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The Effects of Coaches' Behaviors and Burnout on the Satisfaction and Burnout of Athletes

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THE EFFECTS OF COACHES' BEHAVIORS AND BURNOUT ON THE SATISFACTION AND BURNOUT OF ATHLETES

By

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To my beloved parents, with love and appreciation.
And to Huda, Sief, Mohammad, and Salam,
the best part of my life.

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ABSTRACT

The main purpose of this study was to investigate the relationship between coaches' burnout, coaches' behaviors, and levels of burnout and satisfaction experienced by college athletes. The secondary purposes were to examine how coaches' levels of burnout were related to perceived coaching behavior, and to examine the link between athletes' levels of burnout and satisfaction.

Forty two male and female coaches employed at the 8 public universities in Jordan, and 413 male and female college athletes participated in this study. The participants completed translated version of the Leadership Scale for Sports (LSS; Chelladurai & Saleh, 1980), Athlete Burnout Questionnaire (ABQ; Raedeke & Smith, 2001), Athlete Satisfaction Questionnaire (ASQ; Riemer & Chelladurai, 1998), and Maslach Burnout Inventory-Educators Survey (Maslach, Jackson, & Leiter, 1996). Data were analyzed using descriptive statistics, Pearson product-moment correlation coefficients, and stepwise regression.

The results of this study suggest that there is a significant relationship between coaches' leadership behaviors and burnout. It was discovered that personal accomplishment and emotional exhaustion to be significant predictors of the coaches' leadership behaviors. Significant relationships were found between perceived coaching behaviors and athletes' outcomes. Athletes who perceived their coaches as providing more training and instruction, social support, feedback, and exhibiting more democratic behavior and less autocratic behavior were more satisfied and less burned out. In addition, significant negative relationships were found between athletes' satisfaction and athletes' burnout.

CHAPTER 1
INTRODUCTION

When individuals encounter dissatisfaction with their performance, are emotionally drained from the stress of their job, and eventually distance themselves from their clients or colleagues, they are considered to be professionally burned out (Arlotto, 2002). Burnout can, and does, affect a variety of people in a widely dispersed spectrum of professions (Pines & Aronson, 1988). It is not limited to persons in any one occupation and there are not clearly defined and universally recognized characteristics that can be best identified with all those afflicted. Schaufeli and Enzmann (1998) wrote:

> "Burnout is a metaphor. It is a state of exhaustion similar to the smothering of a fire or the extinguishing of the candle. Where there used to be a vital spark and the flame of life was burning bright. It is now dark and chilly. The fuel has been used up and the energy backup is depleted" (p. 1).

Burnout researchers do agree that persons in human service professions (e.g., teachers, nurses, social workers, physicians, police officers, etc.) appear to be at greater risk of becoming burned out because they spend careers focusing on the needs of others (Cherniss, 1995; Maslach, 1993; Schaufeli & Enzmann, 1998). This attention to the needs of others takes an emotional toll on the professional, which can lead to overwhelming exhaustion; feelings of frustration, anger, and cynicism; and a sense of ineffectiveness and failure (Leiter & Maslach, 2001).

The problem of burnout is not new. In fact, it has been studied for many years from a physiological perspective, and it is only in the last few decades that burnout has been thoroughly investigated and discussed from a psychological perspective by scholars and researchers from diverse areas of study. Burnout is a type of prolonged response to chronic emotional and interpersonal stressors on the job (Schaufeli, Maslach, & Marek, 1993). As such, it has been an issue of particular concern for people-oriented occupations in which (a) the relationship between providers and recipients is central to the work, and (b) the provision of education, service, or treatment can be a highly emotional experience (Maslach, 1999). The first articles about burnout, which appeared in the mid 1970's (Freudenberger, 1974; Maslach, 1976), provided an initial description of the burnout phenomenon, gave it the identifying name of "burnout," and showed that it was not an abnormal response by a few deviant people but was actually quite common (Maslach, 1999). According to Maslach, Jackson, and Leiter (1996), "burnout is a state of exhaustion in which one is cynical about the value of one's occupation and doubtful of one's capacity to perform" (p. 20).

It is important at this point to note that most of the systematic research on burnout during the 1980's and early1990's focused on people-oriented occupations such as human services,

health care, and education (Cordes & Doughtery, 1993). These occupations are considered "high-touch" in that they involve lots of face-to-face contact (Maslach & Leiter, 1997). Such jobs can be so emotionally and physically demanding that the risk for burnout is high. The dedication these jobs demand, the long hours and excessive workloads, are exhausting, as are potential conflicts with clients, patients, students, colleagues, or supervisors (Maslach & Leiter, 1997).

While the study of burnout is originated in the area of human service professions, the study of burnout is applicable to other areas (Graf, 1992). Many occupations not classified as helping professions may be vulnerable to the development of burnout because it is the nature of the interpersonal contacts in jobs that causes strain (Maslach & Jackson, 1984; Shirome, 1989). In the athletic community, burnout is a buzzword that has raised considerable concern among coaches, athletes, and sport psychologists (Raedeke, 1997; Raedeke, Lunney, & Venables, 2002). Most athletes, coaches, and sport psychologists have used the term "burnout" and most have probably also experienced burnout at some point of their lives (Vealey, Armstrong, Comar, & Greenleaf, 1998). Burnout is of great interest to sport researchers because it involves the psychological, emotional, and physical withdrawal from activities previously enjoyed and pursued vigorously by athletes, coaches, and officials (Smith, 1986).

Studies in the exercise and sport sciences have identified burnout as an important issue related to athlete's perseverance, as well as coaching longevity, and productivity (Raedeke, Granzyk, & Warren, 2000). Researchers have found evidence of stress and burnout in coaches (e.g., Caccese & Mayerberg, 1984; Capel, Sisley, & Desertrain, 1987; Collins, 2002; Dale & Weinberg, 1989; Graf, 1992; Kelley, 1994; Kelley, Eklund, & Ritter-Taylor, 1999; Price & Weiss, 2000; Raedeke et al., 2000), athletes (e.g., Cohn, 1990; Fender, 1989; Gould, Horn, & Spreeman, 1983; Gould, Tuffey, Udry, & Loehr, 1996a, 1997; Gould, Udry, Tuffey, & Loehr, 1996b; Price & Weiss, 2000; Raedeke, 1997; Raedeke et al., 2002; Vealey et al., 1998), officials (e.g., Rainey, 1999; Rainey & Hardy, 1999; Taylor, Daniel, Leith, & Burke, 1990), teacher-coaches (e.g., Drake & Hebert, 2002; Figone, 1986; Kelley, 1990; Kelley & Gill, 1993), athletic trainers (e.g., Campbell, Miller, & Robinson, 1985; Capel, 1986; Gieck, Brown, & Shank, 1982), and athletic directors (e.g., Copeland & Kirsch,1995; Martin, Kelley, & Dias,1999a; Martin, Kelley, & Eklund, 1999b; Ryska, 2002).

Application of the burnout concepts is evident throughout the sport domain (Price & Weiss, 2000). In terms of provider-recipient relationship in sports, coaches represent the provider and athletes represent the recipient. Coaches provide their athletes with feedback and reinforcement about performance that athletes use to correct, motivate, and reinforce skills and behaviors (Price & Weiss, 2000). The dynamics of the sport domain encourage frequent and intense interactions between coaches and athletes. Interactions with athletes are reported as one contributor to coach burnout (Dale & Weinberg, 1989; Kelley et al., 1999; Price & Weiss, 2000; Udry, Gould, Bridges, & Tuffey, 1997; Vealey et al., 1998). Similarly, athletes have identified their interactions with coaches as one potential source of feelings of burnout (Gould et al., 1996a, 1997; Price & Weiss, 2000; Udry et al., 1997; Vealey et al., 1998). This interplay among coaches, athletes, and burnout may be effectively explained within the coaching behaviors and leadership style research (Price & Weiss, 2000).

The coach-athlete relationship is an integral part of sport, and anecdotal evidence from many athletes indicates that this relationship is essential to the ultimate quality and perceived success of their competitive sport careers (Vealey et al., 1998). This importance of coaches in the

lives of their athletes deserves an investigation of the behavior of coaches as it may relate to burnout and satisfaction in athletes.

Despite the growing body of literature on burnout in athletics, many questions remain unanswered. There is a need for more empirical support into the existence of athlete burnout in both individual and team sports. Links between coaching behaviors, level of coach burnout, and athlete outcomes (e.g., burnout and satisfaction) need to be investigated (Price & Weiss, 2000; Vealey et al., 1998). Moreover, factors contributing to the development of burnout need to be identified and studied (Collins, 2002; Graf, 1992; Vlahos, 1997).

To date, minimal research has been conducted to investigate how various coach characteristics and behaviors relate to athletes' psychological responses. In one of the few studies to do so, Price and Weiss (2000) examined the relationship among coach burnout, coach behaviors, and athletes' psychological responses. Results from that study revealed that lower perceived competence and enjoyment, and higher anxiety and burnout were associated with coaches who exhibited less frequent training and instruction, social support, and positive feedback. Also, greater use of democratic and less use of autocratic style was associated with more positive and less negative psychological outcomes for athletes. Studies show that the burnout experienced by athletes and coaches has different antecedents and perhaps even different psychological, physiological, and behavioral consequences (Vealey, Udry, Zimmerman, & Soliday, 1992). Therefore, research in the area of athletics' burnout seems to be warranted.

Theoretical Framework and Conceptual Model

In order to better understand the coach-athlete relationship, studies have been conducted and efforts have been made to develop the most reliable frameworks to measure the effects of coaching behaviors and leadership styles on athletes' outcomes. This section will describe the most popular models that will be integrated in this study; they are: (a) The Multidimensional Model of Leadership (Chelladurai, 1980, 1990), (b) Athlete Burnout Model (Raedeke & Smith, 2001, (c)) Athlete Satisfaction Model (Chelladurai & Riemer, 1997)), and (d) The Maslach Burnout Model (Maslach & Jackson, 1981; Maslach et al., 1996).

The Multidimensional Model of Leadership

Coaches' leadership behavior is an important factor affecting athletes' psychological outcomes. The multidimensional model of leadership proposes that group performance and member satisfaction are functions of the congruence among three states of leader behavior: required, actual, and preferred behavior (Chelladurai, 1980, 1990, Chelladurai & Riemer, 1998).

According to Chelladurai, effectiveness of coaching behaviors is a function of situational, member, and leader characteristics. Situational characteristics (i.e., parameters of the organization and/or its environment, such as the goals of the team, the formal organizational structure of the team, social norms, and cultural values) would require that the coach behave in certain ways. Member characteristics (e.g., age, gender. ability) primarily influence athletes' preferred coaching behaviors, while the coach's personal characteristics (e.g., gender, age, personality characteristics, and years of experience) influence the coach's actual behaviors (Chelladurai, 1980, 1990, 1999; Chelladurai & Riemer, 1998).

In order to test the multidimensional model of leadership, Chelladurai and Saleh (1980) developed the Leadership Scale for Sport (LSS). It identified five dimensions of leader behavior that were especially relevant for coaches: training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback. These coaching behaviors are predicted to affect athlete performance and satisfaction.

The *training and instruction* dimension measures coaching behavior aimed at improving the athletes' performance by emphasizing and facilitating hard and strenuous training; instructing them in the skills, techniques, and tactics of the sport; clarifying the relationship among he members; and structuring and coordinating the members' activities. *Democratic behavior* includes coaching behavior, which allows greater participation by the athletes in decisions pertaining to group goals, practice methods, and game tactics and strategies. The *autocratic behavior* dimension refers to coaching behavior, which involves independent decision-making and stresses personal behavior authority. *Social support* refers to coaching behavior characterized by a concern for the welfare of individual athletes, behavior positive group atmosphere, and warm interpersonal relations with members. Finally, the positive feedback dimension describes behaviors, which reinforces an athlete by recognizing and rewarding good performance (Chelladurai, 1996; Chelladurai & Saleh, 1980).

The LSS (Chelladurai & Saleh, 1980) has been by far the most widely used and researched scale in the sport leadership literature. Studies used the LSS indicated that leadership behavior was found significantly related to athletes satisfaction (e.g., Chelladurai & Arnott, 1985; Chelladurai, Imamura, Yamaguchi, Oinuma, & Miyauchi, 1988; Horn, 1992; Riemer & Chelladurai, 1995; Riemer & Toon, 2001; Schliesman, 1987; Sriboon, 2001), and athlete's burnout (e.g., Price & Weiss, 2000; Udry et al., 1997; Vealey et al., 1998). Research results also indicated that the five dimensions of leader behavior in sports model explains coaching behavior not only among different types or levels of sports but also among athletes from different cultures (Weiss & Friedrichs, 1986; Schubiger, 1993).

According to the proposed model (see Figure 1), the specific behaviors of the coach are expected to influence the levels of burnout and satisfaction of the athletes. Therefore, the coach-athlete relationship studied within the multidimensional model of leadership is an appropriate approach to studying the relationship among coach behaviors and athletes' psychological outcomes.

Athlete Burnout Model

In the last few years, athlete burnout has drawn increasing interest from researchers and sport psychologists (e.g., Gould et al., 1996a, 1996b, 1997; Price & Weiss, 2000; Raedeke, 1997; Raedeke et al., 2002; Vealey et al., 1992, 1998; Vlahos, 1997). Raedeke and Smith (2001) proposed the conceptual framework and measure in sports in which athlete burnout has three dimensions namely emotional/physical exhaustion, reduced sense of accomplishment, and devaluation.

The emotional/physical exhaustion dimension taps feelings associated with being emotionally and physically exhausted by the demands of training and competition. The reduced sense of accomplishment dimension assesses athletes' feelings of personal growth and successful achievement through their sport participation. The devaluation dimension assesses athlete's loss of interest in sport and their desire to withdrawal (Raedeke & Smith, 2001).

The proposed model (see Figure 1) indicates that coaches' behaviors are expected to influence athletes' levels of burnout directly. A review of the literature (e.g., Price & Weiss, 2000; Raglin & Morgan, 1989; Udry et al., 1997; Vealey et al., 1998) clearly indicates that more than a few studies have found that coaches' behaviors influence athletes' levels of burnout. The significant results of these studies warrant their inclusion in the model.

Athlete Satisfaction Model

Satisfaction is an integral part of sport participation and enjoyment. Without satisfaction, athletes would turn to other sources for potential success and enjoyment (Maday, 2000). Satisfaction in sport has been studied extensively in combination with several variables, mostly leadership (Chelladurai, 1984; Chelladurai et al., 1988; Coffman, 1999; Dwyer & Fischer, 1990; Horne & Carron, 1985; Riemer & Chelladurai, 1995; Riemer & Toon, 2001; Schliesman, 1987; Sriboon, 2001; Yusof, 1999). Several scholars in sport psychology have included athlete satisfaction as an antecedent or outcome variable in their work. For example, the multidimensional model of leadership (Chelladurai, 1980, 1990) includes satisfaction as an outcome variable along with performance.

Studies based on the multidimensional model of leadership (Chelladurai, 1980, 1990) have been largely concerned with linking leadership dynamics with athlete satisfaction. Satisfaction as an outcome has been employed in different leadership studies based on the multi-dimensional model of leadership (Chelladurai, 1984; Chelladurai et al., 1988; Dwyer & Fischer, 1990; Eichas, 1992; Horne & Carron, 1985; Riemer & Chelladurai, 1995; Riemer & Toon, 2001; Schliesman, 1987; Sriboon, 2001). In the multidimensional model (Chelladurai, 1980, 1990), leadership behaviors were suggested to be antecedents of member satisfaction. The model suggests that the discrepancy between athletes' perceived and preferred leadership style would impact their level of satisfaction.

In 1997, Chelladurai and Riemer proposed the model "A Classification of Facets of Athlete Satisfaction." The purpose of the model was to study the needs, benefit, and treatment that were provided for intercollegiate athletics. Based on Chelladurai and Riemer's (1997) classification of facets of athlete satisfaction, Riemer and Chelladurai (1998) developed, a multiple-item, multiple-dimension scale to measure athlete satisfaction, the Athlete Satisfaction Questionnaire (ASQ). The development of the ASQ resulted in a final scale with 15 facets, or subscales, and a total of 56 items on the scale.
The format of the scale allows researchers to include those dimensions of satisfaction most salient for a particular situation (Riemer & Toon, 2001).

In the proposed model (see Figure 1), satisfaction was evaluated using 4 of the ASQ's 15 subscales: training and instruction satisfaction, personal treatment satisfaction, team performance satisfaction, and individual performance satisfaction. The first two subscales concentrate on satisfaction with the process of coaching behavior, while the second two assess satisfaction with outcomes associated with the processes of leadership (Riemer & Chelladurai, 1998). *Training and instruction satisfaction* refers to satisfaction with the training and instruction provided by the coach. *Personal treatment satisfaction* refers to satisfaction with those coaching behaviors that directly affect the individual yet indirectly affect team development. It includes social support and positive feedback. *Team performance satisfaction* refers to athlete's satisfaction with his or her team's level of performance. Task performance includes absolute performance, goal achievement, and implies performance improvements. Finally, *individual performance*

satisfaction refers to athlete's satisfaction with his or her own task performance. Task performance includes absolute performance, improvements in performance, and goal achievement (Riemer & Chelladurai, 1998).

The Maslach Burnout Model

Researchers do agree that persons in human service professions (e.g., teachers, nurses, social workers, physicians, and police officers) appear to be at greater risk of becoming burned out because they spend careers focusing on the needs of others (Cherniss, 1995; Maslach, 1993; Schaufeli & Enzmann, 1998). Coaches are included among those helping professionals who have been identified as having a high potential of burning out (Graf, 1992; Kelly, 1994).

Maslach and Jackson (1981) developed the most widely accepted definition of burnout. Based on empirical evidence recorded from questionnaires and interviews of service providers, burnout was defined as "a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity" (Maslach et al., 1996, p. 4). Emotional exhaustion refers to feelings of being emotionally overextended and depleted of one's emotional resources. Depersonalization refers to a negative, cynical or excessively detached response to other people at work. Reduced personal accomplishment refers to a decline in feelings of one's competence and productivity at work (Maslach et al., 1996).

Many studies have investigated burnout among coaches (e.g., Collins, 2002; Graf, 1992; Kelley et al., 1999; Kelley & Gill, 1993; Price & Weiss, 2000; Vealey et al., 1992). Researchers also tried to identify factors that contribute to burnout in coaches. One optional individual difference that could contribute to burnout is leadership behavior, since how a coach relates to his or her athletes can have a great impact on whether the coach becomes burned out (Dale & Weinberg, 1989; Kelley et al., 1999).

Studies investigating the relationship between leadership styles and burnout have found strong relationships between burnout and coaches leadership behavior (e.g., Dale, 1987; Dale & Weinberg, 1989; Kelley et al., 1999; Price & Weiss, 2000; Vealey et al., 1998). The results of these studies indicate that burnout affects coaches' behaviors. Therefore, the link between coaches' levels of burnout and their leadership styles justify their inclusion in the model. In summary, burnout, which was initially recognized as a social problem, has developed into a prospering research area. The concept has successfully penetrated from practice into the realm of academic psychology, and some major achievements have been made.

Coaches' leadership behaviors have been found to highly associate with athletes' burnout and satisfaction. Leadership behaviors are composed of certain behavioral characteristics and attributes regarding how the coach interacts with his or her athletes in terms of training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback. Coaches can make significant changes in the athletic environment and alleviate the impact of stressors by intervention strategy. Different leadership behaviors produce different impacts on the athletes' psychological responses, dealing with their own stressors, and fulfilling their expectations.

As described in this section, Figure 1 presents the model to be tested in this study. It proposes that coaches' leadership behaviors may affect the outcomes of athletes (i.e., satisfaction and burnout). In addition the model proposes that coaches' levels of burnout might affect their behaviors, and it tries to investigate the link between athletes' burnout and satisfaction.

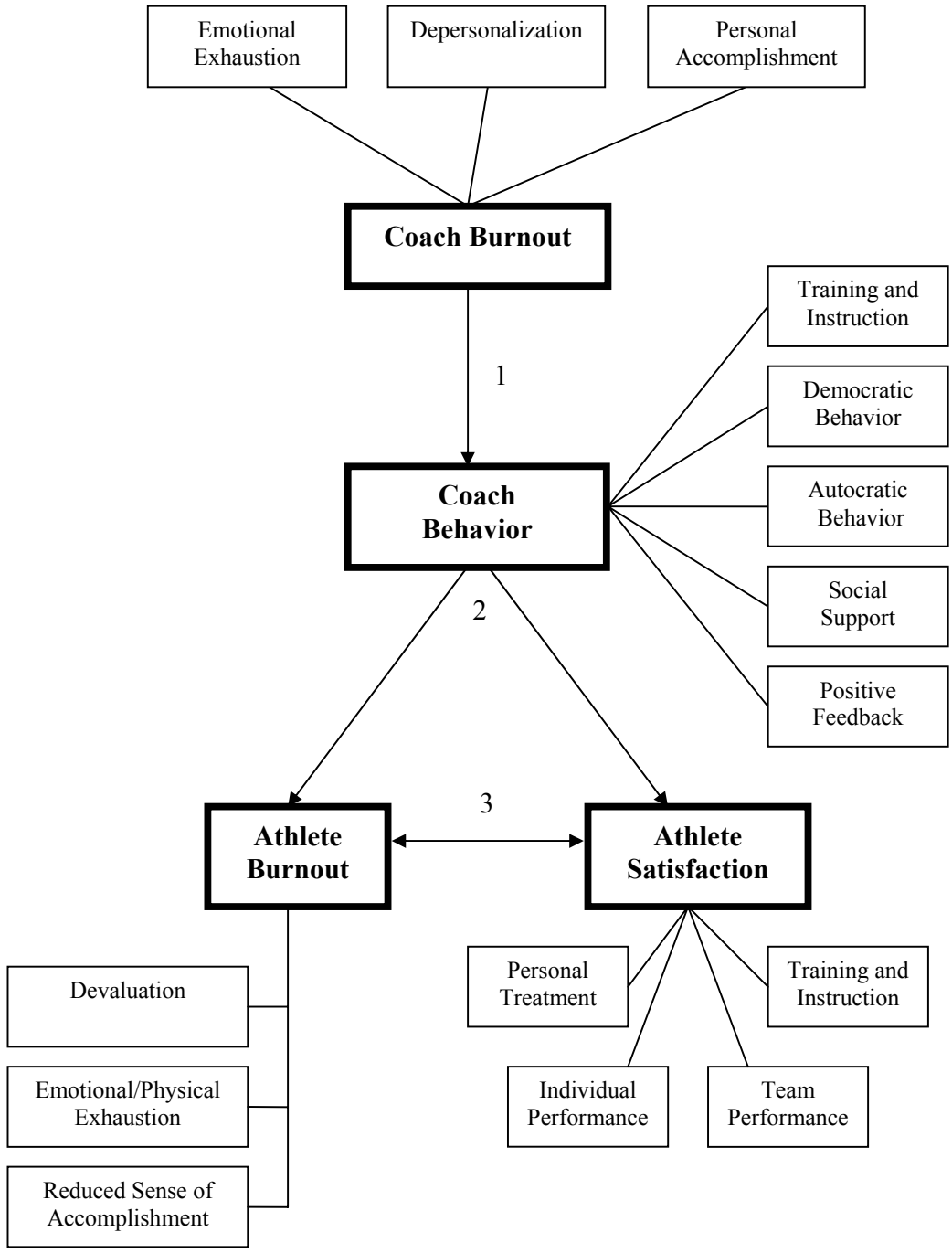


Figure 1. The proposed model of the study.

