

Healthy Lifestyle and Exercise: How to Promote Physical and Mental Health through Physical Exercise

Haolun Xu^{1,a,*}

¹Teacher Education Department, Nanchong Vocational and Technical College, Nanchong, 637131, Sichuan, China

^axuhaolun@nczy.edu.cn

*Corresponding author

Abstract: *With the development of social economy and the improvement of daily living standards, humans are paying more and more attention to physical and mental health, and exercise has become an important component of a healthy lifestyle. As a new Social phenomenon, healthy life has a great impact on human daily behavior. How to combine physical exercise to form a more perfect healthy lifestyle to promote physical and mental health has become a research hotspot in the world today. This article aims to promote the organic integration of healthy lifestyle and exercise behavior, and deeply explores the importance and role of healthy lifestyle and physical exercise in physical and mental health. It also makes a clearer statement on the boundaries of physical and mental health. This article analyzes and summarizes the characteristics and background information of a healthy lifestyle, and explains why promoting physical and mental health is beneficial for the construction of social civilization. It verifies the effectiveness of a healthy lifestyle that combines sports and exercise in this article. This article shows through experimental results that living a healthy lifestyle that includes appropriate physical exercise can enable individuals to have a higher evaluation index of their physical and mental health status. Compared with individuals who do not deliberately exercise for daily life, the average assessment index has increased by 11.7%. A healthy lifestyle and physical exercise have an extremely important impact on physical and mental health. Guiding society more correctly and widely promoting the correct concept of physical exercise to promote physical and mental health is conducive to promoting the healthy development of social civilization.*

Keywords: *Healthy Living, Physical Exercise, Mode of Motion, Physical and Mental Health, Health Condition*

1. Introduction

In modern society, in order to strengthen comprehensive exercise habits and health awareness, and improve physical fitness and physical and mental health throughout the year by widely promoting healthy lifestyles, physical exercise, as an important activity, occupies an important position in building a healthy life. Among them, physical exercise aims to promote the physical and mental health of the entire population by cultivating active participation in various physical fitness exercises, thereby improving the body's immune system level, relieving life pressure, and promoting physical and mental health. With the rapid development of the economy and the significant improvement of the quality of life for the whole people, people are paying more attention to the state of physical and mental health. How to regulate emotions, enhance physical fitness, and promote mental health through physical exercise to achieve the goal of physical and mental harmony is a hot research direction in current society.

The conclusion that physical exercise can effectively promote the development of physical and mental health is extremely important. Therefore, it is necessary to explore the forms and effects of physical exercise, and analyze the effectiveness of physical exercise on physical and mental health. The process of sports requires the participation of energy, and the development of sports should be planned and structured, accompanied by repetitive characteristics, which can effectively improve the health of one or more parts of the body [1-2]. In the process of physical exercise, the whole people can improve their physical fitness and reduce all-cause mortality. By comparing the self psychological state reports of different exercisers and non exercisers, it is found that people who often take physical exercise generally have a healthier psychological state [3]. It is very important to explore how sports can

intervene in the physical and mental state of the exercise population. By collecting and comparing data on the physical and mental health status of the audience based on physical exercise health behaviors, the internal connection between sports and the physical and mental state of young people is revealed, and the forms of sports development are explored [4-5]. Based on the era background of the outbreak of the epidemic virus, a standard evaluation was conducted on the general level of physical fitness and physical health of the entire population, and the importance of physical and mental health was emphasized to highlight the prominent position of correct physical exercise in preventing and intervening in adverse physical and mental conditions. The effectiveness of physical exercise was also explored [6]. The above research explores the effectiveness of physical exercise on physical and mental health, opening up new directions for improving the overall quality of the people.

