

increases. However, due to the prevention and control of the epidemic, colleges and universities mostly implement closed campus management and greatly reduce the gathering of recreational and sports activities, so the single exercise time of college students is relatively short, mostly less than half an hour.

In addition, it can be seen from the survey results that sports time and sports frequency show significant differences in gender, grade and major, which is consistent with Lin Xiaogui's previous research results. In the survey, the amount of physical activity of male students was higher than that of female students, which may be due to the difference in interest and cognitive value of sports between male and female students. In terms of grades, junior and senior students exercise less than freshmen and sophomores. Among them, the first grade has the highest amount of physical exercise, while the fourth grade has the lowest, which may be related to the opening of public PE class in the first grade. In addition, as freshmen just enter the university campus, they have higher curiosity and exploration psychology for various sports, so they are more active in physical exercise. In the senior year, due to internship, postgraduate entrance examination, employment and other reasons, the time and frequency of sports decreased significantly. Because of their own major and physical education courses, the physical activity of students majoring in physical education is higher than that of non-physical education majors. It can be seen from the above that the amount of physical exercise of college students is uneven in the context of the normalization of epidemic prevention and control. Therefore, colleges and universities should strengthen the physical health education of college students and cultivate the concept of lifelong physical education of college students.

According to the research findings, the mental health of male students is better than that of female students, and the mental health of freshmen and sophomores is better than that of juniors and seniors. Among them, 32 freshmen and 35 seniors have poor mental health respectively, indicating that freshmen have more negative emotions as they have just entered college and still need to further adapt to college life. Senior year due to college, work and other reasons, the pressure is greater, so easy to produce serious psychological problems. There were 56 students with poor mental health in PE majors, accounting for 11.0% of the total number of students, which was significantly higher than that in non-PE majors (6.7%). This shows that due to the impact of the epidemic, some sports events cannot be carried out in colleges and universities, and closed campus management limits off-campus sports activities, which leads to a lot of bad emotions among students majoring in physical education. In view of the above problems, colleges and universities should pay special attention to the mental health status of female students, senior students and students majoring in physical education, strengthen the mental health education and improve the psychological adjustment ability of college students. At the same time of epidemic prevention, we should strengthen the consciousness of physical exercise of college students and correctly guide them to improve their mental health through sports.

The amount of physical activity of college students will affect their mental health. The results show that the longer and more frequent a single exercise session is, the more likely it is to have a healthy mental state. This shows that reasonable and regular physical exercise can not only improve physical function, improve health level, but also reduce pressure, improve anxiety, depression and other adverse emotions, significantly improve the mental health of college students. In addition, to strengthen the education and guidance of less physical exercise, exercise not active students, cultivate their interest in sports, firmly establish the concept of "harmonious development of body and mind".

To sum up, as the epidemic prevention and control has entered the normal stage, colleges and universities should publicize more relevant sports and health knowledge, guide active participation in sports, and strengthen the body, strengthen psychological quality and improve mental health through physical exercise. In terms of the amount of physical activity, only time and frequency of physical activity are selected in this study, and the influence of other factors should be further discussed. The relevant investigation content of mental health status comes from self-report of college students, which may have recall bias.

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COLLEGE STUDENTS' INDEPENDENT PHYSICAL EXERCISE BEHAVIOR AND ITS INFLUENCE UNDER THE NORMALIZATION OF EPIDEMIC PREVENTION AND CONTROL

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Background: Since January 2020, the rapid spread of COVID-19 has forced the world into a serious situation of epidemic prevention and control due to its high transmissibility and long incubation period. In

the context of COVID-19 sweeping the world, the daily operation of Chinese society has been disrupted. During this period, all kinds of outdoor exercise activities cannot be carried out. Some surveys show that the anxiety and depression level of college students is higher than the norm of Chinese adults. The compression of individual activity space has hidden trouble for college students' physical and mental health. To understand the status quo and influencing factors of college students' physical exercise behavior during COVID-19, and to provide reference for promoting college students' physical exercise. More and more studies have shown that physical exercise plays a key role in improving people's physical and mental health. Physical exercise is helpful to maintain a positive psychological state, can effectively regulate the role of bad mood has become a consensus. Based on this, colleges and universities should pay attention to students' physical health while carrying out psychological intervention, so that college students can maintain their physical and mental health through good exercise habits. Sports motivation is the motivation to directly or indirectly promote individuals to engage in physical exercise, is an important driving force to promote postgraduates to participate in physical exercise, and plays an important role in understanding postgraduates' exercise behavior. In order to explore the interaction between sports motivation and physical exercise behavior of college students, qualitative research method was adopted, semi-structured interview results were used as materials and MAXQDA software was used to conduct qualitative text analysis. On this basis, sports motivation, motivation internalization and sports behavior were studied.