Note. Adapted from (LSS; Chelladurai & Saleh, 1980; ABQ; Raedeke & Smith, 2001; ASQ; Riemer & Chelladurai, 1998; MBI; Maslach, Jackson, & Leiter, 1996).

Purpose of the Study

The main purpose of this study was to investigate the relationship between coaches' burnout, coaches' behaviors, and levels of burnout and satisfaction experienced by college athletes. This relationship is illustrated as Link 2 in the study model represented in Figure 1. The secondary purposes were to (a) examine how coaches' levels of burnout were related to perceived coaching behavior, and (b) examine the link between athletes' levels of burnout and satisfaction. These sub-purposes are represented as Link 1 and Link 3 respectively in the study model (see Figure 1).

Hypotheses

The following hypotheses were tested in this study:

Hypothesis 1: The perceived level of coach burnout (emotional exhaustion, depersonalization, and reduced sense of accomplishment) will be negatively correlated with each of the following leadership behaviors: training and instruction, democratic behavior, social support, and positive feedback, and positively correlated with autocratic behavior.

Hypothesis 2a: athlete satisfaction with training and instruction will be positively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and negatively correlated with autocratic behavior.

Hypothesis 2b: athlete satisfaction with personal treatment will be positively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and negatively correlated with autocratic behavior.

Hypothesis 2c: athlete satisfaction with team performance will be positively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and negatively correlated with autocratic behavior.

Hypothesis 2d: athlete satisfaction with individual performance will be positively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and negatively correlated with autocratic behavior.

Hypothesis 3a: athletes' levels of devaluation will be negatively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and positively correlated with autocratic behavior.

Hypothesis 3b: athletes' reduced sense of accomplishment will be negatively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and positively correlated with autocratic behavior.

Hypothesis 3c: athletes' emotional/physical exhaustion will be negatively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and positively correlated with autocratic behavior.

Hypothesis 4: athletes' satisfaction (i.e., training and instruction satisfaction, personal treatment satisfaction, team performance satisfaction, and individual performance satisfaction) will be negatively correlated with athletes' burnout (i.e., emotional/physical exhaustion, reduced sense of accomplishment, and devaluation).

Pilot Study

A pilot study was conducted in January of 2003 with a random-selecting sample size of 39 male and female athletes and 4 head coaches. The main purpose of the study was to investigate the relationship between coaches' burnout, coaches' behaviors, and levels of burnout and satisfaction experienced by college athletes. The secondary purposes were to (a) examine how coaches' levels of burnout are related to perceived coaching behavior, and (b) examine the link between athletes' levels of burnout and satisfaction.

Regression analysis, correlation coefficients, and descriptive statistics were employed to analyze the data. The Cronbach alpha revealed the internal consistency of the MBI factors in terms of emotional exhaustion (.72), depersonalization (.65), and reduced personal accomplishment (.74), the LSS factors in terms of training and instructions (.95), Democratic behavior (.78), Autocratic behavior (.45), Social support (.80), and Positive feedback (.84). Reliability coefficients for the Athlete Burnout Inventory were .76, .83, .82 for reduced sense of personal accomplishment, devaluation, and emotional/physical exhaustion respectively. Internal reliability for the four satisfaction subscales was .85 for training and instruction satisfaction, .93 for personal treatment satisfaction, .75 for team performance satisfaction, and .82 for individual performance satisfaction.

Results of the study showed that athlete's burnout was related to perceived autocratic behavior of the coach. Democratic behavior was associated with greater levels of athlete satisfaction. Negative relationships were found between athlete satisfaction and athlete burnout. Finally, the coaches participated in this study reported low levels of emotional exhaustion and depersonalization, and higher levels of personal accomplishment.

Definition of Terms

For the purposes of clarifications, the following terms were defined:

Burnout. "A syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity" (Maslach et al., 1996, p. 4).

Emotional Exhaustion. Refers to feelings of being emotionally overextended and depleted of one's emotional resources (Maslach et al., 1996).

Depersonalization. Refers to a negative, cynical or excessively detached response to other people at work (Maslach et al., 1996).

Reduced Personal Accomplishment. Refers to a decline in feelings of one's competence and productivity at work (Maslach et al., 1996).

Training and Instruction. Coaching behavior aimed at improving the athletes' performance by emphasizing and facilitating hard and strenuous training; instructing them in the skills, techniques and tactics of the sport; clarifying the relationship among the members; and by structuring and coordinating the members' activities (Chelladurai, 1996).

Democratic Behavior. Coaching behavior, which allows greater participation by the athletes in decisions (Chelladurai, 1996).

Autocratic Behavior. Coaching behavior, which involves independent decision-making and stresses personal behavior authority (Chelladurai, 1996).

Social Support. Coaching behavior characterized by a concern for the welfare of individual athletes, behavior positive group atmosphere, and warm interpersonal relations with members (Chelladurai, 1996).

Positive Feedback. Coaching behavior, which reinforces an athlete by recognizing and rewarding good (Rewarding Behavior) performance (Chelladurai, 1996).

Training and Instruction Satisfaction. Refers to satisfaction with the training and instruction provided by the coach (Riemer & Chelladurai, 1998).

Personal Treatment Satisfaction. Refers to satisfaction with those coaching behaviors that directly affect the individual yet indirectly affect team development. It includes social support and positive feedback (Riemer & Chelladurai, 1998).

Team Performance Satisfaction. Refers to athlete's satisfaction with his or her team's level of performance (Riemer & Chelladurai, 1998).

Individual Performance Satisfaction. Refers to athlete's satisfaction with his or her own task performance (Riemer & Chelladurai, 1998).

Emotional/Physical Exhaustion. Refers to feelings associated with being emotionally and physically exhausted by the demands of training and competition (Raedeke & Smith, 2001).

Reduced Sense of Accomplishment. Denotes athletes' feelings of personal growth and successful achievement through their sport participation (Raedeke & Smith, 2001).

Devaluation. Denotes athlete's loss of interest in sport and their desire to withdrawal (Raedeke & Smith, 2001).

Basic Assumptions

In this study, the following assumptions were made:

1. The participants in the study will be able to read and understand the instruments as administrated.
2. The participants in the study will respond to the instruments' questions honestly, consistently, and with genuine objectivity.
3. The instruments used in the study are accurate, valid, and reliable.

4. The participants will be representative of the athletes and coaches in Jordan to evaluate coach behaviors, athlete and coach burnout, and athlete satisfaction.

Limitations

The following limitations were considered in this study:

1. The translation of the surveys from English into Arabic language may have some limitations and may result in distortion of the exact meaning.
2. The willingness of athletes and coaches to complete the questionnaires for fear of the confidentiality of their results.
3. The measurement of burnout, satisfaction, and coaches' leadership behaviors relied on a well-known, self-reported measurement instruments. Self-reported information might have some limitations, such as social desirability, social responsibility, and consistency of responses. The data are based on the perceptions of the respondents thus; potential and intentionally false information is beyond the researcher's control.
4. This study will be restricted to athletes and coaches in public universities in Jordan.
5. The findings of the study could be generalized only to coaches and athletes in the public universities in Jordan, excluding athletes and coaches in clubs and other sports organizations.
6. The timing of the survey may have affected the responses of the participants. Surveys were distrusted and collected during the summer semester 2003, from July 1, 2003 to August 20, 2003. This was after the competitive season ended (off-season).

Significance of the Study

It has been speculated that employees who suffer from burnout contribute less to the organization than those who do not. As complacency sets in, productivity and efficiency are reduced. This directly affects organizational productivity (Graf, 1992). As knowledge is increased and burnout is reduced, organizations should be able to function at a higher level of effectiveness.

Due to the popularity of the term "burnout" in sport, much progress has been made on the empirical as well as on the conceptual level. However, much work remains to be done. There is still a great need for research that is theory-driven, and includes other than self-report measures. Moreover, valid tools for individual assessment have to be developed as well as specific-organizational-interventions (Schaufeli & Bunnk, 1996).

Coaches and athletes are highly dependent on one another, and this coach-athlete relationship is a crucial component of sport. Accordingly, research is needed to investigate how various coach characteristics and behaviors relate to athletes psychological responses and experiences (Price & Weiss, 2000). The study will add to the dearth of literature in the area of coaching leadership behaviors and their effects on athletes' psychological outcomes by allowing the voice of the athlete to be heard. The relational nature of leadership, particularly the

importance of followers, is an important aspect in the present literature. According to Rost (1993), leadership is "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (p. 102). An enhanced coach athlete relationship allows for potential increases in communication, compatibility, and effectiveness.

This study will also uncover meaningful relationships among levels of coach burnout, coaching behaviors, and athletes' psychological responses (satisfaction and burnout) to sport experiences. In doing so further support for the multidimensional model of leadership will be provided as well as greater insight into the correlates of athletes burnout.

In this study, many components of organizational management in sports, such as leadership behaviors and job burnout of coaches are examined in the context of their contributions to athletes' satisfaction, performance, and well-being. These will hopefully be useful to coaches and administrators as they change their management and behaviors to reduce or eliminate those factors that manifest burnout in athletes.

Benefiting from the study, athletic directors and administrators would be able to detect and imply the possibility of burnout prevention effectively and efficiently. Also, the data may be beneficial in suggesting relevant direction in which to develop intervention strategies and plans of action. The coaches may develop intervention strategies, alter organizational climates, modify their leadership styles, and implement reward strategies to reduce athlete burnout, improve working conditions, and create healthier environment. Finally, and most importantly, to date burnout has predominantly been studied among human services professionals. However, it becomes increasingly clear that workers from other occupational fields might suffer from the syndrome as well. Accordingly, our challenge for the coming years is to expand burnout research beyond the occupational area in which it first emerged (Schaufeli & Bunnk, 1996).

CHAPTER 2

BACKGROUND AND REVIEW OF LITERATURE

This chapter presents a brief background about Jordan and a review of related literature relevant to the study. The first section presents brief information about Jordan, its educational system, and sports and athletics at the collegiate level. The following section deals with an overview of burnout. It focuses on the definitions of burnout and provides a review of major research conducted in sport especially with athletes and coaches. This is followed by a review to the concepts and definitions of the leadership behaviors, and exploring the theoretical approaches that have been proposed by the theorists. Next, this chapter spots light on the leadership theory in sport and explores the prevalent models of leadership and the work conducted in this area. Finally, this chapter ends with a comprehensive review of athletes' satisfaction and how it relates to leadership behaviors.

Background

As I am going to do this study with college athletes in Jordan, it is essential to mention some information about the country, its educational system, and sport and athletes at collegiate level. Therefore, the following paragraphs describe Jordan, education in Jordan, and college athletics.

General Information

The Hashemite Kingdom of Jordan is a small country located at the heart of the Middle East. It is situated in the Levant near the southeastern coast of the Mediterranean Sea. The unique location of Jordan has given it strategic and economic importance, making it a vital trading and communication link between east and west. The country shares borders with Syria to the north, Iraq to the east, Saudi Arabia to the east and south, while Palestinian National Authority and Israel lie to the west. The area of Jordan is about 92,300 square kilometers (57,354 square miles). Amman is the capital and largest city of Jordan (Microsoft Encarta Online Encyclopedia, 2003).

The population of Jordan was estimated at 5.46 million in 2003, with approximately 40% of the population under the age of 15 and only 3.3% of the population over 64 years of age (Microsoft Encarta Online Encyclopedia, 2003). Ethnically it is estimated that 98% of the population is of Arab origin. The remaining 2% are divided between those of Circassian and Armenian descent. The great majority of the Jordanian people are Sunni Muslims, estimated at 92% in 2001, with an additional 2% divided between Shi'a Muslims and Druze. The remainder

of the population consists of 6% Christians. Islam is the state religion and Arabic is the official language (The Hashemite Kingdom of Jordan, 2003).

Education

Jordan has made significant strides in education in recent decades. Starting from almost nothing in the early 1920's, Jordan has forged a comprehensive, high-quality system to develop the human capital of its citizens. Today there are 2787 government schools, 1493 private schools, 48 community colleges, and 20 universities (Education in Jordan, 2003).

Education in Jordan is free for all primary and secondary school students, and compulsory for all Jordanian children between the ages of 6 and 15. It is estimated that Jordan has achieved over 95% enrollment for its school age children, as compared with only 47% in 1960. At the secondary level, about 80% of the male children and 78% of the female children go to school. Some 91% of the Jordanian population age 15 or older was literate in 2003. In the 1998–1999 school year 706,198 pupils attended elementary schools in Jordan, another 579,400 students attended secondary schools, and 142,200 students were enrolled in institutions of higher education (The Hashemite Kingdom of Jordan, 2003).

In 1988, the Jordanian government launched on an ambitious ten-year, $1 billion plan, to improve the quality and relevance of education in the nation by restructuring the curricula to focus on developing students' problem solving and critical thinking skills, and linking academic knowledge to real life. This was followed by another four-year plan ending in 2002 which focused on upgrading teachers' skills, school administration, educational information systems, pre-school education and education for children with special needs (Education in Jordan, 2003).

The history of higher education in Jordan is brief. After his coronation in 1953, late King Hussein created a Royal Education Commission to make recommendations to the Crown for the development of the education system. The commission's first priority was basic literacy. Education Law No. 20 of 1955 made education compulsory for six years; Education Law No. 16 of 1964 extended the period to nine years. The resulting expansion of compulsory and secondary education created a college market for training teachers, with an increase in enrollment in teacher training institutes from 46 in 1952 to 7,000 in 1976. Since 1950, and even after higher education developed within the country, advanced study abroad was the principal technique used by the government to resolve shortages of educated personnel (Burke & Al-Waked, 1997).

The country's first public university, the University of Jordan, was established in 1962, and the second, Yarmouk University, in 1976. In 1981, these were joined by Mu'ta University and in 1995 by Hashemite University and Al-Albayt University. The public institutions also comprise the Jordan University of Science and Technology, which was separated from Yarmouk University in the late 1980's, Al-Balqa' Applied University, and King Hussein University, which was founded in 1999.

In 1990, the first private university, Amman Private University, was opened with an enrollment of 1,324 students, and since that time the number of private universities increased enormously to reach 12 universities nowadays.

Sports and Athletics in Jordan Universities

The Jordanian society is a young one with about 75% of the total population below 35 years of age. Accordingly, it is necessary and important to look after this large segment of the

society, to care for them, and to channel their energies and abilities toward serving and developing society (Burke & Al-Waked, 1997).

Universities in Jordan are committed to enhance the physical side of their students, support them, and meet their needs. The universities provide different sports activities to the university students with a view to achieve harmony between the student's physical, intellectual, social, and emotional capacities.

Through participation in sports, students can pursue personal development, ethical and responsible behavior, and can also develop a sense of leadership and strength of character. By practicing sport and through effective participation, students can grow, learn, enjoy themselves, and develop their personal, physical and intellectual skills. They also can form new friendships, develop communication skills, and change their life style.

Each university in Jordan has an athletic department embedded within the Faculty/ Deanship of Students Affairs. A general manager heads each athletic department. The departments have many functions and responsibilities, such as, forming university teams in the various sports, offering proper training for the students and university teams, managing and maintaining equipments and facilities in the university, organizing different competitions in different sports for the students and employees in the university. These sports include, but are not limited to, soccer, basketball, handball, volleyball, table tennis, squash, track and field, tae kwon do, karate, cycling, and gymnastics. Many universities have modern arenas and facilities. Qualified coaches in different sports have been hired and elite athletes are sent to different countries to improve their physical fitness and skills.

Sports activities in public and private universities are governed by the Jordanian Universities' Union, the highest governing body for sports in the universities. This union organizes annual competitions in different sports between the universities. It also arranges the participation in the national and international tournaments. In addition, it works with the Ministry of Youth, Jordan Olympic Committee, and national sports federations in selecting members to Jordan's national sport teams.

Burnout

Burnout Defined

Burnout is a well-known and prevalent phenomenon in the helping professions. This term has been popularized to worldwide attention (Maslach & Jackson, 1986; Maslach et al., 1996). Burnout was first investigated in the 1970's as a crisis of overextended and disappointed human service workers. Early interpretations centered on the collapse of the professional mystique; people entering these sectors apparently had developed unrealistic expectations on the basis of their training and general cultural background (Huberman & Vandenberghe, 1999). Gradually, the problem was attributed more specifically to conflicts between caregivers' values for enhancing the lives of their recipients and limitations in the structure and process of human service organizations.

In 1974, Freudenberger popularized the term "burnout" when he referred to the reaction a person experiences as a result of excessive demands placed upon his/her energy, strength and

resources. Freudenberger based this definition on his own personal experience and on clinical cases he saw in his psychoanalytic practice (Vlahos, 1997).

During the late 1970's and early 1980's, systematic empirical studies (e.g., Cherniss, 1980, Iwanicki & Schwab, 1981; Maslach & Jackson, 1981; Perlman & Hartman, 1982; Pines, Aronson, & Kafry, 1981) began to appear that more clearly conceptualized and defined the burnout construct. As more studies were conducted, the burnout phenomenon became associated with the specific feelings experienced by individuals whose jobs require repeated exposure to emotionally charged interpersonal situations (Maslach, 1978). Put simply, Pines and his associates defined burnout as a general experience of physical, emotional, and mental or attitudinal exhaustion (Pines, 1981; Pines, Aronson, & Kafry, 1981).

Maslach and her colleagues have used a systematic line of research to clarify the components of burnout (e.g., Leiter & Maslach, 2001; Maslach, 1976, 1978, 1982, 1993, 1998; Maslach & Jackson, 1981; Maslach et al., 1996; Maslach & Letier, 1997; Maslach, Schaufeli, & Leiter, 2001). Not only has this line of research provided scholars with a clearly, more fully developed conceptual model of burnout, but also a psychometrically sound instrument (the Maslach Burnout Inventory, 1981, 1986, 1996) by which to measure burnout. Maslach and colleagues defined burnout as "a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity" (Maslach et al., 1996, p. 4).

The popularity of this definition is due to the fact that the most widely used self-report questionnaire, the MBI, includes the three dimensions that are mentioned in this definition. Emotional exhaustion refers to feelings of being emotionally overextended and depleted of one's emotional resources. This dimension was regarded as the basic individual stress component of the syndrome (Leiter & Maslach, 2001; Maslach, 1998; Maslach et al., 2001). Depersonalization refers to a negative, cynical or excessively detached response to other people at work. The depersonalization component represents the interpersonal dimension of burnout. Reduced personal accomplishment refers to a decline in feelings of one's competence and productivity at work. This lowered sense of self-efficacy, represents the self-evaluation dimension of burnout (Leiter & Maslach, 2001; Maslach, 1998).

The three dimensions were not deducted theoretically but resulted from labeling exploratory factor-analyzed items initially collected to reflect the range of experiences associated with the phenomenon of burnout (Maslach, 1998). Consequently, Maslach and her colleagues modified the original definition of the last two dimensions. Depersonalization was replaced by cynicism, referring to the same cluster of symptoms (Maslach et al., 2001). The new label for this dimension of the syndrome poses new problems. Cynicism is a rising concept in psychology and organizational behavior, used to refer to negative attitudes involving frustration from, disillusionment and distrust of organizations, persons, groups or objects (Andersson & Bateman, 1997; Dean, Brandes, & Dharwadkar, 1998). Abraham (2000) has suggested that work cynicism tends to be closely related to burnout. The third dimension (reduced feeling of accomplishment) was re-labeled as reduced efficacy or ineffectiveness, depicted to include the self-assessments of low self-efficacy, lack of achievement, lack of productivity, and incompetence (Leiter & Maslach, 2001; Maslach et al., 2001).

Pines and Aronson (1988) presented a somewhat broader definition of burnout. They described burnout as "a state of physical, emotional, and mental exhaustion caused by long-term involvement in situations that are emotionally demanding" (p. 9). Physical exhaustion is

characterized by low energy, chronic fatigue, weakness, and a wide variety of physical and psychosomatic complaints. Emotional exhaustion involves feelings of helplessness, hopelessness and entrapment. Finally, mental exhaustion refers to the development of negative attitudes towards one's self, work and life itself (Schaufeli & Buunk, 1996). Finally, a less well-known but more precise definition of burnout has been proposed by Brill (1984, p. 15):

> "Burnout is an expectationally mediated, job-related, dysphoric and dysfunctional state in an individual without major psychopathology who has (1) functioned for a time at adequate performance and affective levels in the same job situation, and who (2) will not recover to previous levels without outside help or environmental rearrangement."

Consequently, distress from lay-off or economic hardship is not interpreted as burnout since it is not expectationally mediated. Moreover, burnout can occur in every type of job but not outside the occupational context. In addition, incompetent individuals are excluded as well as those who suffer from mental illness. Finally, individuals who either experience a temporary decrement in their performance or who are able to recover on their own are not considered burned-out (Schaufeli & Buunk, 1996).

Although burnout has been defined in various ways, Dale and Weinberg (1990) identify several common characteristics of burnout represented in most definitions of the term. First, burnout involves feelings of exhaustion that take multiple forms such as physical, mental, and emotional. This exhaustion is often seen in individuals involved in tasks that demand a great deal of interpersonal interaction such as nursing, social work, coaching, and high level competitive sport. Second, this exhaustion leads to a negative change in an individual's response to others such as cynicism, depersonalization, a lack of engagement, and a lack of empathy. Third, burnout is characterized by a lack of perceived accomplishment in terms of what one has accomplished and/or what one will accomplish. This perceived lack of personal accomplishment may then decrease performance level, which completes the vicious cycle to create low self-esteem and a desire to withdraw from the activity. The fourth common element of most definitions is that burnout is a chronic response to ongoing prolonged stress as opposed to occasional reactions to acute stressors (Vealey et al., 1998).

