Conclusions: The results show that music therapy can reduce anxiety and has a potential positive impact on alleviating anxiety. Moreover, using the method of song discussion is more effective for the recovery of patients' condition than simply listening to music. In addition, music therapy is a safe and low-cost intervention measure, which should be more widely used in clinical treatment as an effective adjuvant therapy technology.

Key words: music therapy - song discussion - patients with anxiety disorder - psychological emotion - comparative study

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INTRODUCTION

Anxiety disorder is a kind of neurosis, which is mainly reflected in the anxiety of patients. There are two clinical manifestations of anxiety disorder, namely acute anxiety and chronic anxiety (Bojorquez et al. 2020). Its clinical manifestations are dyspnea, chest tightness, palpitation, frequent urination and urgent urination (Çift & Benlioglu 2020). Relevant studies have found that anxiety patients often have psychological conditions such as worry, panic, depression and loss, which will have a great impact on the life of patients (Latif et al. 2020). Physiologically, patients are highly alert and severe (Drzymalski et al. 2019). Among various psychotherapy methods, one is called music therapy. Music contains great influence. People's mental state can be changed by it, and people's ideological understanding can also be changed by it (Chahal et al. 2021). In order to achieve the goal of treatment, several steps of reconstruction, maintenance and promotion can effectively improve people's mental and physical health. In the process of music therapy, the therapist first understands the specific situation of the treated person, selects appropriate tracks, and specially arranges them to be played in the room, and then leads the patient to listen to music, so as to relax the patient's state as much as possible, guide the treated person to freely Associate and recall. Through the whole series of processes, the deep psychological world of the treated is excavated, and the subconscious is also presented. When the treated person gets rid of the heavy mental burden, he will naturally come out of the dilemma.

There are three kinds of music therapy techniques: receptive music therapy, reconstructive music therapy and impromptu music therapy (Gauba et al. 2021). Among them, the receptive music therapy method performs treatment by playing music to the treated person. The core is listening to music and various psychological and physiological experiences caused by listening to music. There are also many methods of receptive music therapy, including song discussion, music memory, music imagination and so on. The method of reconstructive music therapy is to let the treated person compose music, play musical instruments, sing songs and so on to participate in various music activities, so as to achieve the goal of treatment. This method does not require the treated person to have professional and technical knowledge or training in music. The focus is to let the treated object not only hear music, but also integrate into various music activities. Impromptu music therapy treats diseases through such activities by playing the desired notes on a specially customized instrument. The instruments used are often relatively simple, and you can play as much as you like even if you have never learned and trained. This study discusses whether there are differences in the treatment effect of

anxiety disorder by simply listening to music and songs, and makes an experimental study on which method will have a better treatment effect, so as to provide a theoretical reference for the treatment of anxiety disorder.

SUBJECTS AND METHODS

Study setting

Music acts on psychology through artistic appeal, guides reason with emotion, and becomes a means of treatment. It can not only affect people's mood and behavior, eliminate mental troubles, but also enhance the disease resistance of the human body. The beautiful melody of music can make people relaxed and happy and emotional stability. Rhythmic music can make people excited, excited and emotional. The connotation of "treatment" in music therapy is closer to psychotherapy, that is, with the help of music and music related forms, music therapists develop the potential of treatment objects, promote the recovery of physical and mental health, exercise life ability to meet social needs and improve their quality of life. In short, music therapy is a complete treatment process. In this process, the therapist allows patients with anxiety disorder to experience various music forms, the close relationship of mutual trust between the therapist and the treated or the treated formed in the treatment process, and the treated to explore their own deep inner experience, to help anxiety patients recover.