Objective: This research mainly from the college students' physical exercise attitude and emotion, the independence of the physical exercise (self-study and the tube), and physical exercise behavior of self-regulation, goal, content and evaluation) three aspects to understand the present situation of students' independent consciousness of physical exercise, can be the case for analysis, in this process, the key is to explore students' independent consciousness, college students in physical exercise, whether has the subjective initiative, will take the initiative to participate in, physical exercise is a long-term process, if just rely on others to supervise, it is difficult to stick to it, and the exercise is good for solve this problem, Starting from the inner needs of college students, it provides more stable motivation for college students.

Subjects and methods: By using the method of literature, questionnaire and interview survey, the college students in 10 colleges and universities were investigated, and the status quo of their independent physical exercise behavior was analyzed from three aspects: physical exercise attitude and emotion, independence and self-regulation. See Table 1 and Table 2.

The psychological demand scale was based on the "Physical exercise Psychological Demand Scale" with 15 items in 3 dimensions, including sense of competence, sense of autonomy and sense of relationship, which was revised by Chun Yan. The score is scored on a seven-point scale. The higher the score is, the higher the sense of autonomy/competence/relationship is, and the lower the score is. Empirical analysis showed that the scale had good validity and reliability.

Self-determination motivation scale, will Markland and Tobin, establishment of "physical exercise behavior adjustment scale (BREQ-2)" translation and revision for the internal motivation and external motivation, lack of motivation, a total of three dimensions of 19 items "exercise self-determination motivation scale", the measure of teenagers in varying degrees of self-determination motivation in physical exercise. According to the 7-point scoring method, the higher the score is, the stronger the corresponding motivation is. Otherwise, the weaker it is. Empirical analysis showed that the scale had good validity and reliability.

The exercise satisfaction scale was translated and revised from the leisure satisfaction Scale compiled by Beard and Ragheb into the Physical exercise Satisfaction Scale with 24 items in 6 dimensions, including psychology, physiology, society, relaxation, education and aesthetics, to measure the teenagers' satisfaction with physical exercise. According to the 7-point scoring method, the higher the score is, the stronger the corresponding motivation is. otherwise, the weaker it is. Empirical analysis showed that the scale had good validity and reliability.

Happiness Scale, developed by reference Diener and Emmons "SWLS well-being Scale" (Satisfaction with Life Scale) and Motl and Dishman "sports pleasure Scale", happiness, pleasure, for direction, set up suitable for teenagers in our country contains five entries "exercise happiness Scale", measure the youth sports exercise the happiness of the pleasure. According to the 7-point scoring method, the higher the score is, the stronger the corresponding motivation is. otherwise, the weaker it is. Empirical analysis showed that the scale had good validity and reliability.

According to the physical education learning interest scale, independent physical exercise consciousness is defined as the consciousness of individuals consciously and actively knowing and participating in physical exercise through the inquiry of relevant data. Taking the learning Autonomy scale (SRQ-A) and other scales as reference, it mainly reflects students' attitude and emotion towards physical exercise, independence of physical exercise (self-study and self-management) and self-regulation of physical exercise behavior (target, content and evaluation). As far as students are concerned, it refers to the psychological activities in which they take the correct and effective way to decide their behavior in the process of participating in sports

activities according to their own understanding of physical exercise.

SPSS 19.0 software was used for factor analysis, reliability analysis, descriptive statistical analysis and analysis of variance.

Result: The emotion and attitude of sports is the source of the consciousness of independent physical exercise. Without the correct understanding of physical exercise, there is no awareness of independent physical exercise. For students, exercise attitude and emotion are the understanding and enthusiasm of some basic knowledge of sports. The more the understanding and understanding is, the more conducive to the formation of higher awareness of independent physical exercise, the more conducive to the formation of awareness of independent physical exercise. Through the survey, college students' attitude and emotional status of physical exercise needs to be improved, especially girls, boys' physical exercise emotion and attitude is better than girls, in general, in physical exercise emotion and attitude of college students basically reached a good stage.

