

Research on the Influencing Factors of Physical Activity Behaviour of College Students

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Abstract: Physical exercise behaviour of college students is an important way to improve physical fitness. In the face of the continuous decline of college students' physical fitness and health, it is especially important to improve college students' physical exercise behaviour. This paper collects relevant literature at home and abroad through the literature method to explore the influencing factors affecting college students' physical exercise behaviour. The results show that the factors affecting college students' physical activity behaviour mainly include four factors: exercise motivation, exercise attitude, sports environment and self-efficacy.

Keywords: college students, physical exercise behaviour, influencing factors

1. Introduction

With the arrival of the mobile Internet era, college students' physical exercise behaviour has been subjected to a major impact, and the status quo of college students' physical exercise behaviour is not optimistic, college students' participation in physical exercise is becoming less and less, and their physical fitness has become a downward trend. Many college students may lack enough time and motivation to participate in physical exercise under academic pressure. Tasks such as studying for courses, preparing for exams, and completing homework often take up most of their time, making physical activity a secondary consideration in their daily lives. Social activities and recreational pastimes may take up most of college students' free time. Although social interaction is crucial for building relationships and enriching campus life, excessive participation in social activities may lead to a lack of physical exercise. In addition, the lack of adequate exercise facilities and resources is also one of the factors affecting college students' physical activity. Some schools may not have sufficient sports facilities or have fewer hours open to students, which may limit students' choices and opportunities for physical activity. Individual health awareness and exercise habits may also affect the physical activity status of college students. Some students may lack the awareness and importance of health and the importance of physical exercise, thus ignoring the necessity of exercise. It can be seen that the status quo of college students' physical exercise is affected by a variety of factors, mainly by internal and external factors. From these two aspects, this paper will dig deeper into the factors affecting college students' physical exercise, provide theoretical basis for finding out the necessary solutions, and guide college students to further increase their physical exercise behaviours and change the situation of college students' physical quality decline.

2. Connotation of physical exercise behaviour

Physical exercise is an important embodiment of sports behaviour and an important way to improve physical quality. Exercise is the unique and most fundamental way of sports, is the central link of people engaged in sports, but also an important symbol of the difference between sports and other behaviours. To achieve the fundamental purpose of sport and to meet the ever-developing social and personal needs for sport is mainly achieved through various kinds of physical exercise, and all other kinds of sports behaviour are, in the final analysis, to serve the exercise behaviour. There are various forms of physical exercise, such as ball games, gymnastics, martial arts, athletics and so on. Therefore, physical exercise should firstly stimulate the individual's exercise behaviour. Only by stimulating the individual's interest in exercise will the individual be motivated to persist in the exercise programme for a long time. Therefore, the concept of physical exercise behaviour is that conscious, planned and organised exercise can be regarded as physical exercise behaviour.[1] Xi Xuehui pointed out that

physical exercise behaviour refers to the physical activity behaviour that is planned and repeated and combined with natural forces for the purpose of developing the body, enhancing physical fitness, entertaining the mind and body, and enriching cultural life. [2] Cai Nan pointed out that physical exercise behaviour is the behaviour that people adopt according to the actual conditions in order to achieve a certain exercise goal, which is the pursuit of the sports goal, and which creates a certain degree of interaction with other individuals. [3]

To sum up, the physical exercise behaviour studied in this paper mainly refers to the physical activity behaviour of conscious, planned and organized participation in sports for the purpose of improving health, entertaining the body and mind, and increasing self-satisfaction.

3. Analysis of Influencing Factors of Physical Activity Behaviour

3.1 The influence of exercise motivation on physical activity behaviour

Physical exercise motivation is the internal drive and psychological motive that drives individuals to engage in physical activity, and determines the purpose, intensity, frequency and effect of individual participation in exercise. [4]

Exercise motivation is regarded as an internal psychological process that results from a combination of internal physiological needs and external triggers from the socio-cultural context. The functions of exercise motivation include initiating function, selecting function, reinforcing function, and maintaining function. The initiating function refers to the individual's desire to start physical activity out of his or her heart; the selecting function enables the individual to choose specific sports according to his or her own goals and interests; the reinforcing function influences the individual's effort in the exercise process and his or her expectation of the results of the exercise; and the sustaining function is a source of motivation to help the individual continue to engage in physical exercise.

