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Relationship between leader–member exchange and burnout in professional footballers

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Abstract

Numerous variables influence burnout, one of which is leader–member exchange. The present study was conducted to determine whether leader–member exchange quality affects burnout in professional footballers. The study used the Leader–Member Exchange-7 scale developed by Scandura and Graen (1984) to measure leader (coach)–member (player) exchange and Pines’s (2005) abbreviated version of the burnout scale developed by Pines and Aronson (1988) to measure burnout. The data were obtained from the professional players ($N=107$) of six football clubs in the Turkish Secondary Football League in western Turkey. The results demonstrated that quality of leader–member exchange significantly and inversely influenced burnout of professional footballers. The study also evaluated quality of leader–member exchange in terms of three strengths of relationship (low, fair, and high) between the coach and players. Contrary to expectations, the results revealed significant differences in burnout when comparing low versus fair quality and low versus high quality, while no significant difference in burnout was observed between fair and high quality.

Keywords: *Leader–member exchange, burnout, professional football, players, Turkish League*

Introduction

Both leader–member exchange and burnout have been the subject of various studies in the literature since the 1970s, as they have important effects on both employees and organizations. These variables have a significant influence on employees, in physical and psychological terms (Maslach, 2003), and organizational performance (Zhang, Du, Ma, & Wang, 2009). High-quality leader–member exchange has various implications, including job satisfaction, commitment, high performance, innovative behaviour, and citizenship behavior (Graen & Uhl-Bien, 1995), while burnout leads to low organizational commitment, absenteeism, intention to leave one’s job, and turnover (Maslach & Leiter, 2008). Football clubs may be considered organizations in which leader–member exchange and burnout effects can be observed in players and coaches. In this context, clubs seek to gain competitive advantage in leagues, and coaches – who are team leaders – seek to overcome their players’ problems and want their job satisfaction, team loyalty, and performance to be high. Successful coaches, players, and thus their clubs earn vast amounts of money and status on the one hand,

and are followed by large numbers of fans on the other. Given such gains, it is crucial for football clubs to eliminate effects that may reduce individual and team performance. Thus it is important to investigate the relationship between leader–member exchange quality and burnout in football teams. The aim of the present study is to determine whether leader–member exchange quality influences burnout in professional footballers.

Few studies in management have examined the relationship between leader–member exchange quality and burnout (see Graham & Witteloostuijn, 2010; Huang, Chan, Lam, & Nan, 2010; Larson & Gouwens, 2008). Although research on leadership in sports has increased since the 1980s (see Chelladurai & Arnott, 1985; Chelladurai, Haggerty, & Baxter, 1989; Chelladurai & Quek, 1995; Chelladurai & Saleh, 1980; Kent & Chelladurai, 2001), only a few studies have been conducted on leader–member exchange (Case, 1998; Hoye, 2004). In contrast, burnout studies abound in the sports literature (Goodger, Gorely, Lavalley, & Harwood, 2007). In a recent review, Goodger et al. (2007) synthesized burnout studies in the sport literature. They concluded that most of the published research used

psychological, demographic, and situational factors as the correlates of burnout and the findings of the published research were inconsistent, as some reported a positive, some a negative, and some no relationship with athlete burnout and these factors (i.e. psychological, demographic, and situational). For instance, Raedeke and Smith (2001) reported that burnout was positively correlated with stress, trait anxiety, and motivation but negatively correlated with enjoyment, commitment, and social support. Using self-determination theory, Longsdale and colleagues (Lonsdale, Hodge, & Rose, 2009) found that less self-determined motives had positive associations and more self-determined motives negative associations with burnout. They stated that although a number of studies have investigated burnout, they lacked depth both conceptually and methodologically. The researchers highlighted that a considerable gap exists in terms of definition, theoretical conceptualization, and measurement of burnout in the sports literature. Therefore, especially for sports organizations, it is argued that there is a gap in research addressing the relationship between leader-member exchange and burnout. Therefore, the aim of this study is to examine the relationship between leader-member exchange and burnout in professional footballers in an attempt to add to current knowledge in sports management.

