

## Self-determination in teaching formative basketball players and its influence on respect to rules and opponents

Juan José Pulido\*, Pedro A. Sánchez-Miguel\*, Francisco M. Leo\*,  
David Sánchez-Oliva\* and Diana Amado\*

*SELF-DETERMINATION IN TEACHING FORMATIVE BASKETBALL PLAYERS AND ITS INFLUENCE ON THE RESPECT TO RULES AND OPPONENTS*

**KEYWORDS:** Motivation, Sport, Adaptive behaviors, Adolescents.

**ABSTRACT:** The aim of this study was to examine adaptive behaviors in teaching formative basketball players with regard to their motivations to play. Hence, 284 federative basketball players, ranging in age from 11 to 16 years old from the Region of Extremadura took part in the study. Descriptive analysis, correlation analysis and lineal regression analysis were conducted with SPSS 19.0 statistical program. Results showed that more self-determined players had greater adaptive conducts, such as respect to rules and opponents. Finally, it is noteworthy to provide intrinsic regulations in youth basketball players to create a good learning and promotes social values.

Sport context is a good stage to develop social and personal values in adolescents (Lee, Whitehead, Ntoumanis, and Hatzigerorgiadis, 2008). Concretely, federative sport in youth should be a way to learn in the cognitive, motor and expressive paradigm, as well as it should focus on social aspect of the physical activity and sport (Vallerand, 2007).

Moreover, if we add to this implicit relevance the particularly circumstances of a social and educative context where aggressive, violent, xenophobic and competitive behaviors are shown, the sport is not only a reference to teach transversal subjects, but it is essential a pedagogical intervention that helps to develop adolescents integrally (Cervelló, 2003).

In a sport like basketball, despite of being a sport modality where contact is punished, sometimes there are situations that are against players "fair play" (Abenza, Bravo, and Olmedilla, 2006). Furthermore, temporarily this type of unsportsmanlike performances is shown in low categories and this should be the collective where all efforts have been joined to mitigate these conducts (Leo, Sánchez-Miguel, Sánchez-Oliva, Gómez, and García-Calvo, 2009).

Moreover, there are numerous researches that have focused on analyze the reasons of this inverse orientation to the sport morality, using Self-Determination Theory (Gagné, 2003; Sánchez-Oliva, Leo, Sánchez-Miguel, Gómez and García-Calvo, 2011; Chantal, Robin, Vernat and Bernache-Assollant, 2005; Chantal and Vallerand, 2000). According to Deci and Ryan (2000), there are three types of motivation with regard to self-determination level. The highest self-determination level is intrinsic motivation, and refers to those circumstances in which

individuals freely engage in activities for their own sake and for the pleasure, fun and inherent satisfaction in their participation. A second type of motivation is called extrinsic motivation in which individuals engage in activities because they value the associated outcomes, and is divided in identified regulation, introjected regulation and external regulation. The third type of motivation is called amotivation, and constitutes a psychological state in which people lack either a sense of efficacy or a sense of control with respect to attaining a desired outcome. Finally, this model indicates that motivational regulation will promote the appearance of different behavioral, cognitive and affective consequences (Vallerand, 2007).

This theory proposes that humans have three fundamental needs that must be satisfied in the social context to reach any type of regulation (Deci and Ryan, 1985). The first need is to feel autonomous in performing an activity. The second need is to perceive relatedness with others in the community of involvement. A third fundamental need is to perceive competence in relation to the activity. Research supports the view that individuals who experience higher levels of satisfaction of the three fundamental needs express more self-determined forms of regulation (Deci and Ryan, 2000).

Therefore, based on the different studies (Balaguer, Castillo and Duda, 2008; Sánchez-Oliva et al., 2011; Gagné, 2003) that have analyzed how motivational aspects influenced the social behaviors in youth athletes, the main aim of this work is to examine motives for practice in youth basketball players and their influence on respect to rules and opponents in the sport context.

Correspondence: Juan José Pulido González. Department of Didactics of Musical, Plastic and Corporal Expression. University of Extremadura. Avenida de la Universidad s/n. 10071, Cáceres, Spain. Email: jpul86@gmail.com.

\* Universidad de Extremadura.  
– Artículo invitado con revisión

Thus, according to the aim of the study, the main hypothesis was that higher self-determined motivation and satisfaction of the three basic psychological needs would predict behaviors of respect to rules and opponents by youth basketball players.

## Method

### Participants

The sample was formed by 284 male ( $n = 149$ ) and female ( $n = 135$ ) youth basketball players, belonged to different team sports from autonomous community of Extremadura, ranging in age from 11 to 16 years old ( $M = 12.47$ ;  $DT = 1.18$ ), grouped in under-12 ( $n = 153$ ), under-14 ( $n = 86$ ) and under-16 ( $n = 45$ ) categories.

