

Comparative Research of Individual and Group Music Therapy Interventions on Adjustment and Negative Coping of University Freshmen

Lu Xinyi^{1,#}, Lan Huiying^{1,#}, Huang Ziqing², Sun Wenxuan¹, Yuan Zishu^{1,*}

¹School of Health Management, Guangzhou Medical University, Guangzhou, 511495, China

²School of Mental Health, Guangzhou Medical University, Guangzhou, 511495, China

*Corresponding author: yuanzishu@gzhmu.edu.cn

#The authors contribute equally.

Keywords: Social adjustment, Negative coping, Music therapy, Individuals, Groups

Abstract: In response to the social adaptation problems of university freshmen upon entering university, music therapy is proposed to improve the social adaptability of university freshmen such as interpersonal interaction and reduce the negative coping of university freshmen when facing problems. The research purpose is to explore the effectiveness of group and individual music therapy interventions on the social adjustment and negative coping styles of university freshmen, and to explore whether there is a difference in the efficacy of the two treatments mentioned above. And the results are that group music therapy reduces negative coping in university freshmen, and individual music therapy improves adjustment and reduces negative coping in university freshmen. There is no significant difference between group music therapy and individual music therapy in improving freshmen's social maladjustment and reducing their negative coping.

1. Introduction

University is a critical period of personal growth for young people and a major turning point in their lives. Because of the vastly different learning styles, interpersonal interactions and life patterns at university, it is difficult for new university freshmen to adapt to this change of role within a short period of time. If the adaptation to the new environment is not handled properly or is not cognitively justified, individuals are unable to react and adjust in a timely manner, which affects their lives and may lead to psychological problems resulting in psychological disorders or mental illnesses ^[1]. It is therefore particularly important for university freshmen to be able to adapt to university life and study ^[2]. Therefore, universities should take effective measures to improve the social adaptability such as interpersonal interaction among university freshmen and reduce the negative responses of university freshmen when they face problems ^[3].

Music therapy is widely used in psychological counselling and as an intervention that is widely available, easy to implement and highly effective. Professor Bruscia, a famous American music therapist, gave the definition: "Music therapy is a systematic process of intervention wherein the therapist helps the client to promote health, using music experiences and the relationships that develop

through them as dynamic forces of change ^[4]." There are two forms of music therapy: individual music therapy and group music therapy. The therapist chooses different forms of therapy depending on the goals, the patient's physical and psychological conditions and the therapeutic environment. Individual therapy involves one therapist working one-to-one with one patient, with an emphasis on the patient-therapist relationship. Individual therapy is more suited to deeper levels of psychoanalysis and treatment, and it provides a safe environment for clients to open up and expose their deepest feelings and complexes and even their privacy. Group music therapy, on the other hand, allows patients to form multi-level interactions with other members of the group and the therapist in a group music activity, emphasizing the dynamic relationship between group members. Group music therapy is suitable for similar patients to come together to share their emotional experiences with each other, to gain a sense of security and identity within the group, to learn from the experiences of other members in coping with shock and distress, and to increase self-understanding and experience ^[5]. There are significant differences between the effects of individual and group music therapy on individual interpersonal relationships. Further in-depth exploration of the different effects of individual and group music therapy will provide a theoretical basis for music therapists to use different forms of music therapy to improve individual interpersonal relationships.

To synthesize these issues, this study used the Social Maladjustment and the Trait Coping Style Questionnaire to screen out university freshmen who scored higher than the norm for healthy people, and tested the effectiveness of the two forms of music therapy on improving the social adjustment and optimizing coping styles of university freshmen through the individual music therapy and group music therapy intervention models respectively. The following research hypotheses are proposed: Firstly, individual music therapy has a significant effect on improving social adjustment and reducing negative response in university freshmen. Secondly, group music therapy has a significant effect on improving social adjustment and reducing negative response in university freshmen.

This study uses two different forms of intervention, individual and group, to analyze the effectiveness of music therapy on the adjustment problems of university freshmen, which not only contributes to the healthy physical and psychological development of university freshmen, but also provides new thinking on ways to address the adjustment problems of university freshmen. Moreover, complements and develops the research on music therapy and the adjustment problems of university freshmen, and provides a reference for the direction of the application of music therapy ^[6].