Literature review

Leader-member exchange theory

First appearing in the 1970s as the “vertical dyad linkage theory,” leader-member exchange theory was developed in 1982 by Graen and his colleagues (Dienesch & Liden, 1986). The theory focuses on the business relationship between a leader and the various members of a work unit, team, department, or organization. It argues that interactions of leaders with their subordinates result in different relationships, the quality of which influences individual and organizational performance (Scandura & Pellegrini, 2008; Schriesheim, Castro, & Cogliser, 1999; Van Breukelen, Schyns, & Le Blanc, 2006). It also maintains that since leaders have limited time, power, and resources in organizations (Bauer & Green, 1996), they cannot use the same leadership style with all subordinates (Wayne, Liden, & Sparrowe, 1994). Therefore, the theory attempts to describe how leaders use their power and resources to develop different relationships with their subordinates (Deluga & Perry, 1994).

As leader-member exchange theory argues, business relationships between a leader and subordinates range from high to low quality (Deluga & Perry, 1991). In high-quality interactions, leaders establish

closer relations with only a few key subordinates, the “in-group”, due to limited resources. In this kind of relationship, they provide “in-group” members with support and resources beyond the employment contract (Dockery & Steiner, 1990). These relationships can result in special benefits and opportunities, including favourable performance appraisals, promotions, support in career development (Deluga & Perry, 1994), increased job attitude, influence in decision-making, open communications, support for the member’s actions, and confidence in and consideration of the member (Case, 1998). As a result, leaders gain hardworking members who are more strongly devoted to their jobs (Deluga & Perry, 1994). In contrast, leaders’ relationships with other subordinates who are not “in-group” members are of a relatively lower quality. Leaders usually use their position of power in their relationships with the subordinates who are in the “out-group”. Low-quality relations may be characterized by low trust, less support, infrequent interaction, and fewer rewards (Wilhelm, Herd, & Steiner, 1993). In such low-quality relations, leaders expect subordinates to carry out their formal job requirements (Le Blanc, Jong, Geersing, Furda, & Komproe, 1993). Low-quality relations are known to have an influence on the subordinates in the form of low performance (Huang et al., 2010; Janssen & Van Yperen, 2004; Zhang et al., 2009), weak loyalty to the organization (Kinicki & Vecchio, 1994), and low job satisfaction (Schriesheim, Neider, & Scandura, 1998). Moreover, it is also known to influence organizational citizenship behaviour (Chen, Wang, Chang, & Hu, 2008).

Leader-member exchange theory is based on two other theories: role theory and social exchange theory (Hofmann, Morgeson, & Gerras, 2003). Role theory focuses on the roles of leaders and members, while social exchange theory mainly deals with the exchange between a leader and members. Graen (1976) notes that in organizations, organizational members perform their jobs and duties through the roles they assume. In this respect, role theory can be useful in explaining how role-development processes function in the leader-member exchange framework (Dienesch & Liden, 1986). Social exchange theory argues that individuals can participate in an exchange only if there is an expectation of achieving rewards in return for the social costs they incur. In contrast to economic exchange, social exchange lacks rules or contracts that govern relationships, and there is no guarantee that the cost incurred will always be rewarded. An individual’s belief in whether the other party will reciprocate is the main determinant in social exchange. A strong belief in reciprocity among individuals is argued to result in greater willingness for exchange (Bolat, Bolat, &

Seymen, 2009; Lambe, Wittmann, & Spekman, 2001).

Burnout

The concept of burnout was introduced to the literature by Freudenberger (1974), who described it as business-related stress (Leung & Lee, 2006). Later, Maslach (2003) defined burnout as “a psychological syndrome that involves a prolonged response to stressors in the workplace” (p. 189). Persons suffering from burnout exhibit low energy, lack of motivation, negative feelings about themselves or their work, and withdrawal from interpersonal interactions (Thomas & Lankau, 2009). The three sub-dimensions of burnout are *emotional exhaustion*, *depersonalization*, and *reduced personal accomplishment* (Maslach & Jackson, 1981; Maslach, Schaufeli, & Leiter, 2001). Leiter and Maslach (1988) define these dimensions as follows: “Emotional exhaustion refers to feelings of being emotionally overextended and drained by one’s contact with other people. Depersonalization refers to an unfeeling and callous response toward these people, who are usually the recipients of one’s service or care. Reduced personal accomplishment refers to a decline in one’s feelings of competence and successful achievement in one’s work with people” (pp. 297–298).

