Optimism and Burnout in Competitive Sport

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The aim of this study was to analyze the relationship between optimism and burnout in the context of athletic competition. The sample was composed of 227 athletes that competed in wrestling at Spain’s national level. For the assessment of constructs, the Spanish version by Otero et al. (1998) of the Life Orientation Test (LOT-R) was utilized, as well as the Inventario de Burnout para Deportistas (IBD), which was an adaptation for athletic populations by García de Los Fayos (1999) of the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981). The results demonstrate a relationship between optimism and the three dimensions of burnout, in which the athletes who are more optimistic demonstrate less emotional exhaustion, less depersonalization, and a greater perception of personal accomplishment in their athletic performance.

Keywords: Optimism; Burnout; Athletic Competition

Introduction

Sport psychology studies, apart from other things; interpret the relationship between psychological variables, performance and health (Cote, Baker, & Abernethy, 2003; Durand-Bush & Salmela, 2002; López-López, Jaenes-Sánchez, & Cárdenas-Vélez, 2013). The study of personality in sport involves an extensive line of research (Cox, 2009; Vealey, 2002; Weinberg & Gould, 2010). According to Valdés, (1998), studies are mainly oriented in two directions: 1) first analyzing how participation in sport influences on personality and 2) secondly analyzing the possibility of predicting individual differences and explain them in terms of personality or personality traits. Studies of personality and sport also seek age differences or even the influence of a profile on athletic performance (Ruiz & García, 2013).

These two lines of consolidated research in sport psychology are related to some aspects of the personality such us the importance of optimism and the appearance of burnout syndrome. These two aspects have been recurrent observed in both, from athletes and in different professionals working in the sport environment (De la Vega, Ruiz, Rivera, & Ortín, 2012, García & Díaz, 2010; García de los Fayos, Ortín, & Carlin, 2010). The relationship between burnout and optimism has been studied in contexts such as education (Rothmann & Essenko, 2007), work (Happell & Koehn, 2011) or health (Sánchez & Méndez, 2007). However, research studies focused on the context of physical activity and sport are much more scarce and the available references indicate a clear relationship between burnout and optimism, as we show later in this paper.

Optimism and Sport

Positive psychology has become a sound paradigm in the field of applied psychology and psychological research in recent years. The starting point was the address given by Martin Seligman to initiate his presidency of the American Psychological Association (Seligman, 1998). This discipline, supported by scientific research, studies the processes that underlie the positive emotions and attitudes of human beings as psychological processes and resources that prevent the manifestation of mental illness (De la Vega, Ruiz, Bastista, Ortín, & Giesnow, 2012).

Among the most researched constructs within positive psychology is optimism, which has been studied in different contexts related to health and performance (Hefferon, 2012; Marta, Colligan, Malinchoc, & Oxford, 2000; Rees, Ingledew, & Hardy, 2005; Remor, Amorós, & Carrobles, 2006).

Optimism has mainly been analyzed from two theoretical perspectives. Firstly, there is the dispositional theory proposed by Scheier and Carver (1985), which is focused on the expectations that subjects have for the events that can happen to them. In this sense, a person with favorable expectations will increase his or her effort to achieve a goal (García & Díaz, 2010). For this model, optimism and pessimism are generalized expectations, considered to be stable dispositions, or in other words, traits (Ferrando, Chico, & Tous, 2002).

On the other hand, optimism has been studied from the theory of explanatory style, which was initiated by Abramson, Seligman and Teasdale in 1978 and has its origins in the most classic attribution theory (Weiner et al., 1971). The explanatory styles refer to the way people explain what happens to them (Isaacowitz, 2005; Shapcott, Bloom, Johnston, Loughead, &
models have been offered which help us more clearly under-
stand the development of athletic stress; that by Schmidt and
Stein (1991), supported by athletic commitment; that by Coak-
ley (1992), which explains the syndrome through maladaptive
variables both from a purely investigative perspective as well as
execution of each athlete in the same situation a few minutes
later was observed. It is noteworthy that the pessimistic swim-
mers had worse results in the second situation. On the other
hand, the optimistic subjects equaled or even improved on the
times from the first situation.