2. Research design

2.1 Research Process

This experiment uses a quasi-experimental design with pre- and post-test and follow-up measurements. The study subjects were randomly assigned to a group music therapy group and an individual music therapy group. Members of the group music therapy group were given eight sessions of group music therapy, twice a week (50 minutes each). Members of the individual music therapy group were given eight sessions of group music therapy, twice a week (30-40 minutes each). A pre-test on social adjustment and negative coping styles was administered to each member before the intervention, and a post-test was administered to all group members at the end of the fourth week of treatment, with a final comparison of the group's pre-test and post-test scores to test the effectiveness of the treatment. The Social Maladjustment and the Trait Coping Styles Questionnaire (Negative Coping Styles Subscale) were used as measurement instruments and combined with qualitative materials such as the Complementary Therapist Observation Record Form to explore the effects of group music therapy and individual music therapy on the social adjustment and negative coping styles of university freshmen, with a return visit four weeks after the end of the treatment.

2.2 Purpose of the research

To explore the effects of group music therapy and individual music therapy on social adjustment and negative coping styles of university freshmen. The experimental group of university freshmen respectively underwent eight sessions of group music therapy and individual music therapy intervention. At the end of the intervention, pre- and post-test scores were used to test whether there were significant differences between the experimental groups in terms of social adjustment and negative coping styles, and to further explore the feasibility of using group music therapy and individual music therapy to improve social adjustment and reduce negative coping.

2.3 Research Subjects

2.3.1 Intervention targets

The Social Maladjustment and the Trait Coping Style Questionnaire were administered to freshmen in the grade of 2021 at a medical school in Guangzhou. 16 university freshmen with a total score higher than or equal to 14 on the Social Maladjustment and a negative coping score higher than or equal to 29 on the Trait Coping Style Questionnaire who voluntarily participated in the music therapy trial were selected as subjects. The group music therapy group includes 8 students, 7 females and 1 male. The individual music therapy group includes 8 students, 4 females and 4 males.

2.3.2 Music Therapists

The group music therapy leader and the individual music therapy therapist in this research were responsible for the initial interview assessment, the design of the individual and group music therapy sessions, and the analysis and discussion of pre- and post-treatment data.

2.4 Statistical analysis methods

2.4.1 Analysis of treatment effects

Following data entry and computation using SPSS 22.0, signed rank tests were conducted on data from pre- and post-tests of the Social Maladjustment and the Trait Coping Style Questionnaire (negative coping) for members of the group music therapy group and the individual music therapy group to analyze whether music therapy changed scores on the two scales.

2.4.2 Comparison of the effect of the two treatments

Following data entry and computation using SPSS 22.0, the change in score on both scales was obtained by subtracting the pre-test score from the post-test score. A non-parametric test of two independent samples for the amount of change was conducted in order to compare and evaluate the efficacy of the two treatments. In addition, binary regression analysis was performed to compare the efficiency of the two treatment methods.

2.5 Research instruments

2.5.1 Venue & Equipment

Venue: Music therapy room at a university in Guangzhou.

Equipment: piano, guitar, African drums, triangle, banging bells, wooden fish, rattles, sand hammers, bell drums, Bluetooth speakers and other musical equipment.

2.5.2 The Social Maladjustment

The Social Maladjustment uses a scale developed by Wiggings (1966) based on the MMPI reflecting homogeneous entries related to lack of social interaction skills. It focuses on measuring an individuals' social skills, self-attitudes and the ability to make friends with the opposite sex. The scale contains four factors: 1) Discomfort and lack of assurance in social situations. 2) Discomfort with social etiquette. 3) Lack of self-confidence. 4) Unwillingness to be the object of attention. High scores on this scale suggest shyness, restraint and reticence in social activities and interpersonal interactions.

2.5.3 The Trait Coping Style Questionnaire

The Trait Coping Style Questionnaire is used to reflect the existence of relatively stable coping strategies related to personality traits. It is divided into two main components, namely negative coping (NC) and positive coping (PC), each containing 10 items. NC and PC showed a low correlation and NC was chosen for analysis and discussion in this research.

2.5.4 Group Music Therapy Programs

A self-prepared Group Music Therapy Program was used as the main tool for this intervention experiment, which consisted of eight group music therapy sessions with targeted interventions for subjects with poor social adjustment and more negative coping styles.

2.5.5 Complementary Therapist Observation Record Form

A self-prepared Complementary Therapist Observation Record Form allows complementary therapists to observe and record information related to group members' performance, number of target behaviors and emotional state during group activities, so that therapists can make better adjustments for the following music therapy activities, and solve members' problems.

