

The prediction of sport satisfaction based on coach's controlling behavior, athletes' self-efficacy and motivation

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Abstract

There are many individual and interpersonal factors that can affect sports results. Therefore, the current research aimed to predict sports satisfaction based on the coach's controlling behavior, athletes' self-efficacy, and motivation. The present research was a descriptive correlational study of university athletes, from which 15 teams were selected by cluster sampling. 184 athletes in the age range of 18 to 25 years participated in the research. Questionnaires on sports satisfaction, coach's controlling behavior, sports self-efficacy, and behavioral regulations in sports were used. The data were analyzed using Pearson's correlation coefficient and linear regression in SPSS23 software and LISREL 8.8. The results showed that the athletes' self-efficacy and coaches' controlling behavior had a positive and significant relationship with intrinsic motivation. Athletes' satisfaction had a negative and significant relationship with amotivation and a positive and significant relationship with the external motivation and internal motivation. Finally, sports satisfaction showed a positive and significant relationship with the coach's controlling behavior. The results of the regression analysis also showed that the assumed relationship model is significant, and all variables can predict sports satisfaction. The results of the beta coefficient showed that amotivation negatively and other variables, including internal motivation, self-efficacy, external motivation, and the coach's controlling behavior, can positively predict athletes' satisfaction. It was identified that intrinsic motivation is the most important and strongest factor in influencing athletes' satisfaction. The results were discussed using theories related to self-efficacy, autonomous motivation, and intrinsic and extrinsic motivation.

Keywords: Sport Satisfaction, coach's controlling behavior, self-efficacy, motivation

1. INTRODUCTION

Undoubtedly, there are many individual and interpersonal factors that create success in team sports. The athlete's perception of the coach's behavior as an individual factor under the influence of the interpersonal factor of the coach-athlete relationship can affect sports success and athlete satisfaction (Adnan et al., 2021). Also, the athlete's belief in the ability to perform his tasks in sports in order to achieve specific goals is considered one of the most important aspects in sports that can include sports success. This issue shows itself as sports self-efficacy (Felts et al., 2008). Athletes with high self-efficacy have confidence in their sports skills, control their behavior and environment, and have the ability to direct their motivations (Rogowska et al., 2022). Meanwhile, the athlete's motivation can be influenced by internal dimensions - such as self-efficacy (Mouloud and Elkader, 2016) and external dimensions such as athlete-coach relationships (Mageau and Vallerand, 2033). Motivation and its related concepts are at the center of sports participation and different theories have been created to explain motivation and its effect on sports performance. Some theories regarding human motivation consider a passive being and consider environmental factors as the cause of behavior. Other theories consider the internal and unconscious factors as the basis of human behavior, and the third group are those who consider the interaction between the environment and the individual's perception as the basis of human behavior with a cognitive integration approach (Keegan et al., 2010). Deci and Ryan's cognitive evaluation theory, which examined the theoretical structure of autonomy, indicates that the human need for a sense of individual competence and freedom of action has an internal tension. The basic assumption of this theory is that people are more likely to participate in activities that have self-

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determined motivation and can do it with their own free will. Based on this, a motivational continuum is created, with intrinsic motivation at the top and amotivation at the bottom (Deci and Ryan, 2008). According to the materials stated in the context of the dual relationship between the athletes' motivations with an internal factor (self-efficacy) and an external factor (the coach's controlling behavior), as well as the effect of the mentioned factors on the level of athletes' satisfaction, therefore, the present research is aimed at the relationship between types of motivation (internal, extrinsic and lack of motivation), examine the coach's self-efficacy and control behaviors and examine the effect of these factors on sports satisfaction.

2. ANALYSIS

The current research method is a descriptive correlation type, which was created in order to reach an analytical model of the relationships between variables. The statistical population of the research included university athletes in team sports such as soccer, futsal, volleyball, basketball and handball in Iraq, from which 15 teams were selected by cluster sampling. In order to calculate the number of people needed with G*Power 3.1.9.4, the effect size was 0.15, alpha was 0.05, and the total number of predictors was 5 components. Therefore, the minimum number of samples required was 138 athletes. According to the participation of people in the place of data collection, 184 people in the age range of 18 to 25 years participated in the research.

2.1. Measurements

Sports self-efficacy questionnaire: To measure it, Kroll et al.'s (2007) sports self-efficacy questionnaire was used. This questionnaire contains 10 questions that measure the level of self-efficacy of athletes in a 4-point Likert scale.

Sports Behavior Regulation Questionnaire: The six-factor sports behavior regulation questionnaire of Lonsdale et al. (2008) divided the dimensions of motivation in the form of unmotivated factors, external regulation, introverted regulation, self-regulatory regulation, mixed regulation and internal motivation in 24 questions.