Design

The study volunteers were all from anxiety patients hospitalized in the department of psychology of our hospital. A total of 45 anxiety patients (19 males and 26 females, age range 26-48 years) were selected according to CCMD-3 and Hamilton Anxiety Scale (HAMA). Finally, 40 patients completed the effective test. They were randomly divided into two groups: music therapy group and song discussion group. Both groups were treated with routine anti anxiety therapy. Among them, the music therapy group: give the selected tracks, including "Moonlight Sonata", "spring river flower moonlight night" and other exciting, lively, passionate and happy music, take the way of listening, bring the patients into a quiet and comfortable room, put on headphones, and just let the patients listen to the music. Song discussion group: the therapist or patient selects the song, plays it to the patient, and then discusses the meaning of music and lyrics. Both groups were treated 3 times/week, 1 hour each time, and a course of treatment for 2 months. Symptom checklist 90 (SCL-90), self rating Anxiety Scale (SAS) and heart rate variability (HRV) were measured before and after treatment. Among them, HRV indicators include: recording the 24-hour R-R interval standard deviation (SDNN) of heart rate variability, the standard deviation (SDANN) of the average value of R-R interval every 5 minutes in 24 hours, the root means square value (R MSSD) of the difference between adjacent R-R intervals in 24 hours, and the values of various parameters analyzed in frequency domain, high frequency (HF), low frequency (LF) and LF / HF. Finally, the data are imported into SPSS 24.0 for statistical analysis. Among them, the comparison of SCL-90 results between the two groups before and after treatment is shown in Figure 1.

The comparison of pre-test and post-test difference results of SCL-90 anxiety factors between the two groups are shown in Table 1.

See Table 2 for the comparison of SAS results between the two groups before and after treatment.

See Table 3 for the comparison of HRV indexes between the two groups before and after treatment.

Table 1. Comparison of pre-test and post test difference results of SCL-90 anxiety factors between the two groups

Group	Difference measurement before and after two groups	t	P
Song discussion group	1.85±0.40	-1.947	>0.05
Simple music group	2.07±0.29		

Table 2. Comparison of SAS results between the two groups before and after treatment

SAS	Before treatment			After treatment		
	discussion group	music group	P	discussion group	music group	P
Index	68.06±4.63	86.69±6.35	<0.01	46.13±2.06	50.00±2.75	<0.01

RESULTS

Comparison of SCL-90 results between the two groups before and after treatment

There were significant differences in the ten factors in the music listening group before and after treatment, there was no significant difference in paranoia and the other two factors in the song discussion group before and after treatment, and there was significant difference in the scores of other factors before and after treatment. Moreover, before treatment, the anxiety factors related to anxiety in SCL-90 scale of

the two groups were significantly higher than the normal range, but the results of the two groups were significantly different ($P < 0.05$). There was

significant difference between the two groups after treatment. There was no significant difference between the two groups before and after treatment ($P > 0.05$).

Table 3. Comparison of HRV indexes between the two groups before and after treatment

