

ANALYSIS AND INTERVENTION OF COLLEGE STUDENTS' MENTAL ILLNESS IN THE POST-EPIDEMIC ERA

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SUMMARY

Background: The COVID-19 epidemic has had an immeasurable impact on all sectors of society and has led to anxiety, depression, fear and other negative psychological reactions among college students. Therefore, it is imperative to investigate, analyze and intervene in such phenomenon.

Subjects and methods: In this study, 2,000 college students from a certain university in Zhejiang province are selected as interviewees. Questionnaires are used to summarize and analyze the psychological problems of this group. Besides, statistical methods are conducted to compare the actual effects of different treatments on college students with psychological diseases, so as to find the most appropriate way to alleviate their symptoms.

Results: Statistical analysis shows that the main psychological problems affecting college students during the epidemic are anxiety and depression, which account for far more than other possible psychological symptoms. The results of SCL-90 scale test shows that Physical Exercise has the most significant effect ($R = 67$), while Painting Therapy has the highest stability ($\sigma = 11.898$), compared with the mainstream psychotherapy.

Conclusions: The efficacy and stability of different therapies are different. Therefore, when choosing treatment methods, therapists need to analyze both the validity and stability, and consider whether the therapy is easy to operate into practice. The idea of conducting multiple therapies comprehensively deserves further study.

Key words: post-epidemic era - college students - mental illness - treatment

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INTRODUCTION

The post-epidemic era refers to the era when the epidemic fluctuates from time to time and may break out on a small scale at any time. And the epidemic may return from foreign countries and regions, with a seasonal outbreak. It will last for a prolonged period of time and cause far-reaching effects on all sectors (Chen et al. 2020). At the Conference of Shenzhen Hospital in 2020, Lin Lu, an academician of The Chinese Academy of Sciences, pointed out that COVID-19 pandemic is a stressful event for the public. People may experience various physical and psychological stress responses such as depression, anxiety, fear and insomnia (Sato 2020). Existing research results have proved that the incidence of psychological disorders increases dramatically in conflict environments, which can produce a more significant burden of illness (Jiang et al. 2021).

As a special social group, college students are in a period when their minds are not yet fully mature, and they are extremely vulnerable to external emergencies (Chang et al. 2020). In the post-epidemic era, the recurrence of the epidemic has led to dramatic changes in learning and lifestyle of college students. Nowadays, the majority of universities have shifted their classroom teaching into online teaching. In this case, students must complete tasks such as online assignment submission simultaneously during their studies, and such a complicated procedure has led to a

serious sense of discomfort among many college students (Morote et al. 2020). At the same time, communication among college students has decreased. It is because, to prevent and control the epidemic, schools have set restrictions on students' outdoor activities. Although students can connect with their families and friends through existing social platforms by means of video, voice and text, the intimacy given by these electronic devices is far less effective than direct face-to-face contact in the process of emotional communication (McDonnell et al. 2021). In addition, college students at this stage are also faced with problems such as, adapting to new learning environments and tasks, subject selection, conflicts between ideals and reality, dealing with interpersonal relationships, and future careers. The current situation in the post-epidemic era has exacerbated the impact of all these stressful events, causing more extensive and severe psychological effects on college students. Therefore, seeking scientific and effective mitigation and treatment methods has become an urgent issue to be solved (Grubic et al. 2020).

SUBJECTS AND METHODS

Research subjects

In this study, 2,000 college students enrolled in a university in Zhejiang province have been selected as the research objects.

Inclusion Criteria: Normal college students without a clear diagnosis of mental disorders and physical diseases.

Exclusion Criteria: Students who are unable to communicate and with mental disorders and physical disabilities.

Research tools

1. Wenjuanxing, an online questionnaire platform, is used for network questionnaire survey.

2. Symptom Self-rating Scale (SCL-90), compiled by L.R. Derogatis, consists of 90 items and adopts 10 factors to reflect 10 aspects of psychological symptoms.

3. Statistical tool SPSS 26.0 is conducted for statistical analysis.

Project design

This study is carried out in two steps.

