

THE IMPACT OF HEALTH QIGONG ON COLLEGE STUDENTS' MENTAL HEALTH IN SHANGRAO OF CHINA

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Abstract – The significance of this study is to explore the impact of fitness Qigong on the mental health of college students and find ways to improve their mental health problems. In the past few years, with the increasing number of college students and the increasing pressure of study and life, mental health problems among college students have become more and more common. In view of this problem, fitness qigong, as a traditional, non-drug intervention method, has a significant cultural background and rich forms of exercise, so it has become one of the possible ways to improve the mental health of college students.

This study will use a variety of research methods, including questionnaire survey, laboratory measurement and other ways, to systematically monitor the changes of mental health related indicators in the process of learning fitness qigong. These include anxiety, depression, compulsion, paranoia, mental tendencies, low self-esteem, dependence, and more. By observing and analyzing these data, we can more accurately understand and prove the effect of fitness qigong on improving the mental health of college students.

Finally, we expect that the results of this study will provide a feasible, non-drug and non-invasive intervention method for the improvement of the mental health of college students, and promote the improvement of the mental health level of the whole society in a wider scope.

Keywords – Mental Health, Health Qigong, College Students

I. INTRODUCTION

On a daily basis on a college campus, growing psychological concerns include emotions, depression, relationships, fatigue, and anxiety, among others. The Ministry of Education of China has adopted various practical measures to solve these problems, including organizing mental health education lectures, carrying out mental health activities and providing psychological counseling, etc. In this context, in 2015, the Ministry of Education of the People's Republic of China promulgated the "Plan for Improving the Mental Health Quality of College Students", and universities must pay attention to the construction of the mental health curriculum system.

Establishing a sound mental health education curriculum system can guide students to deeply understand their own mental state, enhance their ability to adjust and adapt, improve their ability to resist stress, and promote the balanced development of physical and mental

health. At the same time, these courses can also inspire students' thinking and promote the healthy development and overall improvement of students' personality. These measures are not only conducive to the personal growth of students, but also provide a better foundation for cultivating outstanding talents.

In addition, with the advancement of science and technology and the expansion of the virtual world of the Internet, college students face more diverse and complex psychological problems, such as Internet addiction, game addiction, and Internet violence. This requires more pertinence and professionalism of university mental health education courses. Only through the construction of a comprehensive and in-depth mental health curriculum system can we effectively help college students solve their psychological problems and at the same time provide better protection for their future development and growth.

II. PROBLEM STATEMENT

2.1 Problem statement

The pressure of study, employment, interpersonal relationship, love and marriage has posed a huge challenge to the mental health of college students, and it has also led to a decline in the mental health of college students. As the hope of the country's future, college students have always been a special group of the times, so providing high-quality learning and living conditions has always been an issue that the party and the government attach importance to. According to a survey by the World Health Organization, the incidence of mental health problems among adolescents worldwide is as high as 20% (Auerbach et al, 2016). In my country, the survey results of the National Center for Disease Control and Prevention show that the proportion of college students with mental health problems is as high as 25.4% (Chen Duhechuan, 2016)

However, with the continuous improvement of the level of science and technology and production technology, the speed of social development is also accelerating, and the competition faced by college students has become increasingly fierce. The pressure brought by this competition is also increasing, including life pressure, work pressure, complex interpersonal relationships, etc., which seriously affect the mental health of contemporary college students. Therefore, how to improve the mental health level of Chinese college students has become the focus of scholars' research. In order to improve the mental health level of college students, it is necessary to start from many aspects, including strengthening mental health education, optimizing the learning and living environment, improving employment opportunities, and so on. Only in

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this way can college students better face the challenges of reality and better realize their own life value.

2.2 Research Objective

This study aims to explore the impact of Health Qigong on the mental health of college students and provide better mental health support. Through empirical research, we will explore the actual effect of Health Qigong on the mental health of college students, and reveal the current status of Health Qigong popularization among college students. At the same time, we will put forward effective countermeasures and suggestions to promote the application and development of Health Qigong among college students. This study will use questionnaire survey and experimental research to reveal the current situation of Health Qigong among college students and provide better mental health support for college students.

1. Determine the mental health level of students in Shangrao City. And 8 mental health indicators.
2. Measure the health Qigong level of college students in Shangrao area through teaching experiments.
3. The relationship between healthy Qigong and mental health

2.3 Research Question

RQ1.1: What is the mental health level of college students in Shangrao before and after the intervention?

RQ1.2: What is the level of psychological symptoms of college students in Shangrao before and after the intervention?

