

Influence Mechanism of Competition Stress on College Athletes' Performance

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ABSTRACT

Combined with previous research on the stressors of college students and athletes, this paper analyzes the collective stressors of college athletes. In the current environment, we believe that in addition to academic pressure, life pressure, and employment pressure, college athletes also have competition pressure. Since most of these special groups are professional athletes, they still maintain the ability to participate in competitive competitions at the university level, so they are the main force in promoting the development of competitive sports. In this group, the stressors they feel cannot be ignored, and these stressors will affect every aspect of their lives. Compared with professional athletes, there are fewer college athletes, so there are fewer studies on this aspect. Taking previous research as a reference, we explored the cross-influence relationship between competition stressors and other stressors in college athletes and expounded the impact mechanism of competition stress on other stressors. In future research, how to reduce the competition pressure of college athletes can start from the reasons of the athletes themselves and the training plan of the coaches.

Keywords: Stress; Competition stress; Competition results; Academic performance; University student

1. INTRODUCTION

With the continuous development of sports in China, college athletes have been one of the main forces of our sports system. They are different from ordinary college students in that they have to maintain their academic performance while also taking into account their athletic performance. So they have to bear more pressure than ordinary college students. Most of the college athletes in this particular group have had competition experience before they entered college. Therefore, it is usually not particularly difficult to deal with the pressure of competition. However, after entering college, the sources of pressure become more and more extensive, and in addition to facing competition pressure, there will be academic pressure, life pressure, employment pressure, etc.

In previous studies, only the stressors that college students face or the stressors that athletes have to deal with have been identified. Very little research has been done on the stressors that college athletes face. Therefore, on this basis, we understand the main stressors of college athletes and explore the cross-impact of pressure such as competition pressure and academic pressure, so that we can grasp the stressors of college athletes and help them to make informative suggestions when facing stress.

2. LITERATURE REVIEW

2.1. University Student' Athlete Competition result

2.1.1. Connotation

Achievement is the data obtained in a test, or exam according to the number of points or ranking [1]. And the athletes' competition performance refers to the comparison of the athletes' hard strength in the sports competition items, to compete for the ranking and achieve superiority in the competition. It is a means for athletes to show their strength and detect the effect of training [2]. For example, in a competition, the athlete has improved the performance, that is, the recent training program is effective, and can continue to strengthen on this basis. A player who has won a place in the competition is considered dominant in the event.

2.1.2. The Importance of Competition Results of College Athletes

The impact on students' performance in the competition is mainly divided into the following two parts: First, good competition results promote college athletes' sports enthusiasm. Second, achievement in the competition will promote their study and life on the campus.

In the first part, it's easy to find out from the interviews with the students participating in the competition that after entering university, the athletes engaged in professional training, put aside their professional project, and their focus for life is shifting, which leads to a decrease in their athletic ability and slack in the competition. Regular sports competition and training, can not only improve the college student's physical fitness but also maintain their competitive skills and will lead to a positive mental and physical state. Physically, keep training can not only maintain university student-athlete's ability but also play a positive impact on their healthy development. Mentally, the maintenance of good performance in competition, to some degree, will improve their self-efficacy and lead to their healthy mental development [3].

The second part, states that a good competition result greatly promotes the building of good self-confidence for the university student-athletes. They are generally coming from the professional athletes' training team. Engaged in professional training for years, their academic foundation is weak, which make them harder to complete their study in university than other students. While a good competition performance will play a positive impact on their self-efficacy, help them to form a sense of competence, and promote their academic, competitive, and physical and mental development jointly [4]. Therefore, it's necessary to pay more attention to competition pressure's impact on this group.