2.6 Intervention programs

2.6.1 Intervention Goals

The group music therapy group uses a case management model and sets goals based on the results of the music therapy assessment. The long-term goals of group music therapy are as follows: I. To establish good group relationships, to increase communication and interaction between visitors, and to improve the social adjustment of group members. II. To release internal stress, to reduce negative coping and to increase positive coping of group members.

The individual music therapy group uses a case management model and sets goals based on the results of the music therapy assessment. The long-term goals of individual music therapy are as follows: I. To establish a good counselling relationship, to increase communication and interaction between the visitor and the counsellor, to ease the visitor's discomfort when entering a new environment and to improve the visitor's social adjustment. II. To release internal stress, to reduce the visitor's negative ways of coping and to increase the visitor's positive ways of coping. III. Targeted improvement of the problems currently experienced by the visitor.

2.6.2 Treatment Techniques

2.6.2.1 The group music therapy group

The techniques of group music therapy are mainly based on re-creative and improvisational music

therapy, including song discussion and song adaptation, music recall, instrumental ensemble, and improvisation. The main treatment techniques used are as follows:

1) Song discussion and song adaptation: The therapist first plays a song or music clip, next leads the visitor to discuss the experience and feelings of the song or music clip, and finally makes a thematic adaptation of the lyrics, which is divided into three levels: support, cognitive-behavioral, experiential and subconscious. This research mainly deals with the support level and the cognitive-behavioral level.

2) Instrumental ensemble: Group members first choose their favorite instrument and then work together on a song in order to improve the interaction between members and to integrate them appropriately and successfully into the group.

3) Improvisation: The group members first choose a rhythmic or melodic instrument that is easy to play or that they like, and then play on a predetermined theme in order to realize the pleasure of independent performance and emotional catharsis. The leader maintains a supportive and inspiring role throughout the performance. The predetermined themes of this research were "What kind of animal am I in the forest?" and "The real me and the ideal me".

2.6.2.2 The individual music therapy group

The techniques used in individual music therapy are mainly re-creative and receptive music therapy, including song discussion and song adaptation, relaxation imagery, musical recall, instrumental ensemble playing and musical imagery drawing. The main therapeutic techniques used are described in the following sections:

1) Musical Imagery: The therapist uses positive and beautiful music as well as verbal intervention techniques to provoke and facilitate positive and beautiful experiences in order to improve mood, self-empowerment and the ability to solve problems on their own.

2) Music progressive relaxation: The therapist uses music with no obvious rhythm or structure to guide the client to feel the relaxation of the body muscles.

3) Musical imagery drawing: Musical imagery drawing is a way for visitors to draw a simple picture of their imagination and to share and discuss what the objects in the picture represent and what realistic meaning they have.

4) Improvisation: Improvisation in individual music therapy requires the visitor to play his or her feelings and thoughts about an event or person with an appropriate instrument. Based on the tone, rhythm and timbre of the performance clip, further analyze the visitor's feelings about the event or person.

3. Research Results

3.1 Quantitative analysis

Quantitative research is a research method to measure and analyze the quantifiable part of a thing, so as to test some theoretical hypotheses of the researcher. The characteristics of quantitative research are that researchers are not used as research tools in the process of research, but scales are used to conduct quantitative and computational analysis of research objects. In this research, quantitative data were obtained through pre-test and post-test of the subjects, and SPSS was used for comparative statistical analysis of the scales of the subjects, trying to conclude that music therapy can regulate, relieve or improve certain symptoms.

3.1.1 Analysis of the effect of the group music therapy

The social maladjustment scores of the group music therapy group after undergoing music therapy

minus the pre-treatment score was the difference quantity. The results in Table 1 and Table 2 show that the frequency of negative difference volume was 5, with a mean grade of 5.50, and the frequency of positive difference volume was 3, with a mean grade of 2.83. These results indicate that the scores on the social maladjustment showed a tendency to decrease to some extent, but there was no significant difference ($p=0.179>0.05$). The results do not provide support for the hypothesis that group music therapy improves social adjustment, meaning that group music therapy does not necessarily improve the social adjustment of university freshmen.

Table 1: Signed Rank Form of the group music therapy group on the pre-test and post-test of the Social Maladjustment.