Symptoms of Burnout

Several recognizable psychological and physiological symptoms are attributable to burnout (Graf, 1992). It is believed that early observation of the onset of these symptoms can lead to early detection of possible burnout. This is an important issue since early treatment can reduce the damage to the employee and the organization. Einsiedel and Tully (1981) listed eighty-four burnout symptoms with some overlap. Carroll and White (1982) listed forty-seven separate symptoms. Beemsterboer and Baum (1984) identified thirty-six symptoms of burnout in the health professions, collected from various sources.

Justice, Gold, and Klein (1981) categorized the symptoms of burnout into four areas. One area included emotional signs, such as memory lapses and confusion. Impatience, overreaction, the inability to relax, and suicide are categorized as behavioral signs. A third category, somatic signs, included such symptoms as migraines, heart attacks, and weight loss. Finally, symptoms grouped as defensive signs included denial, blaming, and rationalizing.

Employee burnout can be identified through several recognizable behaviors. Employees work overtime to try to complete a job, which cannot be completed. A feeling of inadequacy and helplessness accompanies a feeling of reduced personal accomplishment (Maslach, 1982). Additionally, staff moral becomes lower as does efficiency, effectiveness, and quality of performance (Leiter & Maslach, 2001). An increase in job turnover, absenteeism and tardiness is also seen (Leiter & Maslach, 2001).

Based on the examination of over one hundred empirical articles concerning symptoms of burnout in human service professionals, Kahill (1988) grouped the symptoms into five major categories: physical, emotional, behavioral, interpersonal, and attitudinal. Physical symptoms include: (a) fatigue and physical depletion or exhaustion, (b) sleep difficulties, and (c) specific somatic problems such as headaches, gastrointestinal disturbances, colds, and flu. The most common emotional complaints by burned-out workers include emotional depletion, irritability, anxiety, guilt, depression, and feelings of helplessness. Behavioral symptoms associated with burnout include primarily work-related behaviors and consumption behaviors. Work-related behaviors involve turnover, poor performance, absenteeism, tardiness, misuse of work breaks, and theft at work. Consumption behaviors investigated include the use of alcohol, drugs, and caffeine. In terms of interpersonal symptoms, burned-out workers: (a) communicate with clients in impersonal, stereotyped ways, (b) find it difficult to concentrate on clients, and (c) attempt to withdraw from clients. Finally, Kahill (1988) summarized negative attitudes that develop toward clients, work, oneself, and life in general. Burnout victims have been identified as demonstrating cynicism, callousness, pessimism, defensiveness, and intolerance toward their clients. Further, burned-out workers are apt to dehumanize clients by the use of jargon and intellectualization, and by thinking of their clients in stereotyped terms. In addition, burnout victims generally show loss of enjoyment at work and a resistance to going to work.

Despite identification of all these symptoms, it is to be noticed that because of the general ambiguity and lack of conceptual clarity of the burnout field, these symptoms may include practically any sign of psychological distress experienced in work settings. Symptoms have yet to be sorted out by a valid criterion of separating symptoms of burnout from those of other similar constructs.

Burnout in Sport

Burnout is a prolonged response to chronic interpersonal stressors on the job. The three key dimensions of this response are an overwhelming exhaustion, feelings of cynicism and detachment from the job, and a sense of ineffectiveness and failure (Maslach, 1998). Many sport psychologists argue that athletic situations share many of the same features that have been identified in literature on burnout (Vlahos, 1997).

The 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 et al., 1998). For example, individuals within sport teams are forced to spend time together in extensive interpersonal interaction that is necessary for team cohesion and success. Also, personal accomplishment in competitive sport in the form of performance excellence is highly valued and publicly evaluated. Pargman (1998) indicated that burnout is

quite relevant to sport since it is often associated with dropping out or withdrawing from participation. Excessive pressure to succeed, lack of progress, insufficient fun, and frequent failure are factors that contribute to burnout.

Originally, the investigation of burnout focused on a variety of people-oriented professions, such as nurses, physicians, lawyers, social workers, child care workers, police officers, counselors, and probation officers which were found to be inherently stressful (Dale & Weinberg, 1990). A common theme of subsequent research studies and articles revolved around teacher burnout (e.g., Adams, 1988; Austin, 1981; Cedoline, 1982; Figone, 1986). The work environment of teachers is typically characterized by long hours, excessive expenditure of mental and emotional energy, as well as expectations from principals and parents. These stressors are not that much different from those usually encountered by coaches and athletes in competitive sport. Long hours of practice that require a great deal of physical and mental energy along with the pressures to perform on game day make the situation ripe for potential burnout (Dale & Weinberg, 1990). This being said, it is important to note that a majority of the early research on burnout in sport psychology is with athletes and dual role teacher-coaches at the high school and collegiate level. Coaching, at a variety of levels, is inherently stressful. Often times upon entering the coaching profession, young men and women may not be aware of the stressors that come with the job. Additionally, young professionals may not be informed of the long hours, demanding schedules, and high-pressure situations that coaches deal with on a daily basis, regardless of the level (Collins, 2002).

Burnout in Athletes

In recent years, the term burnout has begun to appear with increasing frequency in athletics. Coaches at all levels have begun to discuss the dangers of burnout in their profession. Elite athletes have dropped out of sports at the peak of their careers, maintaining that they are 'burned out' and that participation has become too aversive for them to continue (Smith, 1986). Reflecting its importance to athletic community, burnout has been addressed in numerous articles geared toward coaches, athletes, and participants in a variety of different sports (Raedeke et al., 2002). Despite the fact that burnout is often discussed in the sport community, the base of empirical data on athlete burnout is not well developed (Gould et al., 1996a, 1996b, 1997; Price & Weiss, 2000; Raedeke, 1997; Raedeke et al., 2002; Vealey et al., 1992, 1998; Vlahos, 1997). Consequently, athlete burnout is an important topic that is not yet well understood.

It has been stated that the athlete may share some of the same personality traits attributed to those who have developed occupational burnout; for example, perfectionism, extreme dedication to his/her sport, a concern for others, and high energy (Gould et al., 1996b; Vlahos, 1997). At the same time, the athlete may face the same demands, both within and outside the athletic environment, which have been found to be precursors to the development of burnout in organizational employees (Vlahos, 1997). Athletes are often placed in situations where they must place excessive demands on themselves since so much is expected of them. These high expectations often put athletes under a great deal of pressure causing such reactions as fear of failure, anxiety, frustration with coaches, feelings of overwork, pressure to perform, and depression (Dale & Weinberg, 1990).

Although there are some similarities between athletic situations and organizations, it should be noted that there are important differences too and that may make it inappropriate to compare the two fields (Fender, 1989; Vlahos, 1997). Vealey et al. (1992) stated that "burnout

experienced by athletes and coaches has different antecedents and perhaps even different psychological, physiological, and behavioral consequences than burnout experienced by individuals in organizations" (p. 56). Vlahos (1997) asserted that the athlete faces both extreme physical and psychological demands, whereas few organizational employees are subject to both types of pressures. These differences, and many others, make the athletic situation unique; as such, caution should be used when applying organizational variables to the study of athletic burnout.

At this point in knowledge development, researchers have focused greater attention on providing conceptual models describing the causes of burnout than precisely defining what athlete burnout is (and is not). Theoreticians have linked burnout to stress, overtraining, social issues, and commitment/social exchange theory variables (Raedeke et al., 2002). Certainly, it is important to realize the causes of burnout and it is also critical to carefully distinguish the key signs and symptoms to adequately define burnout.

Although Maslach and Jackson's definition of burnout is widely accepted, it may not be applicable to athletes (Raedeke, 1997; Raedeke et al., 2002). Maslach and Schaufeli (1993) cautioned about overextending their definition outside human services and stated that the definition may need modification to fit a particular domain. Applied to athlete burnout, Maslach and Jackson's definition needs modification to adjust for the contextual differences between the role of an athlete and that of a provider in the human services. Although the coach-athlete relationship is characterized by a provider-recipient relationship, athletes are on the receiving end of that relationship (Raedeke, 1997). Given that the athletes are not human service providers, Maslach and Jackson's definition may require modification to fit the unique characteristics of sport training (Raedeke et al., 2002). Applying Maslach and Jackson's definition to the sport domain, Raedeke (1997) defined burnout as "a syndrome of physical/emotional exhaustion, sport devaluation, and reduced athletic accomplishment" (p. 398).

Fender (1989) examined the definition of occupational burnout and the differences between athletics and organizations and developed a revised definition of burnout that is specific to the sport situation. She defined burnout as "a reaction to the stresses of athletic competition that can be characterized by feelings of emotional exhaustion, an impersonal attitude toward those the athlete associates with, and decreased athletic performance" (p.64). Vealey et al. (1998) defined burnout as "a multidimensional response to the ongoing stresses of competitive sport involvement, which is characterized by feelings of physical and emotional exhaustion, a lack of perceived accomplishment, and a depersonalized attitude in relation to others" (p. 298). On a theoretical level these definitions seem to precisely depict the burnout syndrome, make it specific to the athlete, and provide a testable operational definition. However, it is necessary to note that there has been no research to validate the accuracy of these definitions.

Sources of stress and burnout in athletes. Researchers' attempts to gain insight into the causes of burnout in athletes have been largely conceptual in nature because sports psychologists view athlete burnout as a reaction to chronic stress in competitive situations (Vlahos, 1997).

Support and justifications for conceptual models have been based on empirical findings in the literature on competitive stress, as well as the literature on occupational burnout (Cohn, 1990; Gould, Horn, & Spreeman, 1983; Gould, Jackson, & Finch, 1993; Rotella, Hanson, & Coop, 1991; Scanlan, Stein, & Ravizza, 1991). For example, Scanlan et al. (1991) found five major sources of stress in elite figure skaters: negative aspects of competition (e.g., worries about

the competition), negative significant-other relationships (e.g., interpersonal conflict, skating conflicts), demands/costs of skating (e.g., financial demands, time demands), personal struggles (e.g., physical/mental difficulties, self-doubts about talent), and traumatic experiences (e.g., family disturbances, death of a significant other). Gould et al.'s (1993) study of national champion figure skaters revealed similar sources of stress to those found by Scanlan et al. (1991). While studies that have examined sources of stress are valuable in that they encompass a wide spectrum of athletes' stressful experiences, they often do not necessarily investigate the origins of these stressors.

Sport psychologists agree that competition presents a stressful atmosphere (Graf, 1992). "Competitive stress is a process in which there is a perceived substantial imbalance between competitive demands and the athlete's performance capabilities, under conditions where failure to meet the demands has important consequences and is responded to with increased levels of state anxiety" (Vlahos, 1997, p. 31). In a series of studies on competitive youth tennis players, Gould et al. (1996a, 1996b, 1997) found that interactions of personal and situational factors cause burnout. These studies, in addition to the studies of Cohn (1990) and Gould et al. (1983), provided the first evidence of empirical support for the existence of burnout in athletes. These studies have also provided empirical support for the roles that stress, interpersonal, situational, and individual variables play as antecedents to athlete burnout.

Many situational factors as sources of stress and burnout for athletes have been identified. Some of these include low levels of success, high competitive demands, lack of autonomy, difficulties with coaches, and problems with leadership and supervisory support (Dale & Weinberg, 1990; Price & Weiss, 2000; Rotella et al., 1991; Vealey et al., 1998). Raglin and Morgan (1994), and Silva (1990) reported that most college athletes in their samples had experienced burnout at least once during their college career. The causes of burnout identified by these athletes included severe practice conditions, extreme physical fatigue, lack of recovery from competitive stress, boredom, and emotional exhaustion. Silva (1990) found that "burnout was experienced by 46.9% of the athletes with 81.3% of the respondents indicating that burnout is the worst response to training stress that the athlete can experience" (p.14).

Symptoms of burnout. Some of the symptoms of athletic burnout include a loss of interest, no desire to play, physical and mental exhaustion, lack of caring, depression, increased anxiety, chronic fatigue, and declining performance (Silva, 1990; Weinberg & Gould, 1999). Graf (1992) cited that burnout could be indicated by the existence of injuries. When injuries are nonexistent or made to be more serious than they are, burnout can be indicated. An injured player is not expected to perform at high levels. Thus, the stress to perform well is reduced.

Burnout could lead to withdrawal from a sport. Many victims of burnout do dropout of their sport participation. However, it is important to note that all young athletes who discontinue their involvement in sports do not do so as a result of burnout. In fact, research on youth sport attrition shows that changing or conflicting interests are by far the most common reasons children drop out of a sport (Rotella et al., 1991). Robinson and Carron (1982) examined the factors associated with the decision of high school football players to dropout of competitive sport or to continue as a participant. The factors were characterized as motivational (personal) or situational (environmental). Motivational (personal) factors examined were competitive trait anxiety, achievement motivation, effort, self-esteem, the difficulty of sport, ability, self-motivation, and a number of attitudes toward athletics. Situational (environmental) factors included the influence of referent others, decision to get involved in sport, group cohesiveness,

and leader behavior. Those who dropped out of sport felt they were excluded from the team. They did not receive positive feedback from significant others for their performance. Dropouts exhibited a low sport competence. Dropouts received less support from their fathers than those who stay in sport. Athletic burnout is also characterized by variables such as training and competitive demands, poor player-coach relationships, and low levels of social support from peers (Graf, 1992).

The research in athletics is consistent with the research involving other professions in determining that there is a relationship between burnout and stress. The pressure to win can cause stress, which causes the athlete to drop out of competitive athletics. While pressure and stress are major factors in athletes' burnout, other influences such as time demands, dislike of the coach or the desire to participate in other activities can also be influential in the decision to drop out of athletics (Graf, 1992).

Burnout in Coaches

Research on burnout covers many helping professions, including teachers, nurses, social workers, doctors, and police officers. The definition of human services and helping professions covers numerous occupations and one of these that could be considered is coaching. Coaches fit into the framework of the human service or helping professions and seem to be prime candidates for burnout (Dale & Weinberg, 1990; Weinberg & Gould, 1999). Studies on the burnout phenomenon indicate that coaches do experience burnout (Collins, 2002; Felder & Wishneitsky, 1990; Graf, 1992; Kelley et al., 1999; Kelley & Gill, 1993; Price & Weiss, 2000; Vealey et al., 1992). It is often the case that individuals who are most prone to burnout are the ones who perceive they are most strongly committed and invested, those who strive for excellence, and those that often give a great deal of themselves, with little in return (Collins, 2002). Individuals drawn to the coaching profession are usually dedicated, committed, highly motivated, and intense. These characteristics are also observed in people who are prone to burnout (Graf, 1992).

Coaching is a challenging profession in which pressure and stress are constant (Caccese & Mayerberg, 1984; Graf, 1992; Kelley, 1994; Kelley et al., 1999). This occurs because of a wide variety of stressors unique to coaching which may contribute to coach burnout. These likely antecedents include pressure to win, administrative and parental interference or indifference, disciplinary problems, long hours spent planning, practicing, traveling and recruiting, continuous and often emotionally volatile interactions with players, and pressure from media coverage (Caccese & Mayerberg, 1984; Kelly & Gill, 1993; Weinberg & Gould, 1999).

Dealing with people is a constant part of the coach's responsibility. The ability to deal with personal relationships can affect success to a greater extent than knowledge of sport technique and strategy (Graf, 1992). A coach must deal with parents, boosters, administrators, staff, and athletes. He or she must function in the role of motivator, counselor, advisor, and parental substitute (Caccese & Mayerberg, 1984). Coaches at all levels are required to fulfill several different roles. The dual role responsibilities of being both teacher and coach may create considerable role conflict and ambiguity, which have also been linked to burnout (Capel et al., 1987; Graf, 1992; Hunt, 1984). This being said, it is important to note that the majority of early research on burnout in sport psychology is with athletes and dual role teacher coaches at the high school and collegiate level (Collins, 2002). Teacher-coaches may experience interrole conflict as they attempt to satisfy the requirements of the different positions. Conflicts occur between coaching responsibilities and teaching responsibilities. The coach must prove competence in

terms of wins and losses. The teacher, however, is not held accountable when a student fails to learn the academic material (Figone, 1986). Individuals holding these positions often see coaching as their primary responsibility with winning as a major goal. Graf (1992) cited that the teacher/coach is often fired not due to poor performance in the classroom, but because of a losing record on the playing field. When one individual occupies the position of both teacher and coach, the time demands of both positions create a great deal of stress (Figone, 1986). Capel et al. (1987) found that role conflict and role ambiguity were the variables consistently related to burnout in high school coaches.

Sources of stress and burnout in coaches. In attempting to avoid the burnout syndrome, it is important to determine which factors are related to this unfavorable phenomenon so as to address it appropriately. Researchers investigated many variables to determine if there is a relationship between them and coaches' burnout. Earlier research on burnout in coaching has noted that burnout is related to demographic variables (e.g., gender, marital status, coaching experience), situational variables (e.g., role ambiguity, work overload, professional support), and personal variables (e.g., leadership style, trait anxiety) (Caccese & Mayerberg, 1984; Capel et al., 1987; Dale & Weinberg, 1989; Hunt, 1984). Most of these early studies were overwhelmed by conceptual and methodological shortcomings, and so, their findings were often contradictory (Kelley et al., 1999).

Caccese and Mayerberg (1984) were one of the first researchers to empirically study perceived burnout in coaches specifically focusing on the potential relationship between burnout and gender. The results showed that female coaches scored higher than male coaches on emotional exhaustion and lower on personal accomplishment on the Maslach Burnout Inventory. However, depersonalization did not differ significantly between the two genders. Pastore and Judd (1993) found similar results when examining the gender differences in burnout among coaches. The results indicated that female coaches reported significantly higher levels of emotional exhaustion than male coaches. Female coaches exhibited lower feelings of personal accomplishment than male coaches. In many studies, gender was found to be a factor of coaches' burnout. Kelley et al. (1999) identified gender as a variable contributing to coaches' burnout. Female coaches had a higher tendency than the men did to find coaching issues stressful. Female coaches experienced higher levels of stress and coaching problems than their counterparts (Capel et al., 1987; Kelley & Gill, 1993). A variety of explanations were given for the reasons why the females were more burned out than the males inc1uding fewer years experience, receiving less positive feedback, receiving fewer rewards and less attention, less time to learn to cope with stress, and in an indirect way they may be too idealistic and expecting too much (Caccese & Mayerberg, 1984). Dissimilar findings were found in Dale and Weinberg's (1989) study. They indicated that male coaches scored significantly higher than female coaches did in both the frequency and intensity dimensions of the depersonalization subscales.

Capel (1986) investigated the situational variables of role conflict and role ambiguity, and their relationship to burnout. She studied the psychological and organizational factors related to burnout in athletic trainers. She found that high role conflict and high role ambiguity result in a higher frequency and intensity of burnout. Role conflict was the strongest predictor of all total burnout subscales, except personal accomplishment. Personal accomplishment was best predicted by role ambiguity. In a different study, Capel et al. (1987) found that higher role conflict was associated with higher emotional exhaustion, higher role ambiguity with higher depersonalization, and fewer years as head coach with low personal accomplishment.

With regard to personal variables, leadership style, coaching behaviors, and coaches' trait anxiety have been previously linked with coaching burnout (Dale & Weinberg, 1989; Price & Weiss, 2000; Vealey et al., 1992, 1998). First, theories on leadership suggest that the leader must not only move his or her group toward a specified goal but must also mediate between two sets of equally important, and at times conflicting, forces-situational leadership demands and member preferences in leadership (Chelladurai, 1993). Coaches who are most concerned with interpersonal relationships and decision making by consensus might be more vulnerable to burnout because of the stress associated with being sensitive to the players' leadership preferences while attempting to manage the leadership demands of the sport environment (Kelley et al., 1999). Preliminary evidence does suggest that coaches relying more on a consideration style of leadership were more likely to suffer from greater burnout in attempting to manage those demands than coaches placing more emphasis on an initiating (task-oriented) structure style of leadership were (Dale & Weinberg, 1989).

Psychological responses to burnout have been investigated in examining the relationship of coach burnout to coaching behaviors (Price & Weiss, 2000; Vealey et al., 1998). For example, Price and Weiss (2000) found that high school coaches higher in emotional exhaustion were perceived by their team as providing less social support, instruction, and training. By examining soccer players and their coaches, Price and Weiss (2000) addressed how coaches varying levels of burnout impacted perceptions of behavior by their athletes as well as burnout related to athletes' enjoyment, competence, anxiety and burnout. Using the Maslach Burnout Inventory for the coaching population, results indicated that coaches high in emotional exhaustion were perceived by their team as providing less training and instruction, less social support, and making fewer autocratic and more democratic decisions. The other coach burnout dimensions, depersonalization and reduced personal accomplishment, were not significantly related to coaching behaviors. Based on these findings, it is important to note that coaches higher in emotional exhaustion have different coaching behaviors, as perceived by the athletes. The researchers suggest these findings may be due to the "I don't care" attitude adopted by the coaches who have reached this stage of emotional exhaustion (Price & Weiss, 2000, p. 404). This research is similar to other recent research on collegiate tennis coaches (Kelley et al., 1999), basketball coaches (Capel et al., 1987; Kelley & Gill, 1993), and burnout in women's sports (Collins, 2002; Pastore & Judd, 1992, 1993; Price & Weiss, 2000).

From a stress-mediation perspective, research has also linked coaches' tendency to experience competitive anxiety with burnout among coaches (Vealey et al., 1992). Game settings subject coaches to a host of pressures such as having to make quick and correct decisions: constant assessments of those decisions by players, as well as spectators; and the need to project a controlled and confident image regardless of how one might actually feel (Kelley et al., 1999). With regard to situational variables, previous studies in this line of research have only examined team-sport coaches presiding over nonscholarship programs: NCAA Division III and NAIA (Kelley, 1994; Kelley & Gill, 1993). A search of the literature in the area of team-sport versus individual-sport coaches revealed a scarcity of research. Furthermore, findings from the two studies that examined differences in burnout between individual and team-sport coaches were equivocal. Specifically, whereas Hunt (1984) found no significant differences between team- and individual-sport coaches, Caccese (1982) reported that individual-sport coaches were higher in emotional exhaustion and lower in personal accomplishment than team-sport coaches were.

Recently, researchers addressed the conceptual shortcomings evident in earlier work by grounding research in the framework of current interactional concepts of the stress process advocated in social psychology, health psychology, and sport psychology (Kelley et al., 1999). To better understand the coach burnout, sport psychology researchers have introduced various theoretical frameworks (e.g., Kelley, 1990, 1994; Kelley & Gill, 1993; Kelley et al., 1999; Smith, 1986; Vealey et al., 1992), all of which emphasize the interactional nature of burnout as the result of complex relationships between intrapersonal (cognitions, personality dispositions) and environmental (nature of task, support and resources) factors.