Step 1:

Through the online questionnaire survey (with multiple-choice questions), the abnormal psychological state of the target group during the epidemic has been counted. A total of 2,000 questionnaires have been distributed and 1,823 questionnaires have been recollected. Finally, excluding those with less than 30 seconds response time and more than 80% the same options, 1596 valid

questionnaires are obtained, with an effective recovery rate of 87.5%. Among them, 866 (54.3%) are male students and 730 (45.7%) are female. The results of this survey have been categorized and analyzed.

Step 2:

Among the students with psychological abnormalities, 100 college students are randomly selected and divided by lottery into 10 groups, with 5 experimental groups of 10 students each and 5 control groups of 10 students each. According to the data of the SCL-90 self-rating scale, the relieving effects of different treatment methods or specific behaviors on mental problems are compared and analyzed, and the SCL-90 test scores of each group are recorded. According to the data of the SCL-90 self-rating scale, the effects of different treatments or specific behaviors on the relief of mental problems have been compared and analyzed, and the SCL-90 test scores of each group have been recorded.

RESULTS

Analysis of psychological problems of college students

The 1,596 valid questionnaires collected in Step 1 have been statistically analyzed to categorize the psychosocial problems of the college students affected by the epidemic. The results are shown in Table 1, and the histogram analysis is shown in Figure 1.

Table 1. Statistical table of psychological problems of college students

Type	Anxiety	Depression	Fear	Neurasthenia	Dysphoria	Other conditions	Normal
Number	956	521	315	25	356	289	432
Percentage (%)	59.9	32.6	19.7	1.6	22.3	18.1	27.1

According to statistics, only 27.1% of the 1,596 college students have indicated that they are not affected by the epidemic, and the vast majority of students believed that the epidemic has more or less affected their study and life. It can be clearly seen in the bar chart that anxiety and depression account for the highest proportion of all adverse mental symptoms, accounting for 59.9% and 32.6% of all participants respectively. Besides, anxiety and depression account for 85.0% and 46.3% respectively of students affected by the epidemic, with female students having slightly higher levels of depression and anxiety than male students. Overall, there is a tendency towards anxiety and depression across the genders, to a similar degree. This result is consistent with the existing survey data of college students' mental illness. It can be seen that anxiety and depression are still the mainstream psychological problems that plague college students, and that the impact of epidemic has greatly increased

the probability of occurrence of this problem (Baird 2016).

Selection of therapeutic methods

Music Therapy: Music Therapy refers to a method that is based on psychotherapeutic theories and methods, treating patients with physical or psychological illnesses through music and rhythm (Sezer & Toprak 2015). It is aimed at helping patients who are "in need" of treatment in physical and psychological areas, and providing a "planned" and "purposeful" course of treatment that is carried out for the "needed" part of the treatment. Early therapy is to build an interactive relationship between the therapist and the patient through listening, singing, playing, percussion, rhythm and improvisation to help the patient improve physical, expressive communication, cognitive understanding, social behavior and emotional expression.