		N	Mean Rank	Sum of Ranks
Post-test-Pre-test	Negative Ranks	5	5.50	27.50
	Positive Ranks	3	2.83	8.50
	Total	8		

Table 2: Results of the group music therapy group in the signed rank test of the social. Maladjustment.

	Post-test-Pre-test
Z	-1.345
Sig. (2-tailed)	0.179

The Trait Coping Style Questionnaire (NC) scores of the group music therapy group after undergoing music therapy minus the pre-treatment score was the difference quantity. The results in Tables 3 and Table 4 show that the frequency of negative difference volume was 7, with a mean grade of 4.64, and the frequency of positive difference volume was 1, with a mean grade of 3.50. These results indicate that the scores on the social maladjustment showed a tendency to decrease to some extent, and there was significant difference ($p=0.042<0.05$). The results provide support for the hypothesis that group music therapy reduces negative coping, meaning that group music therapy can reduce the negative coping in university freshmen.

Table 3: Signed Rank Form of the group music therapy group on the pre-test and post-test of the Trait Coping Style Questionnaire (NC).

		N	Mean Rank	Sum of Ranks
Post-test-Pre-test	Negative Ranks	7	4.64	32.50
	Positive Ranks	1	3.50	3.50
	Total	8		

Table 4: Results of the group music therapy group in the signed rank test of the Trait Coping Style Questionnaire (NC).

	Post-test-Pre-test
Z	-2.038
Sig. (2-tailed)	0.042

3.1.2 Analysis of the effect of the individual music therapy

The social maladjustment scores of the individual music therapy group after undergoing music therapy minus the pre-treatment score was the difference quantity. The results in Tables 5 and Table 6 show that the frequency of negative difference volume was 7, with a mean grade of 4.86, and the frequency of positive difference volume was 1, with a mean grade of 2.00. These results indicate that the scores on the social maladjustment showed a tendency to decrease to some extent, but there was no significant difference ($p=0.024<0.05$). The results provide support for the hypothesis that

individual music therapy improves social adjustment, meaning that individual music therapy can improve the social adjustment of university freshmen.

Table 5 Signed Rank Form of the individual music therapy group on the pre-test and post-test of the Social Maladjustment

		N	Mean Rank	Sum of Ranks
Post-test-Pre-test	Negative Ranks	7	4.86	34.00
	Positive Ranks	1	2.00	2.00
	Total	8		

Table 6 Results of the individual music therapy group in the signed rank test of the social maladjustment

	Post-test-Pre-test
Z	-2.252
Sig. (2-tailed)	0.024

The Trait Coping Style Questionnaire (NC) scores of the individual music therapy group after undergoing music therapy minus the pre-treatment score was the difference quantity. The results in Tables 7 and Table 8 show that the frequency of negative difference volume was 6, with a mean grade of 4.33, and the frequency of positive difference volume was 1, with a mean grade of 2.00. These results indicate that the scores on the social maladjustment showed a tendency to decrease to some extent, and there was significant difference ($p=0.043<0.05$). The results provide support for the hypothesis that individual music therapy reduces negative coping, meaning that individual music therapy can reduce the negative coping in university freshmen.

Table 7: Signed Rank Form of the individual music therapy group on the pre-test and post-test of the Trait Coping Style Questionnaire (NC).

		N	Mean Rank	Sum of Ranks
Post-test-Pre-test	Negative Ranks	6	4.33	26.00
	Positive Ranks	1	2.00	2.00
	Equivalent rank	1		
	Total	8		

Table 8: Results of the individual music therapy group in the signed rank test of the Trait Coping Style Questionnaire (NC).

	Post-test-Pre-test
Z	-2.028
Sig. (2-tailed)	0.043

3.1.3 Comparison of the two treatment methods

The change in score on both scales was obtained by subtracting the pre-test score from the post-test score. Compare and evaluate the efficacy of the two treatments by non-parametric test of two independent samples. The results in Table 9 show that there was no significant difference in the efficacy of the two treatments on the Social Maladjustment ($p=0.152>0.05$). The results in Table 10 show that there was no significant difference in the efficacy of the two treatments on the Trait Coping Style Questionnaire (NC) ($p=0.316>0.05$).

Table 9: Comparison of the efficacy of the two treatment methods.

	Post-test-Pre-test
Z	-1.432
p	0.152

Table 10: Comparison of the efficacy of the two treatment methods.