Further, optimism in sport has been studied in relation to
performance (García & Díaz, 2010), the coaches’ assessment of
competition (Ortín, Ortega, López, & Olmedilla, 2012), anxiety
(Martin-Krumm et al., 2003), and confrontation (Holt & Hogg,
2002; Nicholls, Polman, Levy, & Backhouse, 2007).

Burnout and Sport

Burnout, is a tridimensional syndrome characterized by Emo-
tional Exhaustion, Depersonalization (Cynicism), and Reduced
Efficacy, continues to be a construct built around the contri-
butions that various researchers have made. Following the work
of Garcés de Los Fayos et al. (2010), we can affirm the follow-
ing as aspects of burnout.

Predictor variables. Many researchers have described these
variables both from a purely investigative perspective as well as
a more applied perspective. At the end, all have been grouped
into three large groups: social-familial, athletic, and personal
(internal).

Consequences. There are many, from the most worrisome
(dropout; Garcés de Los Fayos, & Cantón, 2007) to others such
as physical problems (illnesses and injuries), dissatisfaction
with the lifestyle that one has, dissatisfaction with one’s role in
relation to sport, unfulfilled expectations, and feelings of iso-
lation.

Theoretical models. On the other hand, various theoretical
models have been offered which help us more clearly under-
stand the development of the syndrome. Thus, models such as
that by Smith (1986), based on the one which is utilized to ex-
plain the development of athletic stress; that by Schmidt and
Stein (1991), supported by athletic commitment; that by Coak-
ley (1992), which explains the syndrome through maladaptive
social processes, and that by Garcés de Los Fayos and Cantón
(2007), which is supported in large part by the unification of the
three previous ones and currently allows us to frame this de-
velopment rather precisely.

Epidemiological data. The epidemiological data are very
relevant in the athletic context as they allow us to adequately
contextualize the importance of the syndrome in the athletic
population. Jiménez, Jara and García (1995) found that about
10% of athletes could be affected by burnout, and Tutte (2009)
encountered similar results.

Measurement Instruments. Finally, it is also important to of-
er a reference about the strategies of evaluation that sport psy-
chologists utilize to assess the presence of burnout in athletes.
From this perspective, in our immediate context, there are two
that are highly utilized: the MBI by Maslach and Jackson
(1981), adapted by Garcés de Los Fayos (1999) and with some
substantial modifications from the items in the original instru-
ment, and the Athlete Burnout Questionnaire (ABQ) by Ra-
deke and Smith (2001), adapted by De Francisco, Arce, An-

Optimism and Burnout in Sport

Both burnout and optimism are related to the subject’s per-
sonality. The studies of personality in the athletic context are
numerous (Ruiz & García, 2013). In this sense, there are studies
that try to describe a specific personality profile in athletes of
one sport or another (Bakker, Whiting, & Van Der Drug, 1993;
Cunha et al., 2010), and there are other studies that indicate
individual differences in athletic performance in terms of per-
sonality (Ezquerro, 1997; Reche, Cepero, & Rojas, 2010; Vives
& Garcés de los Fayos, 2002).

There are a limited number of studies that have assessed the
relationship between optimism and burnout in any context.
However, the data from these studies indicate a relationship
between the two concepts, occasionally pointing to optimism as a
protector variable when faced with burnout or some of its asso-
ciated symptoms. Specifically, an inverse relationship between
optimism and emotional exhaustion for workers of various
professions has been found (Happell & Koehn, 2011; Roth-
mann & Essenko, 2007). This same relationship has been found
in the athletic context, such that the athletes with an optimistic
profile are more resistant to both physical and mental exhaust-
ion, which could be explained by lower levels of tension (Gus-
that the different strategies of confrontation between optimistic
and pessimistic athletes could be a possible mediator between
optimism and emotional exhaustion. These authors also found a
relationship between optimism and reduced efficacy.