Smith (1986) is among the very few who have gone beyond empirical approaches and provided a conceptual model that clarifies its nature, causes, and consequences. These factors were derived from nonathletic populations, and were included in Smith's cognitive-affective model. According to the model, burnout is a consequence of stress-induced costs. An activity that once provided satisfaction becomes so stressful that withdrawal becomes an attractive alternative. His model depicts the "parallel relationships assumed to exist among situational, cognitive, physiological and behavioral components of stress and burnout" (p. 40). Burnout is the consequence of their interrelations. Smith (1986) emphasized cognitive appraisal processes, the evaluative thoughts held by an athlete relative to his readiness to meet a particular challenge. According to Smith, the athlete's emotions are contingent upon perceptions of the situation, its demands, evaluation of available personal resources for satisfying these demands, and understanding of the personal consequences involved in not meeting them. When an athlete misjudges his/her ability to meet task demands because he has low self-confidence or holds irrelevant or incorrect beliefs about the importance of meeting these demands, the stress response is activated. It is therefore important for athletes to have realistic views of their abilities, and to be able to identify their competency range for a variety of tasks. In addition, these elements interact with motivational and personality variables (Pargman, 1998).

Vealey et al. (1992) examined several predictors of coaching burnout proposed in Smith's (1986) stress-mediated burnout model among a sample of high school and college coaches. They found that trait anxiety was the strongest predictor of burnout in coaches. Their findings also supported the importance of cognitive appraisal in the development of burnout, as perceived lack of accomplishment, autonomy, and support were more predictive of burnout than the actual amounts of time coaches spent in work and leisure activities. Similarly, Kelley and Gill (1993) found that stress appraisal related to coaching issues and problems was predictive of coaching burnout. Kelley and colleagues have also recognized the utility of Smith's (1986) cognitive-affective model of stress and burnout in their investigations of burnout among coaches (Kelley, 1990, 1994; Kelley & Gill, 1993; Kelley et al., 1999). Kelley's work has focused on a research model proposing relationships between personal/situational variables, perceived stress, and burnout among coaches and has addressed methodological shortcomings evident in earlier investigations (Kelley et al., 1999). First, coaches from a single sport or from multiple but comparable sports (e.g., baseball and softball) were sampled to provide greater consistency in coaching requirements. Second, data were collected at standardized stages of the season across the participant sample to minimize variability in stress level. Finally, burnout was assessed using a version of the Maslach Burnout Inventory (Form ES; Maslach et al., 1996), developed specifically for helping professionals working in educational settings that were modified to be specific for coaches.

Kelley and Gill (1993) examined the role of stress appraisal as well as personal and situational variables and burnout in dual role collegiate teacher coaches based on Smith's (1986) model of stress and burnout. By surveying 214 male and female teacher-head basketball coaches, the researchers found that social support, gender, and years of experience predict stress levels. Further, stress appraisal was predictive of burnout. Using the Maslach Burnout Inventory, A coaching issue survey, Perceived Stress Scale, Social Support Questionnaire, and Coaching Problems survey the researchers were able to establish that overall social support was the strongest predictor, followed by gender and experience. Further, stress appraisal was most predictive of the emotional exhaustion subscale of burnout. Findings indicate the need to further examine the impact of gender on burnout, specifically emotional exhaustion.

Kelley's first investigation (1990) with NCAA Division III and NAIA basketball teacher-coaches evaluated a simple stress-mediation model for burnout among coaches. The preliminary model was largely supported in that less social support, fewer years of experience, and being a woman rather than a man predicted higher levels of perceived stress, coaching issues, and role conflict, which in turn predicted higher levels of burnout. The identified personal/situational variables, however, accounted for a disappointing portion of the variance (11%) in perceived stress. Further consideration of the conceptual nature of what the Coaching Issues Inventory measured (i.e., the tendency to appraise specific coaching issues as stressful) suggested that it should be placed in the personal/situational component of the model in subsequent investigations (Kelley, 1994). Finally, the basketball coaches in that study, in contrast to those in previous studies (Caccese & Mayerberg, 1984; Dale & Weinberg, 1989) reported moderate to high levels in all burnout components.

Kelley's second investigation (1994) examined an expanded model of stress and burnout in multiple-role NCAA division III and NAIA softball and baseball coaches at the start and end of the season. Path analyses were conducted to test the hypothesized model separately for males and females at the end of the season only, when the burnout was most prevalent. Results partially supported the model: both male and female coaches higher in coaching issues and lower in hardiness had higher level of perceived stress, and thus higher burnout and males lower in social support satisfaction were higher in perceived stress. Both male and female coaches' stress appraisal was predictive of all burnout components. Winning percentage was not associated with perceived stress for either men or women. The male and female coaches in the sample suffered moderate to high levels of emotional exhaustion and low to moderate levels of depersonalization and personal accomplishment.

Based on Kelley's (1994) simple stress-mediation model, Kelley et al. (1999) developed a new model of stress and burnout in collegiate coaches. According to Kelley, a model of stress and burnout in collegiate coaches should include coaching issues and social support as personal/ situational variables. This model added several personal and situational variables previously linked to burnout among coaches that have not been considered in the stress-mediated model of 1994. Leadership style and coach trait anxiety have been added, since these personal variables have been previously linked to coach burnout (Dale & Weinberg, 1989; Vealey et al., 1992, 1998). The model featured additional direct pathways to burnout from hardiness, coaching issues, coach trait anxiety, and leadership style variables.

This model was of interest because it could be used to evaluate whether or not the simple stress-mediation model would adequately account for previously identified gender and competition level differences in burnout (Kelley, 1994; Kelley & Gill, 1993). To test their model

Kelley et al. (1999) surveyed a sample of men and women collegiate head tennis coaches from NCAA Divisions I, II, and III and NAIA. The results revealed that the tennis coaches were suffering from levels of burnout similar to those of other helping professionals working in higher education. The women had higher tendency than the men did to find the coaching issues stressful. Structural equation molding revealed that the stress-mediation model, also featuring direct effects of personality/dispositional variables on burnout, accounted for observed relationships in the data more adequately than other alternative models did.

In general, Kelley's initial studies supported the use of a simple stress-mediation model for understanding coaching burnout. Further evaluation of this notion is, however, warranted on several accounts. First, Smith (1986) argues that personality/motivational variables, in addition to the stress-mediated effects postulated in Kelley's model, might have a direct impact on the burnout experience. There is a need to evaluate elaborations of Kelley's simple stress-mediation model to evaluate this possibility. Second, there are several personal and situational variables previously linked to burnout among coaches that have not been considered in this line of stress-mediated burnout research (e.g., Hunt, 1984).

Summary

Burnout is a syndrome of exhaustion, depersonalization, and reduced personal accomplishment in contrast to engagement with work that is characterized by energy, involvement, and effectiveness. Burnout is often associated with professions that have a high level of stress. Those in the athletic realm are certainly exposed to stress and pressure. Several well-known coaches left their professions, and elite athletes dropped out at the peak of their careers, citing burnout as the reason.

Burnout has been characterized by psychological and physiological symptom. Early recognition of the onset of burnout and the ability to recognize the factors that contribute to burnout can aid in reducing the negative impact of burnout. Early detection can prevent damage to an individual, a coach, a student-athlete, and /or the athletic program from occurring.

Leadership Behaviors

Leadership is probably one of the most extensively studied topics in industrial and organizational psychology. Leadership has drawn a great deal of attention from many researchers and has been investigated since the beginning of this century using different approaches and perspectives. Of particular interest to researchers are the types of behaviors that increase a leader's effectiveness (Yusof, 1999). However, after studying the topic for nearly a century, researchers are still unsure of what exactly makes an individual an effective leader.

Yukl (1998) noticed that the definitions of leadership are often confusing and unclear. This is because the term "leadership" is a common word used to describe complex behavioral phenomenon. Confusion arises when the term leadership is used in conjunction with other terms such as authority, power, management, administration, control and supervision (Yusof, 1999). Added to this confusion is the practice by researchers in defining leadership according to the researchers' own perspective. Therefore, the term leadership has been defined differently by different researchers. For example, leadership as the exercise of influence was defined as "the

behavioral process of influencing individuals and groups toward set goals" (Barrow, 1977, p. 232). As an art of inducing compliance, Tosi, Rizzo, and Carroll (1986) suggested, "leadership is interpersonal influence, which occurs when one person is able to gain compliance from another in the direction of organizationally desired goals" (p. 550). Johns (1988) implied the same thing: "Effective leadership involves exerting influence in a way that achieves the organization's goals by enhancing the productivity and satisfaction of the work force" (p. 309). Yukl and Van Fleet (1992) provided a more elaborate definition, "leadership is a process that includes influencing the task objectives and strategies of a group or organization, influencing people in the organization to implement the strategies and achieve the objectives, influencing group maintenance and identification, and influencing the culture of organizations" (p. 149). Leadership can also be defined in terms of the focus for group process, personality and its effects, a behavior or act, a form of persuasion, an emerging effect of interaction, a differentiated role, and the initiation of structure (Bass, 1990).

Despite the existence of several definitions of leadership, there is no single leadership definition broad enough to encompass the total leadership process. Bass (1990) advocates that it is useless to use only one definition of leadership, specifically, he stated that leadership should be defined by a researcher according to the specific aspects of the leadership phenomenon being investigated by that researcher. For example, a person who is interested in examining the impact of leadership should define leadership in terms of perceived influence, rather than defining leadership in terms of personality traits (Yusof, 1999).

Chelladurai (1999) and Yukl (1998) noticed some common similarities among the different leadership definitions. Specifically, all definitions of leadership emphasize that it is a behavioral process aimed at influencing members to work toward achieving the group's goals. However, Yukl (1998) noticed that the disagreement among the various definitions centers around the issue of who exerts leadership influence, how is leadership influence exerted, and why is leadership influence exerted.

Having several different definitions of leadership can lead to different leadership phenomena being investigated by different people. Differences in leadership definition can also lead to the development of different approaches and methodologies of studying leadership (Yusof, 1999). Yukl (1989, 1998) categorized leadership research into four different approaches: (1) trait approach, (2) behavior approach, (3) power-influence approach, and (4) situational approach. Yukl noted that all modern leadership theories have origins or are related with the four leadership approaches.

Trait Approach

The trait approach was the earliest approach used for studying leadership. In the 1920's researchers tried to determine what characteristics or personality traits were common to great leaders. They considered leadership traits to be relatively stable personality character, such as intelligence, assertiveness, independent and self-confidence. These researchers were proponents of the trait theory and argued that successful leaders have certain personality characteristics that make it likely for them to be leaders, no matter what situation they are in (as cited in Weinberg & Gould, 1999). This line of reasoning would support the notion that "great leaders are born and not made" (Diatelevi, 1997).

Hundreds of trait studies were conducted during the 1930's and 1940's in order to discover the traits of natural leaders, but this massive research effort failed to find any traits that

would guarantee leadership success (Yukl, 1989, 1998). Many of these studies utilized small groups of people, where group members were asked to evaluate the leadership traits of themselves and of other members in the group. In many of these studies, an individual leadership scores were often correlated with individual's personality traits (Yusof, 1999). The trait approach lost favor after World War II, when Stogdill (1948, 1974) reviewed more than a hundred trait-theory studies of leadership conducted from 1904 to 1947. The results showed that leaders can be differentiated from non-leaders on the basis of the following traits: intelligence, insight into situations, verbal facility, sociability, alertness to the needs of others, understanding of the task, self-confidence, initiative, and persistence in dealing with problems. However, Stogdill (1948) could not find any study that would provide conclusive evidence to show that certain leadership traits would assure leadership success in different situations. Specifically, Stogdill (1948) noticed that trait studies could not explain why a leader with certain traits may be successful in one situation, and not be successful in a different situation. Although certain traits might be helpful for a leader to have, they are certainly not essential; nor do they guarantee successful leadership (Weinberg & Gould, 1999).

The trait approach to leadership has been examined in the athletic world as well. Research on coaches has clearly indicated that there are no consistent differences between the personality profiles of coaches compared to the general population (Walsh & Carron, 1977). Researchers also attempted to identify successful coaches according to the trait view. For example, Weinberg and Gould (1999) reported that "one profile of typical coaches was tough-minded, authoritarian, willing to bear the pressure of fans and the media, emotionally mature, independent in their thinking, and realistic in their perspective" (p.189). They, however, did not provide documented evidence to support this coaching profile. In fact, no particular set of traits seems to characterize effective sport leadership (Weinberg & Gould, 1999). Since an ideal leadership style among coaches and athletes has not been found, little sport research today uses the trait approach to leadership theory.

Behavioral Approach

In the 1950's researchers became discouraged with the trait approach and began to pay closer attention to the actual behaviors of leaders on the job; that is what leaders do rather than what leaders have, that make them effective leaders (Yukl, 1989, 1998). In this approach, studies focused on discovering universal behaviors of effective leaders. Behaviorists argued that anyone could be taught to become a leader by learning the behaviors of other effective leaders. Thus, unlike trait theory, the behavioral approach argues that leaders are made, not born (Weinberg & Gould, 1999). This notion at the time of the behavior approach resulted in an interest in training leaders and, in some parts of the research, in an investigation as to whether one kind of behavior was more efficient than the other (Bass 1990; Bryman 1996).

In the crossing between the trait and the behavior approaches an important contribution was made by Hemphill and his colleagues, often referred to as *"the Ohio State studies"* (Hemphill & Coons, 1957). Employees were asked to evaluate a battery of items about the behavior of their leader and indicate to which degree a specific statement reflected the behavior of their leader. Later, the different kinds of leader behaviors could be separated into two higher-order factors termed "consideration" and "initiating structure". Consideration is "the degree to which a leader acts in a friendly and supportive manner, shows concern for subordinates, and looks out for their welfare" (Yukl, 1998, p. 47). Examples include doing personal favors for

subordinates, finding time to listen to subordinates' problems, consulting with subordinates on important matters, being willing to accept subordinate's suggestions, and treating a subordinate as an equal (Yukl, 1998). Initiating structure is "the degree to which a leader defines and structures his or her own role and the roles of subordinates toward attainment of the group's formal goals" (Yukl, 1998, p. 47). Examples include criticizing poor work, emphasizing the importance of meeting deadlines, assigning subordinates to tasks, maintaining definite standards of performance, asking subordinates to follow standard procedures, offering new approaches to problems, and seeing that subordinates are working to capacity (Yukl, 1998). While the first style is relation oriented, the latter is task-oriented (Bryman 1996; Pierce & Newstorm, 1995). Early findings indicated that consideration was related to employee job satisfaction, while initiating structure was connected to group performance (Bryman 1996). In much of the following research, leader-behavior issues remained divided and recognized with many notions, for example, task-oriented and relationship-oriented, production-centered or employee-centered, and directive or participative leadership (Bryman 1996; Pierce & Newstorm, 1995; Yukl 1989).

The behavioral approach assumes that leadership behavior lies on a continuum with people-oriented behavior at one end and task oriented-behavior at the other end. In addition, this approach assumes the existence of single ideal type of leadership behavior. However, Stogdill's (1974) review of behavioral studies showed this assumption to be unrealistic. Specifically, Stogdill (1974) found no evidence that a single leadership behavior is effective across different situations. In other words, Stogdill could not find leadership behaviors that were related with leadership effectiveness across different situations. In the review, Stogdill noticed that situational factors might have moderated the effects of initiating structure or task-oriented and consideration or relationship-oriented behavior on group performance. Based on Stogdill's review, it can be concluded that some situations might favor task-oriented or initiating structure leadership behavior, while relation-oriented or consideration leadership behaviors might work best in other situations.

Power-influence Approach

Power-influence research examines influence processes between leaders and other people. Much of the studies coming under this approach attempt to explain leadership effectiveness in terms of the amount of power possessed by a leader, the types of power, and how power is exercised (Yukl, 1989, 1998). Power is important not only for influencing subordinates, but also for influencing peers, superiors, and people outside the organization. Moreover, the power-influence research seeks to differentiate between the types of power used by effective and ineffective leaders. French and Raven (1995) classify different types and sources of leadership power: (1) referent power, which is associated with the loyalty of followers, (2) coercive power, which stems from the leader's control of punishment, (3) reward power, which stems over the control of resources and rewards, (4) legitimate power, which is associated with the formal authority of the leader, and (5) expert power, which is associated with the expertise and knowledge of the leader. Research using French and Raven's theory has examined the relationship between leader's use of power with subordinates' performance and satisfaction. However, research on this theory has obtained mixed results due to psychometric weaknesses of the instruments used to measure the foundations of power (Podsakoff & Schriesheim, 1985).

Situational Approach

The situational approach, sometimes referred to as the contingency approach, arose in the beginning of the 1960's as a result of the in-ability of earlier approaches to explain the many different aspects of leadership traits or behaviors.

The situational approach emphasizes the importance of contextual factors such as the nature of the work performed by the leader's unit, the nature of the external environment, and the characteristics of followers (Yukl, 1989, 1998). This approach has two major subcategories. One line of research treats leader behavior as a dependent variable, and researchers seek to discover how this behavior is influenced by aspects of the situation such as the type of organization or managerial positions. The other line of research seeks to identify aspects of the situation that moderate the relationship of leader behaviors (or traits) to leadership effectiveness (Yukl, 1989, 1998).

Unlike the behavioral and trait approaches, the assumption of this approach is that different behavior patterns (or trait patterns) will be effective in different situations, and that the same behavior pattern (or trait pattern) is not optimal in all situations (Yukl, 1998). With this assumption, the situational approach is much better than the other approaches mentioned earlier at explaining the conditions where certain leadership behavior may not be effective across different situations (Yusof, 1999).

The situational leadership approach focuses on observable leader behaviors. On the basis of this approach, various models of effective leadership behaviors are constructed for different types of situations by observing how effective leaders behave in different situations. The situational approach provides a framework for examining the relationship between situational variables, leadership behaviors and leadership effectiveness. Furthermore, this approach identifies the situational factors in which a leader must pay attention to in order to be effective (Yusof, 1999).

Leadership Theory in Sport

Leadership has been studied extensively to determine which leadership style leads to the highest productivity, job satisfaction, group effectiveness, and goal achievement. Studies have also been concerned with identifying behaviors that are universally exhibited by leaders in different situations (Dale & Weinberg, 1989). The theories on leadership suggest that the leader must not only move his or her group toward a specified goal but must also mediate between two sets of equally important, and at times conflicting, forces-situational leadership demands and member preferences in leadership (Kelley et al., 1999). Studies of leadership behavior moved toward sport because of the definite structure of athletic teams. There is a leader (the coach) and followers (the athletes), and the coach exhibits a style of leadership behavior. Dale and Weinberg (1989) stated that the studies exploring leadership behavior and sport have investigated many factors such as preferred behavior and experience or ability of the athletes, size of team and nature of the task, along with nature of the sport itself.

Over the past two decades leadership theories in sport have been developed, reducing the reliance on non-sport specific models. Of particular interest to the area of coaching research are the Multidimensional Model of Leadership (Chelladurai, 1980, 1990), the Mediational Model of

Leadership (Smoll & Smith, 1989), and the recently developed Coaching Model (Côté, Samela, Trudel, Baria, & Russell, 1995). All three models propose similar theories of coaching designed to provide a framework for the examination of coaches' behaviors. In addition, the proponents of each model have developed instruments to guide the research investigating the model. The direction of the research based on these instruments has differentiated each model and defined its contribution to the literature on coaching behaviors (Diatelevi, 1997). Each of these models had arisen from the belief that leadership effectiveness was a function of both situational and individual characteristics.

The Multidimensional Model of Leadership (Chelladurai, 1980,1990,1993; Chelladurai & Riemer, 1998) was developed from previous leadership models such as the contingency theory (Fiedler, 1967), path-goal theory (House, 1971; House & Dressler, 1974; House & Mitchell, 1974), and adaptive-reactive theory of leadership (Osborne & Hunt, 1975).

The contingency theory of leadership that was first introduced in by Fiedler (1967) assumes that leadership effectiveness is dependent upon the fit between the leader's style and the situational favorableness. The leader's style (i.e., task orientation compared with employee or relations orientation) is a relatively stable personality characteristic. In the path-goal theory (House, 1971), the central issue is motivation. The theory addresses the unique need of leaders to perform different leader styles in order to provide for general follower satisfaction, motivation and performance or as stated by the author:

> "The motivational functions of the leader consist of increasing the number and kinds of personal payoffs to subordinates for work-goal attainment and making paths to these payoffs easier to travel by clarifying the paths, reducing road blocks and pitfalls, and increasing opportunities for personal satisfaction en route" (House 1971, p. 323).

The theory focused on needs and desires of the subordinates, proposing that the leader's role was only supplemental to provide guidance and social support only if the subordinates need them. The adaptive-reactive theory, which was an extension of the path-goal theory, stated that the leader needed to react to the needs, desires, and pressures of the subordinates (Osborn & Hunt, 1975). These models provided the foundation for the sport-specific multidimensional model of leadership.

The Multidimensional Model of Leadership (Chelladurai, 1980, 1990, 1993; Chelladurai & Riemer, 1998) was a sport-specific synthesis of these pervious models. Incorporating concepts of the earlier models, this model proposes that group performance and member satisfaction are functions of the congruence among three states of leader behavior: required, preferred, and actual leader behavior (see figure 2). Characteristics of the situation, the leader, and the members are considered antecedents to these three facets of leader behavior. The demands and constraints created by situational characteristics (i.e., parameters of the organization and/or its environment, such as the goals of the team, the formal organizational structure of the team, the group task and associated technology, social norms, cultural values, and government regulations) would require that the leader behave in certain ways (from Box 1 to Box 4). In addition, characteristics of the groups defined by such factors as gender, age, and ability would also influence the required behavior (Box 3 to Box 4). The preferences members have for specific leader behaviors are considered a function of the individual difference factors, such as ability, traits, and needs (Box 3 to Box 6). Further, to the extent individual members are aware of the situational demands and

constraints, their preferences are likely to be influenced by the situation (from Box 1 to box 6). Finally, a leader's actual behavior (Box 5) is said to be influenced by (a) his or her personal characteristics of personality, ability, experience, etc. (Box 2); (b) the required behavior (Box 4); and (c) preferences of members (Box 6). The degree of congruence among the required, actual, and preferred leadership behavior (Boxes 4, 5, and 6) is said to determine the levels of performance and satisfaction (Box 7). The final element in the model is the feedback loop that implies that actual leader behavior may also be influenced by group performance and satisfaction (Chelladurai & Riemer, 1998). Figure 2, presents the latest version of the multidimensional model of leadership modified by Chelladurai (1999).

