

Commitment, Enjoyment and Motivation in Young Soccer Competitive Players

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Building upon Deci's and Ryan (1985) Self-determination theory as well as the sportive behavioral correlates of the model of Commitment (Scanlan et al., 1976), this study tries to establish the relationship between motivation and commitment in youth sport. For this purpose 454 young competitive soccer players answered the Sport Motivation Scale (SMS) and the Sport Commitment Questionnaire (SCQ) during the regular season.

The SMS measures the three dimensions of the Motivational continuum (the Amotivation, the Extrinsic Motivation and the Intrinsic Motivation). The SCQ measures the Sportive Commitment and its composing factors such as the Enjoyment, the Alternatives to the sport, and the Social Pressure. Our findings provided a clear pattern of the influence of motivation in sport enjoyment and commitment, outlining the positive contribution of intrinsic and extrinsic motivation to enjoyment and commitment. Amotivation, contributes positively to alternatives to sport and negatively to enjoyment and commitment. It should be noted that extrinsic motivation has a higher contribution to enjoyment whereas intrinsic motivation has a higher contribution to commitment.

Keywords: commitment, enjoyment, self-determination, soccer, young players.

Fundamentándose en la teoría de la Autodeterminación (Deci y Ryan, 1985) así como en los correlatos conductuales del modelo de Compromiso (Scanlan et al. 1976), este estudio trata de establecer las relaciones entre motivación y compromiso en jóvenes jugadores de fútbol. Con este propósito 454 jóvenes jugadores de fútbol contestaron la Escala de Motivación Deportiva (SMS) y el Cuestionario de Compromiso Deportivo (SCQ).

El SMS mide las tres dimensiones del continuum motivacional (Amotivación, Motivación extrínseca y motivación intrínseca). El SCQ mide el compromiso deportivo y los factores que lo componen, tales como el disfrute, las alternativas al deporte y la presión social. Nuestros resultados proporcionan un patrón claro acerca de la influencia de la motivación en el compromiso y la diversión en el deporte, subrayando la contribución positiva de la motivación intrínseca y extrínseca en la diversión y el compromiso. La amotivación contribuye positivamente a las alternativas al deporte y negativamente a la diversión y el compromiso. Es de destacar que la motivación extrínseca tiene una contribución mayor a la diversión, mientras que la motivación intrínseca tiene una contribución mayor al compromiso.

Palabras clave: compromiso, disfrute, autodeterminación, fútbol, jóvenes jugadores.

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During the whole development of the psychological science, there is a long trail of authors trying to investigate the motives underlying the individual's behavior (Birch & Veroff, 1966; Cattell & Child, 1975; Deci, 1975; McClelland, 1985; Maslow, 1970; Murray, 1938). Embedded with other different applied situations, this interest was also often focused to the classification of the reasons driving people, and more specifically young people, to perform and to maintain physical or sportive activities. In this field, Alderman and Wood (Alderman, 1976 1980; Alderman & Wood, 1976) were the first authors to do systematic research, but it was a study by Gill, Gross and Huddleston (1983) on the design, evaluation and application of a psychometric tool (the Participation Motivation Questionnaire, PMQ) that provided a new perspective about this topic. In fact, the motivational factors obtained with the use of the PMQ are framing yet the topic: self-realization (Garaigordobil, 1999); social status; group and team; health and fitness; energy liberation; situational factors; competence development; friendship; and fun or enjoyment.

The research on motivation brings up that the athletes should be motivated from two main sources, which group the most explicit explanations about their motives. First, they may be motivated intrinsically, that is they do sport activities for pleasure, fun or others self-determined reasons. Second, they may have been motivated by extrinsic factors: obtaining benefits, as tangible and material such money or trophies, or social rewards (prestige, public knowledge), or to avoid punishment (Vallerand, Deci & Ryan, 1987). Moreover, Self-determination theory also proposes that the resulting types of motivation will subsequently lead to various positive and negative consequences for the athlete, depending on the nature of the involvement with the activity. If the reasons are intrinsic, or almost derived from a personal choice, positive consequences can be obtained. On the other hand, if the motives are not self-determined (the person has been constricted to do something by any social factor) then we should expect negative consequences on its maintenance of sportive activities (Vallerand & Loiser, 1999). According with this paradigm, the athlete's personal goals (improving, having fun, social comparison, etc.) are fuelled by three major psychological needs: need for autonomy, or the desire to be self-initiating in the regulation of one's actions (deCharms, 1968); the need for competence, which implies that individuals want to interact effectively with their environment (Harter, 1978; White, 1959); and the need for relatedness, that means the desire to feel connected with significant others (Ryan, 1993). After the fact these psychological needs are important for personal growth and actualization, individuals are intrinsically motivated to move toward situations and experiences that will satisfy these basic needs. Also, the perception of these needs into the motivational sequence proposed by Vallerand (1997), represent psychological mediators of the impact of the social events on the motivation. If the perception of social factors

