



Original Article

Sport Orientation Predicts Athlete Burnout in Elite Soccer Players

Meysam Beik^{1*}, Esmaeel Mazhar Esmaeel²

¹Department of Motor Behavior, Faculty of Sport Sciences, Ferdowsi University of Mashhad, Mashhad, Iran.

²Department of Motor Behavior, Faculty of Sport Sciences, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran.

Submission date: 03-07-2024

Acceptance date: 21-08-2024

Abstract

Background: Sport orientation can affect athlete burnout and performance. Therefore, the purpose of this study was to investigate the relationship between sport orientation and athlete burnout in elite soccer players.

Methods: The statistical population of this study was Iraqi elite soccer players (Mean age, 27.3 ± 7.8 yrs; age range, 20-40 yrs) who were active in the Premier League teams of Iraq (Mean, 8.2 ± 4.5 yrs). The sample included 144 athletes that were convincible selected. The measurement tools included sport orientation questionnaire and athlete burnout questionnaire to measure the orientation and the level of burnout of the athletes, respectively.

Results: Multivariate regression test was used to analyze the data of sport orientation as a predictor variable and analysis of sport burnout as a criterion variable. The results showed a negative relationship ($r = -.2$) between sports orientation and athlete burnout in elite soccer players. In addition, the regression results showed that regression coefficients of predictor variables of competitiveness, goal orientation and winning orientation were significant in relation to athlete burnout as criterion variable ($P_s < .05$). The variables of competitiveness ($t = -6.63$, $\beta = -.53$), goal orientation ($t = -6.13$, $\beta = -.49$) and winning orientation ($t = -6.17$, $\beta = .39$) predicted changes in athlete burnout. So, increasing competitiveness and goal orientation variables reduce burnout whereas increased win-orientation increases burnout in elite soccer players.

Conclusion: As a result, it is better for coaches and athletes to develop competitiveness and goal orientation in order to prevent the burnout of elite soccer players.

Keywords: Competitiveness, Football, Goal orientation, Overtraining syndrome, Professional athlete, Winning orientation.

* Corresponding Author: Meysam.beik@alumni.um.ac.ir



Introduction

In recent years, many efforts have been made to investigate and identify the factors affecting the success of sports performance. In this regard, many of these researches support the impact of competitive sports on the psychological, social and physiological characteristics of athletes. A group of these researches have investigated the negative effects of competitive and professional sports such as stress, anxiety and exhaustion on the mental and psychological conditions of athletes (for review see 1,2)

Burnout is one of the factors affecting the performance of professional athletes and makes their participation in sports less than before. Cox (2002) defines burnout as physical or emotional exhaustion that reduces the value of exercise and reduces individual success (3). According to cognitive-affective model of (4), the reaction against chronic psychological stress is called depletion. Gould et al. (1996) also consider burnout as psychological, social and physical withdrawal and isolation from previous activities, which is caused by severe stress that is imposed on the athlete over time (5). Athlete's exhaustion always includes three important symptoms. The first sign is the athlete's feeling of less success in performing movement abilities and sports skills. The second sign refers to his emotional and physical fatigue in connection with training and competition, and the third sign is the decrease in the value of participating in sports. Therefore, researchers define exhaustion in the field of sports in three dimensions; Decreased sense of progress, emotional and physical fatigue, and feelings of worthlessness. Decreased sense of progress refers to feelings such as being stuck, not being effective, and not achieving athletic performance. Emotional and physical fatigue refers to the fatigue of the body and mind during sports performance, and the feeling of worthlessness refers to feelings such as the unimportance and futility of sports activities for a person and the search for alternative activities for them (6).

Research in the field of sports burnout shows that this variable is associated with unpleasant feelings such as lack of pleasure, lack of attraction in other activities, high psychological and social pressures (7), low self-motivation (8), lack of satisfaction, basic psychological needs such as autonomy, sufficiency, and relatedness (1), abnormal perfectionism and doubts about living up to high personal standards (8) in relation to is what emerges from the results of this research is that the characteristics of athletes can be important determinants of athlete burnout (for review see 2). Therefore, currently, sports

psychologists are looking to identify personality traits that preserve the integrity of athletes against the effects of burnout (1,9).