The approach used by Pines, Aronson, and Kafry (1981) to measure burnout may be considered a more general approach that may be applied to different fields. Pines et al. (1981) define burnout as “a state of physical, emotional, and mental exhaustion that results from long-term involvement with people in situations that are emotionally demanding”. The tool they developed to measure burnout has been frequently used in the literature (Enzmann, Schaufeli, Janssen, & Rozeman, 1998; Pines, 2005). Later, Pines (2005) developed a shorter version of the burnout scale. The Burnout Measure Short Version is a unidimensional scale and it is argued that it can be used in all fields to measure burnout. Pines (2005) demonstrated the validity of the Burnout Measure Short Version in different occupations.

The job demand–control model is one of the most effective models used to explain burnout. This model identifies two crucial job aspects in the workplace: job demands and job control. It argues that the interaction between job demands and job control determines the level of business-related stress (Karasek, 1979). Stress may be high in work environments with high job demands and low job control (Van Der Doef & Maes, 1999). Later, Johnson and colleagues (Johnson & Hall, 1988; Johnson, Hall, & Theorell, 1989), incorporated the

social dimension into this model, and thus the job demand–control–support model was introduced to the literature. Social dimension is defined as the social and psychological support for an individual from his or her environment (Van Der Doef & Maes, 1999). These models suggest that in the face of business demands, employees should possess the qualities needed to meet such demands and be furnished with the powers to make business-related decisions. In addition, employees should also be offered adequate social support by the work environment. A lack of these increases the chance of experiencing burnout among employees (Thomas & Lankau, 2009). Although the relationship between the job demand–control–support model and burnout has been tested in other disciplines (Proost, De Witte, De Witte, & Evers, 2004), we were unable to identify any studies testing the relationship in sports.

Smith’s definition of burnout would be most applicable to sports. Smith (1986) defines burnout as “a psychological, emotional and physical withdrawal from sport due to chronic stress (Raedeke, Lunney, & Venables, 2002)”. Adapting this definition, Raedeke et al. (2002) define burnout as “a withdrawal from swimming (sport) noted by a reduced sense of accomplishment, devaluation/resentment of sport, and physical/psychological exhaustion” (p.181). Emotional and physical exhaustion relate to the intense demands associated with training demands and the competitive nature of sports. Accordingly, athlete burnout represents a negative assessment of self-accomplishment and sport experience leading to loss of emotional and physical motivation (Lemyre, Roberts, & Stray-Gundersen, 2007). Literature reports various studies focused on measuring burnout in sports. The Athlete Burnout Questionnaire (Raedeke & Smith, 2001) is one of the most widely used instruments in sports.

Burnout is especially relevant for elite players who must invest extraordinary amounts of time and effort to be successful (Baker, Côté, & Abernethy, 2003). In other words, burnout may be seen in individuals involved in tasks that demand a great deal of interpersonal interaction. Characteristics of burnout can readily be applied to the competitive sport environment, in which physical and emotional exhaustion can occur due to the ongoing demands of a competitive season (Vealey, Armstrong, Comar, & Greenleaf, 1998). For instance, football is a competitive sport, which forces players and coaches into intensive interactions for team success and team cohesion. In particular, professional football is a profession and thus a productive activity performed during work hours; it also functions to earn money and offer status, all of which force players to make strenuous efforts towards personal success. Players compete with both their teammates and players of the

opposing team. Thus, players have to display success during both workouts and games to become starters. All these may act as stress factors, and failure may result in burnout.