### Instruments

*Satisfaction of the basics psychological needs.* Motivational Mediators Scale was used to asses those variables (EMM: García-Calvo, Sánchez-Miguel, Leo, Sánchez-Oliva and Gómez-Corrales, 2011). This instrument is composed of 18 items grouped in 3 factors: perception of autonomy (6 items, i.e.: “When I play sport, I feel free to express my ideas and opinions”), perception of competence (6 items, i.e. “I fell satisfied with my performance in the sport”) and perception of relatedness (6 items, i.e.: “Some of my best friends belong to this team”).

*Self-determined motivation.* An adapted version of the Sport Motivation Scale (SMS: Pelletier, Fortier, Tuson, Brière, and Blais, 1995) was used in this study. This measure had been previously translated into Spanish by Nunez, Martin-Albo, Navarro, and Gonzalez (2006) and was used to assess the players’ basketball motivation. The SMS is a 28- item inventory comprised of five factors that assess the multifaceted dimensions inherent within self-determination theory. The subscales are intrinsic motivation (e.g., “for the pleasure it gives me to know more about the sport I practice”); identified regulation (e.g., “because in my opinion it is one of the best ways to meet people”); introjected regulation (e.g., “because it is absolutely necessary to do sports if one wants to be in shape”); external regulation (e.g., “because it allows me to be well regarded by people that I know”); and a-motivation (e.g., “I used to have good reasons for doing sports, but now I am asking myself if I should continue doing it”).

*Respect to rules and respect to opponents.* Two factors from the Multidimensional Sportspersonship Orientations Scale (MSOS: Vallerand, Brière, Blanchard, y Provencher, 1997) were used to assess those behaviors (Respect to rules, 3 items; e.g. “I respect referee decisions although they are wrong”; Respect to opponents, 3 items; e.g. “I help the opponent get up after a fall”).

Participants responded to all the stems using a 10- point Likert Scale anchored by the scores of 0 (strongly disagree) to 5 (strongly agree).

### Procedure

The scale was developed in scholar time, the general purpose of the study was explained to participants and were asked to answer the questions as honestly as possible and were reassured that their responses would remain strictly confidential. Parents’ requirement was asked by coaches due to the age of participants. Measurements were conducted in the changing room, without the presence of the coach, individually, in an appropriate climate that allowed the players to concentrate without any kind of distractions. Completing the questionnaires took approximately 20 minutes; the main investigator was present at all times and emphasized that the players could ask for clarification of any doubts that might arise during the process.

## Results

Descriptive analysis, correlational analysis and lineal regression analysis were the test done to test the hypothesis of the study.

SPSS statistical program was used to analyze data. Table 1 shows descriptive scores and correlations factors studied. Regarding descriptive analysis, basics psychological needs, more self-determined motivations, respect to rules and respect to opponents obtained high mean values. With respect to the correlations between the diverse variables of the study, there was a positive relationship between basics psychological needs and more self-determined motivational regulations. Respect to opponent variable showed a positive relationship with basics psychological needs and intrinsic motivation. Respect to rules was positive associated with the three psychological needs and more self-determined regulations.

	M	SD	$\alpha$	2	3	4	5	6	7	8	9	10
1. Autonomy	4.23	.59	.76	.52**	.58**	.48**	.21**	.38**	.24**	-.05**	.47**	.31**
2. Competence	3.79	.72	.79	-	.45**	.46**	.25**	.30**	.33**	-.10**	.30**	.30**
3. Relatedness	4.06	.59	.61		-	.36**	.17**	.29**	.03**	-.08**	.34**	.35**
4. Intrinsic	4.12	.68	.85			-	.43**	.57**	.41**	-.06**	.32**	.19**
5. Identified	3.61	1.08	.63				-	.38**	.41**	.02**	.15**	.20**
6. Introjected	3.89	.81	.61					-	.46**	.01**	.19**	.14**
7. External	2.97	1.04	.73						-	.24**	.13**	.07**
8. Amotivation	1.41	.59	.70							-	.00	.05
9. Respet to opp.	4.04	.73	.74								-	.46**
10. Respet to rules	3.67	1.04	.68									-

Table 1. Descriptive statistics and correlations among the factors studied.

To determine the set of variables that help to predict motivational aspects, a lineal regression analysis by blocks was conducted, using respect to rules and respect to opponent as dependent variables. In the first block, basic psychological needs were used as references and in a second block, motivational regulations were added following SDT theory model and avoid

the collinearity between variables. Table 2 shows that satisfaction with the need of autonomy and intrinsic motivation emerged as predictors of respect to opponent, explaining the 10% of the variance. With regard to respect to rules, need of competence and relatedness and identified regulation will predict respect to rules.

