Revista de Psicología del Deporte 2009. Vol. 18 - suppl., pp. 353-356 ISSN: 1132-239X Universitat de les Illes Balears Universitat Autònoma de Barcelona

# ANALYSIS AND COMPARISON OF ADOLESCENT ATHLETES' MOTIVATION: BASKETBALL PLAYERS VS. FOOTBALL PLAYERS

## Bartolomé J. Almagro\*, Cristina Conde\*, Juan A. Moreno\*\* & Pedro Sáenz-López\*

#### KEY WORDS: Motivation, sport, adolescents, football, basketball

ABSTRACT: The motivation of an athlete is determinant for the athletic engagement of the adolescent. The present study attempts to analyze the motivation of adolescent basketball and football players from the perspectives of Achievement Goal Theory (Nicholls, 1989) and Self-Determination Theory (Deci & Ryan, 1985).

The study's sample was composed of 248 athletes from 12 to 17 years of age. Half were from basketball and half were from football. The instruments that were utilized were: the Spanish version of the Sport Motivation Scale (SMS) (Núñez, Martín-Albo, Navarro, & González, 2006), the Spanish version of the Perceived Motivational Climate in Sport Questionnaire-2 (PMSCQ-2) (Balaguer, Mayo, Atienza, & Duda, 1997), and the adapted Spanish translation (Moreno, Moreno, & Cervelló, 2007) of the Intention to be Physically Active Scale (IPAS) by Hein, Müür, and Koka (2004).

The comparison of the means of the variables between football and basketball players was done utilizing the student t-test for independent samples. Significant differences were found for variables such as: intrinsic motivation (IM) toward accomplishment, external regulation, amotivation, task, ego, and Self-Determination Index (SDI). Basketball players obtained higher values in the SDI, in task, and in IM toward accomplishment than football players. The search for premature performance in football and coaches' educations can help to explain these differences. The importance of these differences reside in the relationship between these motivational variables and the adherence to athletic practice.

In conclusion, basketball demonstrated better values in motivational variables, which demonstrates that training sessions are more oriented toward task than ego, that players have more intrinsic and self-determined motivation, and therefore, the adherence of the young athletes will be greater in this sport.

Bartolomé Jesús Almagro Torres. University of Huelva. Department of the Didactics of Musical, Plastic, and Corporal Expression. Faculty of Education Sciences. Avda. tres de marzo s/n 21071 (Huelva) Spain

E-mail: almagro@dempc.uhu.es

\* University of Huelva

\*\* Miguel Hernández University of Elche

This research was financed by the Spanish Ministry of Science and Innovation through the research project "Motivational factors related to physical activity adherence: Analysis in competitive sport contexts" (Ref. DEP2007-73201-C03-02/ACTI) and by the grant from the pre-doctoral program "Programa de Formación de Profesorado Universitario" (Ref. AP2007-02061) from the same Ministry.

## Introduction

Adolescence is a key period for young athletes to commit to becoming regular participants of physical activity, or on the other hand, to completely abandon it (Cervelló, Escartí, & Guzman, 2007). The motivation experienced by athletes during training sessions and competition is determinant for the athletic engagement of the adolescent. The present study attempts to analyze the motivation of adolescent basketball and football players from the perspective of Achievement Goal Theory (Nicholls, 1989) and Self-Determination Theory (Deci & Ryan, 1980, 1985, 1991).

## Method

#### Participants

The study's sample was composed of a total of 248 athletes (20 females and 228 males) between the ages of 12 and 17 years (M = 14.56, SD = .95). Half of the participants were basketball players and the other half were football players. A selection of teams and towns from the province of Huelva, Spain, through a conglomerated random sampling was done.

### Instruments

Sport Motivation Scale (SMS.) The Spanish version (Núñez, Martín-Albo,

Navarro, & González, 2006) of the SMS by Brière, Vallerand, Blais, & Pelletier (1995) was utilized.

Perceived Motivational Climate in Sport Questionnaire-2 (PMSCQ-2). The Spanish version (Balaguer, Mayo, Atienza, & Duda, 1997) of the PMSCQ-2 (Newton, Duda, & Yin, 2000) was utilized.

Intention to be Physically Active Scale (IPAS). The adapted Spanish translation (Moreno, Moreno, & Cervelló, 2007) of the IPAS by Hein, Müür & Koka (2004) was employed.

## Results

Descriptive and bivariate correlation analyses. The descriptive statistics and bivariate correlations of each of the study's variables were calculated, and the results that were obtained support the theoretical constructs of the Achievement Goal Theory and the Self-Determination Theory. The variables that were studied were: intrinsic motivation (IM) to know, IM to experience stimulation, IM toward accomplishment, identified regulation, introjected regulation, external regulation, amotivation, task, ego, selfdetermination index (SDI), and intention to be physically active in the future (IPAF).

Comparison of the variables' means between the football and basketball players. This comparison was done with the student t-test for independent samples. Statistically significant differences in variables such as the following were found: IM toward accomplishment, external regulation, amotivation, task, ego, and SDI. In Figure 1, a graphical representation of these differences between football and basketball players are demonstrated. The basketball players had higher values for SDI, task, and IM toward accomplishment.

