

Investigation on emotional intelligence of college volleyball players in Guangdong Province

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Abstract: The research of volleyball players' emotional intelligence is helpful for coaches to better grasp the level of athletes' psychological function, and has important significance for athletes to understand and regulate their own emotional problems. In this study, the use of "Volleyball players emotional Intelligence Scale", combined with the actual feeling of the athletes in the competition situation, the different levels of college volleyball players were investigated and studied. The results show that the volleyball players' emotional intelligence reaches above the medium level; The total score of emotional evaluation, emotional mediation and emotional intelligence of male volleyball players was significantly higher than that of female players; With the increase of sports years, the total score of emotion perception, emotion regulation and emotional intelligence showed a trend of first increasing and then decreasing, and the sports years node was about 6 years. The level of emotional intelligence of volleyball players increased with the increase of sport level. The volleyball coach can give full play to the positive emotions of the volleyball team on the individual emotions of the players, and give full play to the positive effects of the coach's own emotions on the emotions of the players, and rehearse the emotional experience of the players in the face of changes in different game situations in the training, and rehearse the experience and handling ways of the players to the emotional changes of other teammates.

Key words: emotional intelligence of college volleyball players

Introduction

Volleyball as a skills-dominated class of the antagonistic collective event, volleyball players in the course of the game's emotional experience is related to the level of muscle and normal competition level can play normally; If there is improper emotional processing among the players, it will affect the players' decision-making power and judgment. Therefore, the level of volleyball players' emotional intelligence is one of the important factors that affect the outcome of the game. In recent years, the research on emotional intelligence has been gradually carried out at home and abroad. In the field of sports research, there have been some discussions on emotional intelligence of individual events, but few researches on emotional intelligence of collective events like volleyball.

The emotional intelligence of volleyball players is the ability to perceive, express, evaluate and regulate emotions formed in some specific situations during daily training and competition. Emotional intelligence itself has the characteristics of diversity and multilevel, including emotion perception, emotion expression, emotion evaluation, emotion regulation four dimensions. Emotional perception refers to the ability of athletes to detect and identify their own and others' emotional states and emotional changes in a timely manner during competitions. Emotional expression refers to the emotional response produced in the game can be expressed through language expression, body movements, facial expressions and other ways; Emotional evaluation refers to the ability to evaluate, interpret and reflect on the emotional information of self and others caused by volleyball matches; Emotional regulation refers to the ability to regulate and control one's emotions in the volleyball match to ensure the smooth progress of the match.

This study uses "Volleyball Players Emotional Intelligence Scale" and conducts field research on volleyball players of different levels to understand the current situation of emotional intelligence of college volleyball players, and analyzes the differences of emotional intelligence of college volleyball players in different genders, different ages, different sports years and different grades. Combined with the actual situation of volleyball training and competition and the individual characteristics of volleyball players, the reasons for the differences in emotional intelligence of volleyball players are deeply discussed from different perspectives. It is convenient for coaches to grasp the development of athletes' emotional intelligence in time, and make reasonable use of emotional intelligence to adjust training methods and improve the level of athletes' training and competition.

1. Research methods

This study uses the Volleyball Players Emotional Intelligence Scale compiled by Wu Qiong, which contains 28 items in 4 dimensions, namely emotion perception, emotion expression, emotion evaluation and emotion regulation. The volleyball players in universities were taken as the objects of investigation. In order to accurately express the specific emotional changes during the match, the survey time was selected at the start of the Guangdong University Volleyball League in 2023. A total of 118 people were randomly selected, including 55 men and 63 women, 6 first-level athletes, 9 second-level athletes and 103 third-level and below athletes. SPSS statistical software was used to conduct univariate multivariate analysis of variance on the recovered data.

2. Research data and analysis

1. The overall performance of the emotional intelligence scale for volleyball players

The descriptive statistical results of the four subscales and the total score of the emotional intelligence of volleyball players are shown

in Table 1. The analysis results show that the average total score of the emotional intelligence scale of volleyball players is 99.09 points. Because the number of items in the four subscales is different, the total score of the four subscales cannot be compared with the average. The score results of all the participants in the study reached the above average level.

Table 1 Overall performance of the Emotional Intelligence Scale for volleyball players

	Minimum Values	Maximum	Average	Standard Deviation
Emotional perception	18	35	26.6271	3.05448
Emotional expression	15	27	20.9407	2.5193
Emotional evaluation	6	25	18.4576	3.23349
Emotional regulation	22	45	33.0678	5.0021
Total Emotional Intelligence Score	76	127	99.0932	10.15351

Compared with ordinary students, college athletes have the corresponding sports experience or physical quality, and athletes have to endure high intensity training and competition almost every day, from this aspect, having a good sports emotional intelligence level is a normal performance. From another point of view, the emotional intelligence level of college volleyball players is only above the average, and the overall performance is not satisfactory. Perhaps it is due to the analysis of professional athletes and non-professional athletes as a whole that the research results are shown, but only in this way can the overall level be shown.