RQ1.3: What is the level of self-efficacy of Shangrao college students before and after the intervention?

RQ1.4: What is the attention level of Shangrao college students before and after the intervention?

RQ1.5: What is the stress level of Shangrao college students before and after the intervention?

RQ1.6: What is the self-esteem level of Shangrao college students before and after the intervention?

RQ1.7: How are the emotions and emotional levels of college students in Shangrao before and after the intervention?

RQ1.8: How is the quality of life of college students in Shangrao before and after the intervention?

RQ1.9: How is the sleep quality of college students in Shangrao before and after the intervention?

RQ2: What is the health Qigong level of Shangrao college students before and after the intervention?

RQ3: What is the relationship between Health Qigong and Mental health

2.4 Significant of the study

The significance of this study is to explore the influence of Health Qigong on the mental health of college students, and to find ways to improve the mental health problems of college students. In the past few years, with the increase in the number of college students and the increasing pressure of study and life, college students' mental health problems have become more and more common. In response to this problem, Health Qigong, as

a traditional, non-drug intervention method, has a significant cultural background and rich forms of exercise, so it has become one of the possible methods to improve the mental health of college students.

This study will use a variety of research methods, including questionnaires, laboratory measurements, etc., to systematically monitor the changes in the mental health-related indicators of college students in the process of learning Health Qigong. These indicators include self-perception, emotional state, anxiety and stress levels, etc. By observing and analyzing these data, we can more accurately understand and prove the effect of Health Qigong on improving the mental health of college students.

Ultimately, we hope that through the results of this study, we can provide a feasible, non-drug, non-invasive intervention method for improving the mental health of college students, and promote it in a wider range to promote the improvement of the mental health of the whole society.

2.5 Scope and limitation

The research objects of this study are two classes of the same grade and the same major in Shangrao Normal University, Jiangxi Province. In order to make the work and rest time, academic pressure and other aspects of the two groups of experimental subjects as similar as possible, try to keep the living environment of the two groups of experimental subjects consistent. However, due to the influence of personal eating habits, family background, genetics and other factors, these objective factors may bring certain limitations to this study. Therefore, the influence of these factors will be considered as much as possible in the interpretation and inference of the study results.

Due to the interference of other factors during the winter and summer vacations, the experimental period of this study can only be set as a full semester, that is, four months. Doing so helps to eliminate the influence of other factors on the research results, so that the research results are as accurate as possible.

2.6 Research gap

RG1: In previous studies, SCL-90 (Symptom Checklist 90) was used more to measure mental health symptoms. In this study, the CCSMHS (Chinese College Student Mental Health Scale) was used to improve the pertinence of the measurement

RG2: In previous studies, Health Qigong was rarely used as an intervention method to intervene on the mental health of college students

RG3: In previous studies, mental health symptoms were more used as evaluation criteria. In this study, ①self-efficacy, ②attention, ③stress, ④self-esteem, ⑤mood and emotion, ⑥quality of life, ⑦sleep quality, etc. were added to increase the depth and reliability of the research.

1.1 Definition of Terms

III. LITERATURE REVIEW

Mental health: Mental health refers to a good or normal state of mental aspects and activities. The ideal

state of mental health is to maintain good character, normal intelligence, correct cognition, appropriate emotion, reasonable will, positive attitude, appropriate behavior and good adaptability.

"Analysis and countermeasures of the mental health status of Chinese college students" (WU GUANGHONG) Taking college students across the country as the object of research, it is pointed out that the mental health problems of college students are more serious than normal adults, especially the sophomore and female college students, and the psychological problems are more prominent. This phenomenon is mainly due to a variety of factors, such as the uncertainty of the future, economic pressures such as the yearly increase in university fees, and the needs of adolescent boys and girls for intercourse. These pressures and demands are constantly intensified in college life, and have a serious impact on the mental health of college students. Therefore, we need to start from many aspects and take effective measures to improve the mental health of college students, including strengthening mental health education, providing psychological counseling services, encouraging active lifestyles and exercise habits, etc.

Physical exercise: Physical exercise is a variety of activities that are carried out gradually in order to consciously cultivate physical fitness in the process of human development. Physical activities in the form of walking, running, jumping, throwing and dancing are commonly known as physical exercise.

