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STUDY ON THE THERAPEUTIC EFFECT OF MUSIC GUIDANCE ON DEPRESSIVE PSYCHOSIS

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SUMMARY

Background: *Modern music therapy research has confirmed that music can directly or indirectly affect people's psychological emotion and physiological function. As one of the important technologies for the treatment of depressive psychosis, music guided imagination is a treatment technology that combines music and imagination, that is, using music and imagination to open the psychological world of patients with depressive psychosis, and then change their ideological understanding, so as to achieve the goal of treating depressive psychosis.*

Subjects and methods: *In order to observe the effect of music guided imagination in the treatment of depressive psychosis, 64 patients with depressive psychosis in a class III class a psychiatric hospital were selected. Through the method of random sampling, they were divided into two groups: music guided imagination intervention group (32 cases) and routine nursing control group (32 cases). During the 4-week clinical intervention, both groups were given routine nursing measures, while the intervention group was treated with music guided imagination technology twice a week for 2 hours each time. By observing the control changes of concise Psychiatric Rating Scale (BPRS), Hamilton Anxiety Scale (HAMA) and Hamilton Depression Scale (HAMD) in the two groups before and after intervention, they were used to evaluate the psychotic symptoms, anxiety and depression of patients, and statistical analysis was carried out to draw the conclusion of clinical research.*

Results: *The results showed that there was no significant difference in BPRS scale score, HAMA scale score and HAMD scale score between the two groups ($P > 0.05$). After 4 weeks of intervention, there was significant difference between the scores of the intervention group and the control group ($P < 0.05$).*

Conclusions: *After the implementation of music guided imagination technology, the psychotic symptoms, anxiety and depression of patients in the intervention group were improved, while the psychotic symptoms, anxiety and depression of patients in the control group were not greatly improved. Therefore, it can be said that music guided imagination has a good effect on the treatment of patients with depressive psychosis. In short, music guided imagination 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 guided imagination - depressive psychosis - anxiety - psychological intervention - comparative study*

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INTRODUCTION

Music guided imagination (GIM), as a technology combining music and imagination, was first invented by Dr. Helen bonny. It is committed to studying the in-depth psychotherapy and the state of consciousness transformation. In the process of research, it is found that classical music has the best effect in the in-depth transformation of visitors' consciousness (Sønmez et al. 2019). In specific GIM treatment, different types of music need to be selected according to different stages of patients, mainly including "positive affirmation music", "death resurrection music", "experience music", "analysis and comfort music", "emotional counseling music", "imagination music" and "collective experience music" (Li et al. 2019). Due to the differences of different national cultures and therapists around the world, the choice and application of music are also changing and expanding. Therapists' choice and adjustment of music has been proved to be effective. However, the effect of music has two sides. Inappropriate music may aggravate the situation. Appropriate music can promote the transformation and healing of visitors. Therefore, in the selection of music, the principles that should be followed are: the selected music can promote the formation of visual images, evoke emotional and emotional states, imply early memory, create positive feedback, promote physical relaxation and support spiritual experience (Latif et al. 2020). As a music therapy technology, music guided imagination has different theoretical orientations, including behavior theory, humanistic theory, psychodynamics theory and so on.

There are four procedures in the technical route of music guided imagination (see Figure 1 for details), namely introduction, introduction, music guided imagination and discussion. In the introduction stage of the first activity, the content of some activities is introduced. Group members know each other, and group members talk about their own problems and goals. In the subsequent group activities, the introduction stage is for members to talk about their own feelings of change, their own problems, etc. In the introduction stage, the relaxation music in CD is used to relax the whole body in combination with the muscle gradual relaxation guidelines listed in receptive music therapy. In the stage of music imagination, music and guiding language are also used to guide the imagination of group members. In the final discussion stage, group members share the content of imagination

and discuss the content of imagination. The therapist gives some discussion guidance, analysis, help and suggestions (Bojorquez et al. 2020). This study is mainly based on psychodynamic theory and Jung's analytical psychology theory. As a medium, compared with language, music can easily break through the defense mechanism of patients with depressive psychosis, explore the inner subconscious, introduce the conflicts and emotions in the subconscious to the level of consciousness, understand for depressive psychosis and therapists, and build a bridge between patients and therapists. That is to say, the picture imagined by patients with depressive psychosis is a projection, which can truly reflect their inner world. When the suppressed emotional conflict is processed and integrated at the level of consciousness, it can help depressive psychosis patients solve their problems.