According to (10), wrong coping strategies can become one of the most important factors in the occurrence of burnout in athletes, while (11) believe that positive characteristics can lead to the success of athletes (12). According to Smith's affective cognitive model, when an athlete comes to the conclusion that the demands of the environment are beyond his ability, he infers that he cannot deal with the stress caused by these demands, as a result, the person's cognitive and physiological ability is impaired and the athlete withdraws from the sport to cope with these stresses (2,11). Therefore, pressures and psychological stress can be called one of the most important causes of burnout in athletes (3).

One of the variables that can be related to attrition is sports orientation. Sports orientation consists of three components: competitiveness, goal orientation and winning orientation. Competitiveness is the enjoyment of competition and the desire to strive for success in competitive situations. People who have a competitive spirit have a different interpretation of competitive conditions than non-competitive people, and this causes them to behave differently. Win orientation is a person's desire to win through interpersonal comparisons, and goal orientation emphasizes individual performance and focuses on personal goals in sports (13).

Research shows that competitive stress and anxiety increase when the win component increases. Also, when goal orientation and competitiveness increase, competitive stress and anxiety decrease (14). As stated, since the stresses and pressures imposed on the athlete can be one of the most important causes of fatigue. Therefore, this question arises, can the type of sports orientation, which causes different conditions of stress and anxiety, be related to athlete's depression? Therefore, investigating the relationship between athlete's burnout and sports orientation can help to explain and interpret more possible causes of athlete's burnout. Therefore, the purpose of this research was to investigate the relationship between athlete burnout and sports orientation in elite soccer players in Iraq. The specific hypotheses of the study are as follows:

Hypothesis 1: Competitiveness component decrease athlete burnout orientation in elite soccer players.

Hypothesis 2: Goal orientation component decrease athlete burnout orientation in elite soccer players.

Hypothesis 3: Win orientation component increase athlete burnout orientation in elite soccer players.

Materials & Methods

Participants

The population of this study consisted of elite male soccer athletes who had membership in premier league teams of Iraq for the last five years. This population was consisted 240 players. Based on the Krejcie and Morgan table, the statistical sample of this study involved 144 athletes, and the participants were selected using convenience sampling method. The written informed consent form was completed by the participants, and the research process was approved by the Research Ethics Committee of the Islamic Azad University of Isfahan (Khorasgan) Branch in accordance with Helsinki Declaration (1964).

Measurement Tools

For measuring sport orientation and athlete burnout, we used the following questionnaires that are common in the sport psychology field (for review see 1,15,16).

Sports Orientation Questionnaire (SOQ): We used the SOQ to measuring sport orientation of the participants. This scale included 25 items with three subscales of competitiveness (13 items, such as “I am a determined competitor”), goal orientation (6 items, such as “I set goals for myself when I compete”), and win orientation (6 items, such as “Winning is important”) in 5-point Likert scale (1 = almost never to 5 = almost always), ranging from 35 to 175 scores. The internal consistency coefficients (ICC) were reported .94, .86, and .80 for competitiveness, win, and goal, respectively (17).

Athlete Burnout Questionnaire (ABQ): For measuring burnout of the participants, we used the ABQ. This questionnaire involved 15 items including emotional/physical exhaustion, reduced sense of accomplishment, and sport devaluation (5 items each) in 5-point Likert scale (1 = almost never, 5 = almost always), ranging 15-75 scores (6). Persian version of this questionnaire reported Cronbach’s alpha .77, .80, and .81 for the emotional/physical exhaustion, reduced sense of accomplishment, and sport devaluation, respectively (18).

Data Analysis

Descriptive and inferential statistics were used for data analyzing. In descriptive statistics, mean and standard deviation of the participants' scores of sport orientation and athlete burnout were reported. In inferential statistics, Pearson correlation coefficient was used to investigate the relationship between the variables and then multivariate regression was performed for predicting the variables by SPSS 22. Significant level was set at $p < .05$ for the analyses to reject null hypothesis (H_0).

Results

In descriptive statistics section, table 1 shows mean and standard deviation of sport orientation and athlete burnout scores.