is supportive to the one's feelings of autonomy, competence and relatedness, these factors will have a positive influence on one's motivation, while the opposite –the perception of social factors having negative impact on the basic needs– may have a decremental influence on the motivation to perform. But remains the fact that the relationship between the amount of positive verbal feedback presented and intrinsic motivation is unclear (Vallerand, 1983).

Self-determination theory considers that the dichotomy between intrinsic and extrinsic motivation is inadequate to explain human behavior. Given the fact that the motives for engaging in physical activity is a function of both intrinsic and extrinsic motivating factors (Dishman, 1984; Weinberg, 1984), Self-determination theory provides a unique framework for the study and understanding of the multifaceted motives for the initiation and maintenance of participation in physical activity. For instance, it views motivation as composed by different degrees of motives that forms a continuum, running from the high to the low levels of self-determination, in the same way one moves from intrinsic motivation, to extrinsic motivation, and amotivation (Deci & Ryan, 1985). These different facets of motivation are further delineated into several dimensions comprising amotivation; external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation, which form another continuum pattern ranging from the lowest level of self-determination (amotivation) to intrinsic motivation (highest level of self-determination). This intrinsic motivation, indeed, has a tripartite taxonomy: intrinsic motivation to know; intrinsic motivation to accomplish things, and intrinsic motivation to experience things (Vallerand, Blais, Brière, & Pelletier, 1989).

Usually, the intrinsic motivation of the athletes has been determined by means of the behavioral observation of the persistence of their sportive behavior in a free options scheme, after the removal of the extrinsic rewards associated with them (Deci & Ryan, 1980). But from a cognitive framework, this observation would be complemented by the use of the psychometric approach, using questionnaires addressed to the investigation of the athletes' intrinsical-extrinsical motivational balance (Halliwel, 1980). According to Morris and Choi (1993) the most used questionnaire to measure the intensity of intrinsic motivation in all kinds of situations, is the Intrinsic Motivation Inventory (IMI), developed by Ryan (1982), and ameliorated by McAuley et al. (McAuley, Duncan & Tammen, 1989; McAuley, Wraith & Duncan, 1991). However, in the last few years the Sport Motivation Scale (SMS) has been developed for the evaluation of the paradigm amotivation-extrinsic-intrinsic motivation in sport and physical activity settings, as presented above. The SMS was developed for to measure the dimensions and continuum of the Self-determination theory, operationalizing the motivation in terms of the perceived reasons for participation (Brière, Vallerand,

Blasi & Pelletier, 1995; Martens & Webber, 2002; Pelletier, Fortier, & Vallerand, 1995). After the SMS, there is a widespread adaptations and modifications of the test, all falling into the same Self-determination paradigm, such the Exercise Motivation Scale (EMS) developed by Li (1999).

Another important framework related with the motivation in sports, is the theory of Sport Commitment. The Sport Commitment disposition represents the wish and the decision of maintaining participation in physical activities and sport (Scanlan, Simons, Carpenter, Schmidt & Keeler, 1993). This concept comes from the study of the commitment in the romantic relationships (Kelley & Thibaut, 1978; Rusbult, 1980), and lastly has been introduced in the organisation and human resources field (Chen & Francesco, 2003). According to the theory, the athletes' sportive commitment is determined by several factors: the Sport enjoyment degree obtained through their participation; involvement opportunities derived from the participation; social constraints support and/or pressures; and the impact of the perceived involvement alternatives to the sport. There is a large amount of agreement on the correspondence of the commitment factors with the sportive behavior observed, mostly respect the absolute and relative taxes of withdrawal. And it is especially interesting to use this construct in youths, attending the critical effects of the impact of perceived alternatives, the lack of enjoyment, or the social pressures on this specific range of ages.

The main aim of this study was to evaluate the relationship between sport motivation under self-determination theory and sport enjoyment and commitment in a sample of youth elite soccer players.

Method

Participants

A total of 454 male soccer players with a mean age of 15.6 years ($SD = .24$; range from 14 years to 16 years) participated in this study. This age range corresponds with near-to-peak sport participation rates in our community, and a developmental period where peers are particularly salient as a psychosocial factor. This sample consisted of players extracted from the official competition of the Balearic Football (Soccer) Federation (FBF) of clubs. They belonged to the total amount of the official 26 clubs, covering the three islands which form the Balearic Islands. All participants volunteered, and were contacted through the FBF and with the agreement with their coaches.