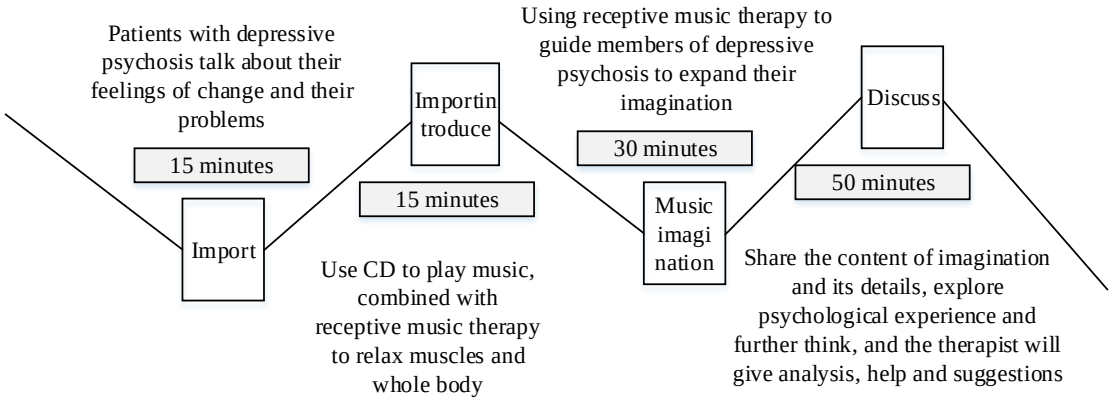

Figure 1. Technical route of music guided imagination

SUBJECTS AND METHODS

Study setting

Music guided imagination is the combination of music and imagination. It is one of the important techniques of music in the treatment of depressive psychosis. Based on psychodynamics and Jung's analytical psychology, music guided imagination technology uses music as the medium to open the door of the subconscious of patients with depressive psychosis, and let the subconscious conflicts and emotions enter the conscious level, so as to achieve the purpose of curing psychological problems in the therapeutic relationship. Music guided imagination technology has been a mature music therapy technology. Its application involves clinical consultation, mental health, postoperative rehabilitation, psychological intervention of psychiatric patients and so on. However, there are few studies on music guided imagination technology in China, especially the use of music guided imagination to intervene in depressive psychosis. In view of this, this study uses music guided imagination technology to intervene patients with depressive psychosis, and discusses its intervention effect and intervention effect.

Design

64 patients with depressive psychosis in a class III class a psychiatric hospital was selected. Through the method of random sampling, they were divided into two groups: music guided imagination intervention group (32 cases) and routine nursing control group (32 cases). The diagnostic criteria of depressive psychosis, with the help of doctor assisted diagnosis and with reference to the diagnostic criteria of depressive psychosis in the classification and diagnostic criteria of Chinese mental diseases (Third Edition), should meet 4 or more of the 9 symptoms.

The patients in the intervention group and the control group were given nursing care according to the routine treatment of psychiatry. According to the specific medication plan, routine drug paroxetine was given according to the doctor's advice. Control group: during the 4-week clinical intervention, the patients were given oral antidepressant western medicine and routine psychiatric nursing according to the doctor's advice. Intervention group: during the 4-week clinical intervention, music guided imagination technology intervention was implemented on the basis of routine psychiatric nursing and treatment (see Figure 1 for the specific process). The control changes of Brief Psychiatric Rating Scale (BPRS), Hamilton Anxiety Scale (HAMA) and Hamilton Depression Scale (HAMD) before and after intervention were observed to evaluate the psychiatric symptoms, anxiety and depression of the patients.

Evaluation tool: BPRS is applicable to most psychiatric patients with psychotic symptoms. It is not only a scale to evaluate the severity of psychotic symptoms, but also one of the professional evaluation scales widely used in psychiatry. It is divided into 18 and 20 versions, and 20 versions are used in this study. HAMA includes 14 evaluation items, and the boundary value is 14 points. Grading criteria: total score > 29 points means severe anxiety, > 21 points

means obvious anxiety, > 14 points means certain anxiety, > 7 points means possible anxiety, and < 7 points means no anxiety. HAMD grading criteria: total score > 35 points for severe depression, > 20 points for mild to moderate depression, and < 8 points for no depression. Among them, the score comparison between the two groups of BPRS at different times is shown in Figure 2.