Table 1. Means and standard deviations of sport orientation and athlete burnout scores

Scale	subscale	Mean \pm SD	Range
Sport orientation	Competitiveness	42.03 \pm 3.56	39-47
	Win orientation	20.36 \pm 2.91	16-24
	Goal orientation	20.68 \pm 3.21	15-25
	Total score	81.49 \pm 9.75	71-97
Athlete burnout	Sport devaluation	16.56 \pm 2.39	14-20
	Reduced sense of accomplishment	19.05 \pm 2.63	17-22
	Emotional/physical exhaustion	18.86 \pm 2.55	16-20
	Total score	53.79 \pm 6.64	42-65

The result of Z scores showed that data was normal ($ps > .05$). the result of Durbin–Watson statistic also showed independence of errors ($DW = 1.5-2.5$).

Correlation coefficients between the variables of sport orientation (competitiveness, win orientation, goal orientation) and athlete burnout (sport devaluation, reduced sense of accomplishment, emotional/physical exhaustion) have been demonstrated in table 2.

Table 2. Correlation coefficient in competitiveness component

Variables	Sport devaluation	Reduced sense of accomplishment	Emotional/physical exhaustion
Competitiveness	-.31*	-.21*	-.24*
Win orientation	-.18*	.07	.05
Goal orientation	-.04	-.37*	-.21*

* $p < .05$

As you see in table 3, regression method (stepwise) was used to predicted the relationship between predictor variable (i.e., sport orientation) and criterion variable (i.e., athlete burnout).

Table 3. Regression analysis (stepwise) for sport orientation and athlete burnout.

Index	Sum of squares	df	F	p	R	R2	Adjusted R2
Regression	591.84	1	14.6	.001*	.3	.09	.08
Residual	5753.9	142					
Total	6345.75	143					
Regression	1805.34	2	28.03	.0001*	.53	.28	.27
Residual	4540.4	141					
Total	6345.75	143					

The results of table 3 shows that in the regression of the relationship between the dimensions of sport orientation and athlete burnout, in two steps, the two dimensions of this variable explain 28 percent of the variance of burnout. The observed F values for the model were significant ($P_s < 0.05$). Accordingly, the regression model has a good fit. Therefore, you can refer to the fitting coefficients in table 4.

Table 4. Regression coefficients of model variables

	variable	Standard beta	Critical error	Beta coefficient	t	p	Cohen's d
1	Constant	77.78	6.3		12.17	.0001*	
	Competitiveness	-.57	.14	-.3	-5.82	.0001*	1.15
2	Constant	74.53			13.21	.0001*	
	Competitiveness	-.99	.15	-.53	-6.63	.0001*	1.18
	Goal orientation	-1.02	.16	-.49	-6.13	.003*	1.02
	Win orientation	-1.03	.17	.39	-6.17	.002*	1.05

Discussion

The purpose of the study was to investigate the relationship between sport orientation and athlete burnout in elite soccer players. The results of the present study showed that there was a negative correlation between sport orientation and athlete burnout in elite Iraqi soccer players. In other words, the higher of sport orientation led to the lower the athlete burnout. The results of the study were consistent with research literature (12,19–21) that showed a significant relationship between task-oriented and ego-oriented and athlete burnout (16).

Based on the results of the present study, it can be due to study's participants included elite soccer players who have win orientation seek challenge because they enjoy competing with their peers, while footballers or athletes in general who do not have a win orientation avoid challenge and do not seek success in their work. Therefore, athletes feel adequate to an activity when they participate in a sporting activity with high preparation and desirable goals and feel their progress in it (1). Given that sports orientations originate from motivational theories (22), it is important for athletes to promote their motivation to achieve success because, according to the results of this study, the higher sport orientation results in the lower the athlete's burnout.

In addition, the results of correlation analysis showed that increasing competitiveness can predict decreasing of the dimensions of burnout including sport devaluation, reduced sense of accomplishment, and emotional and physical exhaustion. However, it can be inferred that highly competitive athletes interpret sports situations and conditions differently than non-competitive individuals, and their perception of these competitive conditions will affect their behavior (1,6). If competitive athletes are not in a position to compete with their opposing teams, they will consider their work and sport to be useless and will become discouraged from their sport, which will slowly lead to their burnout. As a result, in order to prevent burnout in footballers, it is better to include more competitive footballers in competitive events.