Measures

Sport Motivation

Participants responded to the Spanish version (Núñez, Martín-Albo & Navarro, 2007) of the Sport Motivation

Scale (SMS, Martens & Webber, 2002; Pelletier et al., 1995). The 28-item SMS consists of seven 7-point subscales that scored motivation considered as a continuum of the respondent self-determination. The seven scales provided information about the Amotivation Dimension, the Extrinsic Motivation (which includes the External Regulation, the Introjection, and the Identification dimensions), and the Intrinsic Motivation factor, composed itself by the motivation: To Know, To Accomplish, and To Experience things.

Sport Commitment

The Sport Commitment Questionnaire (SCQ, Scanlan et al., 1993) provided a score upon the global Commitment with the sportive practice perceived by the athlete, and its factors, which includes the Enjoyment. We have used the Spanish version of the SCQ, which have showed a good level of reliability in its scales: Sport Commitment ($\alpha = .76$); Enjoyment ($\alpha = .88$); Social Pressure ($\alpha = .80$), and Alternatives to the Sport ($\alpha = .66$). The final exploratory analysis identifies four factors (Sport Commitment, Enjoyment, Alternatives to the Sport, and Social Pressures) and 21 items (Sousa, Torregrosa, Viladrich, Villamarín, & Cruz, 2007). This conceptual view of the enjoyment pinpoints the motivational power of this factor in order to determine the athletes' adherence to the sportive practice, based on the effect of several factors, some considered as positives and others as negative ones. We are using in our analysis the whole Commitment concept, with the Enjoyment factor, as are stated before. The answers were given on a 5-point Likert-type scale from strongly disagree (1) to strongly agree (5). "I like playing soccer this season" is an example of a Sport Enjoyment item.

Procedure

The SCQ and SMS were applied at the middle of the season when all players had a clear, concrete and common soccer experience reference. Procedures insured confidentiality for each participant. The authors planned the devolution and presentation of the results, for the coaches and players who participate, when the whole study was completed.

Data analysis

Data analyses were done using SPSS 15.0. The punctuations of different measures were calculated based on the mean of each item corresponding to the factor. Data analysis techniques were descriptive analysis, internal reliability with Cronbach's alpha, Pearson's correlations coefficient, and linear regression analysis with a stepwise procedure.

Results

Internal reliability and descriptive statistics

The internal reliability as well as the descriptive statistics (means, standard deviation and range) for each measure are presented in Table 1. Internal reliability, using Cronbach's alpha coefficient, was acceptable ($\alpha < .70$) for all measures with the exception of the intrinsic motivation to experience, the identification, the introjection, the external regulation, and amotivation all of them subscales of the SMS whose reliability coefficients were marginally acceptable ($\alpha = .68$, $\alpha = .62$, $\alpha = .60$, $\alpha = .62$, $\alpha = .67$ respectively). The mean scores show that the athletes are more intrinsically motivated than extrinsically and more extrinsically motivated than amotivated. Moreover athletes reported higher levels of commitment and enjoyment than perception of alternatives outside sport.

Pearson's correlations were employed to determine the relationships between the variables of interest (see Table 2). Intrinsic motivation correlated highly with extrinsic motivation and commitment and moderately with

enjoyment. Extrinsic motivation correlated moderately with commitment and enjoyment. Amotivation showed negative and moderate correlations with commitment and enjoyment as well as moderate and positive correlation with alternatives. Commitment showed high correlation with enjoyment and negative and moderate correlation with alternatives. Other correlations are not relevant although being statistically significant because of the sample size.

Regression analysis

In order to determine which constructs within the SMS were significant predictors of the constructs of the SCQ, a series of regression analysis with stepwise procedure were performed. Table 3 summarizes the results obtained of the analysis. When enjoyment was placed as dependent variable, the regression analysis reported that intrinsic motivation, amotivation and extrinsic motivation significantly predicts athletes' enjoyment ($F_{3,452} = 26.60$; $p < .001$) explaining a 16% of total variance. The intrinsic motivation is the predictor that the stepwise analysis reported as first ($\beta = .16$; $p = .003$), followed by amotivation ($\beta = -0.21$; $p < .001$)