2.2. Stress

2.2.1. Definition of Stress

The word stress originated from the Latin word "stringer", which refers to the discomfort or resistance that people encounter in working life. Fletcher et al. define stress as the interaction between individuals and the current environment, and during this process, potential problems are solved [5]. In the sports arena, due to its competitiveness, competition stress occurs and athletes have to maintain a high-pressure state on the field. Neil believes that competition stress refers to the process in which individuals continuously interact with the environment that is mainly and directly related to competition [6]. In his view, competition stress is a relatively complex psychological process. More and more studies have proved that if an individual has been under psychological stress, it will bring many negative effects. Also, as college students belong to a special group, they are faced with the pressure of employment, personal relationships, academics, financial condition, and other issues. If college students are under stress for a long time, they will not only experience negative psychological problems such as depression, anxiety, and paranoia but also have a higher risk of diseases such as high blood pressure, heart disease, and even fatal diseases

[7]. Many college students cannot fully cope with psychological stress, which may lead to their tendency to commit suicide.

2.2.2. Source of Stress

Wang Bin and others believe that competition stress refers to "the needs directly related to the competition environment" [8]. Scholars such as Fletcher believe that the sources of stress can be divided into the source from organization and source from competitiveness [5]. Hanton et al. conducted experiments on 14 elite athletes, and the results showed that these athletes faced both organizational and competitive stress. They further divided competitive stress into seven components: preparation, injury, external pressure, competitors, ego, game events, and imagined events. And there are four categories of organizational stress: environmental problems, personal problems, leadership problems, and team problems [9]. Research shows that organizational stress is more common and more diverse in its form.

It is known that athletes belong to a high-pressure group, and their pressure comes from different aspects: continuous high-intensity training, academic pressure, unexpected events that often occur in various competitions, etc. Appropriate pressure can make athletes set clear goals, enhance self-confidence, and improve their performance on the field. Excessive pressure will increase the psychological burden of athletes, and it is very easy to produce a mentality of "weariness of competition" and "weariness of training", thus affecting the athlete's sports career.

Among college athletes, competition, sports injuries, self-expectation, and academics have a greater impact on them [10]. In the competition, athletes attach great importance to the result of the competition because a good ranking can earn them priority in the scholarship assessment. However, too many psychological burdens and expectations will increase the stress on athletes, which will hinder sports performance. Besides competition, a sports injury is another key factor in the career break of many athletes. For instance, Liu Xiang, who won thirty-six champions during forty-eight competitions, yet gained the infamy of "the deserter at the door" in 2008 for the rupture of the Achilles tendon. Therefore, sports injuries can have a great impact on athletes, and athletes should take care to protect themselves both in training and competition. The next factor is self-expectation. Athletes are fighting hard in the competition arena to show their best level. As every athlete wants to win and make a breakthrough, self-expectation can arise. If the self-expectation is extremely high, it will increase psychological pressure and hurt the performance of the competition. For athletes, it is necessary to establish a correct view of goals, setting a reasonable expectation for winning, to avoid more losses than gains. The last thing is academics, which is the most

essential thing for college students. Currently, for the domestic establishment for sports majors, there are Sports Education, Sports Training, and other majors. Most students of Sports Training Majors did not receive much general education before entering the university but focused more on their professional skills in sports. Therefore, after entering the university, they will face more academic pressure than other sports majors.

2.3. The Relationship Between Stress and Competition Performance of College Athletes

In today's competitive sports, with the continuous rising of the competitiveness of the sports events and the improvement of the performance of athletes, there exists a less significant difference in movement technique and physical quality among athletes. Therefore, the psychological factor has become the key to winning [11]. Due to the instabilities and uncertainties of sports events, the psychological burden is common for athletes, and competition stress can arise. In research on sports, psychologists have used "job performance" as an index to measure the ability to cope with stress. Research finds that there is a certain relationship between the physiological activation level and job performance: when an athlete is in an intermediate activation level (excitement), job performance will improve. At the point where optimal activation level is reached, job performance no longer increases. Overall, the whole pattern shows an "inverted U-shaped curve." According to this finding, we can conclude that the best performance of an athlete is achieved at a moderate level of physiological activation level [12]

Therefore, in daily training, coaches should set an appropriate target for athletes to activate their bodily function and achieve an ideal physiological activation level, to help them achieve the best performance in sports events. As for athletes, it is suggested not to put too much psychological burden on themselves to avoid the influence of unnecessary factors on sports performance.