Coach's Controlling Behavior Questionnaire: Bartholomew et al.'s (2010) Coach Control Behavior Questionnaire measures the level of athletes' perception of the coach's control behaviors using a fifteen-question scale. This scale measures the coach's controlling behavior in four control dimensions using rewards, negative conditional considerations, threats and excessive personal control.

Athletes' satisfaction questionnaire was created by Caliskan and Baydar (2016). This questionnaire measures three components: satisfaction with performance, satisfaction with teammates, and satisfaction with the coach.

2.2. Data analysis

The data obtained using descriptive statistics including mean and standard deviation as well as inferential statistics including Pearson's correlation coefficient and linear regression were analyzed step by step in SPSS23 software. LISREL 8.8 software was used for the conceptual model.

3. ALTERNATIVES, RECOMMENDATION AND DISCUSSION

Descriptive statistics including mean and SD of variables and Pearson correlation coefficients are shown in Table 1. The regression results showed that the assumed relationship model is significant (adjusted R square statistic = 0.40 and Durbin-Watson's statistic = 1.81). Also, the variance analysis statistic showed the significance of the model (Sum of Squares = 17845.60, Mean Square = 3569.12, Degree of Freedom = 5, F-statistic = 25.15, Significance Level = 0.0001). The results of the beta coefficient showed that the strongest predictors of sports satisfaction were intrinsic motivation, self-efficacy, extrinsic motivation, demotivation, and coach's controlling behavior, respectively. In the following, in order to reach a conceptual model, the results of the analysis of the path of predicting sports satisfaction were analyzed. The conceptual model was formed based on the relationships between the variables. After examination, it was shown that two paths based on t values are not significant: the path of self-efficacy to demotivation, the path of coach's control behavior to demotivation. On this basis, the amotivation variable was removed from the whole model. In the following, these two paths were removed and the path analysis was performed again.

Table 1. Mean, SD and correlations of study variables

	sport self- efficacy	coach's controlling behavior	amotivat ion	externa l motivati on	inter nal motivati on	Mean	SD
coach's controlling behavior	0.06					61.88	13.98
amotivation	0.03	-0.06				12.27	6.43
External motivation	0.21**	0.08	0.32**			65.62	14.82
internal motivation	0.23**	0.22**	-0.09	0.33**		20.67	6.69
sport Satisfaction	0.33**	0.26**	-0.19**	0.37**	0.50**	73.40	15.31
sport self-efficacy						26.50	5.04

The second model showed that the path of coach's controlling behavior to external motivation is not significant either. Therefore, this path was also removed and the third model was investigated (Figure 1).

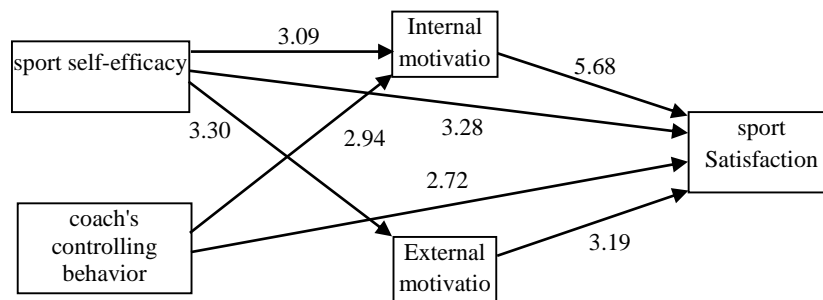


Figure 1. The third path analysis model of relationships between variables (T coefficients)

4. CONCLUSION

The results of Pearson's correlation analysis showed that there is a positive and significant relationship between sports self-efficacy with intrinsic motivation and the total score of extrinsic motivation. However, it was shown that self-efficacy has no significant relationship with amotivation. The results of the present research were consistent with the results of Chowdhury and Shahabuddin (2007). They also showed that there is a positive and significant relationship between self-efficacy and intrinsic and extrinsic motivation. Also, the results of the present study were consistent with the results of Yilmaz et al. (2020). They also showed that there is a positive and significant relationship between motivation for sports success and self-efficacy. Fominykh et al. (2020) also showed that high self-efficacy is associated with a decrease in demotivation. And important factors of self-efficacy include success and failure (experiences that contribute to one's sense of competence) and focus on competition (competition against oneself and some measure of excellence, where the emphasis is on progress, versus competition against opponents, where the emphasis is on winning).