HRV index	Before treatment			After treatment		
	Discussion group	Music group	*P*	Discussion group	Music group	*P*
SDNN	92.20±5.83	91.15±6.81	<0.01	149.90±11.01	114.40±7.38	<0.01
SDANN	72.00±8.81	75.02±8.85	<0.01	128.90±10.10	104.60±10.91	<0.01
RMSSD	22.20±1.00	22.25±1.37	<0.01	58.65±3.76	41.50±4.00	<0.01
HF	312±63.66	348±97.12	<0.01	622.00±47.85	480.65±49.56	<0.01
LF	952±170.92	1053±238.6	<0.01	567.42±202.3	975.50±152.1	<0.01
LF/HF	3.070±0.45	3.905±0.37	<0.01	0.91±0.32	2.02±.20	<0.01
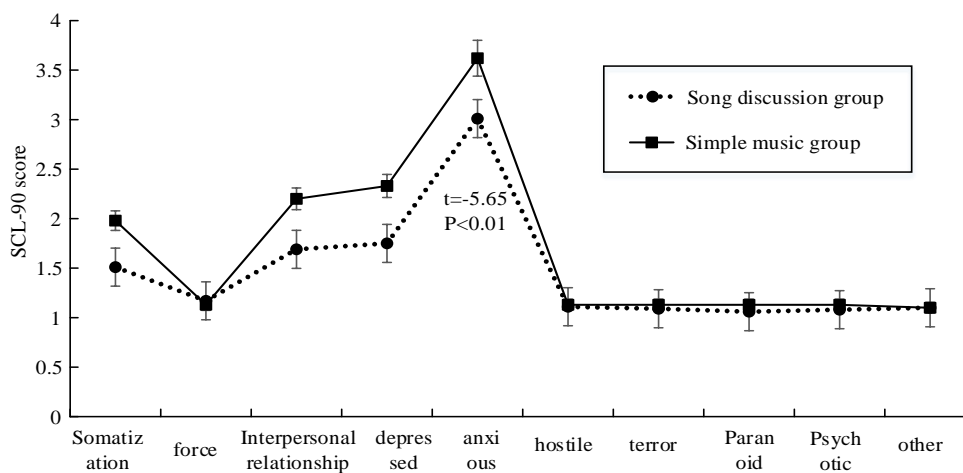
(a)Comparison between Song discussion group and simple music group before treatment
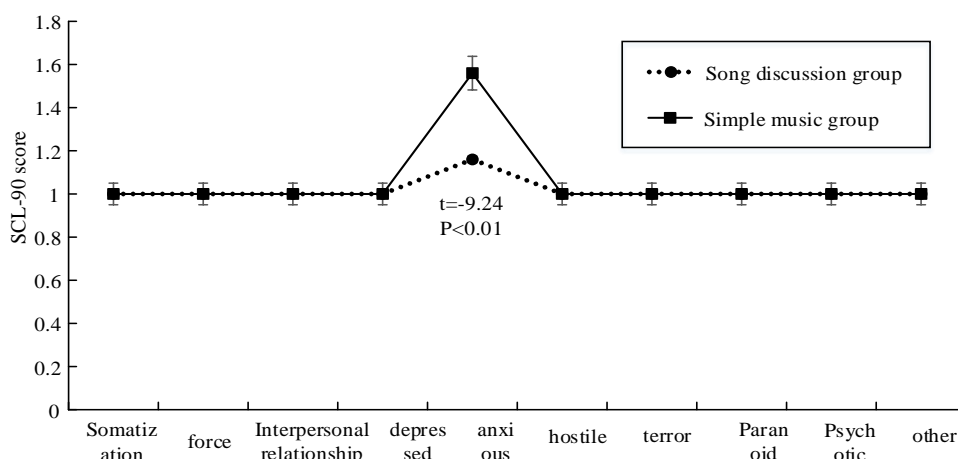
(b)Comparison between Song discussion group and simple music group after treatment

Figure 1. Comparison of SCL-90 results between the two groups before and after treatment

Comparison of SAS results between the two groups before and after treatment

Before treatment, the two groups of patients with anxiety disorder were measured by SAS scale. It can be seen that the scores of patients were more than 50 before treatment. After treatment, the scale was measured again. It was found that the score of the group treated with music alone decreased to

50.00±2.75, and the score of the group treated with song discussion was 46.12±2.06. The scores of the two groups were lower than those before treatment, and the difference was statistically significant ($P < 0.05$).

Comparison of HRV indexes between the two groups before and after treatment

Before treatment, the results of heart rate

variability in the two groups were lower than the normal range, and the low frequency / high frequency was higher than that in normal people, and there was no difference between the two groups ($P > 0.05$). After treatment, the indexes of the simple listening music group were higher than before, and the three indexes of the song discussion group were higher than the other group. The score of the low frequency / high frequency ratio showed that the score of the song discussion group was lower than that of the simple listening music group. There was significant difference between the two groups ($P < 0.05$).