Regarding the relationship between optimism and overall
burnout, Chen, Kee, and Tsai (2008) studied 139 volleyball play-
ers and found that the athletes’ optimism scores were nega-
tively related to the burnout scores. Later, Gustafsson and
Skoog (2012) corroborated these findings in a sample of 217
athletes, when they found an inverse relationship between per-
ceived stress, burnout, and optimism.

The aim of this study was to analyze the relationship be-
tween optimism and pessimism and burnout in competitive
wrestlers.

Method

Participants

The sample was composed of 227 wrestlers that participated
in the Spanish wrestling championship, 165 males (72.69%)
and 62 females (27.31%). The mean age was 20.16 years, with
a range from 15 to 31 years. A simple sampling was carried out.
It was a wide size population, because the sample included the
87% of participants in the competition.

Instruments

Inventario de Burnout para Deportistas (IBD). This instrument is the adaptation of the Maslach Burnout Inventory (Maslach & Jackson, 1981) by Garcés de Los Fayos (1999) for athletic populations. It is composed of 26 items, grouped into three dimensions: Emotional Exhaustion, Depersonalization (Cynicism), and Reduced Efficacy. A five-point Likert scale was utilized for responses, from 1 (“I have never felt or thought this”) to 5 (“I think or feel this daily”). Percentiles greater than 66 in Emotional Exhaustion and Cynicism and below 33 in Reduced Efficacy would indicate burnout (Garcés de Los Fayos, 2004). The reliability coefficient (Cronbach’s alpha) for each of the scales was \( \alpha = .746 \) for Emotional Exhaustion, \( \alpha = .757 \) for Reduced Efficacy, and \( \alpha = .757 \) for Cynicism. As far as validity is concerned, Garcés de Los Fayos (1999) notes that the MBI is the most appropriate instrument for burnout measurement, and after the realized adaptation it shows rates making it a perfectly applicable inventory to the athletes population.

Life Orientation Test (LOT-R). The Spanish adaptation (Otero et al., 1998) of the test by Scheier and Carver (1985) in the review by Scheier, Carver, and Bridges (1994) is used. This is composed of 10 items and utilizes a 5-point Likert scale from 0 (strongly disagree) to 4 (strongly agree). Among the 10 items, three are written in a positive sense (optimism measure) and three are written in a negative sense (pessimism measure), while the final four are fillers. For the interpretation of the test, the researchers followed different criteria. Some studies contemplate each factor, optimism and pessimism, separately (Mroczek, Spiro, Aldwin, Ozer, & Bosse, 1993; Myers & Steed, 1999). Other authors (De la Vega et al., 2012; Ortín et al., 2011) subtract the values obtained for pessimism from the values obtained for optimism, thereby assuming that the athlete’s tendency is optimism if he or she obtains positive values and pessimism if the values are negative. In the present study, the second option was utilized. The reliability coefficient (Cronbach’s alpha) that was obtained in the optimism scale was \( \alpha = .744 \) and it was \( \alpha = .718 \) in the pessimism scale. Respected to the validity, Ferrando et al. (2002) carry out a psychometric analysis of this test and obtain relatively high validity coefficients, marking that the actual version of the questionnaire shows a performance at least equally acceptable as the original scale.

Procedure

Permission was granted from the Spanish Federation of Associated Wrestling Styles as well as all of their individual state member federations before the study took place. The questionnaires were administered during the Spanish Wrestling Championship for the categories of Cadet and Senior after the objectives were explained to them. Data collection was carried out before the athletes’ medical exams and weigh-in. Information about the study was provided to the athletes and any questions were answered.

Statistical Analysis

Various statistical analyses were utilized: specifically, standard statistical methods to calculate means and standard deviation (SD), analysis of correlation (Pearson’s coefficient) to observe the average variation between the scores of the scales from the IBD and LOT-R, and Student t-test for independent samples for assessing the differences between the various groups. Grouping was done to analyze the differences in average optimism and pessimism for subjects with low and high scores in the scales of the IBD. For that, a standard deviation was either subtracted (for the low group) or added (for the high group) to the scale’s mean. Therefore, to obtain the optimistic-pessimistic tendency of the athlete, the criteria of Ortín et al. (2011) were followed, in which the values obtained by the participant in pessimism were subtracted from the values obtained in optimism. Thus, when positive values were obtained, an optimistic tendency was assumed, and when negative values were obtained, a pessimistic tendency was assumed. For all cases, statistical significance was set at 5% (\( p \leq .05 \)), and the analysis of the data was done with the SPSS program (version 15.0, SPSS Inc., Chicago, IL, USA).