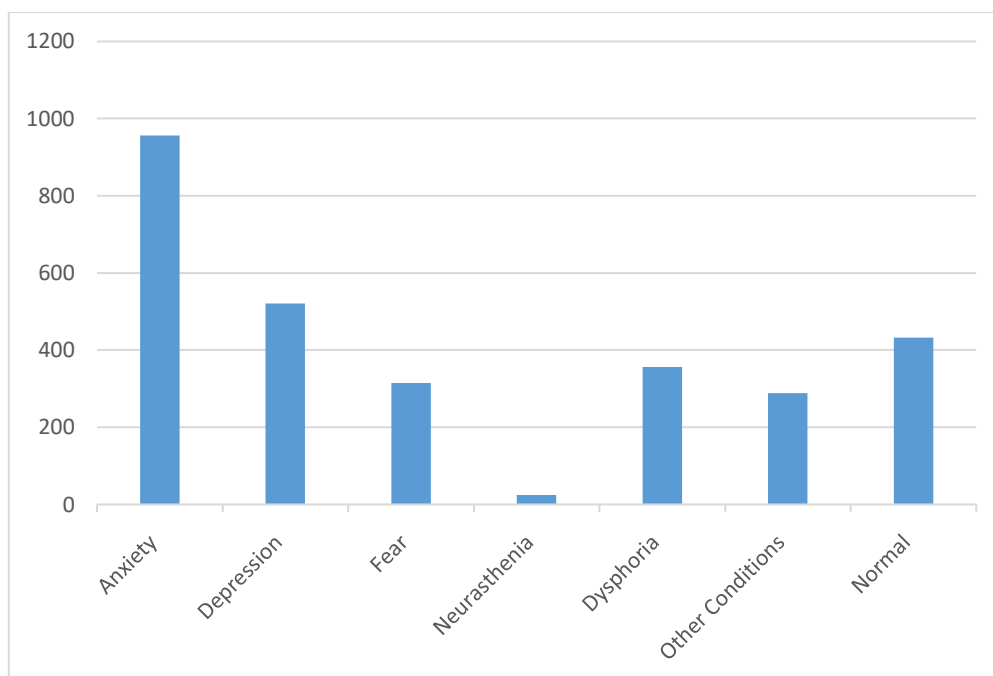


Figure 1. Bar chart of psychological problems of college students

Joy Therapy: The treatment of mental illness is achieved by relaxing the body and mind, enjoying calligraphy and literary works to improve the patient's depressed state of mind.

Physical Exercise: Physical Exercise has the effect of regulating the nervousness of the human body, improving the physical and mental state, restoring physical strength and energy, improving self-confidence and values, and enabling the individual to achieve healthy and harmonious development in a harmonious atmosphere. According to the actual situation, indoor or outdoor exercises can be used to relax the body and mind and regulate emotions.

Morita Therapy: Morita Therapy is a unique, self-contained theory and method of psychotherapy based on Eastern cultural background, which is created by Japanese scholar Morita Masa on the basis of summing up domestic and international psychotherapy methods and his own clinical treatment experience for more than ten years, repeatedly exploring practice and constantly improving. Its concept is that people should accept their symptoms and bad emotions naturally, do not resist the symptoms and do not be disturbed by symptoms in their actions and attitudes. And try to work hard to do what they should do, to live, study and work like normal people (Kitanishi & Mori 1995).

Painting Therapy: Painting Therapy, as one of the methods of psychological art therapy, is to allow the painter to present the repressed feelings and conflicts within the subconscious through the creative process of painting, using non-verbal tools. In the process of painting gain, patients could gain relief and satisfaction, which lead to good results in diagnosis and therapy.

Effectiveness analysis of different therapies

The SCL-90 scale is the most widely used scale for mental disorders and mental diseases. It contains a wide range of psychiatric symptoms, including feelings, emotions, thinking, consciousness, behaviors, life styles, interpersonal relationships, eating and sleeping (Adilay et al. 2018). According to the results of the Chinese norm, if the total score of SCL-90 exceeds 160, it indicates slight psychological problems that should be further checked. If the standard score is greater than 200, it means that there are obvious psychological problems. And a standard score that is greater than 250 indicates more serious psychological problems (Grande et al. 2014).

The 956 questionnaires with selection of anxiety, 56.9% select other items at the same time. Individuals who select more than one item at the same time are those affected by the epidemic and have relatively severe psychological problems. One hundred students are randomly selected from this group and divided into 10 groups by lottery, with five experimental groups of 10 students each and five control groups of 10 students each. The experimental groups are numbered numerically. Different ways of psychotherapy are used for each member from the 1-5 experimental groups, and treatments are as follows successively: Music Therapy, Joy Therapy, Physical Exercise, Morita Therapy, Painting Therapy, with no changes among the control group. Scale tests have been performed on all subjects every seven days for four times in total, and SCL-90 test scores of each subject have been recorded. After eliminating extreme data, average values are taken for statistical analysis. The results of the first two tests are shown in Table 2, and the results of the four tests in the experimental group are shown in Table 3.