The comparison of HAMA scores between the two groups at different times is shown in Figure 3.

The comparison of HAMD scores between the two groups at different times is shown in Figure 4.

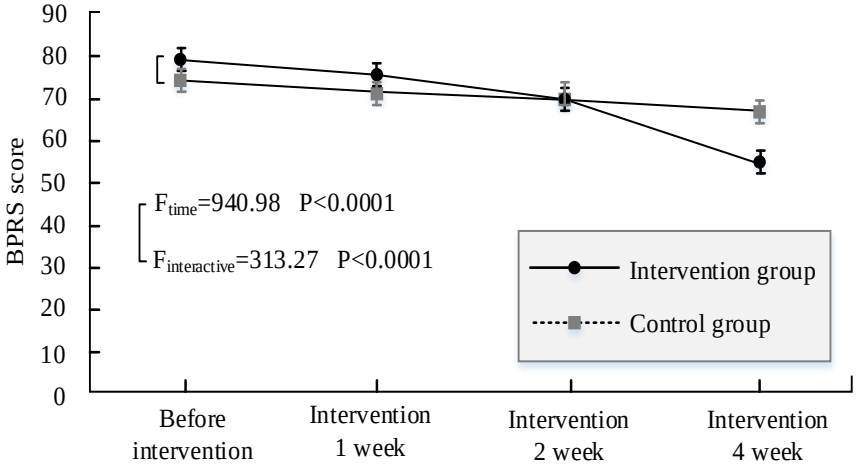

Figure 2. Comparison of BPRS scores between the two groups at different times

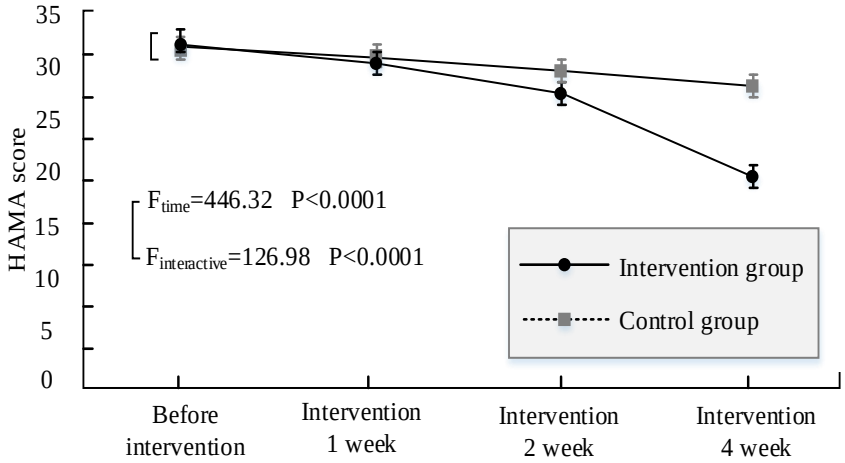

Figure 3. Comparison of HAMA scores between the two groups at different times

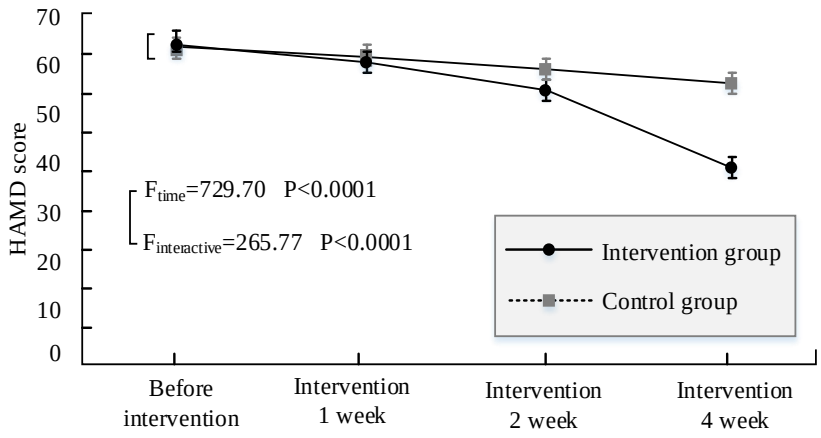

Figure 4. Comparison of HAMD scores between the two groups at different times

RESULTS

Comparison of BPRS scores between the two groups at different times

At the time of enrollment, there was no significant difference in BPRS score between the two groups ($P > 0.05$). After 1 and 2 weeks of intervention, there was no significant difference in BPRS score between the intervention group and the control group ($P > 0.05$). After 4 weeks of intervention, the BPRS score of the intervention group decreased significantly compared with the control group. At the same time, the statistical analysis of single-factor repeated measurement variance showed that there was an interaction between clinical grouping and time ($P < 0.05$). There was a significant difference between the two groups with the continuous increase of treatment time ($P < 0.05$).

Comparison of HAMA scores between the two groups at different times

There was no significant difference in HAMA score between the two groups ($P > 0.05$). After 1, 2 and 4 weeks of intervention, HAMA score analysis showed that the scores of patients in both groups decreased. Statistical analysis of single factor repeated measurement variance showed that there was an interaction between clinical grouping and time ($P < 0.05$). There was significant difference between the intervention group and the control group ($P < 0.05$).

Comparison of HAMD scores between the two groups at different times

There was no significant difference in HAMD score between the two groups ($P > 0.05$). After 1, 2 and 4 weeks of intervention, HAMD score analysis showed that the scores of patients in both groups decreased. Statistical analysis of single factor repeated measurement variance showed that there was an interaction between clinical grouping and time ($P < 0.05$). There was significant difference between the intervention group and the control group ($P < 0.05$).

DISCUSSION

Effect of music guided imagination on depressive psychosis