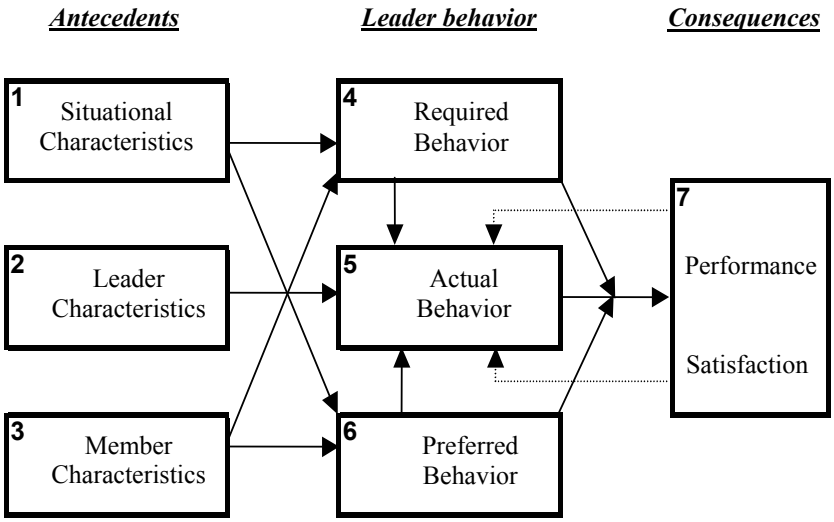


Figure 2. The Multidimensional Model of Leadership.

Adapted from: Chelladurai, P. (1999). *Human resource management in sport and recreation*. (p. 163).

Research based on Chelladurai's multidimensional model and on other general Situational leadership theories have proposed that the type of leadership behaviors that athletes prefer their coaches to exhibit vary as a function of certain characteristics of the athletes themselves (Horn, 1992). For example, when examining intercollegiate and intramural athletes, Erle (1981) found college athletes' preferred greater training and instruction, greater social support, and less positive feedback and democratic behavior from their coaches than the intramural athletes. Similar findings were reported by Terry (1984) and Terry and Howe (1984), who found that athletes participating in interdependent sports showed greater preference for autocratic coaching style, and less preference for democratic coaching style than did athletes participating in independent sports.

Studies examining gender differences between male and female athletes have shown some differences. Terry and Howe (1984) did not find gender differences in preferred coaching style in their sample of 17- to 40-year-old athletes. However, many other researchers have reported quite consistent variation between male and female sport participants. Chelladurai and Saleh (1978) found that male physical education majors representing a variety of sports exhibited greater preference than their female peers for an autocratic coaching style, whereas the female participants indicated significantly greater performance than the males for a democratic coaching style. In addition, the male students in this study exceeded their female peers in preference for social support from their coaches. Terry (1984) found elite college male athletes to prefer significantly more autocratic leadership style than elite college female athletes. Chelladurai and Arnott (1985) also found differences in leadership style preferences of females and males in collegiate athletes. They reported that college basketball players preferred more autocratic than democratic style, and female intercollegiate basketball players preferred more democratic than autocratic leadership style. Gardner, Shields, Bredemeier, and Bostrom (1996) found similar results in high school and junior college baseball and softball teams. Specifically, they found that female athletes perceived significantly more training and instruction, democratic behavior, positive feedback, and task cohesion than did their male counterparts. Males perceived their coaches as being significantly higher in autocratic behavior than females. Junior college athletes showed significantly higher perceptions of social support and social cohesion than high school athletes.

The studies conducted to test the age/maturity hypothesis indicate some support for the notion that increased age and/or athletic maturity affects the type of leadership behaviors preferred by athletes. However, these differences may be evident primarily in the earlier age ranges (Horn, 1992). Specifically, Terry and Howe (1984) administered the LSS to 160 athletes from a variety of sports ranging from 17 to 40 years of age. They found no age differences in regard to preferred coaching behavior. Similarly, Terry (1984) also found no age differences on the five factors of the LSS in a group of 160 athletes ranging in age from 17 to 28 years. In contrast, Chelladurai and Carron (1983), who used the LSS to measure preferred coaching behaviors among four groups of male basketball players (high school midget, high school junior, high school senior, and university level), did find some age differences. Specifically, the preference for coaches who show high levels of socially supportive behavior and who exhibit an autocratic leadership style linearly increased across the four age competitive levels. In regard to coaching behaviors associated with the training and instruction factor, Chelladurai and Carron reported that preference for this set of coaching behaviors decreased for athletes from midget to senior high school level, but then increased again at the university level. In general, research in this area has found that as athlete gains maturity he or she tends to prefer a more autocratic and socially supportive coach (Chelladurai & Carron, 1983; Erle, 1981).

The international acceptance of the LSS (Chelladurai & Saleh, 1978, 1980) has allowed for studies investigating cultural differences in leadership. Studies have shown that, not only must the compared cultures be markedly different in terms of their values to cause differences in leadership preferences, but the sport ideologies within the culture may cause differences as well (Diatelevi, 1997). In testing this aspect, three studies have compared athletes from different cultures in regard to their preferred coaching style. Terry (1984) administered the LSS to 160 elite athletes from 10 different sports and from several different countries. He reported no differences in preferred coaching style as a function of nationality (United States, Great Britain,

and Canada). However, Chelladurai, Malloy, Imamura, and Yamaguchi (1987), and Chelladurai et al. (1988) found significant differences between Japanese and Canadian students on several factors from the LSS. Chelladurai et al. (1987) administered the preferred version of the LSS to Japanese and Canadian male physical education students. The Japanese students were further divided into athletes in traditional sports like judo and kendo, and athletes in modern sports like basketball and volleyball. The results showed that the Japanese in modern sports preferred more democratic behavior than the Canadian athletes; the Japanese in traditional sports preferred more autocratic behavior than the other two groups; both groups of Japanese athletes preferred higher levels of social support than the Canadian athletes; and the Canadian athletes preferred more positive feedback than the Japanese in traditional sports. It was concluded that the type of sport moderated the cultural influences.

In a later study, Chelladurai et al. (1988) administered the preferred and perceived versions of the LSS, and a satisfaction scale that assessed member satisfactions with leadership and personal outcome to Japanese and Canadian university athletes. The results showed that (a) the Japanese athletes preferred more autocratic behavior and social support, while the Canadian athletes preferred significantly more training and instruction, and (b) the Japanese athletes perceived their coaches to be more autocratic while the Canadian athletes perceived their coaches to provide more training and instruction, and to be more democratic, and more rewarding. The results of these studies support the hypothesis that socio-cultural prescriptions can be identified and used to predict or explain differences between athletes from different cultures in regard to preferred coaching behaviors. However, as Chelladurai et al. (1987) found, the type of sport in which group members are involved may interact with culture to affect preferred coaching styles.

Of greater relevance to the present study is the research that has examined the relationship between coaching behaviors and various athletes' outcomes. Chelladurai (1984) demonstrated that greater congruency between perceived and preferred coaching behaviors were related to higher levels of satisfaction in college athletes. Similar findings were reported by Schliesman (1987) and Horne and Carron (1985) with the coaching behaviors of training and instruction, positive feedback, and social support most highly correlated with athlete satisfaction. Coffman (1999) reported that there was more congruence between female athletes and their coaches (males and females), than between male athletes and their (male) coaches. These findings support Riemer and Chelladurai (1995) central tenant of the multidimensional model of leadership, which states that the congruence of perceived and preferred leadership enhances member satisfaction. Weiss and Friedrichs (1986) suggested that specific coaching styles are associated with more satisfied athletes. They found that rewarding behaviors displayed by coaches were the best predictor of team satisfaction, and the use of social support style was closely linked to a team's win-loss percentage. One surprising conclusion from their findings suggested that only 7.2% of athletes' satisfaction was explained by their perceptions of coaches' leadership. Serpa, Pataco, and Santos (1991) argued that the democratic style is the least desired and least used by coaches of elite athletes. In their analysis of perceptions, they found that successful and nonsuccessful teams used different styles.

Chelladurai et al. (1988) assessed satisfaction with leadership, and satisfaction with personal outcome in Japanese and Canadian university athletes. The results showed that the Canadian athletes were more satisfied with both leadership and personal outcome than the Japanese athletes. Furthermore, the perceived scores in all five dimensions of LSS were signifi-

cantly correlated satisfaction with leadership in both sets of data. The higher the perceived score (except in autocratic behavior), the higher the satisfaction with leadership. In contrast, perceived leadership in all dimensions except positive feedback was correlated with personal outcome in the Japanese data while only perceived training and instruction was associated with the same criterion in the Canadian data. Because of these differences, Chelladurai et al. concluded that their results "were more supportive of the cultural-influence hypothesis than of the athletic-influence hypothesis" (p. 374).

A number of studies have addressed the impact success has on athletes' perceptions of and preferences for their coaches' leadership styles (Erle, 1981; Gordon, 1988; Schleisman, 1987; Serpa et al., 1991; Terry, 1984; Terry & Howe, 1984; Weiss & Friedrichs, 1986). For example, Gordon (1988) studied differences based on the levels of success a team achieved, by studying university soccer players. Successful teams perceived more training and instruction, social support, and positive feedback styles from their coaches than athletes from less successful teams.

Another line of research investigated the relationship between leadership styles and negative psychological outcomes such as anxiety, stress, and burnout in both athletes and coaches. Many studies have indicated a strong relationship between leadership styles and burnout (e.g., Dale, 1987; Dale & Weinberg, 1989; Kelley et al., 1999; Price & Weiss, 2000; Udry et al., 1997; Vealey et al., 1998). Dale (1987) examined the relationship between leadership behavior and perceived burnout of coaches and head coaches. The results showed that coaches in the consideration group scored significantly higher in the frequency and intensity dimension of the emotional exhaustion and depersonalization subscales. Kelley et al. (1999) found that higher levels of initiating structure leadership were associated with lower perception of stress and burnout. Consideration leadership was unassociated with stress perceptions, but interestingly higher levels of this leadership style were associated with lower levels of burnout among a sample of collegiate tennis coaches. In contrast, Dale and Weinberg (1989) found that the consideration leadership style, but not the initiating structure leadership style, was associated with elevations in burnout among a sample of high school coaches. The coaches who displayed a consideration leadership style of leadership scored significant higher in frequency and intensity dimensions of emotional exhaustion and depersonalization subscales. Udry et al. (1997) provided support for the relationship between coaching behaviors and athlete burnout. They found that positive influence from coaches (i.e., providing support, empathy, belief in athletes, instructions) was related to lower levels of burnout in junior-elite tennis players. In contrast, negative coach influence (i.e., pressure, unrealistic expectations, conflicting ideas, lack of confidence in athlete) was related to higher levels of athlete burnout.

In their study on burnout experienced by athletes and coaches, Vealey et al. (1998) examined the relationship among coach burnout, athletes' perceptions of coaches' behaviors, and athletes' anxiety and burnout. A total of 12 coaches and 149 female college athletes participated in the study. Two main links in the model were tested: (a) coach burnout levels and athletes' perceived coaching behaviors, and (b) coaching behaviors and athletes' psychological outcomes (i.e., anxiety and burnout). Support was found for the relation between coach burnout and perceived behaviors. Specifically, coaches who reported higher burnout displayed more of an autocratic decision-making style, gave less praise, and lacked empathy according to athletes' perceptions. Results also provided support for the relationship between athletes' perceptions of coaching behaviors and athlete burnout. Perceptions of less empathy and praise by the coach and

a greater emphasis on winning and an autocratic style were related to higher levels of athlete burnout.

Price and Weiss (2000) examined the relationship among coach burnout, coach behaviors, and athletes' well being. A sample of 193 female varsity soccer players and 15 head coaches (10 men & 5 women) of high school teams participated in this study. The results showed that the coaches who were higher in emotional exhaustion were perceived by their teams as given less training and instruction and social support and as making fewer autocratic and more democratic decisions. The burnout dimensions of depersonalization and reduced feeling of personal accomplishment were not significantly related to perceived coaching behaviors. The results also showed that lower perceived competence and enjoyment, and higher anxiety and burnout were associated with coaches who exhibited less frequent training and instruction, social support, and positive feedback. Also, greater use of democratic and less use of autocratic style was associated with more positive and less negative psychological outcomes for athletes.

Summary

The brief review of literature presented in this section suggests that the topic of leadership has attracted a great deal of interest from many researchers. Interest in the topic of leadership has resulted in many different definitions being used to describe the leadership phenomena. In addition, several different approaches have been used to study leadership. However, after nearly a century of research on leadership, and despite the existence of numerous leadership theories, the issue of what makes an individual an effective leader still remains unresolved. To date, researchers are still unclear with respect to the types of behaviors that increase a leader's effectiveness. Thus, the identification and the search for effective leadership behavior continue.

Interest in the study of leadership in sport has increased tremendously by the emergence of the multidimensional model of leadership proposed by Chelladurai in 1980. The multidimensional framework of the model has applications in the sport environment. It takes into consideration the interaction of the coach, athlete, and situation. The model focuses upon three states of leader behavior: actual leader behavior, required leader behavior, and leader behavior preferred by the athlete. Antecedents of situational, leader, and student-athlete characteristics may affect these coaching leadership behaviors. The multidimensional model of leadership suggests student-athlete performance and satisfaction are functions of the congruence between the three types of leader behavior.

Researchers have examined the student-athletes' preferences for leadership behavior of their coaches. Studies found that coaches' leadership behaviors were highly associated with different athletes' outcomes such as, performance, cohesion, enjoyment, anxiety, burnout, and satisfaction. Leadership behaviors are composed of certain behavioral characteristics and attributes regarding how the coach interacts with his or her athletes in terms of training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback. Coaches play an important role in the lives of athletes. They can make significant changes in the athletic environment and reduce the impact of stressors by intervention strategy. Different leadership behaviors produce different impact on the athletes' attitudes in achieving their goals, dealing with their own stressors, and fulfilling their expectations.

Athlete Satisfaction

Satisfaction is an integral part of sport participation and enjoyment. Without satisfaction, athletes would turn to other sources for potential success and enjoyment (Maday, 2000). The importance of satisfaction cannot be underestimated at any age. Chelladurai (1984) indicated that "the degree of satisfaction expressed by athletes in relation to their performance and that of the team taps the degree to which performance reached or failed to reach expected levels" (p. 31). Petlichkoff (1993) suggested that the level of satisfaction an athlete maintained during sport involvement also played a role in perception of performance.

Athlete satisfaction is regarded as the quality of life or quality of the management in the organization as perceived by the athlete (Sriboon, 2001). It is a positive effect resulting from a complex evaluation of structure, processes, and outcome associated with the athletic experience. Satisfaction is "the difference between the perception of what the athletes received and what they want" (Chelladurai & Riemer, 1997, p. 135). Athlete satisfaction is derived from the physical, psychological, and environmental aspects that are associated with athletes. The level of satisfaction is an indicator of the athlete's feelings about the sport team environments (Chelladurai & Riemer, 1997).

Satisfaction in sport has been studied extensively in combination with several variables, mostly leadership (Chelladurai, 1984; Chelladurai et al., 1988; Coffman, 1999; Dwyer & Fischer, 1990; Horne & Carron, 1985; Riemer & Chelladurai, 1995; Riemer & Toon, 2001; Schliesman, 1987; Sriboon, 2001; Yusof, 1999). Several scholars in sport psychology have included athlete satisfaction as an antecedent or outcome variable in their work. For example, the multidimensional model of leadership (Chelladurai, 1980, 1990) includes satisfaction as an outcome variable along with performance. Athlete satisfaction has also been included in other theoretical frameworks. For instance, Carron (1982) included satisfaction as both an antecedent (i.e., personal factor) and outcome (i.e., individual outcome) in his model of cohesion. Satisfaction has also been considered a predicted outcome of a coach's efficacy (Feltz, Chase, Hodge, Simensky, & Shi, 1996). It has also been used as a dependent variable in research on goal orientations (Hom, Duda, & Miller, 1993), coach and player goal orientation and motivational climate (Tammen, 1996), and coach-player compatibility (Horne & Carron, 1985).

It must be noted that other conceptually contiguous constructs, such as commitment, enjoyment, and players' evaluative reactions, have been included in various theoretical models in sport psychology. For example, Schmidt and Stein (1991), in their model of sport commitment, have included satisfaction as one of the antecedents that may be used in predicting the level of commitment and subsequent dropout. Scanlan, Simons, Carpenter, Schmidt, and Keeler (1993) have included sport enjoyment, a construct somewhat akin to and sometimes used interchangeably with satisfaction as an antecedent of sport commitment. Similarly, players' evaluative reactions in Smoll, Smith, Curtis, and Hunt's (1978) Mediational Model of Leadership focus on attitudes toward the coach, the teammates, themselves, and their playing experience. Most of the items in their scale eliciting these reactions refer to "liking" the above elements. That these constructs (satisfaction, enjoyment, commitment, and evaluative reactions) have all been defined as positive affective responses leads to the conclusion that athlete satisfaction is an outcome variable in its own right (Riemer & Chelladurai, 1995; Scanlan et al., 1993; Smoll et al., 1978).

Satisfaction and Leadership

The research based on the multidimensional model of leadership (Chelladurai, 1980, 1990) has been largely concerned with linking leadership dynamics with athlete satisfaction. Satisfaction as an outcome has been employed in different leadership studies based on the multi-dimensional model of leadership (Chelladurai, 1984; Chelladurai et al., 1988; Dwyer & Fischer, 1990; Eichas, 1992; Horne & Carron, 1985; Riemer & Chelladurai, 1995; Riemer & Toon, 2001; Schliesman, 1987; Sriboon, 2001). In the multidimensional model (Chelladurai, 1980, 1990), leadership behaviors were suggested to be antecedents of member satisfaction. The model suggests that the discrepancy between athletes' perceived and preferred leadership style would impact their level of satisfaction. Specifically, the congruence of perceived and preferred leadership enhances member satisfaction. Chelladurai (1984) and Schliesman (1987) examined the relationship between the preferred coach leadership behavior and athlete satisfaction. Both found that the preferred coach leadership behavior was significantly related to athlete satisfaction. Chelladurai (1984) found that discrepancy in coach leadership behavior for athletes in various sports was associated with three measures of satisfaction: satisfaction with performance, satisfaction with leadership, and satisfaction with overall involvement. Among basketball players, discrepancy scores in all dimensions were significantly related to satisfaction with leadership. The greater the perceptions of training and instruction, democratic behavior, social support, and positive feedback, and the lower the perceptions of autocratic behavior relative to the preferences, the greater the satisfaction. With wrestlers, the higher the perceptions relative to the preferences in training and instruction and in social support, the greater the satisfaction with leadership. Schliesman (1987) found that general satisfaction with leadership was related to actual scores in democratic behavior and in social support. Horne and Carron (1985) studied the compatibility in coach–athlete relationship in Canadian university volleyball, basketball, track and field, and swimming athletes. They found that athletes with lower discrepancies between perceived and preferred training and instruction, social support, and rewarding leadership behaviors had higher levels of satisfaction. Also, lower discrepancies between athletes' perceived and preferred leadership behaviors led to increased success. These findings were important because success has been found to be associated with high athlete satisfaction (Berson, 1996; Williams & Hacker, 1982).

Studies based on the multidimensional model of leadership have provided more information on which leadership styles were most closely associated with athlete satisfaction. Weiss and Friedrichs (1986) explored the influence of leader behaviors, coach attributes, and institutional variables on performance and satisfaction of collegiate basketball teams. They found that perceptions of all five-leader behavior dimensions were significantly predictive of team and individual satisfaction scores, with positive feedback serving as the best indicator for team satisfaction, and democratic behavior and social support being the best forecasters of individual satisfaction. In contrast to earlier findings, training and instruction was not among the best predictors of athlete or team satisfaction. Riemer and Chelladurai (1995) supported the findings of Weiss and Friedrichs (1986) in their study involving 201 male NCAA Division 1-AA football players. They found the congruence of preferred and perceived leadership in the dimension of social support was critical to enhancing member satisfaction. They also found that defensive players, whose tasks were more open, preferred higher amounts of democratic behavior and social support than offensive players with less variability in the play environment. Riemer and Chelladurai (1995) found little variance in the satisfaction scores possibly due to a single item

measure, and lack of a large sample. The satisfaction scores obtained were unusually high and testing on a greater number of teams with the multi-item measures needs to be performed before a meaningful conclusion can be determined. Chelladurai et al. (1988) found that higher perceptions of all leadership styles, except autocratic, were related to higher athlete satisfaction. Lower perceived autocratic leadership style, was associated with higher athlete satisfaction.

In contrast, some studies have shown no relationship between satisfaction and leadership style (Dwyer & Fischer, 1990; Riemer & Toon, 2001). Dwyer and Fischer studied perception of wrestlers of coach leadership behaviors as predictors of satisfaction with leadership. They concluded that the athletes perceived coaches as high on 'training and instruction' and on 'positive feedback,' but low on 'autocratic behavior' on the LSS (Chelladurai & Saleh, 1980). No specific perceived leadership style was found related to satisfaction. Riemer and Toon's study of 140 tennis players competing at the NCAA Division I and III Tennis Championship level indicated that athlete satisfaction was not dependent on the congruence between preferred and perceived leadership behavior.

Summary

Several studies in the area of athletic satisfaction have been completed, primarily with relation to leadership behaviors of coaches. The leadership behaviors of the coach play important roles in the determination of success and satisfaction of athletes. The ties between these variables are significant. Further research is necessary to the development of a theory of satisfaction in sport (Maday, 2000). A well-developed theory of satisfaction in sport will allow researchers who are interested in satisfaction to expand the knowledge base concerning this construct.

CHAPTER 3
METHODS

This chapter presents the methods and procedures used in conducting this study. The chapter is divided into the following sections: (a) research design, (b) participants, (c) instruments utilized to collect the data, (d) data collection procedures, and (e) data analysis procedures.

Research Design

This study is quantitative in nature and was conducted using a survey methodology. A large majority of research conducted on leadership, satisfaction, and burnout utilizes surveys/questionnaires as the method for collecting the data (e.g., Chelladurai & Ogasawara, 2003; Collins, 2002; Kelley et al., 1999; Price & Weiss, 2000; Riemer & Chelladurai, 1995; Riemer & Toon, 2001; Sriboon, 2001; Sullivan & Kent, 2003). According to Babbie (1998) survey research is "probably the best method available to the social scientist interested in collecting original data for describing a population too large to observe directly" (p. 256). The use of a survey/questionnaire method has some definite advantages over other methods of collecting data. The questionnaire requires less time, is less expensive, and permits collection of data from a much larger sample (Gay & Airasian, 2000). Questionnaires may be individually administered to each respondent, but for efficiency they are usually mailed or sent via electronic mail (Gay & Airasian, 2000). The nature of this study including a large sample size, the availability of funds, and time constrain supported the survey/ questionnaire method as most appropriate.