A healthy lifestyle is a comprehensive form of individual quality regulation, which can deeply reflect the overall level of physical and mental health in current society by exploring the popularity of the concept of healthy life. The current population generally believes that maintaining distance and self isolation can avoid the invasion of the epidemic virus, but neglects the improvement of physical and mental health through healthy living, which can effectively prevent emotional exhaustion and physical diseases [7]. The elderly population would have more serious complications and higher mortality rates, and a higher demand for healthy living in daily life. Through research on the physical and mental health status of the elderly population, it has been found that the responsibility for physical and mental health disorders in the elderly population is more flexible, and their awareness of healthy living is shallower [8]. Exploring the popularization of the concept of healthy living among different populations and audiences can further explore the impact of the concept on the physical and mental health of people in daily life, and ultimately discover that high-intensity interval training can improve physical and mental health [9]. Due to the high pressure of life rhythm and work content, the daily physical and mental state of the athlete population has also been affected to varying degrees. By improving the physical and mental state of the athlete population, it has been found that a healthy lifestyle based on physical exercise can effectively curb the development of negative states [10-11]. A healthy lifestyle can enhance the resistance of the population to negative states, and popularizing the concept of healthy life is an important way to promote the construction of social quality and civilization.

The concept of healthy life is gradually receiving widespread attention in modern society, and various groups of people have realized the importance of physical exercise for the development of physical and mental health. Exploring the organic combination of physical exercise and healthy life is the current trend of the times. With the continuous development of the social economy, the pressure on work and study is also increasing. This article aims to explore a healthy lifestyle plan to promote the physical and mental health of the whole population, analyze the importance of physical and mental health, summarize the impact of physical and mental status on quality of life, and explore the integration plan of physical exercise and healthy lifestyle, helping groups with poor physical and mental status to better release pressure and improve physical fitness. This article aims to emphasize the concept of healthy living and promote healthy lifestyles, providing suggestions for improving physical and mental health for various groups of people, so that more people can better understand the importance of physical and mental health and how to solve their physical and mental problems through physical exercise and healthy lifestyles.

2. Importance of Physical and Mental Health

The state of mind and body has a significant impact on social, learning, and work activities between individuals. People who are physically and mentally healthy are more able to socialize with others at ease, and have higher mental agility and efficiency in social activities such as learning and work [12]. At present, with the rapid development of the social economy and the accelerating pace of life, the world has become smaller and the social interactions between people have become frequent. In such a colorful and complex social furnace, the requirements for physical and mental health have also risen [13-14]. As human understanding of the connotation of health continues to enrich and deepen, the mental health status of each individual has been widely valued.

The improvement of physical and mental health is considered a microcosm of the development of social quality and civilization education, and its importance is not only reflected at the individual level, but also covers the social level. After a general observation of the current population, every individual can experience more happiness, satisfaction, and self-esteem by improving their physical and mental health levels. Healthy physical and mental health can enhance their sense of happiness and life

satisfaction, improve their quality of life, and actively promote self-evaluation [15-16]. It can maintain physical and mental health to prevent various diseases, cardiovascular diseases and respiratory system problems. The level of individual metabolism is closely related to physical and mental health.

The development of society cannot be separated from the convergence of individual forces. Individuals with healthy body and mind are conducive to gathering the forces to promote social progress. The programs and measures to promote the development of physical and mental health would help improve the level of individual quality, thus enhancing productivity and Social mobility. The development of physical and mental health is also of great significance in reducing social burden and saving national resources. Physical and mental health problems often require a large amount of medical resources and manpower to pile up costs, which brings a heavy burden to countless families at the cost of consuming a large amount of resource costs. Therefore, the importance of physical and mental health is self-evident. By adopting measures such as physical exercise to propose a healthier lifestyle, it can effectively improve the level of physical and mental health and achieve common development between individuals and society. Figure 1 shows the distribution of physical and mental health in society.