	Post-test-Pre-test
Z	-1.002
p	0.316

Binary logistic regression analyzes of the effectiveness of the two treatments in reducing social maladjustment scores were conducted. The results in Table 11 show that the use of group or individual music therapy was not an influential factor in the reduction of social maladjustment scores($p=0.268>0.05$). Binary logistic regression analyzes of the effectiveness of the two treatments in reducing negative coping scores were conducted. The results in Table 12 show that the use of group or individual music therapy was not an influential factor in the reduction of negative coping scores($p=1.000>0.05$).

Table 11: Analysis of the efficiency of two treatment methods to reduce social maladjustment.

	Regression coefficient	Standard error	Wals	p	OR	95% confidence interval of OR	
						Lower limit	Upper limit
treatment methods	1.435	1.295	1.229	0.268	4.200	0.332	53.12
constants	0.511	0.730	0.489	0.484	1.667		

Table 12: Analysis of the efficiency of two treatment methods to reduce social maladjustment.

	Regression coefficient	Standard error	Wals	p	OR	95% confidence interval of OR	
						Lower limit	Upper limit
treatment methods	<0.001	1.512	<0.001	1.000	1.000	0.052	19.36
constants	1.946	1.069	3.313	0.069	7.000		

3.2 Qualitative Analysis

Qualitative research data collection methods do not use scales or other measurement tools, and commonly used collection methods include interview method, observation method and so on. The sample size of this research was small, and the qualitative study happened to be able to describe and analyze the process of music therapy from the microscopic level. In the process of therapy, recording the treatment process by qualitative analysis is helpful for music therapists to find the problems in the process of music therapy and make introspection and adjustment.

3.2.1 The group music therapy

During the course of group music therapy, a relationship is gradually established between the visitors and between the visitors and the therapist.

In the first group music therapy session, there was little dialogue between the visitor and the visitor, mostly between the therapist and the visitor, and the visitor's voice was low when communicating. During the course of the music activities, the visitors were restrained in their actions, and most of them showed reluctance to take the initiative to do individual music activities and to undertake the role of music games, preferring music activities that were performed together in groups.

In the third group music therapy session, visitors shared music that represents each stage of learning in the past and the stories behind the music. For example, there are three visitors shared hilarious stories about a past study period, and when talking about their favorite singers, there are three visitors found group members who had the same preferences as themselves, which enhanced

the relationship between the visitors and the visitors.

In the fourth group music therapy session, most of the visitors began to take the initiative to undertake the roles in the music games, to complete the individual music activities voluntarily, and to ask questions when they were confused about the rules of the activities.

In the sixth group music therapy session, group members share their feelings about the song Look to the Stars. One member volunteered to speak, saying that the song brought her a feeling of blue. The song was then adapted to the theme of university life, from the content of classes, teachers to school canteens, etc. For example, one member said a subject is difficult, other members echoed the sentiment, and when talking about the teacher of a certain subject, one of the members took the initiative to imitate the teacher's class, which made people laugh.

In the seventh group music therapy session, the therapist asked the group members to listen to a song called Forest Rhapsody and answer the question that what animal sounds do you hear in the song. The visitors spoke actively and gave many unexpected answers, for example, some members said they heard cats and dogs.

During the last group music therapy session, one member expressed that daily chores were getting on his nerves, and another member initially offered encouragement and support. At the end of this session, the visitors actively tried several instruments in their choice of instrument, showing a tendency to explore instruments, and surprisingly, one member questioned the material of the triangle.

From the content of the return visit of group members after group music therapy, the 8 visitors have basically adapted to university life and found a suitable mode of getting along with their roommates and classmates. It is worth mentioning that one member is not satisfied with his major and is also considering changing his major. In general, each visitor has his or her own way of relieving emotional lows, such as eating snacks, listening to songs and talking to friends, etc.

3.2.2 The individual music therapy

In the pre-individual music therapy period, most of the clients are restrained and do not actively try the instruments.

Person H chose his familiar African drums directly for his first music therapy session and did not try any other instruments. Starting with the second individual music therapy session, the visitor is targeted for improvement.

Person F, who felt confused about learning English and overwhelmed by how to build relationships with her roommates when she first entered university, believed she was capable of dealing with these issues after several sessions of semi-directive musical imagery, shared more interesting things when talking to the therapist, and emerged more positive and optimistic. In the last two individual music therapy sessions, Person F reported that she has found the ways to get along with her roommates and classmates, feeling confident about her future English studies and taking the initiative to try out each instrument during improvisation accompaniment.