SPSS 26.0 has been employed as an analysis tool to

conduct paired sample *t*-test for the experimental group and the control group. The results are shown in Table 4.

As can be seen from the above table, in the experimental group, the significance test result is less than 0.01, indicating that all the five treatments have obvious therapeutic effects. In the control group, the *P*-

value is 0.880, which is much higher than 0.05, indicating that the condition of subjects does not change significantly at different test times, in line with experimental expectations. SPSS 26.0 is used to statistically analyze the data of the experimental group, and the results are shown in Table 5.

Table 2. Effect comparison between the test group and the control group under different therapies

Experimental group	Music therapy	Joy therapy	Physical exercise	Morita therapy	Painting therapy
First test	175	173	186	184	179
Second test	162	150	152	163	162
First test	174	178	178	180	181
Second test	175	176	179	183	177

Table 3: Experimental group test results under different therapies

Experimental group	Music therapy	Joy therapy	Physical exercise	Morita therapy	Painting therapy
First test	175	173	186	184	179
Second test	162	150	152	163	162
First test	152	142	136	150	156
Second test	143	135	119	143	152

Table 4. *t*-test results of paired samples

Experimental group	Test group	Control group
Std. Deviation	7.9246	2.7749
<i>t</i>	6.095	0.161
<i>Sig.</i>	0.004	0.880

Table 5. Comparative analysis of the specific effects of five therapies

Experimental group	Music therapy	Joy therapy	Physical exercise	Morita therapy	Painting therapy
R	32.00	38.00	67.00	41.00	27.00
Min	143.00	135.00	119.00	143.00	152.00
Max	175.00	173.00	186.00	184.00	179.00
<i>M</i>	158.00	150.00	148.25	160.00	162.25
σ	13.375	16.512	28.546	18.018	11.898

As can be seen in the table above, the value of *R*3 is the largest (67.00), which indicates that physical exercise has the most obvious effect on alleviating mental problems of college students according to the changes. Besides, the values of *R*1 and *R*5 are relatively small, 32.00 and 27.00, respectively. It means that the effects of Music Therapy and Painting Therapy are relatively poor. The value of σ reflects the dispersion degree of sample data. In the analysis results, the value of σ 3 is the highest, which is 28.546, indicating that the effect of Physical Exercise is the most unstable. Additionally, the σ values of other items are relatively low, all less than 20. Among them, σ 5 has the lowest value of 11.898. And value of σ 1 is 13.735, which is close to σ 5, indicating that the therapeutic effects of Painting Therapy and Music Therapy are most stable.

Further, the data of Joy Therapy and Morita Therapy are at the middle level. The effect of Morita Therapy is slightly higher than that of Joy Therapy, but the stability of its therapeutic effect is slightly lower than that of Joy Therapy.

DISCUSSION

The actual results of the questionnaire survey demonstrates that most of the college students who study online and self-isolate at home or in school due to COVID-19 epidemic have experienced varying degrees of anxiety and depression. A small number of students are also accompanied by abnormal psychology such as fear and anxiety. Anxiety and depression have become the main focus of college students' mental health

problems again. The causes of anxiety and depression are diverse, ranging from the academic pressure accumulated in the early years, the overprotection of parents, to the compulsive dependence on social media, and so on (Conroy et al. 2021). This kind of negative emotions have been affecting the growth of students to varying degrees. More and more students feel overwhelmed and need professional psychological counseling (Brewer 2002).

This survey shows that of the 1,596 college students who are part of the sample, only 432 (27.1%) are not psychologically affected by the epidemic, suggesting that the mental health problems of the college students are becoming more serious in the post-epidemic era (Bayram & Bilgel 2008). However, the promotion of student mental health among colleges and universities remains inadequate, with most schools not even offering mental health class. Although some schools provide mental health class irregularly, it is the elective course. This situation must be taken seriously. Universities and colleges should actively provide students with psychological counselling service, frequent, timely and effective mental health guidance and services to students through various forms such as individual counselling, group counselling activities, psychological behavioral training, letter counselling, hotline counselling and internet counselling (Faize & Husain 2021).