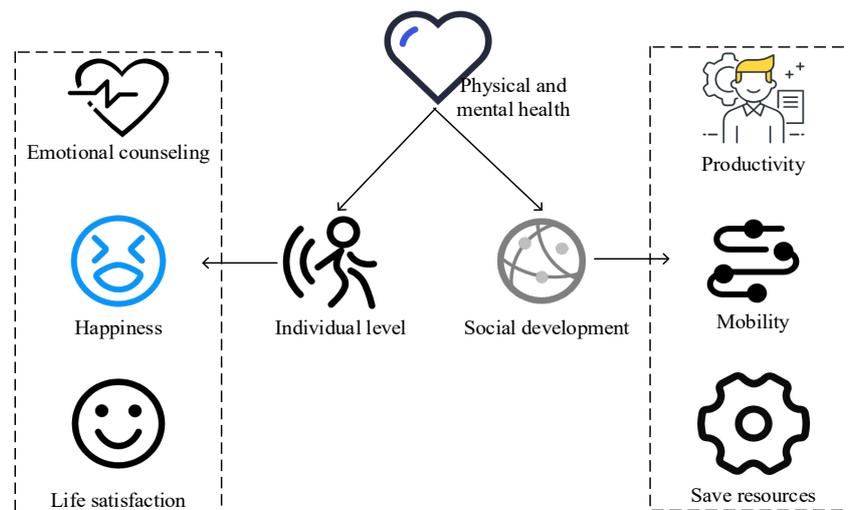


Figure 1. Distribution of physical and mental health in society

3. Impact of Physical Exercise on Physical and Mental Health

Physical exercise helps individuals in society enhance their physical fitness and relieve stress by systematically developing repetitive and regular exercise plans. Long term emotional repression can lead to nervous tension in individuals, and individuals who do not receive emotional relief can make significant errors in their judgments of objective things. Not only can they engage in bizarre behaviors, but in severe cases, they can even lead to diseases [17-18]. Physical exercise can improve the emotions of individuals in the population, and individuals who have undergone appropriate physical exercise can more logically measure the distribution of objective things, thereby reducing the impact of external factors on individual emotions.

Individuals who regularly participate in physical exercise are conducive to forming a correct worldview and outlook on life, actively promoting the development of individual goals, and also positively guiding the formation of healthy and progressive personalities [19-20]. In the process of physical exercise, a good sense of competition and excitement is beneficial for cultivating individual nature. Even if one experiences failure during physical exercise, through correct guidance, they can explore experience from failure, improve their psychological resilience, and correctly face and handle various setbacks when encountering difficulties, forming a healthy and high-intensity psychological state. Figure 2 shows the positive effect of physical exercise on physical and mental health.

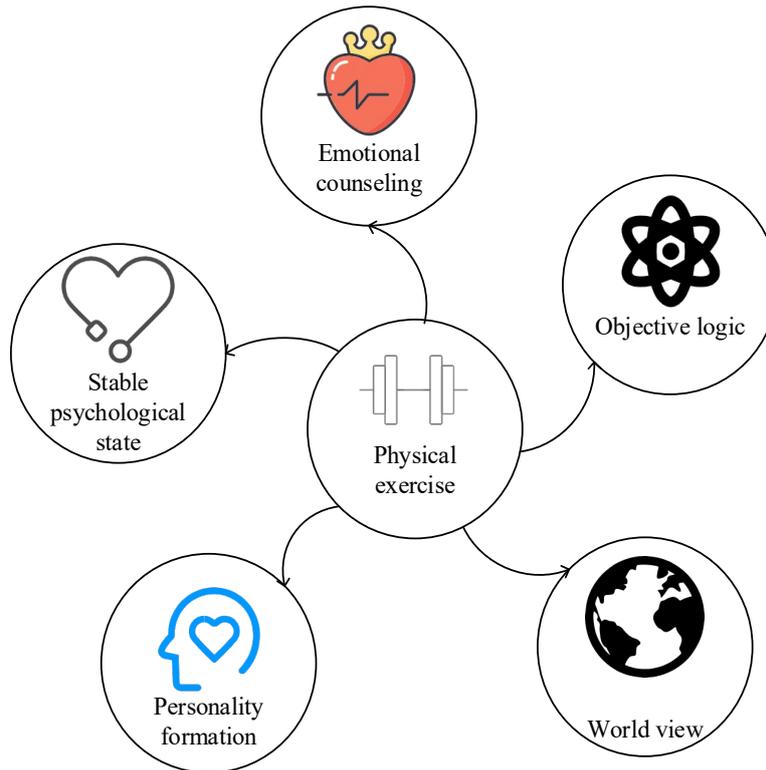


Figure 2. Positive effects of physical exercise on physical and mental health

4. Suggestions for Promoting Physical and Mental Health through Physical Exercise

Due to the different physical and psychological conditions of individuals in society, when engaging in appropriate physical exercise, it is necessary to tailor the exercise plan according to individual circumstances and design an exercise plan that meets one's own load. The specific exercise mode must comply with basic principles such as safety, scientific exercise duration, and reasonable exercise content. This article proposes some suggestions for a healthy life plan based on physical exercise as follows.