2. Analysis of gender differences in volleyball players' emotional intelligence

The results of Table 2 show that: in terms of gender, there are no significant differences in emotional perception and emotional expression among different gender players. Male volleyball players' emotional evaluation, emotional mediation and total emotional intelligence score are significantly higher than female volleyball players.

Table 2 Analysis of gender differences in emotional intelligence of volleyball players

	Male (N=55)	Female (N=63)	F	P
Emotional perception	27.22 +/- 3.24	26.11 +/- 2.81	3.955	0.059
Emotional expression	21.33 +/- 2.85	20.60 +/- 2.16	2.456	0.12
Emotional evaluation	19.25 +/- 3.82	17.76 +/- 2.44	6.554	0.012
Emotional regulation	35.16 +/- 5.10	31.24 +/- 4.15	21.209	0
Total emotional intelligence Score	102.96 +/- 10.77	95.71 +/- 8.28	17.018	0

Note: * $p < 0.05$ indicates significant difference.

Gender can significantly affect the emotional evaluation, emotional mediation and emotional intelligence, but can not significantly affect the level of emotional perception and emotional expression; The intensity of male athletes' competition is indeed higher than that of female athletes. On the whole, this requires male athletes to be more "mature" in emotional regulation ability than female athletes in this aspect. This point is also reflected in the training process of some college sports teams. Even some high-level sports teams will also adopt such training methods.

3. Analysis of differences in emotional intelligence of volleyball players in age

There are no significant differences in emotional perception, emotional expression and emotional evaluation among volleyball players of different ages, while the total score of emotional regulation and emotional intelligence is significantly different among volleyball players of different ages. The older the volleyball players are, the higher the total score of emotional regulation and emotional intelligence is.

Table 3 Analysis of differences in emotional intelligence of volleyball players in age

	18-19 years old (N=25)	20-21 years old (N=53)	Age 22 + (N=40)	F	P
Emotional perception	26.28 +/- 3.43	26.25 +/- 2.48	27.35 +/- 3.42	1.717	0.184
Emotional expression	20.52 +/- 2.22	20.79 +/- 2.60	21.4 +/- 2.59	1.107	0.334
Emotional evaluation	18.32 +/- 2.66	18.40 +/- 2.76	18.63 +/- 4.10	0.084	0.919
Emotional regulation	30.88 +/- 4.85	32.66 +/- 4.32	34.98 +/- 5.36	5.936	0.004
Total points	96 +/- 8.81	98.09 +/- 9.06	102.35 +/- 11.56	3.63	0.03

Note: * $p < 0.05$ indicates a significant difference.

The majority of college volleyball players are between 18 and 22 years old. As they grow older, they become more mentally mature, spend more time in team training, and become more mature in training and competition experience. Therefore, the performance of emotional regulation ability and emotional intelligence will improve with the growth of team training and competition.

4. Analysis of differences in emotional intelligence of volleyball players in sports years

There are no significant differences in emotional expression and emotional evaluation among volleyball players with different years of exercise, while there are significant differences in emotional perception, emotional regulation and emotional intelligence total score among volleyball players with different years of exercise. After a pairwise comparison, athletes with 5-6 years of exercise experience, Their

emotional perception, emotional regulation and emotional intelligence total scores were significantly higher than those of the volleyball players with other years.

Table 4 Analysis of differences in emotional intelligence of volleyball players in sports years

	1-2 years (N=28)	3-4 years (N=40)	5-6 years (N=18)	7-8 years (N=17)	8 + years (N=15)	F	P
Emotional perception	24.86 +/- 2.73	26.58 +/- 2.91	28.67 +/- 3.07	27.41 +/- 2.94	26.73 +/- 2.52	5.333	0.001
Emotional expression	21.04 +/- 2.67	20.3 +/- 2.08	22.28 +/- 2.91	21 +/- 2.12	20.8 +/- 2.88	2.005	0.099
Emotional evaluation	18.04 +/- 2.87	18.13 +/- 2.33	19.5 +/- 5.39	19.35 +/- 2.67	17.87 +/- 3.07	1.15	0.337
Emotional regulation	31.86 +/- 5.23	31.73 +/- 4.46	37.22 +/- 5.30	34.24 +/- 4.07	32.6 +/- 3.98	5.135	0.001
Total points	95.79 +/- 9.71	96.73 +/- 8.92	107.67 +/- 11.56	102 +/- 7.99	98 +/- 8.88	5.667	0.001

Note: * $p < 0.05$ indicates a significant difference.