DISCUSSION

Effect analysis of music therapy

Based on the previous results, this experiment considers to study the alleviating effect of music therapy on anxiety, and further selects two different treatment methods to observe whether there is any difference in the effect of treatment methods. In this trial, three indexes were selected as the reference data to determine the treatment effect. Through the method of random grouping, the patients with anxiety disorder were divided into music treatment group and song discussion group. The scores of SCL-90, SAS and HRV were measured. According to the measurement results, the score of anxiety factor in SCL-90 scale in the music listening group before treatment was 3.62±0.24, which was measured again after treatment as 1.56±0.16, and that in the song discussion group was 3.01±0.41, which was 1.16±0.09 after treatment. The scores of patients in both groups decreased significantly. Because both groups of patients were treated with drugs, the therapeutic effect was achieved by drugs and music therapy. Before SAS treatment, the score of song discussion group was 68.06±4,63 and that of music listening group was 86.69±6.35, which was much higher than that of song discussion group. After treatment, the score of song discussion group was 46.13±2.06, decreased to less than 50, and entered the normal range. The score of music listening group decreased to 50.00±2.75, which was close to the normal range. Considering the reasons, it may be that the anxiety level of the music listening group is more serious before treatment, and the self-assessment score is much higher than that of the song discussion group, so it recovers more after treatment. The three indexes of heart rate variability SDNN, SDANN and R MSSD in anxiety patients were lower than the normal range before treatment, and the low frequency (LF) / high frequency (HF) was significantly higher than the normal value. After treatment, SDNN, SDANN and R MSSD increased, and some were close to the normal range. The low frequency (LF) / high frequency (HF) ratio decreased significantly, which also reflected that the hyperactivity of cardiac sympathetic nervous system was relieved. Through the above analysis, it can be seen that the simple listening to music and song

discussion therapy in music therapy are effective in the treatment of anxiety disorder, which is consistent with the results of predecessors.

The connotation of "treatment" in music therapy is closer to psychotherapy, that is, with the help of music and music related forms, music therapists develop the potential of treatment objects, promote the recovery of physical and mental health, exercise life ability to meet social needs and improve their quality of life. Similarly, different treatment methods applied to clinical patients will also have different curative effects (Contreras-Molina et al. 2021). Whether simply giving patients music therapy or organizing patients to discuss songs, these two methods have obvious effects on alleviating the anxiety of patients with anxiety disorder. However, the effects of the two treatments are different. Since the two groups of patients participating in the experiment used the same drug treatment during the treatment, the difference in the treatment effect between the two groups after treatment can be considered as the difference in the improvement of anxiety by the two music therapy methods (Abdelhakim et al. 2019).

Comparative analysis of two therapies

In order to explore whether different music therapy methods have different therapeutic effects on patients, the data of the two groups were compared. In SCL-90 scale, the difference of anxiety factors before and after treatment in the song discussion group was 1.85±0.41, and that in music listening group was 2.07±0.29, $P > 0.05$. There was no significant difference between the two methods on anxiety factors. The difference between the two groups before and after treatment was compared. The song discussion group was 21.9±5.82 and the music listening group was 36.6±6.67. The treatment effect of the music listening group was better than that of the song discussion group ($P < 0.01$). In addition to two subjective scales, an objective physiological index, heart rate variability, is also cited in this experiment. Before treatment, the results of SDNN, SDANN, R MSSD and low frequency (LF) / high frequency (HF) of the two groups were compared, and there was no significant difference. It can be considered that the subjects of the two groups are homogeneous. Then the two groups were treated with the same drug treatment, but supplemented with different music treatment methods. After comparing the measurement results after treatment, it was found that the SDNN, SDANN and R MSSD of the patients in the song discussion group were higher than those in the simple music treatment group, indicating that the patients in the song discussion group recovered better; The score of low frequency (LF) / high frequency (HF) ratio also shows that the score of song discussion group is lower, indicating that the therapeutic effect of participating in song discussion group is better than that of listening to music group. A number of research results show that due to autonomic nerve dysfunction,

hyperactivity of sympathetic nerve, weakening of vague nerve activity, reduction of autonomic nerve function regulation ability and overall level of heart rate variability in patients with anxiety disorder.

In the comparison of the therapeutic effects of the two methods, different results were obtained. SCL scale showed that there was no significant difference between the two treatment methods. SAS scale showed that the treatment effect of music listening group was better than that of song discussion group, and the result of heart rate variability showed that the treatment effect of song discussion group was more effective in physiological function. This result may be due to the following reasons: Patients with anxiety disorder feel that they have been in an inner experience of fear, nervousness, fear, fear and anxiety (Alkahtani et al. 2020). After treatment, the patients' uncomfortable symptoms are relieved, their mood is happy, and their mood is better than before. However, when they conduct self-evaluation again, it does not rule out that some patients will pay too much attention to their physical condition, doubt the treatment effect, and make positive choices for some items in the scale. In this way, due to the influence of subjective factors, the results of the scale are not enough to truly reflect the real advantages and disadvantages of treatment methods. Human sympathetic and parasympathetic nerve activity is hyperactive or weakened. This change of physiological function is beyond the control of the patient. After treatment, patients have the ability to self-adjust autonomic nerve function, and the overall value of heart rate variability will increase (Ni et al. 2020). Therefore, the detection of physiological indexes before and after treatment may be truer and more accurate to compare the differences reflecting the treatment effect. Therefore, a comprehensive analysis of the application of song discussion in the treatment of anxiety disorder is better than simply listening to music.