Depressive psychosis has a serious harm to people's mental and physical health. Its high prevalence and high recurrence rate are difficult problems in modern nursing treatment. For patients, the drug price is high and the toxic and side effects are large. Music therapy technology has been widely used and studied all over the world, and there is a mature and standardized education system (Chahal et al. 2021). In view of this, this study combined with music guided imagination technology to treat depressive psychosis. On the influence level of BPRS score of patients with depressive psychosis, the results showed that the BPRS score was (76.33±17.38) at the time of enrollment and (61.00±17.24) after 4 weeks. Statistical analysis of single factor repeated measurement variance showed that there was an interaction between clinical grouping and time. With the extension of treatment time, the BPRS score of intervention group and control group was statistically significant *(*$P < 0.05$), which shows that the implementation of music guided imagination technology has a good effect on the mental symptoms of patients. In terms of the impact on the HAMA score of patients with depressive psychosis, the HAMA score was (32.00±8.90) at the time of enrollment and (23.52±9.36) after 4 weeks The degree of anxiety changed from severe anxiety to obvious anxiety, and the anxiety symptoms improved significantly. With the extension of treatment time, the HAMA score of the intervention group and the control group was statistically significant ($P < 0.05$) This shows that the implementation of music guided imagination technology has a good effect on the anxiety status of patients. In terms of the impact on the HAMD score of patients with depressive psychosis, the HAMD score was (63.08±15.11) at the time of enrollment and (52.92±15.79) after 4 weeks. With the extension of treatment time, the HAMD score of the intervention group and the control group was statistically significant ($P < 0.05$). In conclusion, music guided imagination therapy plays an important role in the improvement of BPRS, HAMA and HAMD of depressive psychosis. Music can alleviate the patients' psychotic, depressive and anxious states, increase the patients' self-awareness of treatment and relieve their tension, improving their emergency response ability is conducive to the improvement of patients' social function and quality of life.

From the perspective of modern medicine, music therapy uses different sound wave vibrations of music to make the vibration of various organs of the body resonate with the sound wave, so as to make the tissue cells produce beneficial resonance, activate the excited parts of the nerve, and promote the coordination of the movement rhythm of various organs (Gao et al. 2019) A large number of foreign studies have confirmed that music therapy has achieved remarkable clinical experimental results in reducing blood pressure, slowing breathing, slowing heartbeat and improving microcirculation, which can eliminate the tension and depression caused by various factors Although the results of this study do not reflect the above arguments, this clinical study is based on the above views, and the study is feasible.