Table 1
Internal consistencies and descriptive statistics for each measure

Measure	α	<i>M</i>	<i>SD</i>	Scale range
Intrinsic motivation	.86	5.32	.86	1-7
Extrinsic motivation	.80	4.66	.87	1-7
To know ^a	.70	5.18	1.02	1-7
To accomplish ^a	.71	5.26	1.01	1-7
To experience ^a	.68	5.52	.95	1-7
Identification ^b	.62	4.58	1.04	1-7
Introjection ^b	.60	5.14	1.02	1-7
External regulation ^b	.62	4.24	1.13	1-7
Amotivation	.67	2.72	1.27	1-7
Enjoyment	.89	3.86	1.03	1-5
Alternatives	.70	2.40	.95	1-5
Commitment	.76	3.93	.74	1-5

^a Facet of intrinsic motivation.

^b Facet of extrinsic motivation; $N = 456$.

Table 2
Pearson's correlation between all variables

Factor	1	2	3	4	5	6
1. Intrinsic motivation						
2. Extrinsic motivation	.52**					
3. Amotivation	-.22**	.12**				
4. Commitment	.52**	.35**	-.33**			
5. Enjoyment	.32**	.29**	-.21**	.62**		
6. Alternatives	-.11*	.10*	.38**	-.26**	-.11*	

* $p < .05$; ** $p < .01$

and extrinsic motivation ($\beta = .23; p < .001$). Thus, athletes' enjoyment is partially predicted by the positive effect of intrinsic and extrinsic motivation and the negative effect of amotivation. When alternatives was placed as dependent variable, the regression analysis reported that amotivation significantly predicts athletes' perception of alternatives outside sport ($F_{1,454} = 77.46; p < .001$) explaining a 14.6% of total variance. Amotivation is the best predictor of alternatives ($\beta = .38; p < .001$). Finally, when commitment was placed as dependent variable, the regression analysis reported a similar pattern than for enjoyment ($F_{3,452} = 80.80; p < .001$), that is, athletes' commitment is partially predicted by the positives effect of intrinsic and extrinsic motivation and the negative effect of amotivation ($\beta = .36; p < .001; \beta = .20; p < .001; \beta = -.27; p < .001$ respectively). Being similar the role of extrinsic motivation and amotivation in predicting enjoyment and commitment, the main difference came out in the different contribution of intrinsic motivation which predicts commitment in a higher way than enjoyment.

Discussion

In our study, attending to the fact that all of the participants are currently playing soccer matches and practicing several times weekly at the moment of the data collection, we tried to investigate and describe the relationship between the continuum of motivation in self determination theory and sport commitment and enjoyment. The sport commitment model postulates that sport commitment is a "psychological construct representing the desire and decision to continue sport participation" (Scanlan et al., 1993, p.6). But from our theoretical framework, the concept of "enjoyment" is stated not in an absolute way (as perhaps can be the enjoyment when perceived as the contrary to the boring experienced by the athlete, Duda & Nicholls, 1992) but derived of the Scanlan's (Scanlan et al., 1993, p.6) most complex definition of enjoyment "a positive affective response to the sport experience that reflects generalized feelings such as pleasure, linking and fun". In our case, the player's

enjoyment means a mixed combination of the preferred sportive activity, compared with the weight of the perceived alternatives to the sport; the person's internal satisfaction with the sport; and the feeling of competence while doing the sport. And not so far is important to establish that the "commitment" of one player with his/her coach, or club, or teammates, determined strongly the amount of effort and abilities showed in his/her sportive activity.

Our descriptive results have determined that the intrinsic motivation is clearly predominant between the players in the most important and challenged soccer competition in the Balearic Islands, and the Extrinsic Motivation played a less important role, as in Ntoumanis, (2001).

In a seminal paper from Edward L. Deci (Deci, 1972) on intrinsic motivation, extrinsic motivation and perceived inequity respect to the rewards, he outlined clearly the most important point of interest on the effects of verbal or physical (money) rewards over the intrinsic -if exists- motivation of the persons. He stated that the most important difference in the effects of the external rewards (money and/or verbal) lies in the person's perception of the locus of causality of his behavior. Following that, and in a Deci's earlier study words: "This could lead the subjects to a process of cognitive re-evaluation of the activity from one which is intrinsically motivated by the anticipation of money" (Deci, 1971, p. 107). Perhaps this remains as the most intriguing and key process: how can manage a particular coach, the tempo and the stimuli in order to promote such kind of cognitive re-evaluation, in this precise direction, or in the reverse?

