

The Effect of Autonomy-Supportive Behaviors of Coaches on Need Satisfaction and Sport Commitment of Elite Female Players in Handball Premier League

Sedigheh Hosseinpour Delavar

Member, Islamic Azad University, Kermanshah Branch, Iran

Shirin Zardoshtian

(PhD) Assistant Professor, Faculty of Physical Education, Razi University of Kermanshah, Iran

Behesht Ahmady

MA in sport management, Iran

Azadeh Azadi

MA in Behavior Learning, Iran

Abstract

This study determined the effects of autonomy-supportive behaviors on satisfying the psychological needs and commitment of female handball players in premier league in Iran. Here, we used descriptive research (survey) method. The statistical population of 237 players was selected as our samples. We administered three questionnaires for autonomy-Supportive behaviors, psychological needs and commitment including perceived autonomy-supportive behaviors of coaches in sport (PASSES), satisfaction of the psychological needs in sports and sports Commitment Scale (SCMS) questionnaires. We applied multiple regression analysis and structural equation modeling (SEM) to analyze the data. Results showed there was a positive correlation between autonomy-supportive behaviors with the psychological needs of competence and commitment of athletes. On the other hand, the players' commitment correlated positively with psychological needs. Results of multivariate regression showed that the autonomy-supportive behaviors were predictor of psychological needs and commitment of players. The path analysis, also, established mediator role of psychological needs between autonomy-supportive behavior of the coach and players' commitment. Thus, the self-determination Theory among the elite players and sports teams was confirmed.

Key words: Self-Determination Theory, Autonomy-Supportive, Sport Commitment, coaching behavior, need satisfaction

Introduction

Self-determination theory is a theoretical framework that can induce a wide knowledge on various aspects of sports social environment (Deci & Ryan, 1985).

Satisfying the psychological needs of the communities require regulation, feedback, rewards, or the relationship between the individuals (Deci & Ryan, 2000). In recent years, two interpersonal styles –control and autonomy-supportive - has attracted the most attention (Alvarez et al, 2009). The autonomy-supportive style is defined as a position of authority in which one, who minimizes the pressure and command, uses the ideas of others, takes their feelings into consideration and provide information and opportunities for them to choose (Mageau & Vallerand, 2003).

Studies in sport have established the relationship between autonomy-supportive behaviors and needs satisfaction. Almagro et al (2010) found a positive relationship between coach's autonomy-supportive behaviors with players` autonomy need satisfaction.

Studies show few research considered sport commitment as one of the behavioral outcomes of self-determination. Also, few studies have been conducted in Asian countries (Lim and Wang , 2009). On the other hand, given different cultural values in Iran, no research on the theory of self-determination has been made in the sport setting. Therefore, this study effects of autonomy-supportive behaviors to satisfy the psychological needs and commitment of female handball players in premier league in Iran.

Methodology

This is descriptive (survey) study. Our statistical population included 237 women with mean age of 97.3 ± 82.19 . This study conducted as census and the sample was equal to the total study population. We took 3 questionnaires into account as follows:

1 - Perceived autonomy-supportive behaviors of coaches in sports: This questionnaire developed by Hagger et al (2007) consisting of 12 questions.

2 - The assessment of psychological needs questionnaire encompassed the following: The need for autonomy in the exercise with six items (Deci et al, 2001) The need for competence with 5 items (McAuley et al, 1989) and the need to relatedness with 5 items (Richer and Valerand, 1998). The Questions were modified and updated to handball sport. Cronbach's alpha for the competence, communication and autonomy needs were 0.69, 0.76, 0.79 respectively.

3 - Sport commitment Scale: This questionnaire developed by Askanlan et al (1993) and has 14 items.

We analyzed the data using SPSS16 and LISREL. The mean and standard deviation for age, history of the game were determined. To evaluate the correlation between variables and for

predicting the predictive variables on the mediator and the criterion variable, we used the Pearson correlation multivariate regression analysis, respectively, and structural equations used for modeling and finally a model were presented.

Results

Table 1: Regression coefficients associated with the prediction of "commitment to sport and satisfying psychological needs" based on "coaches` Autonomy-Supportive behaviors»

predictive variable	The criterion variable	B	β	t	sig	VIF
Autonomy-Supportive	competence	0.049	0.216	3.385	0.001	1
	relatedness	0.069	0.158	2.401	0.000	0.95
	autonomy	0.263	0.598	11.220	0.017	0.99
	Commitment	0.250	0.255	4.037	0.000	1

Also, the regression results in Table 2 show a positive linear relationship between the need for competence, integrity and autonomy with sport commitment and all 3 psychological needs could predict the sport commitment of players in the $\alpha=0.01$.