The relationship between leader–member exchange and burnout

The relationship between the leader and member involves a role development process (Hofmann et al., 2003). In this process, the leader assigns duties to and follows their subordinates. When assigning such duties, they take into consideration the knowledge, skills, abilities, and eagerness of their subordinates. In this context, the leader evaluates the subordinates' actions with regard to the duties assigned. Depending on their performance, subordinates in time gain a place in either the “in-group” or “out-group”. Individuals with high performance and willingness find a place for themselves in the “in-group”, while unsuccessful subordinates with low performance find themselves in the “out-group”. Low-performing subordinates are likely to experience burnout over time (Bolat, 2011). The job demand–control model (Karasek, 1979) argues that individuals experience more stress in cases with high job demands or workload but low job control, which results in burnout among subordinates (Van Der Doef & Maes, 1999). In the process of role taking and role making, leaders will offer the subordinates in the “out-group” duties that require extra effort and expect high performance from them. Subordinates who lack the necessary job control (knowledge, skills, abilities, powers, and access to resources) will experience failure, as they will be unable to perform the duties required of them, resulting in burnout (Bolat, 2011).

Within the social exchange framework, leaders provide the subordinates in the “in-group” with greater support beyond the formal job contract, involve them in decisions, offer them organizational resources, and facilitate their access to career development opportunities (Deluga & Perry, 1991, 1994; Graen & Uhl-Bien, 1995; Le Blanc et al., 1993). This in turn reduces the risk of burnout for the subordinates in the “in-group,” who establish high-quality relations with their leaders. On the other hand, support received by the subordinates in the “out-group” will be limited to the job content as stated in the job description. Perceptions of limited control of high job demands and a lack of social support from the leaders will have a negative influence on the key factors that contribute to the burnout (Cresswell, 2009; Cresswell & Eklund, 2004).

Self-determination theory (Deci & Ryan, 1985) has been frequently used as the theoretical framework

for examining athlete burnout (Lemyre et al., 2007; Lonsdale et al., 2009). According to this theory, humans (athletes) have basic psychological needs for competence, autonomy, and affiliation (connectedness with others). If an athlete is intrinsically motivated, self-determined, and autonomous, satisfaction will follow and result in positive psychological outcomes. In contrast, if the athlete has to perform for external reasons and is self-regulated, frustrations will follow. When an athlete feels controlled by external factors such as the coach, they will be motivated by that external regulation. Therefore, it is argued that the low-quality relationship with one's superiors and the strict procedural explanations of the job content will create perceptions and feelings of behaviour being externally regulated for the subordinates in the “out-group”. Accordingly, athletes whose self-determination needs are frustrated will be more likely to experience burnout.

Although the literature contains research examining the relationship between various leadership styles and burnout (e.g. Duxbury, Armstrong, Drew, & Henly, 1984; Zopiatis & Constanti, 2010), studies examining the relationship between leader–member exchange and burnout are limited. In general, the results of recent studies demonstrate a significant and negative relationship between leader–member exchange and burnout. However, previous studies in the sports literature have investigated these constructs separately and to the best of our knowledge no studies have examined the relationship between these constructs together (e.g. Dale & Weinberg, 1989; Liou, Tsai, Chen, & Kee, 2007).

In summary, sports literature shows that studies have either focused on investigating the relationship between leadership and burnout or just simply the leader–member exchange construct. No study has examined the relationship between leader–member exchange and burnout in sports organizations. Research conducted in different service organizations has revealed a significant and negative relationship between leader–member exchange and burnout. Clearly, there is a need to determine whether there is a similar relationship in sports organizations. Leader–member exchange has been applied to the relationship between coaches and players (Case, 1998; Chen, 2010), such as in professional football teams. Based on the models presented, it can be hypothesized that cases of burnout are likely to be seen in this interaction process. Thus, the aim of the present study was to examine the relationship between quality of leader–member exchange and burnout of professional footballers. It was hypothesized that cases of burnout among professional footballers would be reduced as the quality of leader–member exchange increased. In addition, it was hypothesized that there would be statistically

significant differences between different levels (low, fair, and high) of leader–member exchange and burnout.

