

The Influence of Coach-Controlled Behavior and Coach-Athlete Relationships on Athlete Engagement

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DOI: [10.36347/sjahss.2024.v12i07.003](https://doi.org/10.36347/sjahss.2024.v12i07.003)

| Received: 19.05.2024 | Accepted: 26.06.2024 | Published: 03.07.2024

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Abstract

Original Research Article

Athletes' investment is not only a lasting, positive cognitive and emotional experience in sports, but also an important indicator to measure the positive aspect of athletes, which can effectively avoid psychological fatigue in athletes. Therefore, it is particularly important to explore the influencing factors of the athletes' investment and to explore the ways to improve the athletes' investment, and for them to give full play to their sports skills steadily in sports training and competition. **Results:** There were significant negative correlation between coach control behavior and coach-athlete relationship, and between coach-athlete relationship and athlete input. **Conclusion:** From the above results, the coach control behavior is not conducive to the promotion of athlete input and the establishment of coach-athlete relationship.

Keywords: sports, Athletes', psychological fatigue, coach control behavior.

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1. INTRODUCTION

With the rise of positive psychology, researchers have shifted their focus from the negative aspects of human psychology to the positive aspects. In the field of competitive sports psychology, sports engagement has become a popular research direction. Sport engagement is defined as a sustained and positive cognitive and emotional experience in sports [1], and is considered one of the important substitute indicators for measuring sports performance. It is characterized by confidence, dedication, vitality, and enthusiasm. For athletes, sport engagement reflects a positive and healthy psychological state, which helps to stimulate positive qualities such as optimism, resilience, sense of meaning, and creativity, effectively promoting the development and maturity of athletes and laying a solid foundation for enhancing their competitive abilities and improving sports performance (Zhang Zhongqiu, 2012) [2]. In addition, sport engagement is also the best way to prevent athletes from experiencing burnout symptoms (Graña *et al.*, 2021) [3]. Given the multiple benefits of sport engagement, exploring possible predictive factors of sport engagement is crucial for improving athletes' engagement and laying an empirical foundation.

2. LITERATURE REVIEW

"In the exploration of the antecedents of sport involvement, Ye Chulian (2014) proposed a sport

involvement Genesis model that explains the formation and development of sport involvement [4]. This theoretical model mentions that the formation of sport involvement is dynamically influenced by environmental and individual factors. Environmental factors that affect sport involvement include coach behavior, interpersonal relationships, motivation atmosphere, and social support. Among these external environmental factors, interpersonal relationships (such as the coach-athlete relationship) play an important role in the development of athletes' involvement. The reason why the coach-athlete relationship is important for the development of athletes' involvement is that athletes can obtain Coach's care and understanding by establishing a high-quality relationship with their coach, thereby meeting their relationship needs; secondly, they can win the trust and respect of their coach and obtain more autonomy, thereby meeting their autonomy needs; at the same time, they can receive sincere and serious guidance from their coach and make continuous progress in technique and tactics, thereby meeting their ability needs (Aide, 2010). Finally, the satisfaction of these three basic psychological needs will further stimulate the athlete's self-determination motivation, providing a dynamic basis for the formation and maintenance of athlete involvement [5]. In the exploration of the antecedents of the coach-athlete relationship, recent studies have shown that coach control behavior significantly predicts the coach-athlete relationship, and another study found that

coach control behavior significantly negatively predicts athlete burnout [6]. As the opposite of burnout, how does sport involvement affect coach control behavior? We need to explore this issue further. Therefore, based on previous studies, this study aims to explore the specific mechanism of coach control behavior, coach-athlete relationship, and sport involvement to provide theoretical basis for intervention practices of sport involvement."

3. METHODS

3.1. Participants

The principle of convenience was adopted in this study, which used a random sampling method to select high-level active athletes from Shanghai, Heilongjiang, Jilin, Shandong, and Gansu provinces as research subjects. After the athletes' training, a graduate student of sports psychology who had received systematic and professional training was used as the main tester. The main tester provided detailed guidance on how to fill out the questionnaire and distributed paper-and-pencil self-administered questionnaires to the athletes, requiring them to answer carefully and independently based on the guidance and their actual situation. To ensure the quality of the responses, a research assistant read the instructions at the beginning and explained the purpose and requirements of the questionnaire. The average time required for the survey was 15 minutes. This survey was voluntary and anonymous, and the questionnaires were checked and retrieved by the main tester immediately after completion, followed by expressing gratitude to each participant. The athletes had a training duration of more than 3 years and performed well in their respective sports. A total of 500 questionnaires were distributed, and 380 valid responses were obtained with an effective recovery rate of 76%. The sports projects included football, badminton, volleyball, basketball, gymnastics, etc.