But, in the other hand, some surprisingly, there is a lot of Enjoyment which appears to be felt by our participants, despite the burden of the training and competition, and the emotions associated with motivation. In recent studies, adding more complexity to the issue, the enjoyment (coming from the Boring/Diversion two factor model, Duda and Nicholls, 1992) is not always associated significantly with the feeling of competence (Carratalá, Guzmán, Carratalá & García, 2006). Moreover, the Amotivation, according to the descriptive results, shows a very low scorings from our players. It is a reminder of the motivation highs and

Table 3
Predicting variables of commitment factors

Dependent Vs.	Step	Independent Vs	Beta	R ²	ΔR^2	<i>t</i>	<i>p</i>
Enjoyment	1	Intrinsic motivation	.16	.11	.11	2.98	.003
	2	Amotivation	-.21	.13	.02	-4.53	.001
	3	Extrinsic motivation	.23	.16	.03	4.34	.001
Alternatives	1	Amotivation	.38	.15	.15	8.80	.001
Commitment	1	Intrinsic motivation	.36	.27	.27	7.68	.001
	2	Amotivation	-.27	.32	.05	-6.74	.001
	3	Extrinsic motivation	.20	.35	.03	4.28	.001

lows during the slope of the soccer season, perhaps added to the different perceptions of the external and internal motivational determinants? We do not have data –in this study- that allows us to try to answer this question.

The correlations between the Motivational factors and dimensions, and the Commitment and Enjoyment are really interesting to have some discussion here. Besides the reassuring fact that there is a negative correlation between the Commitment and the Amotivation, we have to highlight that the Intrinsic Motivation shows higher correlations than the Extrinsic motivation with the Commitment of our players to sport. And we have now to remind that the Commitment model (Scanlan et al., 1993) is built from a complex set of factors, which includes social pressure and/or support; the perception of alternatives of the sport; the past and current involvement with the sport perceived by the athlete; the team affiliation; and the amount of enjoyment coming from the sportive activity. We have to conclude that the Intrinsic Motivation has more to do with the Commitment than the Extrinsic Motivation, but also we have to remind the importance of the large number of population studied on the significance of the correlations observed. Referring to the predictive capabilities of the different dimensions of Motivation over the Commitment and Enjoyment in our players, we found that both intrinsic and extrinsic motivation contributes to explain both enjoyment and commitment. The difference is that extrinsic motivation has higher impact than the intrinsic one on enjoyment whereas intrinsic motivation has higher impact than the extrinsic one on commitment. Moreover, amotivation contributes negatively to the explanation of enjoyment and commitment and positively to the perception of alternatives to sport participation.

Overall, the study found a population of athletes who have a strong level of Commitment (supported also by their current practice) (Sousa et al., 2007), determined by the Intrinsically determined motivation, but combined with some presence of the Amotivation. These two motivators are acting together in a synergy-blocking game that begins in the External regulators, and maybe ended in the Identification (or in the worse case, in the Introjection), to determine the degree of Commitment and engagement in the playing of soccer. Respect to the Intrinsic and Extrinsic motivators acting together, and in Deci's words, "Apparently, the effects of verbal reinforcements on intrinsic motivation are more complicated than originally hypothesized. There are at least two aspects to any external reward, a "controlling" aspect, and an "information" or "feedback" aspect. The controlling aspect leads to a decrease in intrinsic motivation by changing the perceived locus of causality, while the feedback aspects leads to an increase to intrinsic motivation by increasing the person's sense of competence and self-determination" (Deci, 1972, p. 118). Moreover, and according to other studies (Ryan and Deci, 2000), perhaps the crucial aspect of

positive verbal feedback lies in the qualitative aspect of the message rather in the quantitative one. In fact, low, moderate, or high amounts of positive verbal feedback produce similar increases in feelings of competence and intrinsic motivation (Vallerand, 1983).

This study has several limitations. The psychosocial factors (parents, teachers, coaches) of the Motivation are not analysed in this study (Ulrich-French & Smith, 2006). And there is a possible bias related with our participants: adolescents, just soccer players, living in an island, and all male. Pelletier, Fortier and Vallerand (1995) found more amotivation in males than in females, and less self-determination values).

In summary, if we are interested in developing and enhancing intrinsic (identification) motivation in youth athletes such our population, should not concentrate on external control systems, which are linked directly with performance, but we should concentrate on structuring situations that are intrinsically interesting and challenging, and then (the coach, peer or parent) be interpersonally supportive and rewarding towards the persons in each different situation. Large amounts of rewards or none at all, may reduce autonomy, thereby decreasing the desired intrinsic motivation. Those considerations may play an important role in the formation of coaches, and in the counselling of parents of young and competitive soccer players.

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