

On the Influence of Basketball on the Mental Health of College Students

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Abstract

Objective: To analyze the influence of basketball on college students' mental health. **Methods:** By means of literature review and empirical comparative study, based on the analysis of the types of psychological effects and the influence of basketball on psychological effects, combined with empirical research, the concrete influence of basketball on college students' mental health was confirmed. **Results:** Psychological effects mainly include cognitive ability effect and emotional effect, while basketball has a positive effect on college students' psychological effects and can create a healthy, beautiful and dynamic sports atmosphere. **Conclusion:** Basketball has a significant impact on college students' mental health, which can please students' physical and mental state, keep students in a healthy and positive mental state, improve students' ability to resist pressure and interpersonal communication, and cultivate students' spirit of unity and cooperation, so it is worth learning and applying.

Keywords

Basketball, College students, Mental health, affect.

1. Introduction

Basketball is one of the sports events, and the common basketball competitions are "5 to 5" in the whole court and "3 to 3" in the half court [1]. Through basketball, we can exercise, enjoy our body and mind, and cultivate our team cooperation ability. Mental health is a key content of higher education. Through mental health education, college students can establish correct three views, cultivate their strong will and enhance their ability to resist pressure. From the perspective of sustainable development of college students' mental health education, it is of certain value to analyze and study the influence of basketball on college students' mental health.

2. Types of Psychological Effects and Analysis of Basketball's Influence on Psychological Effects

2.1. Types of Psychological Effects

From the perspective of sports activities, there are two main types of psychological effects, namely:

(1) Cognitive ability effect. Relevant research shows that through the development of sports activities, students' brain cell reaction can be mobilized. At the same time, related research shows that people's advanced thinking function lies in the right hemisphere of the brain. Through sports, people's right hemisphere can be developed. Because the dominant position of brain and sports is opposite, it can promote the dominance of the left limb and develop the right hemisphere, thus improving people's cognitive ability.

(2) Emotional effects. Emotional effect is the most obvious manifestation of human psychological effect. People's emotions are divided into many kinds, including positive emotions and negative emotions, such as optimism, optimism, smile, and refreshed, all of which are positive emotions; Anxiety, depression, tension, worry, fear, fear and so on are all negative emotions. Through the Self-Rating Anxiety Scale (SAS), Self-Rating Depression Scale (SDS), Hamilton Anxiety Scale (HAMA), Hamilton Depression Scale (HAMD), in the form of questionnaire scores, you can assess whether a person has anxiety or depression [2]. Appropriate sports activities can alleviate or eliminate people's negative emotions.

2.2. The Influence of Basketball on Psychological Effect

Basketball is a common sport in colleges and universities. Basketball not only stresses personal skills, such as dribbling, shooting, breaking, passing and catching, rebounding, blocking, defending, etc., but also stresses cooperation with teammates. Take the "5-to-5" whole game as an example. After 48 minutes, it can activate athletes' body and mind, promote dopamine secretion, and achieve the effect of relaxing body and mind and releasing pressure. From the psychological effect of basketball, on the one hand, participating in basketball can expand the cognitive ability of athletes, make athletes have a better view of the overall situation in basketball games, and attach importance to the cooperation with teammates, so as to cultivate the unity and cooperation ability of athletes. On the other hand, participating in basketball can relieve and eliminate athletes' pressure and negative psychological emotions, such as anxiety and depression. Therefore, athletes can devote themselves to the competition, shield the outside interference, find happiness in basketball and develop a healthy and positive attitude.

3. Empirical Study And Analysis of the Influence of Basketball on College Students' Mental Health

3.1. Empirical Research

This time, 40 college students with different negative psychological emotions were included as the research objects. In the process of mental health education, in addition to regular mental health education, the development of basketball activities was emphasized. Before and after the intervention activities, the Hamilton Anxiety Scale (HAMA) and Hamilton Depression Scale (HAMD) were used to score the anxiety and depression of college students. Among them, the HAMA scoring standard is: ① <7 points, no anxiety symptoms; ② >7 points, but <14 points, there may be anxiety symptoms; ③ ≥14 points, but <21 points, but <29 points, there must be obvious anxiety Symptoms: ④ ≥29 points, it may be severe anxiety. The HAMD scoring standard is: ① <8 points, no depressive symptoms; ② 8-35 points, which may be mild or moderate depression; ③ >35 points, may be severe depression. In addition, the data of the same group before and after the intervention were compared. The statistical data was processed by spss21.0, and the related measurement data was expressed with $(\bar{X}+S)$, and then t-test was used. $P < 0.05$, indicating that there is a significant difference between the two groups, with statistical significance [3]. The results of this study are shown in Table 1.

Table 1. Comparison of HAMA and HAMD scores before and after the intervention of 40 college students' basketball activities $(\bar{X}+S)$

Intervention period of basketball activities	HAMA	HAMD
Before intervention (n=40)	22.8±1.1	30.9±2.3
After intervention (n=40)	7.8±1.3	8.2±1.5
t	11.284	12.673
P	<0.05	<0.05

3.2. The Influence of Basketball on College Students' Mental Health

According to the results in Table 1 of the above empirical study, the HAMA and HAMD scores of college students with negative psychological emotions such as anxiety and depression are significantly lower than those before the intervention, indicating that the implementation of basketball intervention can improve the psychological state of college students and relieve or eliminate the negative psychology such as anxiety and depression. Therefore, the intervention method of basketball activities is worth learning and applying in the mental health education of college students. It is worth noting that basketball has the following main effects on college students' mental health:

(1) Pleasant body and mind, enhance the ability to resist pressure. Basketball needs to cooperate closely with teammates, and score by passing, breaking and shooting. The whole process is not for students to participate alone, but to show themselves in an intense and active atmosphere, which can play a role in pleasing the body and mind, and release and alleviate the negative psychology of students such as anxiety and depression. At the same time, the fast conversion of offensive and defensive basketball requires fierce physical confrontation between athletes from both sides. The active participation of athletes in the whole process can improve their ability to resist pressure and effectively release psychological pressure [4].

(2) Improve interpersonal skills. Big data survey shows that college students with negative psychological emotions often have different degrees of social fear, strong inner loneliness, and lack the opportunity to communicate with others and tell their worries. Basketball provides an opportunity for students to communicate. In the course of competition, through the cooperation between teammates, students can feel the happiness of communication, thus alleviating their own negative psychology. In a word, basketball can improve students' interpersonal skills, which is worthy of adoption and application in college students' mental health education.

(3) Cultivate team spirit. Basketball is not a person's sport, it needs close cooperation between teammates, this process can cultivate students' team spirit [5]. When students' teamwork spirit is enhanced, they can have a positive side, eliminate negative psychology, and then develop a healthy and positive attitude. The difficulties in daily life and study can be faced with a positive attitude, and then the difficulties can be solved.

In a word, basketball has many positive influences on college students' mental health. In the process of college students' mental health education, teachers can try to play basketball, so that the methods of college students' mental health education can be expanded and the effect can be improved.

4. Conclusions

To sum up, mental health education is a very important course in colleges and universities. Through mental health education, students can establish a correct outlook on life, values and world outlook, and alleviate and eliminate students' negative psychology, such as anxiety and depression. Basketball is one of the common sports events, which can play the role of pleasing body and mind, improving the ability of resisting pressure and interpersonal communication, and also can cultivate the team cooperation spirit. Therefore, basketball can be infiltrated into college students' mental health education, so as to improve the overall quality of college students' mental health education.

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