Person D had a fear of going on stage to debrief. After desensitization to the music system and ear worming, the visitor reported that she believed in herself more than before and had less fear when talking about going on stage to debrief and answer questions. Person D was positive and proactive in exploring and experimenting with different instruments while performing song improvisation accompaniment, and at the return visit after music therapy, reported feeling happy and more positive about things at the end of each session.

Person A was initially reluctant to reveal his thoughts to the therapist, but after several sessions with the therapist, he found that the therapist was willing to hear and help him to solve his problems, so he was able to express himself to the therapist and work with him to find a solution to his dilemma after the musical imagery drawing.

Person B was initially not interested in music therapy, but after the therapist completed the

instrumental ensemble with her, the visitor expressed a sense of fun and accomplishment and wanted to do the instrumental ensemble again in the next session.

Person G had a clear need for relaxation and calmness, and after completing two sessions of musical relaxation and musical imagery, the visitor was visibly emotionally relieved.

At the end of the individual music therapy sessions, the individual group members were interviewed, and it was clear from the content of the interviews that the eight visitors had largely adapted. They were able to see the issues they had previously felt confused about from a reasonable perspective and found a suitable pattern of getting along with their roommates and classmates. Person F is able to find ways of studying that are suitable for university, as well as ways of getting along and socializing with university roommates. Person D's fear of public speaking is reduced and he gradually finds ways to cope with public speaking. Person A is able to manage interpersonal relationships in the association and does well in the association. Person B is able to manage relationships with his roommates and achieve high grades in his studies. Person C was able to play well with his teammates in the volleyball team and won the match.

4. Discussion

The results of the individual music therapy study showed that there were significant differences in the pre and post measures of the Social Maladjustment and the Trait Coping Style Questionnaire (negative coping subscale) after individual therapy, which suggested that individual music therapy had an improved effect on the social adjustment and negative coping skills of university students. Previous research also proved this suggestion. The spirit of cooperation in musical activities is easily transferred to real life, which helps most pessimistic and self-enclosed students to open their hearts, improve their ability to communicate and understand others, and build good interpersonal relationships while knowing themselves correctly [7-8]. The visitors' ability to get along with the therapist improved in individual music therapy, and that they felt cared for in the therapy, which in turn led to them feeling supported in their adjustment to university life and further better adjusted to their new university life. In addition, the freshman receives positive and favorable emotional experiences during music therapy through musical ensembles and generalize positive attitudes to face the life events they face in their normal lives outside of therapy, i.e., positive coping with life events [9].

The results of the group music therapy study showed that group members' scores on the Social Maladjustment and the Trait Coping Style Questionnaire (negative coping subscale) decreased after group therapy, with significant differences on the Trait Coping Styles Questionnaire (negative coping subscale), but not on the Social Maladjustment. In group music therapy, individuals can gain a sense of self-efficacy through group ensemble and other ways, and help each other in groups to better adapt to the new group [10]. It is evident that university students build good relationships between group members during music therapy, are willing to speak up and participate in activities actively and positively, and express positive ideas and attitudes, which helps them to further develop good social relationships within larger social groups as well, and to cope positively with a wide range of negative events [11].

It is evident that individual music therapy improves the social adjustment of university students significantly better than group music therapy. It is possible that because in individual music therapy, university students are better able to receive holistic care and support from the therapist, whereas in a group there may be a lack of attention and avoidance of social interaction, individual music therapy is better than group music therapy for university students to improve social adjustment and help them better adapt to their new environment and integrate into their new group life.

Furthermore, there was no significant difference between individual music therapy and group

music therapy in terms of the way in which the university students coped with negative events, and both were better at improving their ability to cope positively with negative events. In both individual and group music therapy sessions, university students experience self-reflection and growth, as well as better emotional experience. University students are able to generalize their peak experiences in music therapy into their daily lives, are more motivated and proactive in seeking help or solutions to negative events and are better able to regulate their emotions^[13].

With the development of society, college students are faced with a more complex environment during their growth, which has an important impact on their mental health. Therefore, it is necessary for colleges and universities to actively carry out college students' mental health education activities through effective teaching strategies, guide students to maintain a good mood, actively cope with difficulties and setbacks, establish a correct outlook on life and values, and realize the self-value of life. Music therapy plays an irreplaceable role in college students' mental health education. Music therapy can effectively intervene in the mental health of college students, promote their physical and mental health, improve their psychological quality, guide them to form a healthy personality, edify sentiment^[12].