The motivational drive theory suggests that when an organism's needs are not satisfied, a so-called endogenous stimulus is generated within the organism, and this endogenous stimulus elicits a response, and the end result of the response leads to the satisfaction of the needs. According to the theory of motivational drive, exercise motivation refers to the need or demand to be satisfied through physical exercise, thus it can be seen that exercise motivation is both the psychological driving force for people to participate in and maintain exercise behaviour, and the direct cause of people's physical exercise behaviour [5]. Physical exercise motivation is the internal power to prompt people to participate in sports activities under the impetus of the need for exercise, which has an important role in the physical exercise of college students, students have a strong enough motivation for physical exercise, in order to take the initiative to devote themselves to sports activities, so as to achieve the effect of strengthening the body and physical fitness. [6]

Huang Tianlin et al. pointed out that the motivation of physical activity is the internal motive that promotes one's participation in physical activity. It is an internal process of the individual. The behaviour of performing physical activity is the result of this internal process. It has the property of keeping the behaviour at a certain intensity in the activity. They investigated students' motives for participating in physical activity through questionnaires and found that the first motive for college students to participate in physical activity is to maintain physical health, which is the most basic and main motive, followed by mastering skills and techniques, the third is interest and hobbies, the fourth is recreation and amusement, and the fifth is to relieve fatigue. These items show that most of the students' motives for participating in physical exercise are correct, which contributes to the regularity of physical exercise behaviour. However, some students put the motivation on the examination to meet the standard overall position seventh, the participation group will be this motivation as the fifth, which will be easy to interrupt the behaviour of physical exercise, is not conducive to the formation of the habit of physical exercise. [7]

Wang Yajie pointed out that there is a close and significant intrinsic link between physical exercise motivation and exercise behaviour, which can not only affect the generation of exercise behaviour at a deep level, but also strengthen the effect of exercise behaviour at the psychological level. Generally speaking, students' exercise behaviour and exercise motivation have a close intrinsic relationship. However, motivation does not appear out of nowhere, but is formed under the premise of the formation of students' demand for exercise or other needs. If motivation for physical activity does not exist, it is difficult to generate and externalise students' exercise behaviour. In short, only when the motivation for physical activity is formed can physical activity behaviour be generated. One of the components of

motivation for physical activity is the awareness of physical activity. Only by having the awareness of exercise can we promote the generation of exercise motivation in the process of the formation of exercise demand, so that students can externalise the motivation into behaviours under the perspective of demand satisfaction, and promote the psychological and physiological development of students. Therefore, it can be determined that exercise motivation is a necessary condition for the formation of exercise behaviour and an internal support for the externalisation of exercise awareness. And after the exercise motivation is strengthened, the exercise behaviour can be extended in time, making the exercise behaviour more long-lasting and sustainable. [8]

3.2 The influence of physical exercise attitude on physical exercise behaviour

Physical exercise attitude has a profound influence on physical exercise behaviour. A person's attitude determines his motivation, persistence, and ultimate achievement towards physical activity. Positive attitude towards physical activity can stimulate individuals' intrinsic motivation and enhance their confidence and determination in exercise, thus prompting them to participate in physical activity more actively.

Firstly, a positive attitude towards physical activity can shape a healthy lifestyle. A positive attitude makes individuals more inclined to view physical activity as an enjoyment rather than a burden. They will be more inclined to overcome obstacles and maintain the frequency and duration of their exercise rather than giving up due to laziness or negativity. This active lifestyle can help prevent many health problems and improve an individual's overall sense of well-being.

Second, physical activity attitudes influence an individual's exercise achievement. Those with positive attitudes toward physical activity tend to be more motivated to pursue higher goals, and they are more willing to take on challenges and work to overcome them. In contrast, those with negative attitudes may give up easily in the face of difficulties and lack sufficient perseverance to persevere. Therefore, a positive attitude is often the key to physical activity achievement.

In addition, physical activity attitudes affect an individual's self-perception and self-esteem. Through physical exercise, people can challenge themselves and break through their limits, thus enhancing self-confidence and self-esteem. A positive attitude towards physical activity can help individuals develop positive perceptions of themselves, recognise their potential and value, and thus show more positive attitudes and behaviours in other areas. Li Yan pointed out that the variables within the framework of attitudes and cognitive thinking reflect not only the psychological predisposition to physical activity, but also the subjective thinking of individuals who participate in physical activity. Such as exercise experience, exercise cognition, exercise identity, etc., these variables reflect the individual's cognitive attitude towards physical exercise, which can have a positive impact on exercise behaviour. [9]

Overall, physical activity attitudes have a significant impact on physical activity behaviour. A positive attitude can stimulate an individual's intrinsic motivation, improve the effectiveness and sense of achievement of exercise, shape a healthy lifestyle, and enhance self-knowledge and self-esteem. Therefore, we should endeavour to cultivate a positive attitude towards physical exercise so as to enjoy all the benefits it brings.

3.3 The influence of sports environment on physical exercise behaviour

Sports environment has a significant influence on physical activity behaviour, which includes exercise place, social atmosphere, cultural background and other aspects. A positive sport environment can promote more frequent and sustained participation in physical activity, while an unfavourable environment can be a hindrance to participants' exercise willingness and effectiveness.

Firstly, the accessibility of the sports environment directly affects people's willingness and behaviour to participate in physical activity. If a region or community lacks suitable sports facilities and venues, it is difficult for people to find suitable places to exercise. On the contrary, if sports facilities are available and conveniently located, people are more likely to find suitable ways of exercising and are more willing to spend time and energy doing so.