Further, the results showed that there is a significant relationship between win orientation and reduced sport devaluation, while the relationship between win orientation and reduced sense of accomplishment and reduced emotional and physical exhaustion were not significant. It can be inferred that the win orientation is the desire of an individual to win through interpersonal comparisons (1,6). As a result, if the desire to win is the most important factor for players, their burnout will decrease and they will only think about success and victory. In fact, sports orientation in the dimension of win orientation is one of the important things that helps athletes succeed. However, the dimension of win orientation is related to psychological characteristics and exists in all people and its level is not the same in everyone. On this basis, some people consider sport as a means of entertainment, while others exercise for pleasure, and others, like elite footballers, consider it as an arena for competition, and finally, another group of footballers consider it as a means of victory and avoiding defeat.

Based on the results of this hypothesis, elite Iraqi footballers have a winning mentality, which causes a low level of analytical thinking in them.

Furthermore, the results of this study showed that there was no significant relationship between goal orientation and reduced sport devaluation. There is a significant and negative correlation between goal orientation and reduced sense of accomplishment and there was also a relationship between goal orientation and reduced emotional and physical exhaustion. Goal orientation is one of the dimensions of sports orientation that affects individual performance (12,19,21). In fact, it focuses on personal goals in sports and evaluates success in relation to individuals themselves. Goal orientation also implicitly refers to the goals and efforts of an individual in achieving a certain performance. Accordingly, footballers should be taught to set and formulate goals for themselves in order to achieve sporting success. The results of this hypothesis showed that the more professional footballers are more competitive and goal oriented, and as a result, they do not suffer from burnout and degradation.

In the last, the results of regression analysis indicated that competitiveness and goal orientation negatively predicted athlete burnout, while win orientation positively predicted it. According to the self-determination theory, increasing intrinsic motivation can lead to commitment and enjoyment of the activity (23,24). In the competitive and goal orientation, which is based on individual performance, intrinsic motivation increases and the athlete enjoys his/her activity and reduces athlete burnout. On the contrary, in win orientation, relying on interpersonal comparisons and creating stress and anxiety caused by it and the athlete's perception of external control over sports performance can cause a decrease in intrinsic motivation and enjoyment of sports and increase athlete burnout, which leads to sports dropout (1).

This study had limitations including small sample size and lack of female athletes due to cultural restrictions that can consider for future study. For future study, it is suggested that a study should examine the relationship between positive and negative perfectionism and athlete burnout in soccer players. It is suggested that a study examine the prediction of athlete burnout based on other psychological factors such as competitive anxiety, sports perfectionism, and impulsivity in professional soccer players. In further study, it also is suggested to investigate sport orientation in female elite athletes.

Conclusion

Based on the results of the study, sport orientation affects athlete burnout through win orientation and goal orientation choices during a sport activity such as soccer. Athletes who have win orientation tend to be winners on the field and avoid losing, they compare their success to others. Goal-oriented individuals focus on personal goals in sports and evaluate success in relation to themselves. In comparison to goal orientation and win orientation, competitiveness strongly affects the individual's choice to participate in competitive sports. Competitive individuals highly show interest in joining competitive sports. If managers and coaches pay attention to psychological issues and using psychological and behavioral factors in the most appropriate parts of their soccer players' work programs, they can increase the level of sports orientation in athletes, which will lead to a decrease in burnout in football players. Coaches respond to the need and desire for competitiveness by holding internal (inside the club) or external (outside the club) competitions, or by holding diverse competitions, responding to the needs for goal setting and increasing the motivation of individuals, they can attract more footballers and maintain them by increasing satisfaction and reducing burnout. In the end, we recommend coaches and trainers to improve competitiveness based on goal orientation (individual goals) for reducing athlete burnout as a stressor factor in elite soccer players.

Statements & Declarations

Funding

The authors declare that no funds, grants, or other support were received during the preparation of this manuscript.

Competing Interests

There are no competing interests to disclose.

Author Contributions

MB: Conceptualization, Data curation, supervision, write & review the manuscript. **EE:** Conceptualization, Data collection, Draft manuscript.

Ethics approval

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of Islamic Azad University (Isfahan Branch).

Consent to participate

Informed consent was obtained from all individual participants included this study.

Consent to publish

The authors affirm that human research participants provided informed consent for publication of the group information in the tables.