Table 1. Scores of variables related to independent physical exercise of college students

Refers to the standard	Dimensions	\bar{x}	S
Psychological needs	Autonomy	4.98	1.31
	Sense of relationship	4.56	1.12
	Feeling of competence	3.78	0.96
Self-determination motivation	The internal motivation	4.52	1.29
	External motivation	3.39	1.15
	A lack of motivation	2.41	0.87
Exercise satisfaction	Relax	4.41	1.29
	Psychological	4.19	1.02
	Social	3.92	1.08
	The physiological	3.61	0.81
	Education	3.31	0.89
Feeling of happiness and pleasure	Aesthetic	2.61	0.59
	Feeling of happiness and pleasure	4.21	0.98

The independence of physical training consciousness means that individuals can judge and decide the development progress of things by themselves. It is the ability to deal with problems or events independently in various aspects such as study, work and social interaction, as well as the independent self-care ability in life. In terms of the independence of physical exercise, students can learn motor skills, design exercise plans, set exercise goals and complete exercise content independently. Through the investigation, the independence of college students physical exercise status quo is that the independence of girls' physical exercise is better than that of boys, in general, college students in the independence of physical exercise performance is poor. Self-study ability is an important factor to determine whether students can achieve sustainable development. Self-study is an important part of the consciousness of independent physical exercise, and one of the necessary abilities for students to do independent exercise. It is the ability for students to acquire knowledge and skills by themselves, and also the comprehensive ability for students to display and independently complete the learning content in all aspects. Through the investigation, the overall self-study ability of college students is poor, and the self-study ability of boys is better than girls. According to the interviews with students, most students do not have the habit of preparing in advance for PE class, and generally follow the teacher to learn what the teacher teaches, and generally do not make any other understanding of the class content.

Self-management ability refers to the ability of the educated to control their own thoughts and behaviors consciously and purposefully according to the sports goals by subjective initiative. According to the survey, college students' self-management ability of physical exercise is generally poor, and the self-management ability of girls is better than that of boys. According to the interview survey, in the PE class without teacher's supervision, some girls will seriously complete the classroom tasks assigned by the teacher, while more girls will choose to rest beside them or write homework. Most boys will choose their favorite sports activities and organize activities by themselves. The self-regulation of physical exercise mainly refers to that individuals can make correct judgments and have the ability to control their own emotions and behaviors when facing

their own emotions, desires, physical and mental conditions, external interference of bad behaviors and temptations of other things. For the majority of college students, their self-regulation is relatively weak, in physical exercise can withstand the outbreak of their own bad emotions, and withstand a variety of external adverse interference and temptation. However, self-control is an important ability in the development of teenagers' self-controlled physical exercise consciousness. The lack of self-control is not only detrimental to students' physical and mental health, but also affects the formation of self-controlled physical exercise consciousness. Through the investigation, the self-regulation of girls' physical exercise is better than that of boys.

Table 2. Distribution of scale items

Refers to the standard	The problem
Physical exercise attitude and emotion	1. I think long-term participation in physical exercise is good for improving physique and health
	2. I don't think it's necessary to do physical exercise without PE class
	3. I take an active part in sports in my spare time
	4. I often watch sports games
	5. I know a lot about sports and sports stars
	6. When I am in a more leisurely state, I choose to do physical exercise
Physical exercise independence	7. I actively participate in PE class in order to get a good grade and the teacher's praise
	8. I can learn and master a motor skill by myself
	9. I can design my own exercise plan
	10. I can stick to the exercise plan
	11. I can finish PE tasks by myself when there is no teacher supervising me in the PE class
Self-regulation of physical exercise behavior	12. I can set my own physical activity goals
	13. I can choose my own exercise mode according to my exercise target
	14. I can adjust the pace of exercise when I feel uncomfortable
	15. I can judge for myself whether I'm meeting my exercise goals
	16. I think PE class is a waste of time doing homework
	17. I think in PE class, teachers let students have free activities so that they can chat or do their homework

The needs of the students, target setting can be clearly expressed, scientific goal setting, can transform students demand for students to achieve the goal of motive, make students' behavior to a certain direction, in the process of efforts, in a timely manner to your own behavior compared with their target, determine whether it is consistent, if there is a deviation, you may need to adjust in a timely manner, such ability can achieve the goal. Through the survey, college students' sports exercise of goal setting ability is bad, especially boys, through interviews, students in the school of physical education class is basically no chance to set a goal of exercise, general directly set by the teacher, the teaching goal at the same time, students are basically do not have the habit of setting goals itself, a few students can set your own goals, few people can achieve self-set of goals. To be able to design the content of physical exercise by oneself is one of the important manifestations of the consciousness of independent physical exercise. Through the correct content design, can make our movement process more interesting, in the process of complete the physical exercise, were also more likely to achieve their own sports, for improving the students' ability of physical exercise on the contrary, a movement is not suitable for their own content, not only may not be able to take to the effect of exercise, may also inhibit the development of students' exercise consciousness, through the investigation, design the content of the college students' physical exercise ability is increased with age, continue to improve.