2.4. How to Make Athletes Maintain Optimal Psychological Stress

Success in important competitions is the dream of every athlete, and it is also the hallmark event to make the athlete well-known in the world of sports. But in the face of the upcoming competition, the pressure on athletes will gradually increase, and may even exceed the level they can bear. According to the inverted U-shaped hypothesis, also known as the "Becker's realm", they state that each task has an optimal level of physiological activation, and before reaching or exceeding this optimal point, activity efficiency (performance) declines [12]. Therefore, maintaining an optimal mental state is the key for athletes to perform as they should.

To maintain an optimal psychological state, it is very important to adjust the psychological stress before the game. The coaches can arrange some auxiliary exercises according to the performance of the athletes to help them make adjustments according to their psychological state, to achieve a suitable physiological state. The so-called best mental state before the game is to have confidence in one's strength, the most appropriate state of excitement, the ability to cope with various interference factors, the ability to control one's body at will, and at last the will to fight tenaciously for the game to the end [13]. As an athlete, to not to bear a heavy psychological burden, it is most important to first establish a suitable goal [14]

As long as you have a clear and reasonable competition goal and see where your strength lies, you can better formulate your training plan, and go further in your sports career. Otherwise, it will cause excessive mental stress or negative emotions. Secondly, it is suggested to establish self-confidence to win. At present, the level of athletes is getting higher and higher and the competitiveness is unprecedentedly fierce. But under such conditions, the more confidence you have in yourself, the better your sports performance can be. There are many ways to boost your self-confidence, for example, imagining yourself winning, performing well in daily practice, etc. Besides, it is advised that athletes predict various changes and results before the game. Being aware of the possible results can help them not show panic and other emotions because of a failure. Finally, the same sports team can simulate the real game scene in their daily practice, so that the athletes can adapt to the environment of the game, so as not to show too many mistakes in the real event.

3. LIMITATIONS AND FUTURE IMPLICATIONS

Several limitations of the current study need to be considered. This article summarizes many conclusions of previous research but the conclusion needs to be supported by empirical data to convince readers so that they can read with evidence. Future research can be conducted in the form of a questionnaire to further verify the results of this study. There are many theories and theoretical models involved in stress and competition stress, but the principles involved in the article are relatively one-sided and not in-depth, and the reviewing of the literature is not complete. Therefore, future research can deepen the understanding of stress and competition stress, for example, based on subdivision the sports of college athletes. Since the stress brought by each sport is different, we can conduct an in-depth discussion on this aspect.

For implications, according to our findings, athletes should take the initiative to deal with stress [15]. The active stress response is a positive way of dealing with

stress. If you choose to avoid stress, you will be under more and more stress, the arisen problems will be more difficult to solve, and the error rate will also increase in the competition.

For athletes who are just starting, their reactions to stress are often relatively larger than those of experienced athletes [15]. Therefore, coaches should often observe the emotional state of athletes and help them cultivate some effective strategies to cope with stress to better relieve stress. In terms of academic pressure, it is necessary to help athletes master some learning strategies, so that theories of sports can be applied in training and become the “engine” of training and competition, to achieve an optimal and appropriate psychological state and lay the foundation for creating excellent performance.

4. CONCLUSION

According to domestic research in recent years, there are many studies on university students or athletes, while the study on the special group of university student-athlete is poor. If the pressure of competition and academic of college athletes students can be clarified, the cross-impact will be prevented. In respect to this aspect, we can refer to the management system of the University of Utah in the United States, such as “No matter there is a competition or not, an academic should come the first and if you fail in academic performance, you will be disqualified from the competition.” “If there is a decline in academic performance, you can ask the teacher to make up the lessons” etc. Under this management system, the goal of the athlete's students for every stage is very clear in this school. They should enjoy the competition while competing and enjoy learning while it is time to study. They can clearly distinguish the relationship between academics and competition. If universities in our country have a system suitable for them, those athletes students will no longer be in the mass of training and study and they can coordinate the relationship well, and the cross-impact of training and studying will be avoided so that the students can complete the task at every stage accurately and lead them a better development in the future.

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