Problems and prospects of music guided imagination therapy

Throughout the development of depressive psychosis, it is not difficult to find that depressive

psychosis is one of the diseases often studied by ancient and modern physicians. Although the western medicine treatment effect of depression is obvious, the drug cost is high, its side effects are large, long-term use is easy to produce drug resistance, dependence and certain damage to gastrointestinal tract, liver and blood system (Contreras-Molina et al. 2021). Adverse drug reactions reduce the quality of life of patients. At the same time, patients' rejection is serious and it is difficult to adhere to medication, which limits its wide clinical application. Compared with traditional treatment methods, music therapy has the characteristics of non intervention, non-invasive and painless, which makes patients more willing to accept (Abdelhakim et al. 2019).

At present, music guided imagination therapy is still a new subject in its infancy, and its clinical theoretical mechanism is not perfect. Through the analysis, it is found that there are still many deficiencies in the research of music guided imagination technology. The existing treatment form of music guided imagination therapy is relatively single, and some patients are skeptical about its therapy. They subjectively think that its efficacy is not as good as drugs, poor compliance and cannot adhere to the treatment, which increases the difficulty of clinical case collection (Riley et al. 2019). Due to the limited clinical research conditions, limited sampling and small sample size, the clinical research is still imperfect, and the conclusions also have some limitations. In addition, although music guided imagination therapy developed late in China, music therapy has been applied and studied in various fields such as medicine, education, nursing and so on. The deficiency is that most of the research on music therapy in China is the research of psychology or musicology, and there is still a lack of systematic training system for the education of the combination of music and psychology. Professional music therapists are essential for the future development of music therapy in China (Chahal et al. 2021). Because China has its own system and principle of traditional music, the combination of Chinese classical music and music guided imagination therapy is a potential development direction in the future. That is to say, Chinese traditional music has unique charm with its soft melody, leisurely and complacent tone and mild timbre. There are many records in the medical books and anthologies of ancient doctors on the methods of treating diseases with five tones. Music can purify people's soul and cultivate their sentiment, which is helpful to promote the harmonious and healthy development of body and mind. Music guided imagination can be well combined with China's traditional five element music, which has been studied, which can be used as a direction for the development of music therapy in the future.

CONCLUSIONS

On the basis of previous studies, this study improved and innovated the experiment, adopted more careful experimental design and more accurate statistical methods, and evaluated different treatment times and various aspects of depressive psychosis, so as to evaluate the efficacy of music guided imagination technology. The conclusions include: BPRS, BPRS and BPRS of music guided imagination therapy for depressive psychosis HAMA and HAMD play an important role in improvement, moreover, with the increase of music guided imagination treatment time, the treatment effect is more and more significant. In short, as a safe, non-toxic and effective treatment method, music guided imagination therapy plays an irreplaceable positive role in traditional drug treatment, which is worthy of popularization and application.

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Conflict of interest: *None to declare.*

References

1. *Abdelhakim AM, Samy A & Abbas AM: Effect of music in reducing patient anxiety during colposcopy: a systematic review and meta-analysis of randomized controlled trials. Journal of Gynecology Obstetrics and Human Reproduction 2019; 48:855-861*
2. *Bojorquez GR, Jackson KE & Andrews AK: Music therapy for surgical patients: approach for managing pain and anxiety. Critical Care Nursing Quarterly 2020; 43:81-85*
3. *Chahal JK, Sharma P & Rawat HCL: Effect of music therapy on ICU induced anxiety and physiological parameters among ICU patients: an experimental study in a tertiary care hospital of India. Clinical Epidemiology and Global Health 2021; 11:100716*
4. *Contreras-Molina M, Rueda-Núñez A, Pérez-Collado ML & García-Maestro A: Effect of music therapy on anxiety and pain in the critical polytraumatised patient. Enfermería Intensiva (English ed.) 2021; 32:79-87*
5. *Gao Y, Wei Y, Yang W, Jiang L, Li X, Ding J & Ding G: The effectiveness of music therapy for terminally ill patients: a meta-analysis and systematic review. Journal of Pain and Symptom Management 2019; 57:319-329*
6. *Latif AI, Alhidayat NS, Putra SH, Erika KA, Ningrat S & Syahrul S: Effectiveness of music therapy in reducing the level of anxiety among cancer patients undergoing chemotherapy. Enfermería Clínica 2020; 30:304-307*
7. *Li HC, Wang HH, Lu CY, Chen TB, Lin YH & Lee I. The effect of music therapy on reducing depression in people with dementia: a systematic review and meta-analysis. Geriatric Nursing 2019; 40:510-516*
8. *Riley M, Colson TL & Smothers M: Music therapy's role in the education system. Kentucky Teacher Education Journal: The Journal of the Teacher Education Division of the Kentucky Council for Exceptional Children 2019; 6:5-21*
9. *Sønmez N, Romm KL, Østefjells T, Grande M, Jensen LH, Hummelen B, Tesli M, Melle I & Røssberg JI:*

