

The Influence of Coach Autonomy Support and Coach-Athlete Relationship on Athlete Engagement

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Abstract

Original Research Article

The independent support behavior of coaches and the coach-athlete relationship are all important psychological variables affecting athletes' input. This study examined the influence of coach independent support behavior and coach-athlete relationship on athlete input. **Methods:** 450 Chinese athletes aged 14 to 26 were surveyed by questionnaire. **Results:** Coach independent support behavior and coach-athlete relationship can significantly positively predict athlete input. Moreover, the coach-athlete relationship was significantly positive associated with athlete input. **Conclusion:** Good independent support behavior of coaches and coach-athlete relationship can improve the investment level of athletes.

Keywords: coach-athlete, relationship, psychological variables, sports training.

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1. INTRODUCTION

With the rise of positive psychology research, researchers' focus gradually shifts from solving individual psychological negative problems to promoting human positive psychology. Input is a hot topic in related research, which refers to the individual in a persistent, full state [1] of positive emotions and motivation. Lonsdale Introduce its concept into the sports domain and points out that exercise engagement reflects a lasting, positive cognitive and emotional experience in exercise (Lonsdale, 2007); it is the perfect link between individual traits, motor factors and motor performance [2]. Compared with sensory indicators such as sports satisfaction, sports input can more directly reflect the positive experience of individual cognition and behavior. In addition, sports input is also the best way to prevent the symptoms of burnout in athletes [5]. Given the important influence of sport input on athletic performance, understanding the formation mechanisms of sport input is very valuable to improve and improve the competitive performance of athletes.

2. LITERATURE REVIEW

At present, in the exploration of dependent variables before athletes' input, the coaches independently support behavior, gratitude, coping mode, social support, understanding and care, coach-

athlete relationship, etc., among which motivation is the biggest influence in the individual internal factors, and social support plays the most important influence in the external environmental factors. In competitive sports training, the G.A.MAGEAU study believes that the coach independent support, as an important part of the social support system, can relieve the physical and mental discomfort of athletes in [3]. Atkinson *et al.*, showed that social support was significantly positively associated with athlete input [4]. In China, some researchers believe that the coaching mode of coaches, especially the independent support mode of coaches and the coach-athlete relationship have become important factors affecting the investment of athletes. Therefore, the author assumes that in the independent support of the Chinese athletes, the independent support of the instructors can significantly positively predict the coach-athlete relationship and the relationship.

3. METHODS

3.1. Participants

Based on the principle of convenience, we used the research method of random sampling, and selected the high-level active service athletes from Beijing, Tianjin, Zhejiang, Shandong, Jiangsu and other provinces and cities as the research objects. After the training of the athletes, the professional graduate students of sports psychology with systematic

professional training will explain the instructions to fill in the questionnaire in detail, and issue the paper and pen questionnaire to the athletes, requiring the participants to answer carefully and independently according to the guidance and their own actual situation. To ensure the quality of the responses, the research assistant initially read the instructions and explained the purpose and requirements of the questionnaire. It takes on average 15 minutes to complete the survey. The survey was conducted voluntarily and anonymously, and the questionnaire was received by the subject and acknowledged to each participant. They have been trained for more than three years and have performed well in their respective sports. A total of 400 questionnaires were distributed, and after deleting the invalid questionnaires, 350 questionnaires received valid responses, with an effective recovery rate of 87.5%. Sports include football, basketball, track and field, swimming, gymnastics and so on.

3.2. Instruments

3.2.1. Perceived Autonomy Support : the Sport Climate Questionnaire, SCQ-PAS

The study adopts G.C. Williams *et al* Perceived Autonomy Support: the Sport Climate Questionnaire, SCQ-PAS, revised by domestic scholars Zhu Xiao na, Li Na and others, SCQ-PAS has a total of 3 dimensions and a total of 15 questions. The scale uses a 7-level evaluation, and the higher the score, the higher the level of the coach's self-support coaching. The overall internal consistency coefficient of the scale is 0.96.

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, 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.

3.2.2. Athlete Engagement Questionnaire, AEQ

Using the Athlete Engagement Questionnaire, AEQ, compiled by Lonsdal *et al.*, and translated and revised by domestic scholar Wang Bin *et al.*, the questionnaire has a total of 16 items, including four dimensions of confidence, dedication, vitality and enthusiasm. In this study, the overall internal consistency coefficient of the athlete input scale was 0.96.

3.3. Data Analysis

Data Analysis SPSS 22.0 (IBM, Armonk, NY, USA) is used to enter questionnaire data for descriptive analysis, reliability analysis, and correlation analysis.

4. RESULTS

Table 1 illustrates the mean (M) and standard deviation (SD) of coach autonomy support, Coach-Athlete Relationship, and athlete engagement, and Pearson analysis is used for correlation coefficients between coach autonomy support, athlete engagement and Coach-Athlete Relationship. The results showed that all variables were significantly correlated.

Table 1: Variable Means, Standard Deviation and Correlation Coefficients, (n=350)

	<i>Mean</i>	<i>Std</i>	1	2	3
coach autonomy support	5.55	1.01	1		
Coach-Athlete Relationship	4.10	0.58	0.34***	1	
athlete engagement	2.41	0.79	0.52***	0.46***	1

5. DISCUSSION

5.1The direct role of coaches 'independent support on athletes' input

According to the SEM constructed by predecessors, structural equations support the chain mediation role of basic psychological needs, coaches improve the level of autonomy support, meet the basic psychological needs of athletes, promote the formation of autonomy motivation, and finally improve the level of athletes' investment.

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

This study is a practical application of interpersonal dynamics theory in influencing competitive performance. The coach's good behavior and harmonious coach-athlete relationship can promote their better participation in 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-

athlete relationship significantly positively predicts athlete engagement.

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