Autonomy theory in this context states that competence is one of the basic needs of the athlete and the degree of its satisfaction goes a long way in determining the internal motivation of the individual. Therefore, the psychological factors that influence motivation are 1) the need for competence (a sense of high self-efficacy and self-confidence), 2) the need for independence (making decisions or owning something) and 3) the need for connection (giving importance to others). and being important to them). Therefore, influencing each of these factors can increase internal motivation. In the following, it was shown that self-efficacy has a positive and significant relationship with sports satisfaction. From the point of view of self-efficacy beliefs, athletes who have high self-efficacy have more confidence in their abilities and have a positive view of their performance. This positive belief in their abilities can lead to their greater satisfaction. Similarly, athletes with high self-efficacy are more likely to be satisfied with their performance because they believe in their ability to succeed (Reverdito et al., 2023). On the other hand, as mentioned, self-efficacy is closely related to motivation and effort. Athletes with high self-efficacy are more motivated and willing to put in the effort necessary to succeed. This motivation and effort can lead to improved performance and a sense of success and help to be satisfied with one's

performance (Adnan et al., 2021). Further, the results of the regression model showed that lack of motivation cannot be used to predict sports satisfaction. Finally, the path analysis model was checked to find the best model for sports satisfaction based on the investigated variables. This model also showed that self-efficacy can predict sports satisfaction both directly and indirectly through intrinsic and extrinsic motivation. Also, the coach's controlling behavior could directly and indirectly affect sports satisfaction through internal motivation. This showed the importance of intrinsic motivation in both cases.

5. REFERENCES

- Adnan, M. A. J., Tabassum, Y., Sattar, S., Hussein, H., & Butt, M. Z. I. (2021). Coaching behavior, motivation and psychological well-being in young athletes. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(10), 979-989.
- Bartholomew, K. J., Ntoumanis, N., & Thøgersen-Ntoumani, C. (2010). The controlling interpersonal style in a coaching context: Development and initial validation of a psychometric scale. *Journal of Sport & Exercise Psychology*, 32(2), 193-216 .
- Caliskan, G., & Baydar, H. O. (2016). Satisfaction scale for athlete (SSA): A study of validity and reliability. *European Scientific Journal*, 12 (14), 13-26.
- Chowdhury, M. S., & Shahabuddin, A. M. (2007). Self-Efficacy, Motivation and Their Relationship to Academic Performance of Bangladesh College Students. *College Quarterly*, 10(1), 1-9.
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macro theory of human motivation, development, and health. *Canadian psychology/Psychologie canadienne*, 49(3), 182.
- Feltz, D., Short, S., Sullivan, P (2008). Self-efficacy in sport: research and strategies for working with athletes, teams and coaches. *International Journal of Sports Science and Coaching*, 3(2): 293-295.
- Fominykh, A. Y., Kornienko, D., & Y Fominykh, A. (2020). Association between athletes self-efficacy, emotional regulation and sports achievements. *European Proceedings of Social and Behavioral Sciences*, 94, 252- 259.
- Keegan, R. J., Harwood, C., Spray, C. M., & Lavalley, D. (2010). From 'motivational climate' to 'motivational atmosphere': A review of research examining the social and environmental influences on athlete motivation in sport.
- Kroll, T., Kehn, M., Ho, P. S., & Groah, S. (2007). The SCI exercise self-efficacy scale (ESES): development and psychometric properties. *International Journal of Behavioral Nutrition and Physical Activity*, 4, 1-6.
- Lonsdale, C., Hodge, K., & Rose, E. A. (2008). The Behavioral Regulation in Sport Questionnaire (BRSQ): Instrument development and initial validity evidence. *Journal of sport and exercise psychology*, 30(3), 323-355.
- Mageau GA, Vallerand RJ. (2003). The coach-athlete relationship: A motivational model. *Journal of sports science*, 11(21): 883- 904.
- Mouloud, K., & Elkader, B. (2016). Self-efficacy and achievement motivation among football player. *The Swedish Journal of Scientific Research*, 3(11), 13-19.
- Reverdito, R. S., Fonseca, S., Lopes, A., Aires, K., Santos Alves, L., Alves de Lima, L., ... & Gonçalves, C. (2023). Sources of sport satisfaction and perceived self-efficacy among youth in a competitive environment. *Perceptual and Motor Skills*, 130(3), 1221-1238.
- Rogowska, A. M., Tataruch, R., Niedźwiecki, K., & Wojciechowska-Maszkowska, B. (2022). The mediating role of self-efficacy in the relationship between approach motivational system and sports success among elite speed skating athletes and physical education students. *International journal of environmental research and public health*, 19(5), 2899.
- Yılmaz, T., Yiğit, Ş., Dalbudak, İ., & Acar, E. (2020). Investigation of university students' self-efficacy and sport specific success motivation levels. *Turkish Studies (Elektronik)*.