CONCLUSIONS

This study has analyzed and summarized the current status of college students' mental problems in the post-epidemic era, and tested the positive effects of common mitigation methods or healing methods on college students' mental problems. The specific analysis results are as follows:

Firstly, the therapeutic effect of Physical Exercise is obvious, but there is a certain degree of instability of the effect. Because of the high feasibility of this therapy and its positive effect on the physical health of patients, it can become one of the main options for improving the patient's mental state. Secondly, Joy Therapy and Morita Therapy are excellent choices for improving the mental state of patients as they can take into account the stability of the results achieved while ensuring overall effectiveness. Thirdly, Music Therapy and Painting Therapy, while having a high degree of stability, have relatively weak overall effectiveness. They can be used in conjunction with other therapies to achieve optimal results, depending on the actual situation.

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Contribution of individual authors:

Pengcheng Li: wrote original draft, participated in literature search and analyses, evaluations and

manuscript preparation, as well as wrote the paper.

Yanling Mei: conceived and designed the manuscript, interpreted the data, and participated in project administration including resources, software, validation, visualization, conceptualization, investigation and methodology.

References

1. Adilay U, Guclu B, Gokse M & Keskil S: *The correlation of scl-90-r anxiety, depression, somatization subscale scores with chronic low back pain. Turkish Neurosurgery* 2018; 28:434-438
2. Baird SL: *Conceptualizing anxiety among social work students: implications for social work education. Social Work Education* 2016; 35:719-732
3. Bayram N & Bilgel N: *The prevalence and socio-demographic correlations of depression, anxiety and stress among a group of college students. Social Psychiatry and Psychiatric Epidemiology* 2008; 43:667-672
4. Brewer T: *Test-taking anxiety among nursing & general college students. Journal of Psychosocial Nursing and Mental Health Services* 2002; 40:22-29
5. Chang JH, Yuan YX & Wan D: *Mental health status and its influencing factors among college students during the epidemic of COVID-19. Journal of Southern Medical College* 2020; 40:171-76
6. Chen X, Wang X, Mu JP, Jian G, Lu JT, Xie JL, Feng L, Gou N, Liu ZC & Ai CQ: *In post-pandemic era, improve public mental health knowledge in action, but still need to efforts. Basic & Clinical Pharmacology & Toxicology* 2020; 127:29-30
7. Conroy K, Salem HC, Georgiadis N, Hong A, Herrera J, Furr J, Green G & Comer JS: *Gauging perceptions and attitudes about student anxiety and supports among school-based providers. School Mental Health* 2021; 4:1-7
8. Faize FA & Husain W: *Students with severe anxiety during COVID-19 lockdown - exploring the impact and its management. Journal of Mental Health Training Education and Practice* 2021; 16:153-163
9. Grande TL, Newmeyer MD, Underwood LA & Williams CR: *Path analysis of the SCL-90-R: exploring use in outpatient assessment. Measurement and Evaluation in Counseling and Development* 2014; 47:271-290
10. Grubic N, Badovinac S & Johri AM: *Student mental health in the midst of the COVID-19 pandemic: a call for further research and immediate solutions. International Journal of Social Psychiatry* 2020; 66: 517-518
11. Jiang GR, Li DY, Ren ZH, Yan YP, Wu XC, Zhu X, Yu LX, Xia M, Li FL, Wei H, Zhang Y, Zhao CX & Zhang L: *The status quo and characteristics of Chinese mental health literacy. Acta Psychologica Sinica* 2021; 53:182-185
12. Kitanishi K & Mori A: *Morita therapy: 1919 to 1995. Psychiatry and Clinical Neurosciences* 1995; 49:245-254
13. McDonnell E, Berger RS, Corbett CR, Coppola KM & Brodt-Ciner ZN: *Medical students' motivations to help older adults during the COVID-19 pandemic. Journal of the American Geriatrics Society* 2021; 69:1174-1177
14. Morote J, Violeta P, Sandoval KD, Molina MM & Rondan AT: *Mental health studies in medical students in the context of covid-19. Revista Colombiana de Psiquiatria (English ed.)* 2020; 49:223-224
15. Sato J: *Research at a distance: area studies in the post-*

pandemic era. International Journal of Asian Studies
2020; 17:105-108

16. Sezer BT, Sezer O & Toprak D: *What do we know about music therapy? Konuralp Tip Dergisi* 2015; 7:167-171

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ANALYSIS OF THE APPLIED VALUE OF HUMANISTIC PSYCHOLOGY IN COLLEGE STUDENTS' ART EDUCATION