Regression analysis by blocks coefficients taking respect to opponent as dependent variable				
Variable	$\beta$	$R^2$	$T$	$p$
Block 2		.25		
Autonomy	.38		5.05	.00
Intrinsic	.14		2.00	.04
Regression analysis by blocks coefficients taking respect to rules as dependent variable				
Variable	$\beta$	$R^2$	$t$	$p$
Block 2		.18		
Competence	.16		2.34	.02
Relatedness	.21		2.93	.00
Identified	.15		2.39	.01

Table 2. Regression analysis by blocks coefficients taking respect to opponent as dependent variable.

## Discussion

The aim of the study was to examine the reasons for practice of youth basketball players and their influence on respect to rules and opponents. After the analysis of the obtained results, basics psychological needs and more self-determined regulations play an important role in adaptive behaviors of youth basketball players.

In this regard, high significant relationships among more self-determined motivation and respect to rules and opponent were found. More particularly, as it was indicated in previous studies, self-determined motivations and basics psychological needs were positive related with adaptive behaviors (Chantal and Vallerand, 2000; Chantal et al., 2003; Sánchez Oliva et al., 2011). Therefore, it is normal that basketball players who feel more satisfaction and pleasure with the own activity, showed respects' behaviors through the internal logic aspects of this sport, such as respect to rules and opponents. Nevertheless, previous studies did not find any significant differences between intrinsic motivation and respect to rules (Sánchez-Oliva et al., 2011). In this research, both intrinsic motivation and identified regulation showed a significant relationship with respect to sport rules, whereas Sánchez-Oliva et al. (2011) found a relationship between identified motivation and respect to opponent.

On the other hand, a-motivation was not related with maladaptive behaviors, so this finding is not consistent with

previous studies (Chantal and Vallerand, 2000), where authors found that athletes who were externally motivated to engage in an activity or were not motivated to practice showed less adaptive behaviors.

Moreover, according to the relationships between basics psychological needs and adaptive behaviors, it is noteworthy how the need of autonomy positive predicted respect to opponents, whereas need of competence and relatedness positive predicted respect to rules behaviors. Nevertheless, none of the similar studies to our research found significant relationships between basics psychological needs and sportsmanlike behaviors. In this regard, Gagné (2003) and Sánchez-Oliva et al. (2011) found significant relationships with perception of autonomy and relatedness, whereas Sánchez-Oliva et al. (2001) found only perception of autonomy as variable significantly related with sportsmanlike behaviors.

However, more self-determined motivations will promote the appearance of adaptive behaviors, being necessary a satisfaction of the basics psychological needs to mediate in the more self-determined regulations (Deci and Ryan, 1985). To conclude, this study provides evidence of the importance of self-determined motivations on sportsmanlike behaviors. The most significant influence in youth athletes (parents and coaches, mainly) should promote self-determined behaviors that lead to the performance of more adaptive conducts in the practice.

*AUTODETERMINACIÓN EN JUGADORES DE BALONCESTO EN FORMACIÓN Y SU INFLUENCIA EN EL RESPETO A LAS REGLAS Y A LOS ADVERSARIOS*

**PALABRAS CLAVE:** Motivación, Deporte, Comportamientos adaptativos, Adolescentes.

**RESUMEN:** El objetivo del presente estudio era analizar los comportamientos adaptativos de jugadores de baloncesto en etapas de formación en función de sus motivaciones para realizar la práctica deportiva. Para ello, han participado 284 jugadores federados de baloncesto, de entre 11 y 16 años de edad de la región de Extremadura. Para el análisis de los resultados se ha utilizado el programa estadístico SPSS 19.0 y se han realizado el análisis descriptivo, de correlaciones y de regresión lineal por bloques. Los resultados más importantes del estudio muestran que los jugadores con motivaciones más autodeterminadas, como la motivación intrínseca e identificada, muestran mayores conductas adaptativas, como son el respeto a las reglas y a los adversarios. Finalmente, se debe fomentar la práctica deportiva de los jóvenes jugadores de baloncesto desde regulaciones más intrínsecas para que el deporte en estas edades sea algo más que deporte y sirva de aprendizaje y transmisión de valores sociales.

*AUTODETERMINAÇÃO EM JOGADORES DE BASQUETEBOL EM FORMAÇÃO E SUA INFLUÊNCIA NO RESPEITO ÀS REGRAS E AOS ADVERSÁRIOS*

**PALABRAS CLAVE:** Motivação, Desporto, Comportamentos adaptativos, Adolescentes.

**RESUMO:** O objectivo deste estudo foi analisar os comportamentos adaptativos de jogadores de basquetebol em etapas de formação em função das suas motivações para a prática desportiva. Para tal, participaram no estudo 284 jogadores federados de basquetebol, com idades compreendidas entre os 11 e os 16 anos de idade da região da Extremadura. Para a análise dos resultados foi utilizado o programa estatístico SPSS 19.0 realizando-se uma análise descritiva, de correlações e de regressão linear por clusters. Os resultados mais importantes do estudo mostram que os jogadores com motivação mais auto-determinada, como a motivação intrínseca e identificada, apresentam mais comportamentos adaptativos, tais como o respeito pelas regras e pelos adversários. Finalmente, deve-se fomentar a prática desportiva dos jovens jogadores de basquetebol a partir de uma regulação mais intrínseca para que o desporto nestas idades seja mais que apenas desporto e sirva de aprendizagem e transmissão de valores sociais.