Methods

Sample

The data used in this study were obtained from the professional players of six football clubs in western Turkey, in May 2010. These clubs were in the Turkish Secondary Football League. First, the interviewer distributed 150 questionnaires to the players, taking utmost care to ensure confidentiality, and collected the questionnaires in a similar fashion a week later. In total, 121 questionnaires were collected, a return rate of 80.6%. Of these, 14 forms not properly completed were discarded. The 107 players in the sample had a mean age of 25.7 years. Thirty-four (31.8%) were married, while 73 (68.2%) were single. Four (3.7%) were primary school graduates, 75 (70.1%) were high-school graduates, and 28 (26.2%) were college graduates. Furthermore, the players had been playing football for 7.07 years on average.

Instruments

The Leader-Member Exchange-7 scale developed by Scandura and Graen (1984) was used to measure quality of leader (coach)–member (player) exchange, and Pines's (2005) abbreviated version of the burnout scale originally developed by Pines and Aronson (1988) was used to measure the players' burnout. Previous studies (Huang et al., 2010) showed that demographic factors such as gender, education, and age could have an effect on work performance and hence on burnout. Therefore, to isolate the effects of leader–member exchange on burnout of professional players, we included these demographic variables as control variables in the hierarchical regression analysis.

Although the literature contains various instruments developed to measure leader–member exchange (Schriesheim et al., 1999), the Leader-Member Exchange-7 scale developed by Scandura and Graen (1984) is a unidimensional scale with the most appropriate psychometric qualities (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995). Therefore, this scale has been most commonly used in the literature to assess leader–member exchange (Yukl, O'Donnell, & Taber, 2009). Since there appears to be a general consensus that the Leader-Member Exchange-7 scale captures the construct (Lee, Murrmann, Murrmann, & Kim, 2010), this scale was used in the present study. The participants responded to each question using a 5-point scale. On

a scale of “extremely ineffective” to “extremely effective”, participants answered questions such as “How would you characterize your working relationship with your coach?” High values indicate a high quality of leader–member exchange.

To measure the players' burnout, we employed Pines's (2005) abbreviated version of the 10-item burnout scale originally developed by Pines and Aronson (1988), and most commonly referred to in the literature (Enzmann et al., 1998). We preferred to use this unidimensional scale, since it can measure burnout for all professional groups (Pines, 2005) and facilitates obtaining responses using a brief scale. Statement examples include: “I feel depressed because of my job” and “I feel worthless because of my job”. The statements were rated on a 7-point Likert-type scale ranging from 1 (“never”) to 7 (“always”). High values indicated burnout (Pines, 2005).

Analysis and results

Data were further examined for missing data and distributional properties. Once the incomplete cases were removed, the remaining dataset had no missing data on any of the variables that were used in the analyses. We believe that the personal data collection method together with the short survey contributed to us obtaining data with no missing values. We then examined the data for distributional properties for the regression analysis. To this end, we tested the normality properties of both leader–member exchange and burnout variables. Kolmogorov–Smirnov tests resulted in non-significant P -values for both burnout ($P > 0.311$) and leader–member exchange ($P > 0.208$), indicating that data for both variables (leader–member exchange and burnout) met the normality criterion suggested in the literature. Furthermore, stem-and-leaf and box plot results also confirmed the results of the Kolmogorov–Smirnov tests. Further analyses of the distributional properties of the data showed that skewness scores were within the acceptable range (-2 and $+2$) used in the literature and they were closer to zero, leading us to conclude that the data used for regression analysis could be assumed to be normally distributed and hence the statistical analyses used can be considered appropriate. Construct validity of the scales was tested through varimax rotation – principal component factor analysis – and Cronbach's alpha coefficient test was used to check their reliability. Kaiser–Meyer–Olkin coefficient and Bartlett's sphericity test were performed to determine whether the data were appropriate for factor analysis. Correlation analysis was used to determine relationships among variables. To test the hypothesized effects of leader–member

exchange quality on burnout, hierarchical regression analysis was performed.