Secondly, the social atmosphere of the sports environment plays an important role in influencing individuals' physical exercise behaviour. A positive social environment can stimulate interest, provide support and encouragement, and promote the formation and continuation of exercise behaviour. For example, a cohesive and friendly sports team or community organisation can provide individuals with

exercise partners, guidance and rewards, enhancing their motivation to exercise and sense of belonging. On the contrary, if the social environment lacks support and encouragement, or even suffers from discrimination or exclusion, it will reduce people's willingness and confidence to participate in physical exercise. Xue Wenmin points out that in different environments, learning moods and attitudes will vary, and learning effects will naturally be different. In the sports environment of institutions of higher learning, whether this environment is good or not is related to the school can normally carry out various sports activities. Only a good, harmonious school sports environment can improve the enthusiasm of students to participate in sports, which in turn helps to strengthen students' healthy and good sports behaviour. [10]

In addition, the cultural context of the sports environment also affects individual physical activity behaviour. Different cultures have different attitudes, habits and values towards physical activity, which directly affects individuals' attitudes and behaviours towards physical activity. For example, in some cultures, physical activity is seen as a necessary way of life and is valued and encouraged, whereas in other cultures, physical activity may be seen as a luxury or irrelevant activity in which people are less likely to participate.

In summary, the sport environment has a significant impact on physical activity behaviour. A positive sport environment can promote people's more active participation in physical activity and increase their willingness and effectiveness to exercise; whereas an unfavourable environment can be a hindrance to participants' willingness and effectiveness to exercise. Therefore, we should work to improve the sports environment and provide more support and encouragement, so as to promote the physical activity behaviour of the general public.

3.4 Effect of self-efficacy on exercise behaviour

Self-efficacy refers to an individual's sense of confidence and competence in accomplishing a specific task or reaching a specific goal. In the field of physical activity, self-efficacy has a significant impact on exercise behaviour, which can influence how often, for how long, and to what extent a person chooses to participate in exercise. Exercise self-efficacy affects an individual's willingness to participate in physical activity, and there is a positive correlation between the two [11], and the college student population's access to an increased sense of exercise efficacy in an athletic atmosphere may be an important variable influencing physical activity. [12]

Firstly, high levels of self-efficacy will motivate individuals to be more active in physical activity. When an individual believes in their ability to exercise effectively and achieve desired outcomes, they are more motivated to overcome obstacles and persevere. In contrast, low levels of self-efficacy may lead individuals to doubt their own abilities and thus reduce their willingness and motivation to exercise. McAuley's [13] study supports this idea and suggests that exercise self-efficacy is important for motivating and maintaining adherence to individual physical activity behaviours, and that physical activity behaviours counteract exercise self-efficacy and lead to increases in its level.

Secondly, self-efficacy also has an impact on the persistence of exercise behaviour. Individuals with high self-efficacy are more likely to persist in exercise and maintain long-term exercise habits because they believe in their ability to overcome difficulties and challenges. On the contrary, individuals with low self-efficacy may be prone to give up in the face of difficulties or setbacks and lack sufficient perseverance to exercise consistently. Rudolph's [14] study pointed out that exercise self-efficacy can increase the frequency of physical activity and prolong exercise adherence.

In addition, self-efficacy influences the level of commitment and effort that individuals put into the exercise process. Individuals with high self-efficacy tend to be more motivated to pursue higher goals, they commit more effort to exercise, and they consistently seek improvement. On the contrary, individuals with low self-efficacy may feel uneasy about their abilities and performance, resulting in a lack of motivation and commitment during exercise. Bozoian's [15] study also confirmed that exercise self-efficacy and physical activity behaviour can be mutually predictive of each other. Individuals' pre-exercise determination of their state can, to a certain extent, contribute to the occurrence of physical activity behaviour.

In summary, self-efficacy has an important influence on physical activity behaviour. A high level of self-efficacy can motivate individuals to participate more actively in physical exercise, maintain a consistent exercise habit, and be more actively engaged and diligent in the exercise process. Therefore, developing and improving levels of self-efficacy is essential for promoting individual health and fitness.

4. Summary

Physical activity behaviour is influenced by various factors. Through collecting literature, this paper found that physical activity behaviour is influenced by exercise motivation, exercise attitude, sports environment and self-efficacy, which become the main factors affecting physical activity behaviour. Aiming at these influencing factors, the necessary improvement measures are proposed, which can effectively enhance the physical exercise behaviour of college students. However, with the deep integration of mobile Internet and college students' life, new influencing factors may exist. For this reason, we can only keep abreast of the times, combine the advantages of mobile Internet, and further improve physical activity behaviour from the aspects of exercise motivation, exercise attitude, sports environment, self-efficacy and so on.

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