The individual situation of students has a great impact on the awareness of independent physical exercise, among which, gender and personal sports emotion have the greatest impact, which can be mainly shown from the aspects of the mastery of sports skills, attitude during exercise, and frequency of weekly exercise.

At the same time, whether one has mastered a sports skill also has a very important impact on the consciousness of independent physical exercise. According to the survey, individual differences among college students are relatively large, and the objective differences among different individuals will directly affect students' willingness to participate in physical exercise independently.

Physical exercise knowledge base refers to students' understanding of physical exercise-related knowledge and skills, which is the basis for students' positive attitude towards physical exercise. Different levels of understanding will lead to different emotional attitudes towards physical exercise. According to the survey, most college students choose running, ball games, dancing and other forms of daily physical exercise. College students have a clear understanding of the purpose of physical exercise, which lays a foundation for strengthening the consciousness of independent physical exercise. College physical education is the most direct form of cultivating college students' sports consciousness, but also one of the most effective ways. Physical education courses pay attention to the cultivation of students' sports concept during the period of reading, enrich students' understanding of sports through multiple channels, improve students' sports appreciation ability, build a good sports culture atmosphere, and promote the formation of students' lifelong sports consciousness. The survey shows that college students are satisfied with the content and way of the current PE class, but in PE class, the PE teacher is too dominant in class, and students lack the opportunity to show themselves, which is an important factor affecting the lack of independence of college students. According to the interview, some students said that the teachers in PE class generally explained ball games, and most girls could not learn the sports knowledge of their favorite sports, thus inhibiting the development of the awareness of independent physical exercise, which is also one of the factors affecting the male students' awareness of independent physical exercise is stronger than that of female students. Venue equipment is the link between teachers' teaching and students' learning of sports knowledge, as well as the most basic material guarantee of a PE class. At the same time, the quality of venue equipment and whether it can meet the needs of students affect the participation of college students in physical exercise. In 10 college students and physical education teachers found in the survey, the school's venue equipment is more adequate. Results show that, the university is equipped with the site of the equipment on the whole, or better, that school for students to take exercise provides some basic guarantee, but in the subsequent visit investigation found that many students reflect in the physical education, to the use of the equipment is not sufficient, strong hope school physical education, to innovation, rich indoor physical education form, reasonable use of sports equipment, indoor gym, positive innovation to ensure that the students physical training needs, also can better enhance the independent consciousness of their physical education classes.

In daily life, parents' attitude towards sports will also affect children's attitude towards sports, which plays a very important role in children's awareness of independent physical exercise. Students' psychology is unstable, and parents' educational concepts will directly affect students' attitude towards physical exercise. Most of the parents to give students take exercise to encourage and support, like exercise, to understand the physical exercise of long-term system have some improvement effect on the students' physical and psychological, but there is a part of the parents of the students think that physical exercise will only waste learning time, impact study result, because the parents too much intervention the student's curriculum, excessive take up students' spare time, so that the students have no spare time for exercise, it will be hard to develop the students' independent consciousness of physical exercise. Family income has a direct impact on lifestyle and behavior habits. The level of family income determines whether they can afford other consumption, such as sports consumption, in addition to meeting the basic needs of life.

Human beings are group animals, and the social environment has a subtle influence on individual beliefs and behaviors. By creating a good social environment, it is helpful to mobilize the enthusiasm of teenagers to participate in physical exercise and develop good physical exercise behavior. The situation of sports equipment in the community is good, but the community sports activities are relatively single and the atmosphere is not enough, which is not conducive to the development of students' awareness of independent physical exercise.