Quality of leader–member exchange was evaluated in terms of three strengths of relationship (low, fair, and high). Thus, scores between 1.00 and 2.60 indicated low quality; those between 2.61 and 3.40 indicated fair quality; and those between 3.41 and 5.00 indicated high quality. Studies in the literature have used five different cut-off points to convert the interval scaled leader–member exchange into categories: very ineffective = 1.00–1.80, ineffective = 1.81–2.60, neutral = 2.61–3.40, effective = 3.41–4.20, and very effective = 4.21–5.00). However, the frequency analysis of our data indicated that the use of five groups would lead to categories with very low response rates, which would not be appropriate for analysis of variance (ANOVA). Therefore, using values reported in the literature (Toremén, Karakus, & Yasan, 2009), we combined the two top groups and two bottom groups, which resulted in a more reasonable classification of the data. One-way ANOVA was performed to determine whether there was any significant inter-group difference, while Tukey's test was performed to identify which group was the origin of the difference.

Test for validity and reliability

To test the unidimensionality of both leader–member exchange and burnout scales, we used confirmatory factor analysis. For leader–member exchange, we ran confirmatory factor analysis with all seven items forced to a single latent variable. Confirmatory factor analysis results provided strong model fit indices (chi-square = 17.054, $P > 0.19$; goodness-of-fit index = 0.956; comparative fit index = 0.990; root mean square error of approximation = 0.054). Similarly, confirmatory factor analysis results of the 10-item burnout scale yielded good model fit indices (chi-square = 36.402, $P > 0.10$; goodness-

of-fit index = 0.942; comparative fit index = 0.988; root mean square error of approximation = 0.057). These values meet the criteria suggested in the literature for assessing model fit (Browne & Cudeck, 1993; Byrne, 2001). These model fit values indicate that both scales were unidimensional and items in the scales measured the constructs they are intended to measure (leader–member exchange and burnout).

Correlation analysis

The correlation analysis revealed a significant and negative relationship between leader–member exchange and burnout ($r = -0.437$; $P < 0.001$). Literature indicates that this correlation is of moderate strength with high statistical significance. Moreover, results show that age ($r = 0.551$; $P < 0.000$) and years of experience of professional football ($r = 0.529$; $P < 0.000$) are positively correlated with burnout. This relationship suggests that burnout increases with increasing age and experience of professional football (Table I).

Hierarchical regression analysis

The results of the hierarchical regression analysis (two steps) show that quality of leader–member exchange has a significant and negative effect on burnout ($\beta = -0.372$, $P < 0.001$), in support of the first hypothesis. An r^2 of 0.449 for the model indicates that almost half of the variance in the dependent variable was accounted for by the independent variables used in this study. No significant relationship could be established between the control variables and burnout. In the correlation analysis, the variables associated with burnout, age, and playing experience lost their significance when subjected to a hierarchical regression analysis. Therefore, it could be argued that when evaluated

Table I. Results of correlation analysis.

| Variables | mean | s | 1 | 2 | 3 | 4 | 5 |
|------------------------------------|------|------|----------|---------|--------|---------|----------|
| 1. Marital status | – | – | | | | | |
| 2. Age | 25.7 | 4.40 | –0.351** | | | | |
| | | | 0.000 | | | | |
| 3. Educational status | – | – | 0.065 | –0.017 | | | |
| | | | 0.503 | 0.863 | | | |
| 4. Professional playing experience | 7.07 | 4.32 | –0.357** | 0.924** | –0.077 | | |
| | | | 0.000 | 0.000 | 0.428 | | |
| 5. Leader–member exchange | 2.50 | 1.01 | 0.068 | –0.163 | 0.050 | –0.113 | |
| | | | 0.486 | 0.094 | 0.611 | 0.248 | |
| 6. Burnout | 3.48 | 0.80 | –0.119 | 0.551** | 0.034 | 0.529** | –0.437** |
| | | | 0.223 | 0.000 | 0.728 | 0.000 | 0.000 |

**Correlation significant at $P < 0.01$ (two-tailed).

with leader–member exchange, these two variables lose their effects on burnout (Table II).

One-way ANOVA of quality of leader–member exchange

The analysis revealed a significant inter-group difference at the $P < 0.01$ level (Table III). To identify the origin of this difference, the data were subjected to a Tukey test, the results of which demonstrated a significant difference in burnout between the group with low-quality leader–member exchange and the group with a fair quality of leader–member exchange between coaches and players (mean difference = 0.8136; $P < 0.05$). Similarly, a significant difference in burnout was identified between the group with low-quality and the group with high-quality leader–member exchange (mean

difference = 0.8718; $P < 0.01$). However, no significant difference in burnout was observed between the groups with fair- and high-quality leader–member exchange, providing partial support for the second hypothesis regarding differences among the various qualities of leader–member exchange and burnout. In summary, players with low-quality leader–member exchange arguably experience more burnout than players with fair- and high-quality leader–member exchange (Table IV).