## References

- Abenza, L., Bravo, J. F. and Olmedilla, A. (2006). Estrategias psicológicas para una intervención en crisis: un caso en balonmano femenino. *Revista de Psicología del Deporte*, 15(1), 109-125.
- Balaguer, I., Castillo, I. and Duda, J. L. (2008). Apoyo a la autonomía, satisfacción de las necesidades, motivación y bienestar en deportistas de competición: un análisis de la teoría de la autodeterminación. *Revista de Psicología del Deporte*, 17, 123-139.
- Cervello, E. (abril, 2003). *Agresión y violencia en el deporte*. Trabajo presentado en las Jornadas Violencia y Sociedad, Alicante.
- Chantal, Y., and Vallerand, R. J. (2000). Construction et validation de l'Echelle de motivation envers l'action bénévole (EMAB). *Society and Leisure*, 23, 477-508.
- Chantal, Y., Robin, P., Vernat J. P. and Bernache-Assollant, I. (2005) Motivation sportspersonship and athletic aggression a mediational analysis. *Psychology of Sport and Exercise*, 6(2), 233-249.
- Deci, E.L. (1975). *Intrinsic motivation*. New York: Plenum.
- Deci, E. L. and Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Deci, E. L. and Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry*, 11, 227-268.
- Gagné, M. (2003). The role of autonomy support and autonomy orientation in prosocial behavior engagement. *Motivation and Emotion*, 27(3), 199-223.
- García-Calvo, T., Sánchez-Miguel, P. A., Leo, F. M., Sánchez-Oliva, D. and Gómez, F. R. (2009). *Análisis psicométrico de la Escala de Mediadores Motivacionales (EMM)*. Manuscrito en revisión.
- Lee, M. J., Whitehead, J., Ntoumanis, N. and Hatzigerorgiadis A. (2008). Relationships among values, achievement orientations, and attitudes in youth sport. *Journal of Sport and Exercise Psychology*, 30(5), 588-610.
- Leo, F. M., Sánchez Miguel, P. A., Sánchez Oliva, D., Gómez, F. R. and García Calvo, T. (2009). Análisis de las relaciones existentes entre la orientación y el clima motivacional con los comportamientos antisociales en jóvenes deportistas. *Revista Iberoamericana de Psicología del Ejercicio y del Deporte*, 4(1), 15-28.
- Luckwü, R. M. and Guzmán, J. F. (2011). Deportividad en balonmano: un análisis desde la Teoría de la Autodeterminación. *Revista de Psicología del Deporte*, 20(2), 305-320.
- Núñez, J. L., Martín-Albo, J., Navarro, J. G. and González, V. M. (2006). Preliminary Validation of a Spanish Version of the Sport Motivation Scale. *Perceptual and Motor Skills*, 102(3), 919-930.
- Pelletier, L. G., Fortier, M. S., Vallerand, R. J., Tuson, K. M., Brière, N. M. and Blais, M. R. (1995). Toward a new measure of intrinsic motivation, extrinsic motivation, and amotivation in sports: The Sport Motivation Scale (SMS). *Journal of Sport and Exercise Psychology*, 17, 35-53.
- Reinboth, M. and Duda J. L. (2006). Perceived motivational climate, need satisfaction and indices of well-being in team sports: A longitudinal perspective. *Psychology of Sport and Exercise*, 7(3), 269-286.
- Sánchez-Oliva, D., Leo, F. M., Sánchez-Miguel, P. A., Gómez, F. R. and García-Calvo, T. (2011). Teoría de autodeterminación y comportamientos pro-sociales en jóvenes jugadores de fútbol. *Apunts: Educación física y deportes*, 108(1), 32-38.
- Vallerand, R., Brière, N. Blanchard, C. and Provencher, P. (1997). Development and validation of the multidimensional sportspersonship orientations scale. *Journal of Sport and Exercise Psychology*, 16, 126-140.
- Vallerand, R. J. (2007). Intrinsic and Extrinsic Motivation in Sport and Physical Activity. In G. Tenenbaum y R. C. Eklund (Eds.), *Handbook of sport Psychology* (3ª ed., pp. 59-83). New York: Wiley.