Participants

Participants in this study were coaches and athletes from the 8 public universities in Jordan. This sample was not a random sample but one of convenience based on volunteers. Of the 55 coaches attended a meeting at the Hashemite University, 42 male and female coaches agreed to participate and returned usable surveys making the response rate 76.3%. The majority of the coaches who responded were males (88.1%) while females were only 11.9%. Coaches ranged in age from 26 to 50 years and their mean age was 36.38 years (SD = 6.35). The mean

number of years they had been coaching at the university was 8.39 years (*SD* = 4.82). Coaches in this study ranged in total experience from 5 to 31 yeas with a mean coaching experience of 13.83 years (*SD* = 6.32). Further, 59.5% of the coaches indicated that a bachelor degree was their highest level of education. 31% indicated they obtained a masters degree, 4.8% diploma, and 4.8% held a doctorate degree. As the sample was drawn from the collegiate level, the high level of academic achievement would be expected. Additional demographic information indicates that the majority of the coaches (73.8%) had responsibilities other than coaching such as field maintenance, fundraising, academic advising, refereeing, and so on. Eighteen of the coaches (42.9%) coached a second sport in addition to their major sport, and 24 coaches (57.1%) did not coach other sports. Tables 1 and 2 present the descriptive statistics for the coaches.

Table 1
Means, Standard Deviations and Ranges for Age, Years Coaching at University, Total Years Experience, and Contact Hours with Athletes (N = 42)

Variable	Mean	SD	Range
Age	36.38	6.35	26-50
Years coaching at university	8.39	4.82	3-20
Total years experience	13.83	6.32	5-31
Contact hours with athletes per week	24.26	11.06	3-40

Table 2
Additional Demographic Variables Frequencies for Coaches (N = 42)

Variable	Frequency	Percent
Gender		
Male	37	88.1
Female	5	11.9
Highest degree completed		
Diploma	2	4.8
Bachelor	25	59.5
Master	13	31.0
Doctorate	2	4.8
Coaching more than one sport		
Yes	18	42.9
No	24	57.1
Have additional responsibilities		
Yes	31	73.8
No	11	26.2

A total of 430 male and female athletes agreed to participate in this study. Of the 430 prospective participants, 17 questionnaires were disqualified from the study because the participants responded to less than half of items, thus 413 were included in the study, for a response rate of 96%.

Athletes participated in this study included 297 males (71.9%) and 116 females (28.1%). Athletes ranged in age from 18 to 30 years (M = 20.55, SD = 1.60), had played an average of 2.32 years of varsity sports (SD = 1.08), and reported that they spent about of 10.5 hours per week in participating in sport (M = 10.53, SD = 5.96). Many of the athletes had been involved in organized sports for about 6 years (M = 6.62, SD = 3.06). Additional demographic information indicated that 19.9% of the athletes were freshmen, 27.8% were sophomore, 30.5% were juniors, 20.6% were seniors, and 1.2% of the athletes did not did not provide information on this variable. Tables 3 and 4 provide the sample statistics for the athletes.

Table 3
Descriptive Statistics of Athletes (N = 413)

Variable	Mean	*SD*	Range
Age	20.55	1.60	18-30
Years playing sport at university	2.32	1.08	1-6
Years participating in organized sport	6.62	3.06	1-18
Hours spent participating in sport	10.53	5.96	1-29

Table 4
Additional Demographic Variable Frequencies for Athletes (N = 413)

Variable	Frequency	Percent
Gender		
Male	297	71.9
Female	116	28.1
Education level		
Freshmen	82	19.9
Sophomore	115	27.8
Junior	126	30.5
Senior	85	20.6
Unknown	5	1.2

Instruments

Leadership Scale for Sports (LSS; Chelladurai & Saleh, 1980; see Appendices A & B).

The LSS consists of 40 items representing different aspects of leadership behavior. The response for each item is on a 5-point Likert-type scale ranging from 1 (never) to 5 (always). Each athlete rates how often his/her coach exhibits that leadership behavior, while each coach rates how often he/she displays these same behaviors.

The LSS measures five dimensions of coaching behaviors including training and instruction (13 items), democratic behavior (9 items), autocratic behavior (5 items), social support (8 items), and positive feedback (5 items). Training and instruction is behavior aimed at improving the athletes' performance by emphasizing and facilitating hard and strenuous training, instructing them in the skills, techniques and tactics of the sport, and clarifying the relationship among the members. Democratic behavior is a decision-making behavior, which reflects the extent to which the coach permits participation by the athletes in decision-making. Autocratic behavior is a decision-making behavior whereby the coach makes all decisions, keeps apart from the athletes, and demands obedience to his or her authority. Social support refers to the extent to which the coach is involved in satisfying the interpersonal needs of the athletes. Positive feedback is behavior, which is offered as a reward to an athlete for good performance.

Adding scores for questions for each dimension and then dividing by the number of items produces scores for each of the five coaching behaviors. The scores are then interpreted as the perceived level of that specific leadership behavior by the coach on 5 (100%) to 1 (0%) rating.

The LSS has three versions; the preference version prefaces all items with "I prefer my coach …" (e.g., I prefer my coach to emphasize hard, vigorous training to improve performance level). The perception version prefaces all items with "My coach …" (e.g., my coach does not explain his/her actions). The third version of the LSS is used to measure a coach's perception of his/her own leader behavior or to measure "ideal" leader behavior. It uses the precursor "In coaching, I …" (e.g., in coaching I help athletes with their personal problems). For the purposes of the study, the perception version of the LSS was used to assess athletes' perceptions of their coaches' behaviors (see Appendix A), and the coach's version of the LSS was used to assess coaches' perceptions of their coaching behaviors (see Appendix B).

Validity and reliability for the LSS dimensions have been demonstrated through different studies (e.g., Chelladurai et al., 1988; Chelladurai & Saleh, 1980; Dwyer & Fischer, 1988; Price & Weiss, 2000; Riemer & Chelladurai, 1995; Riemer & Toon, 2001). Chelladurai and Saleh (1980) reported internal consistency estimates (Cronbach's alpha) for the perceived form of LSS of .93, .87, .79, .86, .92 for training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback, respectively. In addition, the test-retest reliability was .71 for social support, .82 for democratic behavior, .76 for autocratic behavior, .71 for social support, and .79 for positive feedback. Moreover, the psychometric properties for the coach's version of the LSS have been demonstrated in previous research (e.g., Dwyer & Fischer, 1988, 1990; Horne & Carron, 1985; Sullivan & Kent, 2003).

Few studies reported low internal consistency estimates (Cronbach's alpha) for the autocratic behavior scale (e.g., Chelladurai et al., 1988; Dwyer & Fischer, 1988; Sullivan & Kent, 2003). Chelladurai and Riemer (1998) and Price and Weiss (2000) suggested that researchers include additional items to strengthen the reliability of the autocratic subscale. Price and Weiss (2000) added three items to the autocratic subscale in an attempt to improve its

reliability. They reported coefficient alpha of .71 for the autocratic subscale. Taking these suggestions into consideration, this study added the same three items recommended by Price and Weiss (2000) to the autocratic subscale in an attempt to improve its reliability. These items were "doesn't take into account athletes' suggestions when making decisions," 'controls what athletes can and cannot do," and "makes decisions regardless of what athletes think."

With respect to validity of the LSS, Chelladurai and Saleh (1980) claimed content validity for the scale because each of the components extracted was meaningful. Chelladurai and Saleh (1980) also claimed factorial validity (i.e., construct validity) on the basis of the stability of the five-factor solution over three different data sets (preferences of physical education students, and preferences and perceptions of varsity level athletes). Chelladurai (1993) suggested that criterion-related validity can be inferred from the empirical support for the theoretical relationships between the five dimensions of leader behavior and selected criterion variables (a) athletes' satisfaction (Chelladurai, 1984; Chelladurai et al., 1988; Riemer & Chelladurai, 1995; Schliesman, 1987; Weiss & Friedrichs, 1986), (b) performance (Friedrichs, 1984; Gordon, 1986; Weiss & Friedrichs, 1986), (c) drop out behavior or turnover in athletics (Robinson & Carron, 1982), and (d) coach-athlete compatibility (Horne & Carron, 1985).

Athlete Burnout Questionnaire (ABQ; Raedeke & Smith, 2001; see Appendix C).

The ABQ is a 15-item multidimensional questionnaire that measures three components of burnout in athletes, emotional/physical exhaustion (E), reduced sense of accomplishment (RA), and devaluation (D). Each subscale consists of 5 items measured on a 5-point Likert-type scale ranging from 1 (almost never) to 5 (almost always). The emotional/physical exhaustion subscale taps feelings associated with being emotionally and physically exhausted by the demands of training and competition (e.g., I feel overly tired from my [*sport*] participation). The reduced sense of accomplishment subscale assesses athletes' feelings of personal growth and successful achievement through their sport participation (e.g., it seems that no matter what I do, I don't perform as well as I should). The devaluation subscale assesses athlete's loss of interest in sport and their desire to withdrawal (e.g., I feel less concerned about being successful in [*sport*] than I used to).

The content and construct validity of the ABQ have been demonstrated by Raedeke and Smith (2001). In terms of reliability, Raedeke and Smith reported internal consistency estimates (Cronbach's alpha) of .91 for emotional/physical exhaustion, .85 for reduced sense of accomplishment, and .90 for devaluation. Additionally, the test-retest reliability estimates derived from a sample of cross-country runners for the three subscales were .92 for emotional/physical exhaustion, .86 for reduced sense of accomplishment, and .92 for devaluation. A high score on the ABQ indicates greater degree of athlete burnout.

Athlete Satisfaction Questionnaire (ASQ; Riemer and Chelladurai, 1998; Appendix D*)*.

The ASQ is a multidimensional scale developed by Riemer and Chelladurai (1998) to measure athlete satisfaction. The ASQ contains 56 items grouped into 15 subscales with respondents using a 7-point Likert-type scale ranging from 1 (not satisfied at all) to 7 (extremely satisfied). The ASQ includes important components of athletic satisfaction determined through the following subscales: individual performance, team performance, ability utilization, strategy, personal treatment, training and instruction, team/group task contribution, team/group social

contribution, team/group ethics, team/group integration, personal dedication, budget, medical personnel, academic support services, and external agents.

The format of this questionnaire allows researchers to include those dimensions of satisfaction most salient for a particular situation (Riemer & Chelladurai, 1998; Riemer & Toon, 2001). For this study, satisfaction was assessed using four of the ASQ's 15 subscales: training and instruction satisfaction (3 items), personal treatment satisfaction (5 items), team performance satisfaction (3 items), and individual performance satisfaction (3 items). The first two subscales concentrate on satisfaction with the process of coaching behavior, while the second two assess satisfaction with outcomes associated with the processes of leadership (Riemer & Chelladurai, 1998).

Riemer and Chelladurai (1998) reported internal consistency estimates (Cronbach's alpha) ranging from .78 to .95 (mean = .88). Riemer and Chelladurai also provided initial evidence of construct validity for the ASQ. They used confirmatory factor analyses and the item-to-total correlations to confirm the construct validity of the scale. Correlations between the ASQ (Riemer & Chelladurai, 1998) subscales and the subscales measuring the constructs of "Desire to Quit" and "Team Commitment" (Chelladurai & Riemer, 1997) and the Negative Affective Scale (Levin & Stockes, 1989) provide evidence for the criterion-related validity.

Maslach Burnout Inventory - Educators Survey (Maslach et al., 1996; see Appendix E).

The MBI Form ES is the widely used version of the original Maslach Burnout Inventory (MBI; Maslach et al., 1996) modified for use with populations working in educational settings. The only modification of items in the MBI-ES has been to change the word "recipient" to "student." The 22-item MBI Form ES consists of three subscales measuring emotional exhaustion, depersonalization and lack of personal accomplishment.

The 9-item emotional exhaustion subscale assesses feelings of being emotionally overextended and exhausted by one's work. The five items in the depersonalization subscale describe an unfeeling and impersonal response toward recipients of one's care, service, treatment, or instruction. The subscale of personal accomplishment contains eight items that assess feelings of competence and successful achievement in one's work with people. All three subscales use a 7-point Likert-type scale ranging from 0 (never) to 6 (occurring every day) to measure the frequency of experiencing feelings of burnout.

Burnout is conceptualized as a continuous variable, ranging from low to moderate to high degrees of experienced feeling. It is not viewed as a dichotomous variable, which is either present or absent. A high degree of burnout is reflected in high scores on the emotional exhaustion and depersonalization subscales and in low scores on the personal accomplishment subscale. An average degree of burnout is reflected in averages scores on the three subscales. Finally, a low degree of burnout is reflected in low scores on the emotional exhaustion and depersonalization subscales and in high scores on the personal accomplishment subscale.

At present, scores are considered high if they are in the upper third of the normative distribution, average if they are in the middle third and low if they are in the lower third. Furthermore, the scores for each subscale are considered separately and are not combined into a single, total score. Thus, three scores are computed for each respondent.

Validity for the MBI was demonstrated by several ways. The MBI scores were correlated with behavioral ratings, presence of certain job characteristics, and with measures of outcomes hypothesized to be related to burnout. The reliability coefficients for the MBI subscales are

reported to be .90 for Emotional exhaustion, .79 for Depersonalization, and .71 for Personal Accomplishment (Maslach et al., 1996). Also validity and reliability have been well documented for coaches (e.g., Kelley, 1994; Kelley et al., 1999; Kelley & Gill, 1993; Vealey et al., 1992). This inventory was modified to increase face validity for coaches by changing "students" to "students/athletes" and "work" to "coaching". Earlier research has shown that this change in wording had no effect on the psychometric properties of the scales (Kelley, 1994; Kelley et al., 1999; Kelley & Gill, 1993; Price & Weiss, 2000; Vealey et al., 1992, 1998).

Demographic Questionnaires

The researcher developed two demographic questionnaires to collect general background information about the participants. Athletes was requested to provide general background information regarding their gender, age, type of sport played, years playing and participating in organized sports, and hours spent weekly in practice and play (see Appendix F). The coaches was asked to provide general information about their age, coaching status (i.e., volunteer, paid/full-time, or paid/part. time, number of weeks per year engaged in coaching, and number of years of coaching experience (see Appendix G).

The following tables summarize the internal consistency estimates for the instruments utilized in this study (see Tables 5 through 8).

Table 5
Internal Consistency Estimates for the LSS Dimensions

Measure	*Study*	*Sample*	*Dimensions*				
			TI	DB	AB	SS	PF
LSS	Chelladurai and Saleh (1980)	Canadian athletes	.93	.87	.79	.86	.92
	Dwyer and Fischer (1988)	Canadian wrestlers	.86	.81	.52	.77	.82
	Riemer and Chelladurai (1995)	NCAA football players	.89	.85	.61	.83	.84
	Price and Weiss (2000)	Female soccer players	.88	.83	.71	.80	.88
	Riemer and Toon (2001)	College tennis players	.88	.86	.57	.78	.87
	Sullivan and Kent (2003)	American and Canadian intercollegiate coaches	.83	.79	.34	.51	.83

Note. TI = Training and Instruction; DB = Democratic Behavior; AB = Autocratic Behavior; SS = Social Support; PF = Positive Feedback.

Table 6
Internal Consistency Estimates and Test Re-test Coefficients for the ABQ Dimensions

Measure	Study	Sample	Dimensions		
			EPE	RPA	DEV
ABQ	Raedeke and Smith (2001)	Senior swimmers and college athletes	.91a .92b	.85 .86	.90 .92

Note. EPE = Emotional/Physical Exhaustion; RPA = Reduced Sense of Accomplishment; DEV = Devaluation.
a = Cronbach alpha coefficients.
b = Test re-test coefficients.

Table 7
Internal Consistency Estimates for the ASQ Dimensions

Measure	Study	Sample	Dimensions			
			Individual Performance	Team Performance	Training and Instruction	Personal Treatment
ASQ	Riemer and Chelladurai (1998)	American and Canadian university athletes	.85	.95	.88	.92
	Riemer and Toon (2001)	NCAA tennis players	.92	.91	.90	.93

Table 8
Internal Consistency Estimates for the MBI Dimensions

Measure	Study	Sample	Dimensions		
			EE	DP	PA
MBI	Iwanicki and Schwab (1981)	Teachers	.90	.76	.76
	Maslach et al. (1996)		.90	.79	.71
	Vealey et al. (1998)	Coaches	.72	.75	.77
	Kelley et al. (1999)	Coaches	.89	.72	.79
	Price and Weiss (2000)	Coaches	.88	.70	.85

Note. EE = Emotional Exhaustion; DP = Depersonalization; PA = Reduced Sense of Personal Accomplishment.

Translation of Surveys

The five major instruments, LSS (coach's and perception versions), ABQ, ASQ, and MBI-ES, were translated from English into Arabic language after getting the required permissions from the original authors and/or publishers (see Appendices H, I). A standard three-step protocol reported by Blaschko and Burlingame (2002) was used when translating the questionnaires. First, the instruments were translated from English into Arabic language by a professional scholar who is fluent in both English and Arabic languages. Second, the instruments were translated back from Arabic into English language by a second scholar who is also competent in both English and Arabic languages. In the final step, a third professional scholar, fluent in both English and Arabic languages compared and evaluated the original English and the translated-back copies in order to verify the accuracy and validity of translation (see Appendix J for the letters of translation verification).

Reliability of Arabic translation surveys. In order to assure the psychometric properties of the translated questionnaires, internal consistency measures of reliability were computed for all instruments used in this study by calculating Cronbach's (1951) alpha coefficients. The results of the analyses can be seen in Tables 9, 10, 11, 12, and 13. As shown in the tables, all coefficients were judged to be acceptable based on Nunnally and Bernstein's (1994) criterion of alpha being greater than .70.

Table 9
Reliability Coefficients for Maslach Burnout Inventory (MBI)

Factor	Alpha	No. of Items
Emotional Exhaustion	.83	9
Depersonalization	.87	5
Personal Accomplishment	.85	8

Table 10
Reliability Coefficients for Leadership Scale for Sports (LSS – Coaches' Perceptions)

Factor	Alpha	No. of Items
Training and Instruction	.81	13
Democratic Behavior	.83	9
Autocratic Behavior	.73	8
Social Support	.81	8
Positive Feedback	.80	5

Table 11
Reliability Coefficients for Athlete Burnout Inventory (ABI)

Factor	Alpha	No. of Items
Reduced Sense of Personal Accomplishment	.81	5
Devaluation	.77	5
Emotional/Physical Exhaustion	.82	5

Table 12
Reliability Coefficients for Athlete Satisfaction Questionnaire (ASQ)

Factor	Alpha	No. of Items
Training and Instruction Satisfaction	.82	3
Personal Treatment Satisfaction	.86	5
Team Performance Satisfaction	.81	3
Individual Performance Satisfaction	.84	3

Table 13
Reliability Coefficients for Leadership Scale for Sports (LSS – Athletes' Perceptions)

Factor	Alpha	No. of Items
Training and Instruction	.84	13
Democratic Behavior	.80	9
Autocratic Behavior	.71	8
Social support	.75	8
Positive Feedback	.75	5

Procedure

The researcher contacted the authors and copyright holders of the instruments used in this study and got their permissions to use and translate the instruments (see Appendices K, L, M, and N). The instruments then were submitted to the Human Subjects Committee at Florida State University and were approved (see Appendix O).

In June 2003, the researcher traveled to Jordan in order to start the data-collection process. Before distributing the questionnaires, letters of recommendation to facilitate the implementation of the study, written by the researcher's advisor, were hand-delivered to the office of each university president of the 8 public universities in Jordan (see Appendix P for a sample letter). Telephone calls were also made to the appropriate Dean of Students' Affairs

and/or Athletic Manager in the universities. The purpose of these calls was to provide a brief description of the study and to obtain the permission to conduct the study.

Once permission was granted, the researcher attended a meeting for the coaches held in the Hashemite University from July 14-15, 2003. In this meeting, the researcher provided a brief description of the study, means to insure confidentiality and anonymity, and attempted to elicit participation. After that each coach received a survey packet including: a cover letter (see Appendix Q), a demographic questionnaire (Appendix G), Maslach Burnout Inventory Form ES (Appendix E), the Leadership Scale for Sports – coach's perceptions version (Appendix A), and an envelope. The coaches were asked to volunteer to fill the questionnaires. They were told to seal the questionnaires in the provided envelop and return them to the researcher after the meeting.

Coaches who completed the questionnaires and agreed to allow their teams to participate in the study were then asked to schedule an appointment with the researcher to meet with their athletes. At the meeting, which typically occurred before practice or at team meetings, the athletes were given a verbal and written explanation of the study being conducted. Athletes then were given the opportunity to voluntarily participate in the study. Athletes who agreed to participate were given a survey packet containing: a cover letter (Appendix R), a demographic questionnaire (Appendix F), Athlete Burnout Questionnaire (Appendix C), the Leadership Scale for Sports (Appendix B), Athlete Satisfaction Questionnaire (Appendix D), and an envelope.

Participants were given as much time as they needed to complete the questionnaires and were assured that their answers would remain confidential. To further ensure confidentiality and anonymity, the athletes did not put their names on the forms and returned them directly to the researcher. In addition, coaches were asked to leave the area during the administration of the questionnaires.

Data Analysis

Data were analyzed using the Statistical Package of Social Sciences (SPSS) version11 software. Data analysis was preceded by first examining scales' reliabilities, correlations among variables, and means and standard deviations for all questionnaires used in this study. The assumption of normality was examined by calculating and inspecting the skewness and kurtosis values for all of the study variables. The level of significance for all statistical tests was set at .05. This level of significance was selected based on its extensive use in the literature.

To test hypothesis one, Pearson product-moment correlation coefficients (PPMC) were calculated for the purpose of determining the relationship between coaches' perceived levels of burnout (emotional exhaustion, personal accomplishment, and depersonalization) and leadership behaviors (training and instruction, autocratic behavior, democratic behavior, social support, and positive feedback). Correlation coefficients are used to allow us to compare the strength and direction of association between different pairs of variables (Gay & Airasian, 2000; Glass & Hopkins, 1996). For example, correlation near +1 has a high size and positive direction of relationship. In this line, correlations in the range of .60 - .80 are considered moderate to high, correlations between .40 - .60 are considered moderate, between .20 - .40 are low and correlations under .20 are considered very low (Gay & Airasian, 2000). The Pearson product-

moment correlation coefficient was chosen because it is the most common correlation technique among correlation coefficients to be used in research, appears to be simple, and gives straightforward indices of relationship (McMillan & Schumacher, 1997). Moreover, "the Pearson *r* is used when both variables to be correlated are expressed as continuous such as ration or interval data" (Gay & Airasian, 2000, p. 329) which fits the situation in this study. Next, linear regression analyses and stepwise regression analyses were conducted using the three burnout variables (emotional exhaustion, personal accomplishment, and depersonalization) as predictor variables (IVs), and the five coaching behaviors of training and instruction, autocratic behavior, democratic behavior, social support, and positive feedback as criterion variables (DVs).