Discussion and conclusions

Although the broader literature provides a limited number of studies investigating the effects of leader–member exchange on burnout, such studies are lacking in the sports literature. Therefore, this study was designed to contribute to the sports literature by empirically investigating the effects of leader–member exchange on professional footballers’ burnout by controlling for some demographic variables and experience.

The results of this study show that quality of leader–member exchange is related to burnout. Quality of leader–member exchange has a significant and negative influence on burnout, indicating that the incidence of burnout is reduced among professional players with increasing quality of leader–member exchange. Thus, the presence of a significant and negative relationship between the two variables has been confirmed for professional footballers, as in other fields (Bolat, 2011; Graham & Witteloostuijn, 2010; Huang et al., 2010; Larson & Gouwens, 2008). In terms of quality of leader–member exchange, significant differences in burnout were observed between low versus fair and low versus high levels of quality. This study also demonstrated that players who most commonly experience burnout are those with low-quality leader–member exchange. The study found no significant difference in burnout between fair and high levels of quality, which was an unexpected result. Possible causes for this result might be that

Table II. Results of hierarchical regression analysis between burnout and the independent variables.

| Independent variables | Step 1 | Step 2 |
|------------------------------------|--------|---------|
| 1. Marital status | 0.088 | 0.095 |
| 2. Age | 0.421 | 0.263 |
| 3. Educational status | 0.049 | 0.073 |
| 4. Professional playing experience | 0.176 | 0.284 |
| 5. Leader–member exchange | | −0.372* |
| <i>F</i> | 11.787 | 16.440 |
| <i>R</i> ² | 0.316 | 0.449 |
| Adjusted <i>R</i> ² | 0.289 | 0.421 |

Note: Standardized beta values were used, * $P < 0.001$.

Table III. Results of one-way ANOVA for quality of leader–member exchange.

| | Sum of squares | d.f. | Mean square | <i>F</i> | <i>P</i> |
|----------------|----------------|------|-------------|----------|----------|
| Between groups | 11.063 | 2 | 5.531 | | |
| Within groups | 98.219 | 104 | 0.944 | 5.857 | 0.004* |
| Total | 109.282 | 106 | | | |

* $P < 0.01$.

Table IV. Post-hoc test results.

| (I) Quality | Mean | | (j) Quality | Mean difference (I – j) | <i>s_x</i> | <i>P</i> | 95% CI | |
|-------------|---------|------|-------------|-------------------------|----------------------|----------|-------------|-------------|
| | Burnout | LMX | | | | | Lower bound | Upper bound |
| Low | 3.21 | 2.13 | Fair | 0.8136* | 0.30886 | 0.026 | 0.0792 | 1.5480 |
| | | | High | 0.8718* | 0.25800 | 0.003 | 0.2583 | 1.4852 |
| Fair | 2.40 | 3.09 | Low | −0.8136* | 0.30886 | 0.026 | −1.5480 | −0.0792 |
| | | | High | 0.0582 | 0.23880 | 0.968 | −0.5096 | 0.6260 |
| High | 2.34 | 3.97 | Low | −0.8718* | 0.25800 | 0.003 | −1.4852 | −0.2583 |
| | | | Fair | −0.0582 | 0.23880 | 0.968 | −0.6260 | 0.5096 |

Note: LMX = leader–member exchange, CI = confidence interval. *Mean difference is significant at $P < 0.05$.

players with a fair quality of leader–member exchange may perceive, albeit not as much as those with high-quality leader–member exchange, that they have established close relations with their coaches, have access to resources when needed, and receive support from their fellow players. In short, players who are unhappy in their relationships with their coaches, who do not receive social support, and are not motivated will be more likely to experience burnout (Cresswell, 2009; Leymre et al., 2007).