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SUMMARY

Background: The purpose of this study is to promote the overall development of students, systematically learn the knowledge of art education, and enhance the aesthetic ability in art learning, further shape the perfect personality of students, and effectively improve the effectiveness of art education for college students. Therefore, it analyzes the application value of humanistic psychology in college students' art education, investigates and analyzes the current status of college students' art education, and proposes the necessity and applicability of humanistic psychology in college students' art education.

Subjects and methods: In this study, using the relevant theories of humanistic psychology and questionnaire survey method, 335 college students in a university conducted a questionnaire survey on college students' art education. According to the survey results, this paper puts forward the necessity and applicability of humanistic psychology in college students' art education, analyzes the application value of humanistic psychology in college students' art education.

Results: Through the questionnaire survey method, this paper investigates and analyzes the current situation of college students' art education, and puts forward that the application necessity and applicability of humanistic psychology in college students' art education are as follows: the requirements of modern art development trend for teaching and learning, the particularity of learners themselves, the expression of art education, the function of art education and the harmonious relationship between teachers and students. The applicability of humanistic psychology in college students' art education lies not only in the characteristics of art education and students' needs, but also in the objective requirements of college students' art education teachers' professional quality. This paper analyzes the application value of humanistic psychology in college students' art education as follows: under the guidance of humanistic psychology, college students' art education teaching purpose, organization form, teaching concept, teaching methods and forms.

Conclusions: Through the questionnaire survey and statistical results, according to the current situation of college students' art education, this paper puts forward the necessity and applicability of humanistic psychology in college students' art education, and analyzes the application value of humanistic psychology in college students' art education. So as to effectively promote the all-round development of students, systematically learn the knowledge of art education, improve aesthetic ability in art learning, further shape students' perfect personality, and provide a certain reference value for improving the effectiveness of college students' art education.

Key words: humanistic psychology - art education for college students - art education application - applied value analysis

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INTRODUCTION

Humanistic psychology pays more attention to human subjectivity rather than objectivity than using data statistics to study psychology (Liang 2019). It is more subjective. For example, the transformation in psychoanalysis is the problem of the relationship between analysts and analysts, the problem between two subjects. Psychoanalytic theory is an idea or an investigation method or a treatment method based on the existence of unconsciousness (Crocker & Baur 2020). It belongs to typical humanistic psychology, which includes psychoanalysis. Humanistic psychology is a human-oriented psychology that studies the nature, experience and value of the whole human being. In short, humanistic psychology is named for its emphasis on people-oriented values, and emphasizes people's growth and development as well as people's positive essence and value. People-oriented is the purpose of humanistic psychology (Chen & Tan 2019). Humanism takes the holistic view of man as a methodology, studies the

whole of man and personality, emphasizes that man's psychology is a unity composed of three processes of knowledge, emotion and consciousness, and emphasizes that man should be developed as a whole, and a certain psychological state of man cannot be isolated for research. The main theoretical ideas of humanistic psychology are self-realization theory and hierarchy of needs theory (Lichtenstein 2019). Self-realization theory holds that the perfect development of human ability is self-realization. The concept of self-realization mainly refers to the realization of human will in personal behavior and the realization of human nature. The hierarchy of needs theory divides people's needs from low to high into different levels, and divides people's needs into seven levels from low to high, which are physiological needs, security needs, belonging and love needs, respect needs, desire for understanding and understanding, beauty needs and self-realization needs. The most important contribution of humanistic psychology is the application of humanistic psychology theory to practice, which has a very far-reaching practical