Cognitive behavior therapy in early psychosis with a focus on depression and low self-esteem: a randomized controlled trial. Comprehensive Psychiatry 2019; 97:152157

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ANALYSIS ON INFLUENCING FACTORS OF COLLEGE STUDENTS' EMPLOYMENT INTENTION CONSIDERING BEHAVIORAL PSYCHOLOGY

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SUMMARY

Background: *Considering the influencing factors of college students' employment intention from the perspective of behavioral psychology, the effective job-hunting behavior of college students is regarded as the premise of successful employment. Job-hunting behavior is a complex dynamic process. In this project, the psychological factors affecting the success of students' employment are analyzed. The employment of college students has always been the focus of society. Therefore, from the perspective of sexual behavior psychology, this paper analyzes the influencing factors of college students' employment intention, so as to provide some help for college students' employment choice.*

Subjects and methods: *In this study, the influencing factors of college students' employment intention are analyzed by setting questionnaire questions and selecting respondents. Firstly, the rationality of the questionnaire question setting is verified, and then the reasonable questions are distributed and effectively recovered. Finally, through the recovered questionnaire questions, listening to the extraction factors and SPSS software, the obtained data are analyzed to determine that personal factors, family factors and social factors are the key factors affecting college students' employment intention.*

Results: *After feature extraction and exploratory factor analysis, four common factors were extracted. The total variance interpretation rate of the four common factors is 69.33%, indicating that the four factors can explain 64.10% of the information of the whole questionnaire, and the variance interpretation rate of each factor after rotation is more than 10%. On the whole, the results of exploratory factor analysis are good, and the key degree of influencing factors determined is more effective.*

Conclusions: *In this study, by setting up a questionnaire and inviting 1000 qualified college students to choose and answer the questionnaire questions. Through the research, it is found that the key factors affecting the employment of college students mainly include three aspects. As can be seen from the analysis of the identified key influencing factors, personal factors are the key, followed by the influence of family and society. Therefore, after determining the important influence degree of the influencing factors of these key factors, we should effectively dredge and guide the students' employment view according to different influencing factors, establish the information of self-improvement and self-reliance for students in the family, and relax the conditions for students in the social and economic development to improve the employment of college students.*

Key words: *behavioral psychology - college students - employment intention - influencing factors*

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INTRODUCTION

In recent years, with the slowdown of economic development and the transformation of economic structure, the employment situation of college students has become more severe. Therefore, as an important part of educational economic management, employment guidance in colleges and universities has attracted more and more attention from the state, society and colleges and universities themselves. There are a lot of guidance and requirements for the employment of some college graduates. It also requires colleges and universities to provide employment guidance to college students, and the employment guidance and services should meet the requirements of "whole process, full staff, specialization and informatization" (Cheng 2019). However, in the process of transforming from the traditional employment guidance mode to the "four modernizations" employment guidance mode, there is still a lack of understanding of students' employment intention, employment values, career maturity, entrepreneurship and grass-roots employment intention and employment guidance, resulting in college employment guidance divorced from students' needs, unclear direction and pertinence. Under the continuous guidance of this policy, the employment problem of college students has been improved to a certain extent, but college students' employment intention is affected by their own behavioral and psychological factors, and this factor has become the leading factor (Wang 2021). According to relevant information released by the Ministry of education, the number of employed college students reached a new high in 2019, 7.95 million in 2017, 8.2 million in 2018 and 8.34 million in 2019. According to the deployment of the government work report, 1352 new urban jobs will be created in 2019, and there will be 8.34 million college graduates in 2019, accounting for nearly 62% of the new employment population. It can be seen that the employment of college students plays an important role.

College students' employment mentality is a series of psychological attitudes formed by college students in the process of considering employment, preparing for employment and seeking employment. The employment of college students has always been a topic