Most studies on leadership in the sports literature have focused on developing leadership scales (Chelladurai & Saleh, 1980) and leadership styles, such as transformational and transactional leadership (Doherty, 1997; Pruijn & Boucher, 1995). The leader–member exchange approach focuses on the quality of interactions between the leader and subordinates, rather than the leader’s leadership style (Gerstner & Day, 1997). According to leader–member exchange, no matter what leadership style is adopted by a leader, some members will be in the “in-group” while others will be in the “out-group”. The main reason for this is that leaders’ power, time, energy, and resources are limited, and they cannot possibly share them equally with all members (Wayne et al., 1994). For instance, the number of player restrictions imposed by the rules forces coaches to make choices among players that may be very similar in terms of their abilities. Therefore, this will result in some players in a football team being in the “in-group” and some the “out-group”. In a study conducted with female basketball players, Case (1998) reported an “in-group” and “out-group” of team players, which shows that leader–member exchange theory can also apply to the sports context.

This study demonstrates that the incidence of burnout among professional footballers varies with quality of leader–member exchange, and that burnout is reduced with a higher quality of leader–member exchange. Given that the quality of leader–member exchange positively affects players’ job performance (Zhang et al., 2009) and job satisfaction (Janssen & Van Yperen, 2004), while burnout negatively influences job performance (Wright & Cropanzano, 1998), it is clear that coaches should make more efforts to enhance the quality of leader–member exchange. According to leader–member exchange, given coaches’ limited time and resources, some players will certainly remain in the “out-group” – for instance, only 11 squad members can start a game, and the coach will not be able to favour each player equally in his or her team selection. However, the coach can reduce the number of players in the “out-group” to a certain extent by increasing the quality of leader–member exchange. To help enhance the quality of leader–member exchange, it might be useful for coaches to adopt

more relation-motivated styles (such as transformational leadership) and receive training on human relations, participative management, motivation, and communication, if necessary (Bolat, 2011). Thus, with higher-quality leader–member exchange, the incidence of burnout among players will be reduced, which will not only increase retention and improve job satisfaction of players, but will also manifest itself in the form of positive performance on the team.

In summary, this study presents the results of an empirical study that was designed to examine the role of leader–member exchange on professional footballers’ burnout. There is a pressing need to empirically examine and address the hypothesized relationship between these two variables in the sports literature. Our results show that differing qualities of leader–member exchange significantly influence the incidence of burnout among professional footballers and, therefore, potentially have an important influence on their performance. We strongly believe that this empirical study provides crucial evidence and contributes body of knowledge by filling the gaps in the sports literature with respect to the relationship between these two important variables.

Based on the findings of this study, we recommend that coaches should pay close attention to signals of burnout (such as tiredness, depression, and physical weakness) in their players and make a concerted effort to improve the quality of leader–member exchange. Although not exhaustive, some of the actions that could be taken by coaches include improving open communications, making players feel that they are important and valued, and if necessary, designing individualized training sessions for those players who show signs of burnout. Furthermore, enlisting the skills of a professional sport psychologist could be beneficial. Coaches should use their knowledge, expertise, and other available resources to improve the quality of social interactions and therefore quality of leader–member exchange to reduce the incidence of burnout among players. Such efforts will help improve player and team performance.

This study focused on football and professional players, thus the results cannot be generalized to other groups of professional footballers or other sports. Therefore, other researchers should apply similar research design and analysis methods in different countries and cultures in an attempt to replicate the results of the present study. Future studies should incorporate specific cultural measures to test the applicability and validity of the concepts and theories developed in advanced economies to other environments (Spector, Cooper, Sanchez, & O’Driscoll, 2002). By manipulating cultural variables, researchers could isolate the effects of leader–member exchange on burnout in different cultural

environments and hence offer broader generalizations. Furthermore, we did not control the playing time in this study. It is possible that playing time has some influence on burnout. Our thinking was that some of the items represented in the leader-member exchange scale reflected some aspects of playing time. However, we strongly believe that future studies should use playing time as one of the control factors in testing the relationships between these two variables. Finally, future studies should examine the role of different coaching (leadership) styles for player burnout and the consequences for professional players.

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