4.1 Adhere to Gradual Progress

Individuals should adhere to the objective law of gradual progress when doing physical exercises. They should not do exercises with greater intensity at the beginning of the exercise. They should start with simple warm-up activities, and constantly increase the intensity of exercise, so that the body has a process of adaptation. Gradual physical exercise is also aimed at preventing individuals from experiencing negative emotions of fear of difficulty. Excessive exercise intensity can easily lead to weak willed individuals giving up, which goes against the goal of improving physical and mental health. Gradual physical exercise can give individuals a certain sense of freshness, and through different intensities and forms of exercise, it can guide individuals to develop enthusiasm for physical exercise and facilitate consistent exercise.

4.2 Adhere to Comprehensive Development

The healthy development of body and mind is inevitably comprehensive, so the goal of physical exercise should also be as comprehensive as possible. Comprehensive physical exercise includes a variety of exercise modes, exercise items, and exercise styles. More comprehensive physical exercise can better promote the progress of individual comprehensive abilities, not only conducive to improving physical fitness, but also can alleviate emotions. Obtaining good physical fitness through physical exercise can help soothe individual stress and emotional fluctuations more smoothly. Therefore, comprehensive development of physical exercise is essential. Table 1 shows the analysis of types of physical exercise.

Table 1. Analysis of Types of Physical Exercise

Exercise behavior	Exercise mode	Exercise essentials	Exercise duration
Dumbbell push chest	Anaerobic exercise	Shoulder sinking and chest raising, fixing Scapula	30 minutes
Plank	Aerobic exercise	Keep shoulders, back, and waist level to maintain core stability	5 minutes
Jumping Jack	Aerobic exercise	The movement amplitude is in place, and the hands and feet are extended	15 minutes

4.3 Adhere to Long-Term Self-Discipline

The development of things should be viewed from a long-term perspective. The trend of physical and mental health is a test of individual willpower and effort. Physical exercise must be distributed in a long-term healthy life. Only by adhering to long-term physical exercise can people see results in individuals. Adhere to physical exercise and cultivate it as an inherent habit in a healthy life, enabling individuals to possess self-discipline that not only enhances physical fitness but also enhances psychological resilience. The body's immune system, which is enhanced through physical exercise, gradually disappears after the body stops exercising. To maintain the body's immune strength and mental health, it is necessary to cultivate self-discipline and persist in long-term physical exercise.

5. Application Effect Experiment of Health Plan

In order to verify the promotion effect of physical exercise on physical and mental health, 20 first-year students from a certain university were divided into two groups as observation objects for a comparative experiment on the application effect of health plans. Among them, the college students in the control group did not intentionally violate the normal pace of life in daily life, while the college students in the experimental group lived according to a healthy lifestyle plan with appropriate physical exercise. After a period of observation, the physical and mental status of the college students in both groups of experiments was evaluated. The establishment of evaluation criteria is very important. Evaluation criteria are established based on evaluation indicators such as physical status, psychological status, exercise patterns, and healthy lifestyle patterns. The upper limit of the evaluation index is 9, with 1-3 being poor, 4-6 being good, and 7-9 being excellent. Figure 3 shows the comparison of application effects between the control and experimental groups.