For hypotheses 2a, 2b, 2c, and 2d, PPMC coefficients were first calculated to determine the correlations between the five variables of coaching behaviors (training and instruction, autocratic behavior, democratic behavior, social support, and positive feedback) and the four variables of athlete satisfaction (training and instruction satisfaction, personal treatment satisfaction, team performance satisfaction, and individual performance satisfaction). Then, four separate linear regression analyses and stepwise regression analyses were conducted using the five coaching behaviors of training and instruction, autocratic behavior, democratic behavior, social support, and positive feedback as predictor variables (IVs), and training and instruction satisfaction, personal treatment satisfaction, team performance satisfaction, and individual performance satisfaction as the criterion variables (DVs).

For hypotheses 3a, 3b, and 3c, the same procedures, as mentioned in the second hypothesis, were used. First the PPMC coefficients were calculated and then, three separate linear regression analyses and stepwise regression analyses were conducted. The coaches' behaviors variables of training and instruction, autocratic behavior, democratic behavior, social support, and positive feedback were used as predictor variables (IVs), and athletes' emotional/physical exhaustion, reduced sense of accomplishment, and devaluation as the criterion variables (DVs).

To test the fourth hypothesis, PPMC coefficients were computed in order to determine the magnitude and direction of the relationship between athletes' perceived levels of burnout (emotional/physical exhaustion, reduced sense of accomplishment, and devaluation) and satisfaction (training and instruction satisfaction, personal treatment satisfaction, team performance satisfaction, and individual performance satisfaction).

CHAPTER 4

RESULTS

This chapter presents the results of the data analysis procedures conducted for this study. The presentation of the results is divided into two main sections. The first section describes the procedures undertaken to examine the data for missing subjects, missing data, outliers, and the assumption of normality testing. The second section presents the results of the analyses of this study's hypotheses.

Preliminary Analyses

The purpose of the preliminary analyses was to evaluate the accuracy of data entry, normality, and missing subjects and data. The data collected from all participants were coded and entered to the SPSS spreadsheet. Descriptive statistics of all the variables in this study were examined by using SPSS frequencies. The minimum and maximum values of each variable were examined for the accuracy of data entry by inspecting for "out of range" values. An examination of these values showed that no "out of range" values were entered. In addition, missing subjects were not detected either.

It was noticed that few variables have cases with missing data. Missing data can produce a crippling reduction in the statistical power of data analysis (Tate, 1998). Tabachnick and Fidell (1996) discussed that the seriousness of missing data depends on several factors: size of data set, random versus nonrandom missing data, and number of missing data points. The examination of these missing cases showed that for each variable, the number of missing data was small. Specifically, none of the variables has missing data which exceeded 2.4% of the total sample size. Further examination of these cases showed that the missing values were distributed in a random pattern throughout the sample. Thus, it was concluded that the limited number of missing data would not represent a problem in terms of interpreting the results of this study. Further, it was decided to replace variables with missing data with the mean value of that variable for the entire sample; "the obvious strength of this strategy is that there is no loss of sample size and statistical power" (Tate, 1998, p. 47).

With respect to the potential outliers, Tate (1998) suggested identifying potential outliers by examining the studentized residuals which behaves approximately like a standardized residual with absolute values of approximately 2.5 or 3 and larger reflecting possible outlier observations. Examination of the studentized residuals in this study showed that no cases exceeding +/-2.5 or 3. Thus, no outliers were detected in this study.

The assumption of normality was examined by inspecting the kurtosis and skewness values for each of the variables (see Table 14 and Table 15). The variables' skewness values for the coaches ranged from -.96 to .96, and kurtosis values ranged from -.54 to .18. With regard to the athletes, the variables' skewness values ranged from -.98 to .65, and kurtosis values ranged from -.98 to .83. As shown in Tables 14 and 15, the kurtosis and skewness values for all of the variables were different from zero, indicating that none of the distributions was perfectly normal. Further examination of the normality values presented in the tables show that all of the values were within ±1 from zero, indicating no substantial departure from normality. Tables 14 and 15 show the means, standard deviations, skewness, and kurtosis for all variables in the study.

Table 14
Summary Statistics for Coaches' Leadership Behaviors and Burnout Variables

Variable	Mean	SD	Skewness	Kurtosis
Training and Instruction	4.14	.59	-.96	-.34
Democratic Behavior	3.59	.76	-.46	-.32
Autocratic Behavior	2.84	.75	.29	-.34
Social Support	3.84	.67	-.57	-.44
Feedback	4.05	.71	-.75	-.54
Emotional Exhaustion	12.10	4.97	.38	.02
Depersonalization	5.61	4.90	.96	.18
Personal Accomplishment	39.88	5.91	-.69	-.29

Table 15
Summary Statistics for Athletes Satisfaction, Athletes Burnout, and Athletes Perceptions of Coaches' Leadership Behaviors

Variable	Mean	SD	Skewness	Kurtosis
Training and Instruction Satisfaction	5.02	1.22	-.67	-.98
Personal Treatment Satisfaction	5.29	.94	-.48	-.83
Team Performance Satisfaction	5.29	.95	-.59	-.67
Individual Performance Satisfaction	5.01	1.19	-.56	-.91
Devaluation	2.36	.81	.46	-.28
Reduced Sense of Accomplishment	2.41	.78	.60	-.48
Emotional/Physical Exhaustion	2.4	.81	.65	-.33
Training and Instruction	3.95	.78	-.98	.82
Democratic Behavior	3.58	.82	.41	-.75
Autocratic Behavior	2.63	.59	-.28	.83
Social Support	3.77	.75	-.20	-.10
Feedback	4.09	.64	-.85	.19

Testing of the Study Hypotheses

The first hypothesis stated that the perceived level of coach burnout (emotional exhaustion, depersonalization, and reduced sense of accomplishment) would be negatively correlated with each of the following leadership behaviors: training and instruction, democratic behavior, social support, and positive feedback; and positively correlated with autocratic behavior.

To test this hypothesis, PPMC coefficients were computed to examine the hypothesized relationships among coaches' perceived levels of burnout and leadership behaviors. The results presented in Table 16 indicate significant moderate to strong correlations between coaches' leadership behaviors and burnout.

The correlations among emotional exhaustion and training and instruction, democratic behavior, social support, and feedback were significant ($p < .01$) and ranged from -.40 to -.70. The correlation between emotional exhaustion and autocratic behavior was moderate, negative and significant ($r = .47$; $p < .01$). These results support the direction and magnitude of the correlations assumed in the first hypothesis.

The correlations among personal accomplishment and training and instruction, democratic behavior, social support, and feedback were positive and significant ($p < .01$). These correlations ranged from .57 to .80. Emotional exhaustion was negatively correlated with autocratic behavior ($r = -.45$; $p < .01$). These results support the direction and magnitude of the correlations assumed in the first hypothesis.

The correlations among depersonalization and the five variables of coaching behaviors depicted in Table 16 ranged from -.21 to .20. These correlations were weak and not significant; however, the relationships between depersonalization and training and instruction, democratic behavior, social support, positive feedback, and autocratic behavior were in the direction hypothesized.

Table 16
Correlations between Coaches Leadership Behaviors and Burnout

	Emotional Exhaustion	Depersonalization	Personal Accomplishment
Training and Instruction	-.70**	-.21	.80**
Democratic Behavior	-.40**	-.19	.57**
Autocratic Behavior	.47**	.20	-.45**
Social Support	-.59**	-.21	.79**
Feedback	-.57**	-.16	.77**

** $p < .01$, 2-tailed.

To further elaborate on the correlational findings and to better understand the significant relationships observed between the burnout variables and coaching behaviors' variables, five separate regression analyses were conducted using the three burnout variables (emotional

exhaustion, depersonalization, and personal accomplishment) as the predictor variables, and each leadership behavior variable as the criterion variable. The results of these analyses are presented in Tables 17, 18, 19, 20, and 21.

The results presented in Table 17 indicate that personal accomplishment was the most significant predictor of coaches' training and instruction behavior and accounted for 63% of the variance in coaches' leadership behavior of training and instruction followed by emotional exhaustion which accounted for 5% of the coaches' training and instruction behavior variance. The two-variable prediction model was statistically significant, $F(2, 39) = 41.58$, $p < .0001$, and accounted for 68% of the variance in coaches' leadership behavior of training and instruction.

A second regression analysis was conducted where all burnout variables (i.e., emotional exhaustion, depersonalization, and personal accomplishment) were entered together into the regression model. Results of this analysis (see Table 17) were similar to those found in the stepwise regression analysis. The three variables of coach burnout were found to be significant predictors of the training and instruction behavior, $F(3, 38) = 29.75$, $p < .0001$. Examination of the standardized regression coefficients (β's) showed that personal accomplishment had the strongest regression coefficient, and thus, the main predictor of the coaches' leadership behavior of training and instruction ($\beta = .62$, $p < .01$) followed by emotional exhaustion ($\beta = -.35$, $p < .01$), whereas, depersonalization did not impact coaches' training and instruction behavior ($\beta = .16$).

Table 17
Linear Regression with Coach Burnout (Emotional Exhaustion, Depersonalization, Personal Accomplishment) as Predictors and Coach Training and Instruction Behavior as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Personal Accomplishment	.59	4.82**	.80	.63	.63	68.76**	41.58	.0001
Emotional Exhaustion	-.30	-2.44**	.83	.68	.05	5.93**		
Emotional Exhaustion	-.35	-2.79**						
Depersonalization	.16	1.62						
Personal Accomplishment	.62	5.10**						
			.84	.70	.70	29.75**	29.75	.0001

** $p < .01$

Results of the stepwise regression analysis, presented in Table 18, show that personal accomplishment was the only significant predictor of coaches' democratic behavior, $F(1, 40) = 18.78$, $p < .001$, and accounted for 32% of the variance in coaches' democratic behavior.

In a second regression analysis, all burnout variables were entered together. The regression results were similar to those found in the stepwise regression analysis and revealed that burnout variables were found to be significant predictors of coaches' democratic behavior, $F(3, 38) = 5.97$, $p < .01$, and accounted for 32% of the democratic behavior variance.

Examination of the standardized regression coefficients (β's) showed that personal accomplishment was a significant predictor of coaches' democratic behavior (β = .55, $p < .01$). Emotional exhaustion and depersonalization were not significant predictors of the democratic behaviors and failed to add any accounted variance in the regression equation.

Table 18
Linear Regression with Coach Burnout (Emotional Exhaustion, Depersonalization, Personal Accomplishment) as Predictors and Coach Democratic Behavior as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Personal Accomplishment	.57	4.33**	.57	.32	.32	18.78**	18.78	.0001
Emotional Exhaustion	-.03	-.16						
Depersonalization	.03	.19						
Personal Accomplishment	.55	3.02**						
			.57	.32	.32	5.97**	5.97	.002

** $p < .01$

Stepwise regression was also conducted using emotional exhaustion, depersonalization, and personal accomplishment to account for coach autocratic behavior. The results of this analysis are presented in Table 19. Emotional exhaustion was the only significant predictor of coaches' autocratic behavior and accounted for 22% of the variance in coaches' autocratic behavior, and was significant ($p < .01$).

Table 19
Linear Regression with Coach Burnout (Emotional Exhaustion, Depersonalization, Personal Accomplishment) as Predictors and Coach Autocratic Behavior as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Emotional Exhaustion	.47	3.38**	.47	.22	.22	11.45**	11.45	.002
Emotional Exhaustion	.31	1.59						
Depersonalization	-.02	-.12						
Personal Accomplishment	-.25	-1.30						
			.51	.26	.26	4.35**	4.35	.01

** $p < .01$

In a second regression analysis, the three variables of coach burnout were entered together. These variables were found to be significant predictors of coaches' autocratic behavior, $F(3, 38) = 4.35$, $p < .01$, and accounted for 26% of the variance in coaches' autocratic behavior. Although none of the standardized regression coefficients was significant, this regression was significant at $p < .01$.

Results for the stepwise regression analysis with coaches' social support behavior as the dependent variable are presented in Table 20. The regression results revealed that personal accomplishment was a significant predictor of social support behavior ($\beta = .79$, $p < .01$). The prediction model was statistically significant, $F(1, 40) = 66.20$, $p < .001$, and accounted for 62% of the variance of coaches' social support behavior.

In a second regression analysis, all three variables of coach burnout were entered together. These variables significantly predicted coaches' social support behavior, $F(3, 38) = 22.58$, $p < .001$. They accounted for 64% of the variance of coaches' social support behavior, but, examination of the standardized regression coefficients (β's) revealed that personal accomplishment was the single significant predictor of the coaches' social support behavior ($\beta = .74$; $p < .01$). The other two predictors (i.e., emotional exhaustion and depersonalization) added only 2% accounted variance to that of personal accomplishment.

Table 20
Linear Regression with Coach Burnout (Emotional Exhaustion, Depersonalization, Personal Accomplishment) as Predictors and Coach Social Support Behavior as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Personal Accomplishment	.79	8.14**	.79	.62	.62	66.20**	66.20	.0001
Emotional Exhaustion	-.14	-1.00						
Depersonalization	.12	1.11						
Personal Accomplishment	.74	5.56**						
			.80	.64	.64	22.58**	22.58	.0001

** $p < .01$

Results for the stepwise regression analysis with positive feedback behavior as the dependent variable are presented in Table 21. The regression results revealed that personal accomplishment was a significant predictor of positive feedback behavior ($\beta = .77$, $p < .01$), and accounted for 59% of the variance of coaches positive feedback behavior.

In a second regression analysis, all three variables of burnout were entered together. Although the regression significantly predicted coaches' positive feedback behavior, $F(3, 38) = 20.97$, $p < .001$, and accounted for 62% of the coaches' positive feedback behavior, examination of the standardized regression coefficients (β's) showed that personal accomplishment was the only significant predictor of the coaches' positive feedback behavior ($\beta = .74$, $p < .01$). The other

two predictors (i.e., emotional exhaustion and depersonalization) added only 3% to the accounted variance and were not significant.

Table 21
Linear Regression with Coach Burnout (Emotional Exhaustion, Depersonalization, Personal Accomplishment) as Predictors and Coach Positive Feedback Behavior as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Personal Accomplishment	.77	7.65**	.77	.59	.59	58.52**	58.52	.0001
Emotional Exhaustion	-.14	-1.00						
Depersonalization	.18	1.60						
Personal Accomplishment	.74	5.43**						
			.79	.62	.62	20.97**	20.97	.0001

** $p < .01$

To test hypotheses 2a, 2b, 2c, and 2d, PPMC coefficients between the perceived leadership behaviors of training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback, and the variables of athletes' satisfaction (training and instruction satisfaction, personal treatment satisfaction, team performance satisfaction, and individual performance satisfaction) were computed. These PPMCs are presented in Table 22.

As the results in Table 22 show, moderate to moderately high, positive, and significant correlations were found between all athlete satisfaction variables and coaching behaviors of training and instruction, democratic behavior, social support, and positive feedback (*r*'s = .38 to .66). The correlations among the four variables of athlete satisfaction and autocratic behavior were moderate, negative, and significant (*r*'s = -.35 to -.49).

Table 22
Correlations between Perceived Coaches Leadership Behaviors and Athletes Satisfaction

Variable	TIS	PTS	TPS	IPS
Training and Instruction	.59**	.53**	.38*	.51**
Democratic Behavior	.66**	.65**	.56**	.63**
Autocratic Behavior	-.49**	-.44**	-.41**	-.35*
Social Support	.60**	.56**	.48**	.52**
Feedback	.61**	.63**	.48**	.59**

Note. TIS = Training and Instruction Satisfaction; PTS = Personal Treatment Satisfaction; TPS = Team Performance Satisfaction; IPS= Individual Performance Satisfaction.
** $p < .01$, 2-tailed.
* $p < .05$, 2-tailed.

Hypothesis 2a stated that athlete satisfaction with training and instruction would be positively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and negatively correlated with autocratic behavior. The PPMC coefficients reported in Table 22 show that the correlations between athlete's training and instruction satisfaction and coaching behaviors of training and instruction, democratic behavior, social support, and positive feedback were moderate to moderately high, positive, and significant (r's = .59 to .66, $p < .01$). Autocratic behavior was moderately, negatively, and significantly correlated with athlete's training and instruction satisfaction (r = -.49; $p < .01$). This result supports the relationship hypothesized in hypothesis 2a.

To expand upon these correlational findings and the significant relationships observed between coaching behaviors and athletes' training and instruction satisfaction, a stepwise regression analysis was conducted with the perceived leadership behaviors of training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback as predictor variables, and athlete's training and instruction satisfaction as dependent variable. The results of stepwise regression analysis presented in Table 23 show that coaches' training and instruction behavior accounted for 57% of the variance in athletes' training and instruction satisfaction, and was significant ($p < .01$). Democratic behavior added 4% accounted variance to reach 61% accounted variance in athletes' training and instruction satisfaction. The two-variable prediction model was statistically significant, $F(2, 410) = 316.36$, $p < .001$.

Table 23

Linear Regression with Coach Behaviors (Training and Instruction, Democratic Behavior, Autocratic Behavior, Social Support, and Positive Feedback) as Predictors and Athletes Training and Instruction Satisfaction as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Training and Instruction	.65	17.97**	.76	.57	.57	546.54**	316.36	.0001
Democratic Behavior	.22	6.13**	.78	.61	.04	37.56**		
Training and Instruction	.63	15.59**						
Democratic Behavior	.15	2.54**						
Autocratic Behavior	-.06	-1.63						
Social Support	.08	1.27						
Positive Feedback	-.03	-.79						
			.78	.61	.61	127.94**	127.94	.0001

** $p < .01$

In a second regression analysis, all five variables of perceived leadership behavior were entered together in the regression model. Results of this analysis (see Table 23) were similar to those found in the stepwise regression analysis. The five variables of coaches' behaviors resulted

in a significant model predicting athletes' training and instruction satisfaction, $F(5, 407) = 127.94$, $p < .0001$, and accounted for 61% of the variance in athletes' training and instruction satisfaction. Examination of the standardized regression coefficients (β's) revealed that only training and instruction behavior and democratic behavior were significant predictors of athletes' training and instruction satisfaction (β = .63 and .15 respectively, $p < .01$). The other three predictors (i.e., autocratic behavior, social support, and positive feedback) failed to add any accounted variance of athletes' training and instruction satisfaction.

To test hypothesis 2b stating that athlete satisfaction with personal treatment would be positively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and negatively correlated with autocratic behavior, PPMC coefficients were computed (see Table 22). The correlations between athlete personal treatment satisfaction and coaching behaviors of training and instruction, democratic behavior, social support, and positive feedback were moderate to moderately high, positive, and significant (r's = .59 to .66, $p < .01$) were moderate to moderately high and significant (r's = .53 to .65, $p < .01$). The correlation between autocratic behavior and athlete personal treatment satisfaction was moderate, negative, and significant ($r = -.44$, $p < .01$). This result supports the relationship hypothesized in hypothesis 2b.

To expand upon these correlational findings and depicting the relationships observed between coaching behaviors and athletes' personal treatment satisfaction, a stepwise regression analysis was conducted with the perceived leadership behaviors of training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback as predictor variables, and athlete's personal treatment satisfaction as dependent variable. The results of stepwise regression analysis presented in Table 24 revealed that training and instruction behavior accounted for 52% of the personal treatment satisfaction variance, and was significant ($p < .01$). The standardized regression coefficient of training and instruction (β = .58) was significant ($p < .01$). Social support was added second to training and instruction model, adding 4% of the explained personal treatment satisfaction variance. The standardized regression coefficient of social support (β = .58) was significant ($p < .01$). In the third step, autocratic behavior was added as a predictor to the training and instruction and social support model. The accumulated explained variance reached 57%, adding 1% to the personal treatment satisfaction accounted variance. The standardized regression coefficient of autocratic behavior (β = -.09) was significant ($p < .05$) and in the expected negative direction. The three-variable prediction model was statistically significant, $F(3, 409) = 176.87$, $p < .001$.

In a second regression analysis, all five variables of perceived leadership behaviors were entered together in the regression model. Results of this analysis (see Table 24) were similar to those found in the stepwise regression analysis. The five variables of coaches' behaviors resulted in a significant regression predicting athletes' personal treatment satisfaction, $F(5, 407) = 106.37$, $p < .001$, and accounted for 57% of the variance in athletes' personal treatment satisfaction. However, examination of the standardized regression coefficients (β's) revealed that training and instruction behavior , social support, and autocratic behavior were significant predictors of athletes' personal treatment satisfaction (β = .58, .15, -.09 respectively, $p < .05$). The other two coaching behaviors (i.e., democratic behavior and positive feedback) failed to contribute any accounted variance in athletes' personal treatment satisfaction.

Table 24
Linear Regression with Coach Behaviors (Training and Instruction, Democratic Behavior, Autocratic Behavior, Social Support, and Positive Feedback) as Predictors and Athletes Personal Treatment Satisfaction as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Training and Instruction	.58	14.45**	.722	.52	.52	448.14**	176.87	.0001
Social Support	.21	5.33**	.747	.56	.04	33.87**		
Autocratic Behavior	-.09	-2.49*	.751	.57	.01	6.22*		
Training and Instruction	.58	13.43**						
Democratic Behavior	.08	1.27						
Autocratic Behavior	-.09	-2.39*						
Social Support	.15	2.19*						
Positive Feedback	-.01	-.14						
			.753	.57	.57	106.37**	106.37	.0001

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

To test hypothesis 2c, stated that athlete satisfaction with team performance would be positively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and negatively correlated with autocratic behavior, PPMC coefficients were computed (see Table 22). The correlations between team performance satisfaction and coaching behaviors of training and instruction, democratic behavior, social support, and positive feedback were moderate, positive, and significant (*r*'s = .38 to .56, $p < .01$). The correlation between autocratic behavior and athlete team performance satisfaction was moderate, negative, and significant ($r = -.41$, $p < .01$).

To expand upon these correlational findings and the relationships observed between coaching behaviors and team performance satisfaction, a stepwise regression analysis was conducted with the perceived leadership behaviors of training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback as predictor variables, and team performance satisfaction as dependent variable. The results of stepwise regression analysis presented in Table 25 show that training and instruction behavior accounted for 47% of the variance in team performance satisfaction, and was significant ($p < .01$). The standardized regression coefficient of training and instruction (β = .58) was significant ($p < .01$). Democratic behavior added 3% to the accounted variance of team performance satisfaction. The standardized regression coefficient of democratic behavior (β = -.21) was also significant ($p < .01$). The two-variable prediction model was statistically significant, $F(2, 410) = 179.20$, $p < .001$, and accounted for 50% of the variance in team performance satisfaction.