Randomized controlled trials have shown that in the face of increasing psychological problems such as anxiety and depression, transmitting information through the Internet and strengthening students' physical exercise are effective psychological intervention methods. In addition, a study by a psychologist in the United States showed that running can reduce students' test anxiety symptoms to a certain extent. Empirical studies have found that when the exercise intensity reaches 35% to 65% of the maximum oxygen uptake, the effect of relieving anxiety is the best. In addition, some scholars believe that Chinese Tai Chi is also helpful for mental health. To sum up, it is worth promoting to adopt various methods to alleviate the psychological problems of college students. (Mailey 2010).

Health Qigong: Health Qigong is a traditional national sport, with physical activity, breathing and psychological regulation as the main forms. It is an important part of Chinese long-standing culture. The General Administration of Sports of the People's Republic of China listed "Health Qigong" as the 97th sports item.

In "Study on the Relationship between Health Qigong and "Xin Xing"", it expounds that Xin Xing is a concept covering people's thoughts, emotions, will, etc. It is the essential feature deep in the human heart and an important part of human spiritual life. Historically, the original idea of Health Qigong can be traced back to the ancient Chinese Taoists and Buddhists, who believed that through practicing Qigong, one could achieve a state of physical and mental health and peace of mind. In this process, perception cultivation, moral pursuit, cultivation of asceticism and integration of mind and body all played an important role. Cultivation of perception means that

through qigong practice, people's senses can be sharpened, and people's cognition of external things can be deepened, so as to improve people's mental abilities. The pursuit of morality means that through qigong practice, people's moral concepts will be more noble, and people will know how to get along with others, thereby improving people's social skills. Cultivating the mind with few desires refers to the practice of qigong to make people's hearts more peaceful, reduce the interference of greed and obsession, and improve people's psychological quality. Body-mind integration means that through qigong practice, people's body and mind can be more coordinated, so as to improve people's physical fitness and mental health. To sum up, long-term Health Qigong practice can help people cultivate their mind, improve their mental ability, social ability, psychological quality and physical quality, so as to achieve a state of physical and mental health and spiritual tranquility. (SI HONGYU and SUN JILONG)

IV. METHOD

4.1 Research subject recruitment

Volunteers were recruited and screened for 226 college students majoring in physical education in Shangrao Teachers College in Shangrao City, Jiangxi Province in 2021. There were no significant differences in courses, work and rest, physical fitness and cognitive abilities of all experimental subjects during the experiment.

4.2 Inclusion and Exclusion Criteria

Inclusion criteria ① age 18-25 years old ② informed consent, voluntary participation ③ university study

Exclusion criteria ① long-term practice of Health Qigong or related series of sports ② severe cardiovascular disease, musculoskeletal system disease

Exclusion Criteria ① Incomplete data filling leading to missing index information ② Those who fill in false information or report false results

Termination criteria ① Those who cannot persist in learning ② Students who do not follow the learning requirements ③ Those who have sudden illness during the study and cannot continue to participate in the study ④ Those who voluntarily propose to withdraw from the research learner

4.3 Group

Mental health scales are issued before the teaching experiment, and the students fill in and recycle on the spot to measure the relevant data of the subjects. Using the "China College Student Mental Health Scale" (CCSMHS) as a test tool to measure the mental health of the students participating in the teaching experiment, the 80 items in the scale were added in equal parts and divided by the five-level scoring system of the scale. 80. Group by final score Experimental group 1: 25 subjects randomly selected with a score of less than 2 (good mental health) are experimental group 1.

Experimental group 2: 25 subjects randomly selected with scores 2-5 (with mild or above mental health problems) are experimental group 2.

Control group 1: 25 subjects randomly selected with a score of less than 2 (good mental health) are control group 1.

4.4 Arrangement of Learning Health Qigong Program

Experimental groups 1 and 2: According to the experimental implementation plan combined with the teaching plan and teaching progress, a Health Qigong teaching is arranged every day for a period of 16 weeks. The teaching content is 90 minutes for each class of Health Qigong; arrange professional coaching, music playback, and exercise monitoring.

Control group: Students in the control group only participated in normal physical education courses.

4.5 Observation indicators

- ① Self-efficiency: The measurement tool is the General Self-efficacy Scale (GSES-General Self-efficacy Scale).
- ② Symptom score: Using the Chinese College Mental Health Scale (CCSMHS)
- ③ Attention: The Schulte Grid (5*5) test was selected as the measurement tool.
- ④ Stress: The Chinese Perceived Stress Scale (CPSS) was selected as the assessment tool.
- ⑤ Self-esteem: assessed with the Self-Esteem Scale (SES).
- ⑥ Mood and emotion: assessed using the Profile of Mood States (POMS).
- ⑦ Quality of Life: The Quality-of-Life Scale (World Health Organization Quality of Life-BREF, WHOQOL-BREF) was used as an evaluation tool.
- ⑧ Sleep quality: The Pittsburgh Sleep Quality Index (PSQI) was used as the assessment tool.