							_		_				
Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. IM know	5.45	1.04	-	.53**	.59**	.52**	.38**	.39**	.61	.32**	.27**	09	.34**
2. IM stim.	5.60	.98	-	-	.62**	.48**	.42**	.32**	05	.40**	.44**	43	.43**
3. IM accomp	5.66	.99	-	-	-	.41**	.37**	.35**	.02	.35**	.32**	04	.36**
4. Ident. Reg.	5.16	1.02	-	-	-	-	.45**	.53**	.12	.22**	.22**	.01	.26**
5. Intro. Reg.	5.57	1.05	-	-	-	-	-	.41**	.08	.33**	.24**	.00	.05
6. Ext. Reg.	4.76	1.33	-	-	-	-	-	-	.35**	.10	01	.29**	-19**
7. Amot	3.13	1.59	-	-	-	-	-	-	-	25**	18**	.43**	-86**
8. IPAF	4.30	.60	-	-	-	-	-	-	-	-	.39**	12	.39**
9. Task	4.07	.55	-	-	-	-	-	-	-	-	-	19**	.35**
10. Ego	3.08	.78	-	-	-	-	-	-	-	-	-	-	42**
11. SDI	4.87	3.85	-	-	-	-	-	-	-	-	-	-	-

Legend: IM know = intrinsic motivation (IM) to know, IM stim.= IM to experience stimulation, IM accomp = IM toward accomplishment, Ident. Reg.= identified regulation, Intro. Reg.= introjected regulation, Ext. Reg.= external regulation, Amot = amotivation, IPAF= intention to be physically active in the future, SDI = self-determination index; \*\* p < .01

Table 1. Descriptive Statistics and Correlations of all the Variables

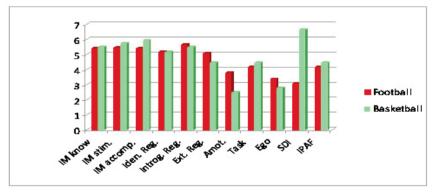


Figure 1. Comparison of the variables' means for the football and basketball players

## Discussion

The results demonstrate significant differences in some of the studied variables between basketball and football players. The basketball players had higher values for SDI, task, and IM toward accomplishment. The professionalization and obsession for football performance (Zarco, Blanca, & Mora, 2001) is reflected in youth teams in many contexts, which may explain why we see more of an ego orientation than in basketball. Another factor that can influence this is the education of the coaches, since in basketball there are more coaches with university degrees than in soccer (Nuviala& Sáenz-López, 2001). The importance of these differences resides in the relationship between these variables and the adherence to athletic practice, as it has been widely demonstrated that the most selfdetermined forms of motivation predict the most positive motivational consequences (Lim & Wang, 2009; Moreno, Cervelló, & González-Cutre, 2006; Wilson, Rogers, Fraser, & Murray, 2004). The task-oriented climate that is created by a coach with a pedagogical education helps to increase the intrinsic motivation and therefore the adherence to sport. In conclusion, these results provide valuable information about the difference that can exist in the motivation of athletes that practice different team sports. Basketball has better values in motivational variables which demonstrates that practices are more task-oriented than ego- oriented, that players have more intrinsic and self-determined motivation, and therefore, the adherence of the young athletes will be greater in this sport.

### References

- Balaguer, I., Mayo, C., Atienza, F., & Duda, J. L. (1997). Factorial validity of the Perceived Motivational Climate in Sport Questionnaire-2 in the case of Spanish elite female handball teams. *Journal of Sport and Exercise Psychology*, 19, 27.
- Cervelló, E., Escartí, A., & Guzmán, J. F. (2007). Youth sport dropout from the achievement goal theory. *Psicothema*, 19(1), 65-71.
- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum.
- Lim, B. S. C., & Wang, C. K. J. (2009). Perceived autonomy support, behavioural regulations in physical education and physical activity intention. *Psychology of Sport and Exercise*, 10(1), 52-60.
- Moreno, J. A., Cervelló, E., & González-Cutre, D. (2006). Motivación autodeterminada y flujo disposicional en el deporte. *Anales de Psicología, 22(2)*, 310-317.
- Moreno, J. A., Moreno, R., & Cervelló, E. (2007). El autoconcepto físico como predictor de la intención de ser físicamente activo. *Psicología y Salud, 17*, 261-267.
- Nicholls, J. G. (1989). *The competitive ethos and democratic education*. Cambridge: Harvard University Press.
- Núñez, J. L., Martín-Albo, J., Navarro, J. G., & González, V. M. (2006). Preliminary validation of a Spanish version of the Sport Motivation Scale. *Perceptual and Motor Skills*, 102, 919-930.
- Nuviala, A., & Sáenz-López, P. (2001). Estrategias de análisis del deporte en edad escolar en la provincia de Huelva. Apunts, *Educación Física y Deportes, 63*, 30-38.
- Wilson, P. M., Rogers, W. M., Fraser, S. N., & Murray, T. C. (2004). Relationships between exercise regulations and motivational consequences in university students. *Research Quarterly for Exercise and Sport*, 75, 81-91.
- Zarco, J. A., Blanca, M. J., & Mora, J. A. (2001). Atención-concentración comoentrenamiento para la mejora del rendimiento deportivo en jugadores profesionales de fútbol. *Revista de psicología del deporte, 1 (10),* 49-68.