Conclusion: (1) College students' awareness of independent physical exercise is generally good. Boys' awareness of independent physical exercise is better than girls', and boys' attitude and emotion of physical exercise are better than girls. To provide more opportunities for students to exercise independently, strengthen the cultivation of independent ability, actively guide students to make exercise plans, set exercise goals, design exercise content, self-evaluation of exercise results, improve the effect of independent exercise, make students experience the fun of independent exercise, cultivate students' awareness of independent physical exercise. (2) In terms of the independence of physical exercise, boys are better than girls in general, and their self-management ability is poor, but girls' self-management ability is slightly better than boys, and boys' self-learning ability is better than girls. Schools and parents should support and encourage students to organize independent sports activities, give full play to the role of after-school exercise, the school regularly hold sports festivals, various competitions, stimulate students to participate in independent exercise enthusiasm, create opportunities for students to exercise, and form a

good campus sports atmosphere. (3) The self-regulation of physical exercise of girls is better than that of boys, and the content design ability of physical exercise increases with age. The overall ability of self-goal setting is relatively poor, especially for boys. Increase the types of sports, such as dancing, tennis, etc., so that students can choose the sports they are interested in according to their personal hobbies and physical conditions, so that students' interest in practice will certainly improve, practice will also be more active, can effectively improve the awareness of independent exercise, and lay a good foundation for lifelong sports.

The results show that on the whole, the students' consciousness of independent physical exercise is good, boys are better than girls in physical exercise attitude and emotion and independence, girls are better than boys in physical exercise self-regulation, senior students are better than junior students. The main influencing factors are personal, school, family and society.

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PSYCHOLOGICAL STATE OF TOURISTS AND COUNTERMEASURES AGAINST COVID-19

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Background: In the spring of 2020, COVID-19 broke out across the country, seriously threatening the safety of people's lives and property. The development of all industries almost came to a standstill, with tourism activities bearing the brunt. However, as the main body of tourism activities, the psychological changes of tourists have a great impact on the travel intention, which greatly impacts the tourism model and tourism benefits. The COVID-19 epidemic has gone through several different stages, including the initial outbreak, high incidence, normalization and post-epidemic era. Tourists' psychology has changed significantly, and the common manifestations include panic, anxiety, sensitivity, depression and compulsion. According to the calculation of China Tourism Academy, the number of domestic tourists will be negative growth by 15.5% in 2020, with a year-on-year decrease of 932 million. The domestic tourism industry was hit hard with a negative growth of 20.6 percent and a loss of 1.18 trillion yuan for the year. In order to adjust tourists' mentality quickly and restore the development of tourism, this paper analyzes the psychological state of tourists at different stages of the epidemic with the method of social investigation, finds out the main factors that affect tourists' tourism psychology during the epidemic, explores the impact of tourism psychology on tourism development and puts forward corresponding countermeasures.

Subjects and methods: In September 2021, some citizens of Huanggang city, which has been severely affected by the epidemic, were selected as the research objects, and questionnaires were generated online and conducted on the platform of Wenjuanxing. The questionnaire included the mood of tourists during the epidemic period, tourists' perspectives on the epidemic, tourists' travel patterns before and after the epidemic, changes in destinations, psychological changes at different stages of the epidemic and influencing factors. The questionnaire survey was conducted in two ways: Online filling by WeChat and QQ groups and offline filling by on-site visiting and issuing questionnaires. All respondents participated voluntarily. A total of 300 questionnaires were sent out, 287 were recovered, and 260 were valid, with an effective rate of 90.59%. SCL-90 scale tests the psychological state of tourists, including somatization, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, hostility, terror, paranoia, psychosis and other nine symptom factors. If the factor score is more than 2, the investigated object is greatly affected by the above factors and has psychological problems. Based on the questionnaire survey data, mathematical statistics and cross analysis were used to study the psychological state of tourists and other related issues in the context of COVID-19.

Results and discussion: The study found that due to the repeatability of the epidemic and the multi-channel nature of transmission, some tourists have a bad mood. Tourism demand, travel mode and travel intention have undergone significant changes, as shown below.

Psychological state of tourists: The results of the questionnaire show that tourists will have stress reaction and chronic reaction when facing emergencies. In the early stage of major public health events, tourists tend to overreact and form self-protection mechanism, and their intention to travel is lowest at this time. The public health condition of the tourist destination has an important relationship with the tourists' health, and the quality of the public facilities of the tourist destination determines the tourists' psychological satisfaction. With the implementation of the normal management of the epidemic and launching of "new tourism" such as "De-ticketing" and "peace of mind travel", tourism industry in post-