4.6 Experimental Design Roadmap

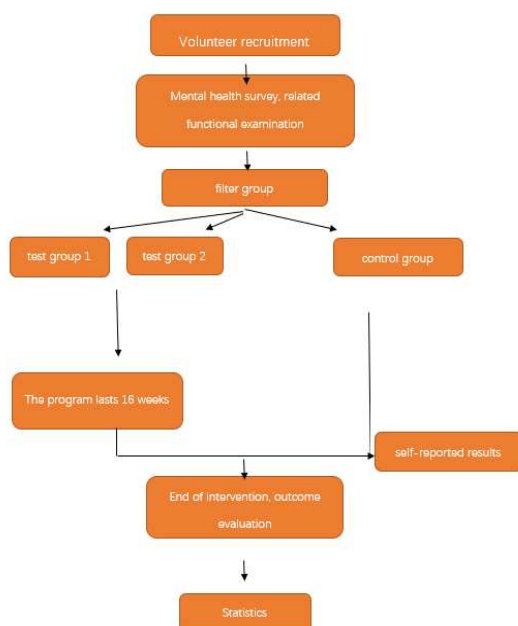


Figure 1. Experimental Design Roadmap

V. FINDINGS

- 5.1 The mental health of college students after learning Health Qigong has been significantly improved
- 5.2 Comparing the results of the experimental group 1 and the experimental group 2 after learning Health Qigong, the experimental group with sub-health in the initial test has a greater improvement than the other experimental group
- 5.3 After scoring and comparing the learning status of Health Qigong, the improvement of the mental health level of the experimental subjects with high Health Qigong learning scores is greater than that of the experimental subjects with low scores.
- 5.4 In the process of learning Health Qigong, recognition and praise from teachers and classmates, role models as role models, and sharing successful experiences with others can all improve personal self-efficacy and self-esteem. These positive experiences can increase an individual's self-confidence and sense of self-affirmation, leading to a more active engagement in the practice. At the same time, the exercise of Health Qigong requires the exerciser to calm their minds, increase the depth and length of breathing to make breathing gentle, relax the body, and unify the mind, will and movements through the breathing guide. Only in a state of inner peace can one achieve a state of calmness, not be disturbed by external things, reduce anxiety, and improve mood. Health Qigong integrates body movements and consciousness, so that one can still maintain a calm state during the exercise, relax the whole body, and always maintain a positive attitude and a happy mood. In this emotional state, anxiety and depression in life can be better relieved, and a positive attitude can always be maintained. The practice process of Health Qigong also requires the practitioners to keep their will, let themselves relax and quiet, control their will not be disturbed by the outside world, and enter their inner world. This kind of practice can exercise one's attention, improve the level of concentration, etc. These are all positive effects on the mental health of college students. Therefore, college students can improve their physical and mental health and relieve the pressure in study and life by learning Health Qigong.

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VI. DISCUSSION

Health Qigong is a kind of low-to-medium intensity aerobic exercise. It not only requires practitioners to learn to stabilize their emotions, but also pays attention to thinking about movements, concentrating attention, eliminating distracting thoughts, and concentrating. This practice method can effectively improve the anxiety and depression of the subjects, because it can help the practitioner relieve stress, reduce physical fatigue, improve physical function, and thus improve mental health.

In addition to exercises and artistic conception that can improve mental health, the cultural connotation of Health Qigong itself can also have a positive impact on the subjects. By learning the profound cultural heritage of Health Qigong, practitioners can get in touch with the profoundness of Chinese culture, thereby improving their traditional cultural literacy and enriching their after-

school life. This kind of positive experience helps to exclude the bad psychology of the subjects in life and study, so as to effectively improve the mental health of college students.

VII. CONCLUSION AND SUGGESTION FOR FURTHER STUDIES

The results of this study show that Health Qigong exercise can help improve the mental health of college students, which provides support for the effectiveness of Health Qigong as a mental health intervention. However, this study only considered the psychological state of college students within the normal range, and did not observe and evaluate the impact on the mental health of college students in pathological states. Therefore, more work needs to be done in the future to explore the application value of Health Qigong in the treatment of mental illness, and to further explore its mechanism. In conclusion, this study provides us with an important starting point, and more research is needed in the future to deeply explore the role and application of Health Qigong in the field of mental health.

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