Table 2 - Regression coefficients associated with the prediction of "commitment to sport," according to "satisfying psychological needs."

predictive variable	The criterion variable	B	β	t	sig	VIF
competence	Commitment	1.157	0.269	4.274	0.000	1
relatedness		0.395	0.320	5.175	0.000	1.2
autonomy		0.494	0.206	3.227	0.001	1

The path analysis

In order to examine the predictive role of independent variable as well as investigate their direct and indirect effects on dependent variable, we used structural equation model. After designing the model, the model was studied and related indices of goodness of fit and measurement errors were obtained. In this regard, as shown in Table 3, five different criteria were measured.

Table 3 - Parameters associated with the model presented

The final model in Figure 1 Shows that a direct and indirect relationship exists between the coaches` autonomy-supportive behaviors and sport commitment (0.25), and total direct and indirect effects on the commitment of the players is 0.6251.

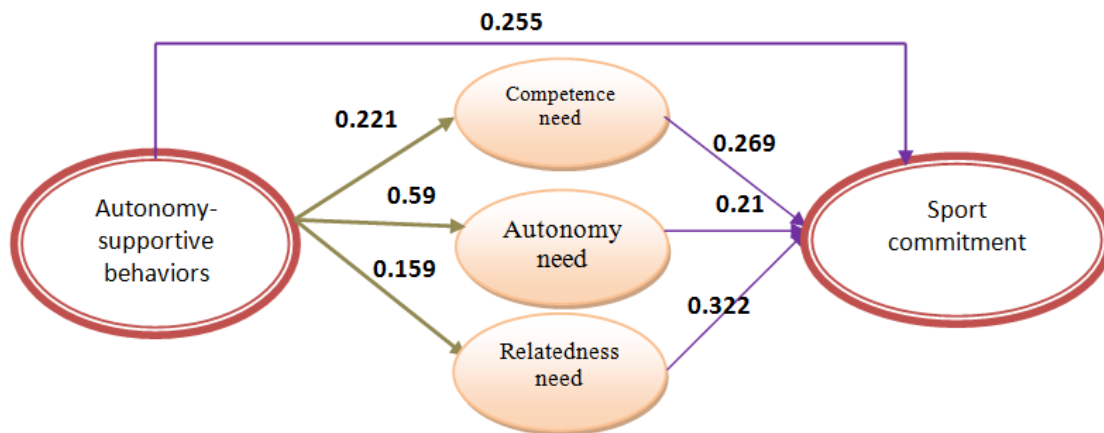


Figure 1: The model of autonomy-supportive behaviors effects on commitment and psychological needs of sports players

Conclusion

Many studies have emphasized the importance of effective communication between coach and player. hcus sA ,quality of effective communication is an important factor enhancing athletic performance. Hence, given the review of current research in the framework of self-determination theory, this study examines the effect of autonomy-supportive behaviors on the satisfaction of psychological needs and commitment to sport.

Results showed that there is positive relationship between autonomy-supportive behavior with satisfying the needs of competence, autonomy and team cohesion. Some research in this regard (Valerand Richter, 1995; Blanchard and Valrnd ,1996; Mageau and Valerand, 2003; Reinboth et al, 2004; Alvarez et al, 2009 and Kamaroa, 2010) refer to the relationship between coaches` autonomy-supportive behaviors and satisfaction of the above-mentioned needs. Also, The results of the research are consistent with those of Edmunds et al 2005; Coatsworth & Conroy (2009), Almagro etal (2010) and Jam et al (2010) . The underlying reason for the consistency of the results is the universality of the psychological needs. Also Deci and Ryan (2000) acknowledged that an important feature of the needs is that they can` t change. In this regard, several studies have (Standage et al, 2005) showed that these needs are the same as far as sex is concerned. Also, concerning interpersonal communication in sport environments,

Valerand & Mageau (2003) have confirmed that interpersonal communication in sport settings shall meet the psychological needs and coach's support of the players.

References

Almagro, BJ, Saenz-Lopez, P., & Moreno, JA (2010). Prediction of Sport Adherence through the Influence of Autonomy-Supportive Coaching among Spanish Adolescent *Athletes*. *Journal of Sports Science and Medicine*, **9**, 8-14.

Alvarez, MS, Balaguer, I., Castillo, I., & Duda, JL (2009). Coach Autonomy Support and Quality of Sport Engagement in Young Soccer *Players*. *The Spanish Journal of Psychology*, Vol. 12, No. 1, 138-148.

Andrew, DPS (2004). *The Effect of Congruence of Leadership Behaviors on Motivation, Commitment, and Satisfaction of College Tennis Players. A Dissertation Submitted to The Florida State University.*

Black, AE, & Deci, EL (2000). The Effects of Instructors 'Support and Students' Autonomous Motivation on Learning Organic Chemistry: A Self Determination Theory Perspective. *Science Education*, 84, 740-756.