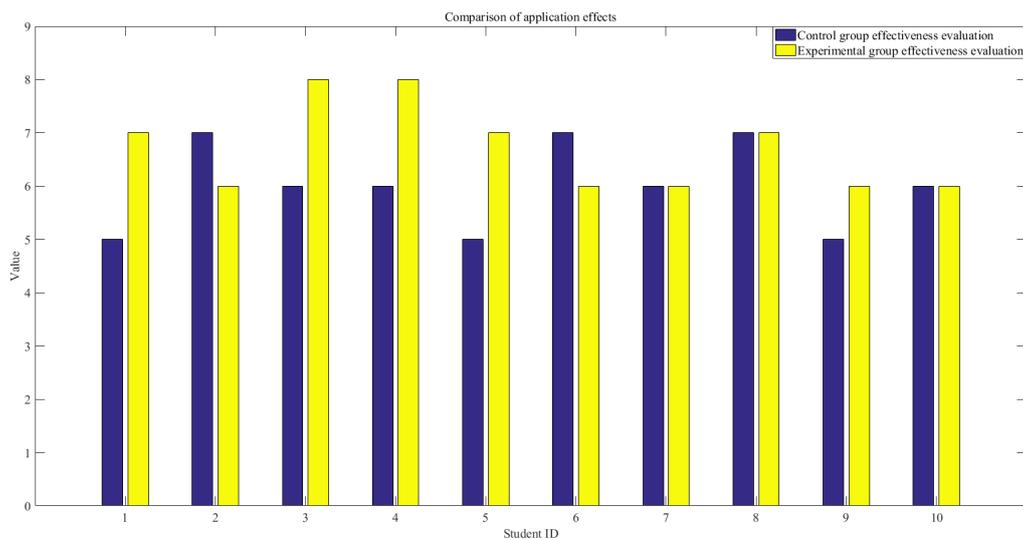


Figure 3. Comparison of application effects between the control and experimental groups

A bad lifestyle can cause a great burden on people's physical and mental health, and in the long run, it can lead to various psychological problems and even diseases. Therefore, it is necessary to popularize a healthy lifestyle and improve the overall quality of the people. Physical exercise has an extremely

significant effect on promoting physical and mental health, and a healthy lifestyle that includes appropriate physical exercise can quickly promote physical and mental health and enhance health awareness. As shown in Figure 3, the average evaluation index of the control group is 6, and the average evaluation index of the experimental group is 6.7. It can be clearly concluded that the physical and mental state of college students who live in a healthy lifestyle with appropriate physical exercise is healthier than that of college students who do not deliberately exercise, The evaluation index of the physical and mental state of college students who follow a healthy lifestyle with appropriate physical exercise has increased by about 11.7%.

6. Conclusions

With the continuous improvement of living standards, health issues have become one of the focuses of current society's attention, and healthy lifestyles aimed at health are becoming increasingly popular. This article explores the importance of physical and mental health, analyzes the impact of physical exercise on physical and mental health, and proposes suggestions for ways to exercise based on the purpose of a healthy lifestyle, in order to fully recognize the inherent connection between healthy lifestyles and physical exercise among various groups. Appropriate physical exercise can help maintain physical health, reduce physical burden, and prevent diseases, while also benefiting mental health, such as alleviating negative emotions such as anxiety, stress, and depression. In daily life, the organic combination of a correct and healthy lifestyle and appropriate physical exercise is a necessary condition to ensure physical and mental health. It is more appropriate to develop a healthy lifestyle that is more in line with individual levels and problem levels, and can better ensure the realization of physical and mental health. This article studies self-management in the process of physical exercise and how to promote physical and mental health through physical exercise, comprehensively verifying the importance of physical exercise in a healthy life, and also demonstrating one of the important factors in maintaining healthy physical and mental health through the rational formulation of physical exercise in daily life.

References

- [1] James Faulkner, Wendy J. O'Brien, Bronagh McGrane, Daniel Wadsworth, John Batten, Christopher D. Askew, et al. "Physical activity, mental health and well-being of adults during initial COVID-19 containment strategies: A multi-country cross-sectional analysis." *Journal of science and medicine in sport* 24. 4 (2021): 320-326.
- [2] M Rodriguez-Ayllon, Cristina Cadenas-S, Fernando E-L, Nicolas E. M, Jose Mora-Gonzalez, Jairo H. Migueles, et al. "Role of physical activity and sedentary behavior in the mental health of preschoolers, children and adolescents: a systematic review and meta-analysis." *Sports medicine* 49. 9 (2019): 1383-1410.
- [3] Sammi R Chekroud BA, Prof Ralitz Gueorguieva PhD, Amanda B Zheutlin PhD, Prof Martin Paulus MD, Prof Harlan M Krumholz MD SM, Prof John H Krystal MD, et al. "Association between physical exercise and mental health in 1·2 million individuals in the USA between 2011 and 2015: a cross-sectional study." *The lancet psychiatry* 5. 9 (2018): 739-746.
- [4] Nikos Ntoumanis, Johan Y. Y. Ng, Andrew Prestwich, Eleanor Quested, Jennie E. Hancox, Cecilie Thøgersen-Ntoumani, et al. "A meta-analysis of self-determination theory-informed intervention studies in the health domain: Effects on motivation, health behavior, physical, and psychological health." *Health psychology review* 15. 2 (2021): 214-244.
- [5] Prof Russell M Viner PhD, Aswathikutty Gireesh MSc, Neza Stiglic MSc, Lee D Hudson PhD, Anne-Lise Goddings PhD, Joseph L Ward MBBS, et al. "Roles of cyberbullying, sleep, and physical activity in mediating the effects of social media use on mental health and wellbeing among young people in England: a secondary analysis of longitudinal data." *The Lancet Child & Adolescent Health* 3. 10 (2019): 685-696.
- [6] Sandro Galea, Raina M. Merchant, Nicole Lurie. "The mental health consequences of COVID-19 and physical distancing: the need for prevention and early intervention." *JAMA internal medicine* 180. 6 (2020): 817-818.
- [7] Achraf Ammar, Khaled Trabelsi, Michael Brach, Hamdi Chtourou, Omar Boukhris, Liwa Masmoudi, et al. "Effects of home confinement on mental health and lifestyle behaviours during the COVID-19 outbreak: Insight from the ECLB-COVID19 multicenter study." *Biology of sport* 38. 1 (2021): 9-21.