3.2. Instruments

3.2.1 Coach Control Behavior Scale

Using the "Controlling Coach Behaviors Scale" (CCBS) developed by Bartholomew, Ntoumanis, and others, and translated and revised by Chinese scholar Zhao Daliang *et al.*, [7], which has been tested for applicability in Chinese athletes and has good reliability and validity. The questionnaire contains 15 items and

four dimensions, including reward control, negative conditional attention, coercion, and excessive personal control. The scale uses a 7-point rating scale, ranging from 1 "strongly disagree" to 7 "strongly agree". The total Cronbach's alpha coefficient of the Coach Controlled Coaching Style Scale is 0.946, and the Cronbach's alpha coefficients of the reward control, negative conditional attention, coercion, and excessive personal control dimensions are 0.884, 0.865, 0.906, and 0.749, respectively.

3.2.2 Coach-Athlete Relationship Scale

3.2.2 Coach-Athlete Relationship Scale

Using the "Coach-Athlete Relationship Questionnaire" (CARTQ) developed by Jowett and Ntoumanis, and translated and revised by Zhong Risheng and Wang Di [8], which has 11 items and includes intimacy, commitment, and complementarity dimensions. It has been tested for applicability in Chinese athlete populations and has good reliability and validity. In this study, the total Cronbach's alpha coefficient of the Coach-Athlete Relationship Scale is 0.95.

3.2.3 Athlete Engagement Scale

Using the "Athlete Engagement Questionnaire" (AEQ) developed by Lonsdal *et al.* and translated and revised by domestic scholars Ye Lv *et al.*, [4], which has 16 items and includes four dimensions of confidence, dedication, vitality, and enthusiasm. In this study, the overall internal consistency coefficient of the Athlete Engagement Scale is 0.96.

3.3. Data Analysis

Data analysis was conducted using SPSS 22.0 (IBM, Armonk, NY, USA) for descriptive analysis, reliability analysis, and correlation analysis of the questionnaire data.

4. RESULTS

Table 1 presents the mean (M) and standard deviation (SD) of coach control behavior, coach-athlete relationship, and athlete engagement. Pearson's analysis was used to obtain the correlation coefficients between coach control behavior, coach-athlete relationship, and athlete engagement. The results showed that all variables were significantly correlated.

Table 1: Variable Means, Standard Deviation and Correlation Coefficients (n=287)

	<i>Mean</i>	<i>Std</i>	1	2	3
The coach controls the behavior	3.00	1.53	1		
Coach-athlete relations	4.32	0.67	0.33***	1	
Athlete engagement	4.31	0.61	-0.14***	-0.51***	1

5. DISCUSSION

5.1. Direct Effect of Coach Control Behavior on Athlete Engagement

Coach control behavior can hinder the satisfaction of athletes' basic psychological needs, leading to a lack of self-determined motivation and ultimately reducing the level of athlete engagement.

athlete relationship significantly positively predicts athlete engagement.

5.2. Direct Effect of Coach-Athlete Relationship on Athlete Engagement

A harmonious and agreeable "coach-athlete relationship" established between athletes and coaches may result in more respect and guidance from coaches in terms of sports techniques, thereby increasing the level of athlete relationship needs. As coaches provide more support to athletes, athletes will perceive more autonomy and control, which will encourage the satisfaction of their autonomous needs. Furthermore, in the process of mutual trust and promotion between athletes and coaches, athletes will actively participate in training and competition, and their training and competition abilities will continuously improve, thereby meeting athletes' ability needs. In addition, according to self-determination theory, the satisfaction of athletes' basic psychological needs will increase their self-determined motivation level for participating in training or competition, thereby maintaining the level of athlete engagement.

5.3. Implications

Good coaching behavior and a harmonious coach-athlete relationship can stimulate athletes to better engage in daily sports training and competition.

5.4. Limitations and Prospects

The limitations of this study. Cross-sectional study. The collected data in this study are cross-sectional in nature and lack trace data, so it is not possible to accurately infer the causal relationship between variables.

6. CONCLUSION

The three hypotheses proposed in this study have been supported. Coach control behavior significantly negatively predicts athlete engagement levels; coach control behavior significantly negatively predicts the coach-athlete relationship; and the coach-

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