Blanchard, C., & Vallerand, RJ (1996). Perceptions of competence autonomy, and relatedness as psychological mediators of the social factors-contextual motivation relationship. *Unpublished manuscript. Universite du Quebec a Montreal.*

Coatsworth, JD, & Conroy, DE (2009). The Effect of Autonomy-Supportive Coaching, Need Satisfaction, and Self-Perceptions on Initiative and Identity in Youth *Swimmers*. *Developmental Psychology*. Vol 45 (2), 320-328.

Deci, EL, & Ryan, RM (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.

Deci, EL, & Ryan, RM (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-determination of *Behavior*. *Psychological Inquiry*, 11, 227-268.

Doherty. AY & Danylchuk. KE (1996). Transformational and transactional leadership and impact of inter university athletic *administrators*. *Journal of sport management*. 11, 275-285

Edmunds, JK, Ntoumanis, N., & Duda, JL (2005). Facilitating Exercise Engagement: An Experimental Test of Self-Determination *Theory*. *Manuscript in Preparation*.

Fredricks, JA, Alfeld-Liro, CJ, Hruda, LZ, Eccles, JS, Patrick, H., & Ryan, AM (2002). A Qualitative Exploration of Adolescents Commitment to Athletics and the Arts. *Journal of Adolescent Research*, 17 (1), 68-97.

Geme, L. (2010). Perceived Autonomy Support, Basic Needs Satisfaction, Motivation Regulation and Well-Being: Verification of Self-Determination Theory in Dancers in Finland. *Master Thesis. University of Jyväskylä.*

Gillet, N., Vallerand, R, J., Paty, M., Gobance, I., & Berjor, S,. (2008). Validation and Adaptation of the Perceived Autonomy Support Scale for Exercise Settings to the Sport Context. *Laboratoire de Psychologie Appliquée Université de Reims Champagne-Ardenne.* Email Adress: [Nicolas.gillet-Reims.fr @ Univ](mailto:Nicolas.gillet-Reims.fr@Univ) .

Hagger, MS, Nikos, LD,, Chatzisarantis, NLD, Hein, V., Pihu, M., Soós, I., & Karsai, I. (2007). The perceived autonomy support scale for exercise settings (PASSSES): Development, validity, and cross-cultural invariance in young people. *Psychology of Sport and Exercise*, 8, 632 - 653.

Ianchini, AL (2008). Factors Influencing the Provision of *Autonomy-Support*. *Doctoral Dissertation. The Ohio State University.* *Intrinsic Motivation, Social Development, and Well-Being. American Psychologist*, 55 (1), 68-78.

Kamaroa, S. (2010). Autonomy Support, Basic Needs Satisfaction, Motivation Regulation, and Well-Being among Elite Level Ballet Dancers in Russian Speaking Countries. *Master Thesis. University of Jyväskylä.*

Kent, A., & Chelladurai, P. (2001). Perceived transformational *leadership*, organizational commitment, and citizenship behavior: A case study in intercollegiate athletics. *Journal of Sport Management*, 15, 135-159.

Lim, BSC, & Wang, CKJ (2009). Percieved Autonomy *Support*, Behavioral Regulations in physical Education and Physical Activity *Intention. Psychology of Sport and Exercise* 10, 52-60.

Mageau, GA, & Vallerand, RJ (2003). The coach-athlete relationship: A motivational model. *Journal of Sport Sciences*, 21, 883-904.

McAuley, E., Duncan, T., & Tammen, V. (1989). Psychometric properties of the Intrinsic Motivation Inventory in a competitive sport setting: A confirmatory factor analysis. *Research Quarterly for Exercise and Sport*, 60, 48-58.

Reinboth, M., Duda, JL, & Ntoumanis, N. (2004). Dimensions of Coaching *Behavior*, Need Satisfaction, and the Psychological and Physical Welfare of Young *Athletes. Motivation and Emotion*, 28, 297-313.

Richer, SF, & Vallerand, RJ (1995). Supervisors 'interactional styles and subordinates' intrinsic and extrinsic motivation. *Journal of Social Psychology, 135* (6), 707-722.

Ryan, RM, & Deci, EL (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist, 55*, 68-78.

Scanlan, TK, Simons, JP, Carpenter, PJ, Schmidt, GW, & Keeler, B. (1993). The Sport Commitment Model: Development for the Youth-Sport Domain. *Journal of Sport & Exercise Psychology, 15* (1), 16-38.

Schuler, J., Sheldon, KM, & Frohlich, SM (2009). Implicit Need for Achievement Moderates the Relationship between Competence Need Satisfaction and Subsequent *Motivation*. *Journal of Research in Personality, 44*,1-12.

Standage, M., Duda, JL, Ntoumanis, N. (2005). A Test of Self-determination Theory in School Physical Education. *British Journal of Educational Psychology, 75*, 411-433.