Results

Table 1 demonstrates the descriptive data from each scale of the IBD and the LOT-R for the total samples. It should be pointed out that 84 athletes, 37% of the total, presented some of the characteristics of burnout proposed by Garcés de Los Fayos (1999); that is, higher than 66% in Emotional Exhaustion and Depersonalization and below 33% in Reduced Efficacy. Specifically, 13 subjects had values above 66% for Emotional Exhaustion, 15 subjects had values above 66% for Depersonalization, and 27 had values above 66% for Reduced Efficacy. Eleven percent (25 subjects) had high scores on two scales, and 18 of those subjects had their high scores in Emotional Exhaustion and Depersonalization. Four subjects (1.76% of the sample) scored high on all three scales.

Regarding the distinction between optimistic and pessimistic athletes, the pessimistic athletes represented 19.82% of the sample (or 45 subjects), and they were characterized by scoring negatively when subtracting their Optimism score from their Pessimism score.

After grouping the subjects who scored low and high in the various scales of the Inventario de Burnout en Deportistas from the addition or subtraction of a standard deviation from the scale’s mean, results that indicate various differences between these groups were obtained. Thus, the athletes with low scores in Emotional Exhaustion (\( n = 38 \)) had significantly different scores from those athletes in the high-scoring group (\( n = 33 \)) (Table 2); specifically, they have higher means in Optimism (\( t_{09} = 3.565; p = .001 \)) and Tendency toward optimism (\( t_{09} = 3.732; p = .000 \)). The differences are partially significant for

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>7</td>
<td>30</td>
<td>17.09</td>
<td>4.917</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>10</td>
<td>36</td>
<td>18.87</td>
<td>6.556</td>
</tr>
<tr>
<td>Reduced Efficacy</td>
<td>10</td>
<td>40</td>
<td>27.33</td>
<td>6.562</td>
</tr>
<tr>
<td>Optimism</td>
<td>0</td>
<td>12</td>
<td>8.00</td>
<td>2.652</td>
</tr>
<tr>
<td>Pessimism</td>
<td>0</td>
<td>11</td>
<td>4.97</td>
<td>2.636</td>
</tr>
<tr>
<td>Tendency toward Optimism</td>
<td>-6</td>
<td>12</td>
<td>3.03</td>
<td>3.930</td>
</tr>
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Pessimism ($t_{68} = -1.841; p = .070$), where the high-scoring group’s subjects obtained higher scores for Emotional Exhaustion.

After carrying out an identical analysis with the Depersonalization scale (Table 3), differences can be observed in the three elements from the LOT-R. This includes greater Optimism ($t_{60} = 2.054; p = .044$) and Tendency toward optimism ($t_{60} = 3.708; p = .000$) for athletes in the group of low Depersonalization (n = 42) while the subjects in the high-scoring group (n = 40) had a higher mean (6.05) in Pessimism ($t_{60} = 3.708; p = .000$).

For Reduced Efficacy, Table 4 presents the descriptive variables for the groups and the differences that were found. Contrary to the Emotional Exhaustion sub-scale, the athletes with low scores in Reduced Efficacy (n = 35) scored significantly differently from those with high scores (n = 39), and they recorded lower mean scores for Optimism ($t_{72} = -4.926; p = .000$) and Tendency toward optimism ($t_{72} = -4.502; p = .000$).