References

- Gustafsson H, DeFreese J, Madigan DJ. Athlete burnout: Review and recommendations. *Curr Opin Psychol.* 2017;16:109–13.
- Woods S, Dunne S, Gallagher P, McNicholl A. A systematic review of the factors associated with athlete burnout in team sports. *Int Rev Sport Exerc Psychol.* 2022;1–41.
- Cox RH. *Sport psychology: Concepts and applications* (2nd ed). 2002; Wm. C. Brown publication.
- Smith RE. Toward a cognitive-affective model of athletic burnout. *J Sport Exerc Psychol.* 1986;8(1):36–50.
- Gould D, Tuffey S, Udry E, Loehr J. Burnout in competitive junior tennis players: II. Qualitative analysis. *Sport Psychol.* 1996;10(4):341–66.
- Raedeke TD, Smith AL. Development and preliminary validation of an athlete burnout measure. *J Sport Exerc Psychol.* 2001;23(4):281–306.
- Raedeke TD. Is athlete burnout more than just stress? A sport commitment perspective. *J Sport Exerc Psychol.* 1997;19(4).
- Lemyre P, Hall H, Roberts G. A social cognitive approach to burnout in elite athletes. *Scand J Med Sci Sports.* 2008;18(2):221–34.
- Gucciardi DF, Gordon S. Development and preliminary validation of the Cricket Mental Toughness Inventory (CMTI). *J Sports Sci.* 2009;27(12):1293–310.
- Meehan HL, Bull SJ, Wood DM, James DV. The overtraining syndrome: a multicontextual assessment. *Sport Psychol.* 2004;18(2):154–71.
- Sheard M, Golby J. Personality hardiness differentiates elite-level sport performers. *Int J Sport Exerc Psychol.* 2010;8(2):160–9.
- Daumiller M, Rinas R, Breithecker J. Elite athletes' achievement goals, burnout levels, psychosomatic stress symptoms, and coping strategies. *Int J Sport Exerc Psychol.* 2022;20(2):416–35.
- Daniels E, Sincharoen S, Leaper C. The relation between sport orientations and athletic identity among adolescent girl and boy athletes. *J Sport Behav.* 2005;28(4):315.
- Jamshidi A, Hossien T, Sajadi SS, Safari K, Zare G. The relationship between sport orientation and competitive anxiety in elite athletes. *Procedia-Soc Behav Sci.* 2011;30:1161–5.
- Gledhill A, Harwood C, Forsdyke D. Psychosocial factors associated with talent development in football: A systematic review. *Psychol Sport Exerc.* 2017;31:93–112.
- Yang JH, Yang HJ, Choi C, Bum CH. Systematic Review and Meta-Analysis on Burnout Owing to Perfectionism in Elite Athletes Based on the Multidimensional Perfectionism Scale (MPS) and Athlete Burnout Questionnaire (ABQ). *Healthcare.* 2023;11(10):1417.

- Gill DL, Deeter TE. Development of the sport orientation questionnaire. *Res Q Exerc Sport*. 1988;59(3):191–202.
- Ahmadi N, Abdoli B, Ariaifar M. Psychometric properties of Persian version of the athlete burnout questionnaire (ABQ) in athletes. *J Sport Psychol Stud*. 2014;9(3):93–102.
- Harris BS, Smith ML. The influence of motivational climate and goal orientation on burnout: An exploratory analysis among Division I collegiate student-athletes. *Introd Sport Psychol Train Compet Coping*. 2009;63.
- Mirshekari K, Zarezade M, Emami A. Prediction of athlete burnout based on competitive anxiety and motivational regulations in elite athletes. *Sport Psychol Stud*. 2015;4(13):136–119.
- Moen F, Federici RA, Skaalvik EM. Junior athletes' goal orientation, motivation, and emotional and physical exhaustion. *Int J Coach Sci*. 2014;8(2):25–41.
- Martínez-González N, Atienza FL, Duda JL, Balaguer I. The role of dispositional orientations and goal motives on athletes' well-and ill-being. *Int J Environ Res Public Health*. 2021;19(1):289.
- Lemyre PN, Roberts GC, Stray-Gundersen J. Motivation, overtraining, and burnout: Can self-determined motivation predict overtraining and burnout in elite athletes? *Eur J Sport Sci*. 2007;7(2):115–26.
- Lonsdale C, Hodge K, Rose E. Athlete burnout in elite sport: A self-determination perspective. *J Sports Sci*. 2009;27(8):785–95.