CONCLUSIONS

The results show that music therapy may reduce anxiety and have a potential positive impact on alleviating anxiety. Secondly, using the method of song discussion to let patients actively participate in the music situation is more effective for the recovery of patients' condition than letting patients passively and simply listen to music. In addition, music therapy is a safe and low-cost intervention measure, which should be more widely used in clinical treatment as an effective adjuvant therapy technology.

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ON THE INNOVATIVE METHODS OF NEWS INTERVIEW FROM THE PERSPECTIVE OF MASS COMMUNICATION PSYCHOLOGY

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SUMMARY

Background: *At present, the development of new media is booming, which has brought great challenges to the development of radio and television news. Therefore, how to develop in the highly competitive environment has become a problem that all journalists must face. In view of various problems in news interview, journalists should deeply dissect and then take corresponding countermeasures to deal with them, so as to make radio and television news develop better in the new media environment.*

Subjects and methods: *From the perspective of mass communication psychology, this paper analyzes the audience psychology of the receiver, analyzes the problems existing in the news interview, puts forward a number of innovative methods of news interview according to the psychological characteristics of the interviewer and the receiver, finds out the root causes of the disadvantages in the news interview, and then solves them.*

Results: *At the same time, it is also necessary to improve the comprehensive quality and ability of the interviewers, so as to bring more and better news information to people.*

Conclusions: *To integrate mass communication psychology into the interview, should recognize the limitations of current technology application, comprehensively understand the work form of news interview, analyze the psychological characteristics and state of the receiver, and promote the development and progress of news interview industry.*

Key words: *mass communication psychology - news interview - audience psychology - news topic structure*

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INTRODUCTION

With the development of network information technology, a variety of new media continue to appear, with faster communication speed and wider audience, which has a great impact on traditional media (Khan et al. 2020). For example, in the past, the fastest media to spread news and information was radio, but in the new media era, people can get information faster with the help of computers and mobile phones. At the same time, with the increasing number of Internet users, the network has become an important way to spread information (Moravec 2019). The report of any news information is inseparable from news interview. Only by doing a good job of news interview can make news and broadcast news. Therefore, the study of news interview skills is of great significance for news reporting (Kim & Hawkins 2020).

News psychology sprouted in China at the beginning of the 20th century. A century later, Chinese mass communication psychology came out. Although there were books named after communication psychology in China at the end of 1980s, the contents of the books actually discussed news psychology, and produced the phenomenon of farfetched and seemingly indistinguishable between journalism and psychology. Journalism and psychology were not really integrated into a whole, but distinct. It was at the end of the 20th century and the beginning of the 21st century that mass communication psychology was really systematically discussed and formed a

discipline. With the reform and opening up, China's communication psychology works gradually sprung up, and many leading figures in the research of communication psychology also emerged. Some researchers mainly study the audience of radio and television, and the research method is random sampling. Some researchers have been engaged in the teaching of mass communication psychology for a long time. Some researchers focus on the creation of a harmonious psychological relationship between the media and the audience, and analyze the expectations and needs of the audience, the acceptance, attention and understanding of the audience, as well as the media guidance methods, the image of the communicator, the rebellious psychology of the audience, and the relationship between the media and the audience. Starting with the core concepts of cognitive psychology, through conceptual analysis, some researchers explore how people acquire knowledge and the cognitive structure of the audience when acquiring information. By exploring the interactive relationship between media information and the cognitive structure of the audience, they reveal the veil of media affecting the audience.

For most journalists, mastering appropriate psychological knowledge has great advantages for daily interview work. Because the news interview itself is a very complex work, often encounter a variety of people in the interview process. Psychology is mainly based on people's psychological activities and phenomena. Therefore, in the process of news