Finally, a comparison between athletes with an optimistic tendency (positive values; n = 182) and those with a pessimistic tendency (negative values; n = 45) is demonstrated in Table 5. The wrestlers with a tendency toward optimism had lower mean scores for Emotional Exhaustion (16.70) and Depersonalization (18.47), and they had higher means for Reduced Efficacy (28.02). There are statistically significant differences between the two groups for Emotional Exhaustion ($t_{225} = 2.424; p = .016$) and Reduced Efficacy ($t_{225} = -3.233; p = .001$), and the differences in Depersonalization ($t_{225} = 1.883; p = .061$) were partially significant.

## Conclusion

Competitive sport occasionally involves stressful situations for the athletes (Ortín et al., 2011). Monitoring these situations and some strategies for suitable confrontation are two of the most important aspects for performance (García & Díaz, 2010).

The aim of this study is to analyze the relationship between optimistic and pessimistic profiles and the various dimensions that compose the syndrome of burnout: emotional exhaustion, depersonalization (or cynicism), and reduced efficacy.

The results indicate that 37% of the athletes have an unhealthy level of some of the three dimensions of burnout. Regarding optimism and pessimism, 80.18% have at least a tendency toward optimism, which has been found in other studies when this construct has been studied in performance sport (Gordon, 2008; Norlander & Archer, 2002; Wilson, Raglin, & Pritchard, 2002).

Regarding the relationship between optimism and burnout, the results to be highlighted are the following. On one hand, the optimistic athletes demonstrate less emotional exhaustion. This aspect is the one that has been most reflected in the scientific literature in various contexts (Gustafsson & Skoog, 2012; Happell & Koehn 2011; Rothmann & Essenko, 2007). In relation to depersonalization, the data are similar, such that the most optimistic athletes demonstrate lower scores for this dimension. Finally, for reduced efficacy, the data again demonstrate a possible healthy effect of optimism, like the optimistic subjects have a higher score in this dimension. The results are similar if the results are analyzed by utilizing the dimensions of burnout as a reference as well as when using the optimist-pessimist profile as a reference.

## Discussion

The scientific literature indicates that optimism favors health. Studies indicate that, among other aspects, optimism can reduce the physical symptoms of illnesses and improves strategies of confrontation (Scheier & Carver, 1985), it favors a more complete and flexible cognitive process (Aspinwall, Richter, & Hoffman, 2001), and it helps the person to evaluate the present and look for better opportunities in the future (Schneider, 2001). Along these lines, if burnout is considered a clinical syndrome that affects the subject’s health, the analysis of the relationship between the two constructs may be relevant in any context.
Thus, psychological interventions may be beneficial in helping athletes learn strategies to gain optimism. Some intervention programs have found positive results along these lines (Sánchez & Méndez, 2007). Among the aspects that should be highlighted from the interventions is the work done on explanatory style and attributes in Seligman’s theoretical line (Sanjuán et al., 2008). The work on optimism may act as a protector when presented with psychological problems such as the appearance of burnout.

Working on these psychological variables can be done by several professionals working with the athlete. Keeping in mind the importance of the coach, the education of the coach regarding the handling of optimistic messages, a suitable reinforcement, and correct attributions may positively affect the athletes. Seligman (2004) upholds the existence of optimistic and pessimistic teams strongly affected by the leadership style of the coaches. The explanatory style of a coach may affect the analytical teams strongly affected by the leadership style of the coach. The explanatory style of a coach may affect the analysis of the results, and in this way influence the feedback that is given to the athletes (Ortín et al., 2012).

Optimism and the prevention of burnout are two aspects that can be learned. In the area of research, there are also validated tests that are specific for each construct. In the present study, the two that are most utilized in the athletic context according to the bibliometric study by Ortín, Marín and Garcés de los Fayos (2012) were used.

It is important to note some limitations of our study, in order to guide future research on optimism and burnout. First at all, it should be marked that this study has been done with a sample in a particular sport. In this sense, it may be interesting to carry out a similar analysis in other sports, including both individual and team sports. On the other hand, although we can observe some statistically significant data in certain burnout scales, it could be relevant to investigate what has produced these results, analyzing the influence of people surrounding the athlete like the coach and the family. Analyzing these causes will favor the possibility to create prevention and intervention programs on burnout and promoting optimism in the context of physical activity and sport.

REFERENCES