- [8] Ipsit V. Vahia, Dilip V. Jeste, Charles F. Reynolds III. "Older adults and the mental health effects of COVID-19." *Jama* 324. 22 (2020): 2253-2254.
- [9] Rebecca Martland, Valeria Mondelli, Fiona Gaughran, Brendon Stubbs, et al. "Can high-intensity interval training improve physical and mental health outcomes? A meta-review of 33 systematic reviews across the lifespan." *Journal of Sports Sciences* 38. 4 (2020): 430-469.
- [10] Andreas S. "Sports psychiatry: mental health and mental disorders in athletes and exercise treatment of mental disorders." *European archives of psychiatry and clinical neuroscience* 269. 5 (2019): 485-498.
- [11] Scott Graupensperger, Alex J. Benson, Jason R. Kilmer, M. Blair Evans. "Social (un) distancing: Teammate interactions, athletic identity, and mental health of student-athletes during the COVID-19 pandemic." *Journal of Adolescent Health* 67. 5 (2020): 662-670.
- [12] Helen L. Ferguson, Christian Swann, Sarah K. Liddle, Stewart A. Vella. "Investigating youth sports Coaches' perceptions of their role in adolescent mental health." *Journal of Applied Sport Psychology* 31. 2 (2019): 235-252.
- [13] L Bailey, M Ward, A DiCosimo, S Baunta, C Cunningham, R Romero-Ortuno, et al. "Physical and mental health of older people while cocooning during the COVID-19 pandemic." *QJM: An International Journal of Medicine* 114. 9 (2021): 648-653.
- [14] Kimberley J. Smith, Christina Victor. "Typologies of loneliness, living alone and social isolation, and their associations with physical and mental health." *Ageing & Society* 39. 8 (2019): 1709-1730.
- [15] Allyson Brothers, Anna E Kornadt, Abigail Nehr Korn-Bailey, Hans-Werner Wahl, Manfred Diehl. "The effects of age stereotypes on physical and mental health are mediated by self-perceptions of aging." *The Journals of Gerontology: Series B* 76. 5 (2021): 845-857.
- [16] Jonathan Glazzard, Szreter Ben. "Developing students' mental health literacy through the power of sport." *Support for Learning* 35. 2 (2020): 222-251.
- [17] Daniel K. Hosker, Daniel K. Hosker, Mona P. Potter. "Promoting mental health and wellness in youth through physical activity, nutrition, and sleep." *Child and Adolescent Psychiatric Clinics* 28. 2 (2019): 171-193.
- [18] Sara B. Oswalt, Alyssa M. Lederer, Kimberly Chestnut-Steich, Carol Day, Ashlee Halbritter, Dugeidy Ortiz. "Trends in college students' mental health diagnoses and utilization of services, 2009-2015." *Journal of American college health* 68. 1 (2020): 41-51.
- [19] Paul Kelly, Chloë Williamson, Ailsa G Niven, Ruth Hunter, Nanette Mutrie, Justin Richards. "Walking on sunshine: scoping review of the evidence for walking and mental health." *British journal of sports medicine* 52. 12 (2018): 800-806.
- [20] Brad Donohue, Yulia Gavrilova, Marina Galante, Elena Gavrilova, Travis Loughran, Jesse Scott, et al. "Controlled evaluation of an optimization approach to mental health and sport performance." *Journal of Clinical Sport Psychology* 12. 2 (2018): 234-267.