This study has certain research shortcomings: Firstly, the number of subjects in this study was relatively small, as the intervention subjects in this study all volunteered to participate and most of the students refused to participate in the experiment due to their academic commitments and other reasons. Secondly, it is not possible to fix the number of people in group music therapy. A small number of group members are absent because of study or research problems, which makes the study appear limited. Complementary music therapists should communicate with their visitors on this issue in a timely manner, in the hope that they will persist and actively participate in group music therapy. Thirdly, the intervention subjects in this study were uneven in terms of gender. The intervention subjects appeared to be more female than male, and since there are more female than male students at this school, this situation was more pronounced in the psychology program, resulting in an uneven distribution of males and females among subjects who met the criteria and were willing to participate in the trial. Fourthly, due to the time constraint of this study, only psychological tests were conducted before and after the treatment and a short-term post-treatment return visit to obtain short-term improvement effects of music therapy on social adjustment and coping styles, and long-term follow-up could not be done to determine the long-term effects of music therapy on improving social adjustment and reducing negative coping. In summary, further expansion of the sample is needed to select a representative sample for long-term follow-up of the visitors' treatment outcomes to address the shortcomings of this study.

5. Conclusion

Individual music therapy has a significant impact on social adjustment and enhancing trait coping styles in university students. Group music therapy has a significant impact on enhancing trait coping styles. There is no significant difference between group music therapy and individual music therapy in improving freshmen's social maladjustment and reducing their negative coping.

Acknowledgements

2023 Guangzhou Medical University First-class professional Development project-School of Health Management - Education Reform Research Project—Exploration and Practice of teaching mode based on ability training (CBE) in applied psychology major—Based on Music Therapy Course and Syllabus, Number: 02-408-2304-12062XM.

References

- [1] Li Jing, Li Bo, Zhou Cunliang, et al. A survey on the mental health status of university students in different grades and its influencing factors (in Chinese) [J]. *Journal of Jining Medical College*, 2001, (04), 32-32.
- [2] Chen Tao, Dong Xiangyu, Li Dongyang, et al. Observations on music therapy and group counselling for depression in university freshmen (in Chinese) [J]. *Journal of Guiyang College of Traditional Chinese Medicine*, 2010, 32(04):18-21.
- [3] Tian Wenhai, Liu Chunli. Problems and countermeasures on the mental health status of new students in higher education (in Chinese) [J]. *Journal of College Counselors* 2020, (05), 75-80.2020.05.015.
- [4] Kenneth E. Bruscia. *Defining Music Therapy* [M]. 2014
- [5] Wang Yu. Analysis and study of the mental health status of first-year university students (in Chinese) [J]. *Chinese Journal of Health Psychology*, 2006.06.012, (06), 630-632.
- [6] Wu Shuqi. On the need to combine mental health education with music for university students (in Chinese) [J]. *A Comparative Study of Cultural Innovation*, 2021, 5(13):13-16.
- [7] Yin J. Effect of Acceptance and Commitment Therapy Combined with Music Relaxation Therapy on the Self-Identity of College Students [J]. *Journal of healthcare engineering*, 2022, 8422903.
- [8] Ferguson S, Brass NR, Medina MA, Ryan AM. The role of school friendship stability, instability, and network size in early adolescents' social adjustment [J]. *Dev Psychol.* 2022 May; 58(5):950-962.
- [9] Wang Jin. Exploring music therapy in the adaptation education of new university students (in Chinese) [J]. *Art Criticism*, 2019(02):165-167.
- [10] Griggs S, Crawford SL. Differences in hope, core self-evaluations, emotional well-being, and health risk behaviors in freshman university students [J]. *Nurs Forum.* 2019 Oct; 54(4):505-512.
- [11] Li D. Music Therapy in Mental Health and Emotional Diversion of Primary and Secondary School Students[J]. *Occupational therapy international*, 2022, 8370682.
- [12] Nwokenna E. N., Sewagegn A. A., & Falade T. A. Effect of educational music intervention on emotion regulation skills of first-year university music education students[J]. *Medicine*, 2022, 101(47), e32041.
- [13] Chen Jin, Liu Xiaoliu, Liu Junsong, et al. Current status of music therapy research at home and abroad and the problems and countermeasures faced (in Chinese) [J]. *World's Newest Medical Information Digest*, 2018, 18(34):94-95.