With the increase of sports years, the total score of emotion perception, emotion regulation and emotional intelligence showed a trend of first increasing and then decreasing, and the node of sports years was about 6 years. Among the volleyball players in colleges and universities, there are 5 to 6 years of sports, most of them have training and competition experience in middle school, compared with those who entered the university and began to accept training and competition, it appears that they have more level in this respect, but with the approaching graduation, the pressure of study and employment will also distract their energy in training and competition. Therefore, 5-6 years such a time node is also in line with their sports characteristics.

5. Analysis of the difference of volleyball players' emotional intelligence in sport grade

There are significant differences in emotional regulation and total emotional intelligence of volleyball players in different sports grades. If the sample size is small (only 6 players in the first level) is not taken into account, it can be considered that the emotional intelligence level of volleyball players will improve with the improvement of sports grades.

Table 5 Analysis of differences in emotional intelligence of volleyball players in sports grades

	Level 1 (N=6)	Level 2 (N=9)	Other (N=103)	F	Salience
Emotional perception	28 +/- 3.43	27.33 +/- 3.43	26.49 +/- 3.43	0.957	0.387
Emotional expression	21.67 +/- 3.43	21.67 +/- 3.43	20.84 +/- 3.43	0.71	0.494
Emotional evaluation	21.33 +/- 3.43	18.89 +/- 3.43	18.25 +/- 3.43	2.739	0.069
Emotional regulation	38.67 +/- 3.43	36.44 +/- 3.43	32.45 +/- 3.43	7.316	0.001
Total emotional intelligence score	109.67 +/- 3.43	104.33 +/- 3.43	98.02 +/- 3.43	5.407	0.006

In colleges and universities, it will be mostly regular student-athletes, and the level of sports will vary. On the whole, there are relatively few athletes above the second level, let alone the first level athletes. Most of the athletes with sports levels are sports students. They are indeed higher in emotional intelligence than ordinary student athletes than ordinary non-sports athletes.

3. Suggestions

1. In addition to physical condition, physical quality and skill level, emotional intelligence level should also be considered in the selection criteria of athletes

The volleyball competition requires the players to judge their emotions in time and optimize their adjustment quickly to avoid negative emotions affecting the game. As far as the current selection standards are concerned, in addition to the national team and high-level sports teams will care about the athletes' mental health, more attention is paid to the athletes' external body condition and physical quality level. The above research has proved that the emotional intelligence level of each athlete is crucial, the athlete's every move will have a positive or negative impact on himself or his teammates, and even affect the performance of the game, so the emotional intelligence test can be added to the selection criteria of volleyball players.

2. Exert the positive emotions of the whole volleyball team on the individual emotions of the players

As volleyball is a team event, the interaction of the players on the court during the game is very important. Positive emotions can promote the team atmosphere and improve their own skills and tactics. When scoring, it is necessary to interact with teammates, run around the court, etc. When making mistakes, it is necessary to shout loudly to vent emotions. Teammates should encourage each other, whether it is verbal or physical encouragement is very important. When interfered by external conditions, teammates should remind each other through language, body movements, facial expressions, etc., to avoid being affected and making improper behaviors.

3. The influence of coaches' emotions on athletes' emotions

In competition, the emotional state of coaches is of great significance for athletes to understand and regulate their own emotional problems. In the face of the changes of players' emotions, coaches should take appropriate ways to regulate them. Observe the emotional problems faced by the players in time and help the players quickly eliminate the influence of bad emotions. When the athlete is not in good condition, whether the coach can help the athlete to reduce the pressure by using specific intervals such as timeouts, substitutions, and interinning breaks. The short interval is a great test of the coach's ability to regulate the athlete's emotion. If the negative impact of emotional response cannot be timely controlled, the athlete will easily fall into a cycle of doubt about his ability in the game.

4. Rehearse the emotional experience of athletes in the face of changes in different competition scenarios in the training.

Improve the athletes' ability to overcome the loss, sadness and other negative emotions caused by sports performance or technical lag behind others. To teach athletes the theory of uplifting spirit and encouraging morale before the official competition, or to prepare specific countermeasures in advance, and the environment to put them in the environment to enhance the ability of psychological adaptation.

5. Rehearse how to experience and deal with emotional changes of other teammates in training

In the face of negative emotions of myself and teammates, how to find ways to vent and deal with them, and reasonable expression of positive emotions, etc. In volleyball games, players can not only adjust their emotions after mistakes, but also their teammates can help them recover. In daily training and competitions, in some specific situations, when the emotions of individuals and teammates change, can they quickly observe and identify? For example, in the field of silence, unwilling to interact with teammates, angry, frowning and other external reactions, indicating that the individual is being troubled by negative emotions. When these behaviors occur, if the athlete can immediately perceive the emotional changes of himself, teammates or opponents and take measures to adjust.

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