In a second regression analysis, all five variables of perceived leadership behaviors were entered together in the regression model. Results of this analysis (see Table 25) were similar to those found in the stepwise regression analysis. The five variables of coaches' behaviors resulted in a significant regression equation predicting team performance satisfaction, $F(5, 407) = 71.90$,

$p < .001$, and accounted for 51% of the variance in athletes' team performance satisfaction. Examination of the standardized regression coefficients (β's) revealed that training and instruction behavior was a significant predictor of team performance satisfaction (β = .60, $p < .01$) followed by democratic behavior (β = .19, $p < .01$). Although, the other three predictors add together 1% of the accounted variance, they were not significant ($p > .05$).

Table 25
Linear Regression with Coach Behaviors (Training and Instruction, Democratic Behavior, Autocratic Behavior, Social Support, and Positive Feedback) as Predictors and Team Performance Satisfaction as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Training and Instruction	.58	14.47**	.69	.47	.47	367.58**	179.20	.0001
Democratic Behavior	.21	5.11**	.71	.50	.03	26.07**		
Training and Instruction	.60	13.10**						
Democratic Behavior	.19	2.82**						
Autocratic Behavior	-.00	-.10						
Social Support	.03	.43						
Positive Feedback	-.05	-1.12						
			.71	.51	.51	83.13**	71.90	.0001

** $p < .01$

Hypothesis 2d stated that athlete satisfaction with individual performance would be positively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and negatively correlated with autocratic behavior.

To test this hypothesis, PPMC coefficients were computed (see Table 22). The correlations between athlete's individual performance satisfaction and the five coaching behaviors were moderate to moderately high and significant (r's = = -.35 to .63, $p < .05$). The PPMC coefficients reported in Table 22 show that the correlations between athlete's individual performance satisfaction and coaching behaviors of training and instruction, democratic behavior, social support, and positive feedback were moderate to moderately high, positive, and significant (r's = .51 to .63, $p < .01$). Autocratic behavior was moderately, negatively, and significantly correlated with athlete's individual performance satisfaction ($r = -.35$, $p < .01$). This result supports the relationship hypothesized in hypothesis 2d.

Furthermore, a stepwise regression analysis was conducted using the perceived leadership behaviors of training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback as predictor variables, and individual performance satisfaction as dependent variable. The results of stepwise regression analysis presented in Table 26 show that coaches' training and instruction behavior accounted for 38% of the variance in individual

performance satisfaction, and was significant ($p < .01$). The standardized regression coefficient of training and instruction ($\beta = .55$) was also significant ($p < .01$). Democratic behavior added 5% accounted variance to reach 43% of the variance accounted for individual performance satisfaction. The standardized regression coefficient of democratic behavior ($\beta = .28$) was also significant ($p < .01$). Positive feedback added addition 1% to the accumulated variance to reach 44% of the individual performance satisfaction accounted variance. The standardized regression coefficient of positive feedback ($\beta = -.14$) was significant ($p < .01$). The three-variable prediction model was statistically significant, $F(3, 409) = 106.33$, $p < .001$, and accounted for 44% of the variance explained in individual performance satisfaction.

In a second regression analysis, all five variables of perceived leadership behaviors were entered together in the regression model. Results of this analysis (see Table 26) were similar to those found in the stepwise regression analysis. The five variables of coaches' behaviors were found to produce a significant regression predicting individual performance satisfaction, $F(5, 407) = 64.15$, $p < .001$, and accounted for 44% of the variance in individual performance satisfaction. However, examination of the standardized regression coefficients (β's) revealed that training and instruction behavior, democratic behavior, and positive feedback were significant predictors of individual performance satisfaction ($\beta = .56, .34, -.12$ respectively, $p < .01$). The other two coaching behaviors (i.e., autocratic behavior and social support) failed to contribute to the accounted variance in individual performance satisfaction, and produced nonsignificant ($p > .05$) regression coefficients.

Table 26
Linear Regression with Coach Behaviors (Training and Instruction, Democratic Behavior, Autocratic Behavior, Social Support, and Positive Feedback) as Predictors and Individual Performance Satisfaction as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Training and Instruction	.55	11.57**	.62	.38	.38	250.53**	106.33	.0001
Democratic Behavior	.28	6.38**	.65	.43	.05	33.83**		
Positive Feedback	-.14	-2.97**	.66	.44	.01	8.82**		
Training and Instruction	.56	11.57**						
Democratic Behavior	.34	4.65**						
Autocratic Behavior	.04	1.05						
Social Support	-.06	-.83						
Positive Feedback	-.12	-2.66**						
			.66	.44	.44	64.15**	64.15	.0001

** $p < .01$

To test hypotheses 3a, 3b, and 3c, PPMC coefficients between the perceived leadership behaviors of training and instruction, democratic behavior, autocratic behavior, social support,

and positive feedback, and the variables of athletes' burnout (devaluation, reduced sense of accomplishment, and emotional/physical exhaustion) were computed. These PPMCs are presented in Table 27.

The results presented in Table 27 show that significant, negative, and moderate to moderately high correlations were found between all athlete burnout variables and coaches' leadership behavior of training and instruction, democratic behavior, social support, and positive feedback (*r*'s = -.58 to -.70). The correlations between autocratic behavior and the three variables of athlete burnout ranged from .47 to .56. These correlations were moderate, positive, and significant.

Table 27

Correlations between Perceived Coaches Leadership Behaviors and Athletes Burnout

Variable	DEV	RSA	EPE
Training and Instruction	-.60**	-.63**	-.58**
Democratic Behavior	-.66**	-.69**	-.64**
Autocratic Behavior	.47**	.56**	.52**
Social Support	-.66**	-.70**	-.63**
feedback	-.70**	-.65**	-.65**

Note. DEV = Devaluation; RSA = Reduced Sense of Accomplishment; EPE = Emotional/ Physical Exhaustion

** $p < .01$

Hypothesis 3a athletes' levels of devaluation would be negatively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and positively correlated with autocratic behavior.

The PPMC coefficients were computed to test this hypothesis and the results presented in Table 27 revealed that the correlations between athlete's levels of devaluation and coaching behaviors of training and instruction, democratic behavior, social support, and positive feedback were moderately high, negative, and significant (*r*'s = -.60 to -.70, $p < .01$). Autocratic behavior was moderately, positively, and significantly correlated with athlete's training and instruction satisfaction ($r = -.49$; $p < .01$). This result supports the relationships hypothesized in hypothesis 3a.

To further expand upon these correlational findings depicting the relationships observed between athlete devaluation and coaching behaviors, a stepwise regression analysis was conducted using the perceived leadership behaviors of training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback as the predictor variables, and athletes' devaluation as the dependant variable. The results of stepwise regression analysis presented in Table 28 revealed that coach autocratic behavior accounted for 18% of the devaluation variance, and was significant ($p < .01$). The standardized regression coefficient of autocratic behavior ($\beta = .32$) was also significant ($p < .01$). Training and instruction behavior added 8% to the accounted variance of athlete devaluation. The standardized regression

coefficient of training and instruction (β = .30) was significant ($p < .01$).The two-variable prediction model was statistically significant, $F(2, 410) = 44.79$, $p < .001$, and accounted for 26% of the variance in athletes' devaluation.

A second regression analysis was conducted where the five variables of perceived leadership behavior were entered collectively in the regression model. The results of this analysis were similar to the results found in the stepwise regression analysis (see Table 28). The five variables of coaches' behaviors resulted in a significant regression equation predicting athlete devaluation, $F(5, 407) = 29.23$, $p < .001$, and accounted for 26% of the variance in athletes' devaluation. Nevertheless, examination of the standardized regression coefficients (β's) revealed that autocratic behavior and training and instruction behavior were the only significant predictors of athletes' devaluation (β = .33, -.33 respectively, $p < .01$). The other three coaching behaviors (i.e., democratic behavior, social support, and feedback) failed to contribute to the accounted variance of athletes' devaluation, and produced nonsignificant regression coefficients ($p > .05$).

Table 28

Linear Regression with Coach Behaviors (Training and Instruction, Democratic Behavior, Autocratic Behavior, Social Support, and Positive Feedback) as Predictors and Devaluation as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Autocratic Behavior	.32	6.97**	.42	.18	.18	89.20**	44.79	.0001
Training and Instruction	-.30	-6.63**	.51	.26	.08	43.97**		
Training and Instruction	-.33	-5.99**						
Democratic Behavior	.10	1.19						
Autocratic Behavior	.33	7.09**						
Social Support	-.10	-1.19						
Positive Feedback	.08	1.48						
			.51	.26	.26	29.23**	29.23	.0001

** $p < .01$

To test hypothesis 3b, which stated that athletes' reduced sense of accomplishment would be negatively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and positively correlated with autocratic behavior, PPMC coefficients were committed (see Table 27).

The PPMC coefficients reported in Table 27 show that the correlations between athlete's athletes' reduced sense of accomplishment and coaching behaviors of training and instruction, democratic behavior, social support, and positive feedback were moderately high, negative, and significant (r's = -.63 to -.70; $p < .01$). Autocratic behavior was moderately, negatively, and significantly correlated with athlete's training and instruction satisfaction ($r = -.56$; $p < .01$). This result supports the relationship hypothesized in hypothesis 3b.

Moreover, a stepwise regression analysis was conducted using the perceived leadership behaviors of training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback as the predictor variables, and athletes' reduced sense of accomplishment as the dependant variable. The results of stepwise regression analysis presented in Table 29 show that training and instruction behavior accounted for 33% of the variance in athlete reduced sense of accomplishment, and was significant ($p < .01$). The standardized regression coefficient of training and instruction ($\beta = -.46$) was also significant ($p < .01$). Autocratic behavior added 2% accounted variance to reach 35% of the variance accounted for athlete reduced sense of accomplishment. Democratic behavior added 1% to the accumulated variance to reach 36% of the athlete reduced sense of accomplishment accounted variance. The standardized regression coefficient of democratic behavior (($\beta = -.13$) was significant (($p < .01$). The three-variable prediction model was statistically significant, $F(3, 409) = 76.36$, $p < .001$, and accounted for 36% of the variance in athletes reduced sense of accomplishment.

Table 29

Linear Regression with Coach Behaviors (Training and Instruction, Democratic Behavior, Autocratic Behavior, Social Support, and Positive Feedback) as Predictors and Reduced Sense of Accomplishment as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Training and Instruction	-.46	-9.68**	.57	.33	.33	197.91**	76.36	.0001
Autocratic Behavior	.13	3.03**	.59	.35	.02	13.00**		
Democratic Behavior	-.13	-2.91**	.60	.36	.01	8.45**		
Training and Instruction	-.47	-9.02**						
Democratic Behavior	-.20	-2.54*						
Autocratic Behavior	.13	3.07**						
Social Support	.08	.95						
Positive Feedback	.00	.08						
			.60	.36	.36	45.90**	45.90	.0001

** $p < .01$

* $p < .05$

In a second regression analysis, all five variables of perceived leadership behaviors were entered together into the regression model. Results of this analysis (see Table 29) were similar to those found in the stepwise regression analysis. The five variables of coaches' behaviors resulted in a significant regression equation predicting athletes' reduced sense of accomplishment, $F(5, 407) = 45.90$, $p < .001$, and accounted for 36% of the variance in athletes' reduced sense of accomplishment. Examination of the standardized regression coefficients (β's) revealed that training and instruction behavior, autocratic behavior, and democratic behavior were significant predictors of athletes' reduced sense of accomplishment (β = -.47, .13, -.20 respectively). The

other two coaching behaviors (i.e., social support and positive feedback) failed to contribute to the accounted variance in athlete reduced sense of accomplishment, and produced nonsignificant ($p > .05$) regression coefficients.

Hypothesis 3c, athletes' emotional/physical exhaustion would be negatively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and positively correlated with autocratic behavior.

The PPMC coefficients were computed to test this hypothesis and the results presented in Table 27 revealed that the correlations between athlete's emotional/physical exhaustion and coaching behaviors of training and instruction, democratic behavior, social support, and positive feedback were moderate to moderately high, negative, and significant (r's ranged from -.58 to -.65, $p < .01$). The correlation between athlete's emotional/physical exhaustion and autocratic behavior was moderate, positive, and significant ($r = .52$, $p < .01$). This result supports the relationships hypothesized in hypothesis 3c.

To further elaborate on these correlational findings, a stepwise regression analysis was conducted using the perceived leadership behaviors of training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback as predictor variables, and athletes' emotional/physical exhaustion as the criterion variable. The results of stepwise regression analysis presented in Table 30 indicate that training and instruction was the most significant predictor of athletes' emotional/physical exhaustion and accounted for 19% of the variance in athlete emotional/physical exhaustion followed by autocratic behavior which accounted for additional 9% of the variance in athlete emotional/physical exhaustion. The two-variable prediction model was statistically significant, $F(2, 410) = 78.69$, $p < .001$, and accounted for 28% of the variance in athletes emotional/physical exhaustion.

Table 30

Linear Regression with Coach Behaviors (Training and Instruction, Democratic Behavior, Autocratic Behavior, Social Support, and Positive Feedback) as Predictors and Emotional/Physical Exhaustion as Criterion

Variable	β	*t*	R	R^2	ΔR^2	ΔF	Overall F	*p*
Training and Instruction	-.33	-7.29**	.44	.19	.19	96.85**	78.69	.0001
Autocratic Behavior	.31	7.01**	.53	.28	.09	49.14**		
Training and Instruction	-.36	-6.46**						
Democratic Behavior	.10	1.17						
Autocratic Behavior	.32	7.05**						
Social Support	-.08	-.97						
Positive Feedback	.05	1.03						
			.53	.28	.28	31.90**	31.90	.0001

** $p < .01$

A second regression analysis was conducted where all five variables of perceived leadership behaviors were entered together into the regression model. Results of this analysis (see Table 30) were similar to those found in the stepwise regression analysis. The five variables of coaches' behaviors resulted in a significant regression equation predicting athletes' emotional/physical exhaustion, $F(5, 407) = 31.90$, $p < .001$, and accounted for 28% of the variance in athletes' emotional/physical exhaustion. Examination of the standardized regression coefficients (β's) revealed that training and instruction behavior and autocratic behavior were the only significant predictors of athletes' reduced sense of accomplishment (β = -.36, .32 respectively; $p < .01$). The other three coaching behaviors (i.e., democratic behavior, social support, and positive feedback) failed to contribute to the accounted variance in athletes' emotional/physical exhaustion, and produced nonsignificant ($p > .05$) regression coefficients.

The fourth hypothesis stated that athletes' satisfaction (i.e., training and instruction satisfaction, personal treatment satisfaction, team performance satisfaction, and individual performance satisfaction) would be negatively correlated with athletes' burnout (i.e., emotional/physical exhaustion, reduced sense of accomplishment, and devaluation).

To examine the hypothesized relationships, PPMC coefficients were computed. These PPMCs are presented in Table 31. The correlations among athletes' devaluation and the four factors of athlete satisfaction ranged from $r = -.63$ to $r = -.69$. These correlations were moderately high and significant at the .01 level. The correlations among the four factors of athlete satisfaction and athletes' reduced sense of accomplishment depicted in Table 31 were negative, moderately high to strong, and significant (r's = -.66 to - .74). Finally, the correlations among athletes emotional/physical exhaustion and the four factors of athlete satisfaction were moderately high, significant at .01 level, and ranged from $r = -.61$ to $r = -.70$. Furthermore, the resulting correlations went in the direction hypothesized, and so, these results support the relationships postulated in the fourth hypothesis.

Table 31
Correlations between Athletes Satisfaction and Burnout Scales

Scale	DEV	RSA	EPE
Training and Instruction Satisfaction	-.69**	-.74**	-.70**
Personal Treatment satisfaction	-.69**	-.72**	-.67**
Team Performance Satisfaction	-.63**	-.71**	-.67**
Individual Performance Satisfaction	-.63**	-.66**	-.61**

Note. DEV = Devaluation; RSA = Reduced Sense of Accomplishment; EPE = Emotional/ Physical Exhaustion
** $p < .01$

CHAPTER 5
DISCUSSION AND CONCLUSIONS

Burnout among active and highly successful people in professional positions has been recognized as a serious problem confronting organizations. Freudenberger (1980) indicated that burnout is experienced across a broad range of professions and that there is some commonality in the burnout phenomenon across individuals. Highly motivated professionals spend great amounts of energy and emotional resources on the job. If those resources are not replenished, either the job or through creative coping skills, the individual becomes through prime candidate for burnout.

In recent years, the term burnout has begun to appear with increasing frequency in the athletic community (e.g., Capel et al., 1987; Collins, 2002; Dale & Weinberg, 1989; Graf, 1992; Kelley, 1994; Kelley et al., 1999; Price & Weiss, 2000; Raedeke, 1997, Raedeke et al., 2000, 2002; Vealey et al., 1992, 1998). Coaches at all levels have begun to discuss the dangers of burnout in their profession. Elite athletes have dropped-out of sports at the peak of their careers, maintaining that they are "burned out" and that participation has become too aversive for them to continue (Smith, 1986). Given the coach as a central and important social agent in a majority of sport contexts (Brusted, Babkes, & Smith, 2001), the process of how coach behaviors influence athletes behaviors is of interest.

The dynamics of the sport domain encourage frequent and intense interactions between coaches and athletes. Interactions with athletes are reported as one contributor to coach burnout (Dale & Weinberg, 1989; Kelley et al., 1999; Price & Weiss, 2000; Udry, Gould, Bridges, & Tuffey, 1997; Vealey et al., 1998). Similarly, athletes have identified their interactions with coaches as one potential source of feelings of burnout (Gould et al., 1996a, 1997; Price & Weiss, 2000; Udry et al., 1997; Vealey et al., 1998). This interaction among coaches, athletes, and burnout may be effectively explained within the coaching behaviors and leadership style research (Price & Weiss, 2000).

A feasible model from which to understand the coach- athlete relationship is the Multidimensional Model of Leadership (Chelladurai, 1980, 1999). According to Chelladurai, effectiveness of coaching behaviors is a function of situational, member, and leader characteristics. Situational characteristics (e.g., sport type, program structure) vary according to the specific context and influence the appropriateness of coaching behaviors. Member characteristics (e.g., age, gender, psychological characteristics) primarily influence athletes' preferred coaching behaviors, while the coach's personal characteristics (e.g., gender, age, years of experience, psychological characteristics) influence the coach's actual behaviors. Coaching behaviors are described in terms of training and instruction, decision-making styles (democratic, autocratic), social support, and positive feedback. These coaching behaviors are predicted to

influence athlete performance and satisfaction. Within Chelladurai's (1980, 1999) model, the linkage between coach behaviors, and athlete outcomes has received little attention (Horn, 1992, Price & Weiss, 2000). Based on theory and research, it is possible that coaches who show higher levels of burnout may lead them to behave in certain ways (Price & Weiss, 2000). For example, burned-out coaches who are emotionally and physically exhausted, feel withdrawn from or negative toward athletes, and experience feelings of inadequacy may provide less training and instruction, positive feedback, and social support and bend toward a decision-making style that is easier to implement (i.e., autocratic). Since the coach-athlete relationship is dynamic and interactive, these behaviors are likely to affect athletes' psychological outcomes such as self-confidence, motivation, anxiety, satisfaction, and burnout (Price & Weiss, 2000). Therefore, the coach-athlete relationship studied within the multidimensional model of leadership is an appropriate approach to studying the relationship among coach behaviors and athletes' psychological outcomes. The main purpose of this study was to investigate the relationship between coaches' burnout, coaches' behaviors, and levels of burnout and satisfaction experienced by college athletes. This study also examined the links between coach burnout and perceived leadership behaviors as well as the relationship between athlete's satisfaction and burnout.

Discussion of Findings

Based on the purposes of this study, a set of four main hypotheses was developed and examined using data collected from 42 coaches and 413 male and female college athletes from 8 public universities in Jordan. Five questionnaires were first translated into Arabic language and then distributed to the coaches and athletes to fill.

To answer the four main hypotheses: first, PPMCs were computed to examine the correlations between the study's variables and second, linear regressions and stepwise regressions were employed to estimate the unique and accumulated variance in each dependent variable accounted for by the independent variables, according to the study hypotheses.

Coaches' Leadership Behaviors and Perceived Burnout

The first hypothesis stated that the perceived level of coach burnout (emotional exhaustion, depersonalization, and reduced sense of accomplishment) would be negatively correlated with each of the following leadership behaviors: training and instruction, democratic behavior, social support, and positive feedback, and positively correlated with autocratic behavior.

The findings of the present study showed partial support for this hypothesis. Leadership behaviors correlated significantly and in the hypothesized direction with emotional exhaustion and personal accomplishment. The correlation between depersonalization and coaches' leadership behaviors were low and not significant, though, were in the hypothesized direction. Specifically, emotional exhaustion was significantly and negatively correlated with coaches' behaviors of training and instruction, democratic behavior, social support, and positive feedback (r = -.70, -.40, -.59, -.57 respectively), and positively correlated with autocratic behavior (r = .47). Coaches who felt emotionally exhausted were perceived as providing less training and

instruction, less social support, and less feedback to their athletes. These results are similar to those reported by Price and Weiss (2000) and Vealey et al. (1998). Price and Weiss (2000) found that coaches who felt emotionally depleted and worn-out were seen as providing less teaching of skills and techniques, showing less concern for their teams, and withdrawing from athletes' interactions. Vealey et al. (1998) reported that emotionally exhausted coaches used less praise and displayed less empathy and communication ability with their athletes.

The results also showed that emotionally exhausted coaches were perceived as exhibiting more autocratic and less democratic behaviors. This result is similar to the results reported by Vealey et al. (1998). Although Vealey et al. did not use the LSS as a measure of coaches' leadership behaviors; they did assess autocratic decision making style. They found that coaches who were higher in emotional exhaustion made more autocratic decisions. In contrast, Price and Weiss (2000) found that emotionally exhausted coaches demonstrated less autocratic behaviors. According to Price and Weiss, "emotionally exhausted coaches could have adopted an "I don't care" attitude, thus relinquishing control and allowing athlete more inputs into important team matters" (p. 404). Emotional exhaustion refers to the feelings of being emotionally overextended and having depleted emotional resources (Leiter & Maslach, 2001). Emotionally exhausted people feel drained and used-up, without any source of replacement. They lack enough energy to face another day or another person in need. Exhaustion prompts people to distance themselves emotionally and cognitively from their work and their clients (Leiter & Maslach, 2001; Maslach et al. 2001). This could be a possible explanation to the results found in this study. Coaches higher in emotional exhaustion may try to separate themselves from their work by showing less care and concern for their teams, withdrawing from athlete interactions, providing less teaching of skills and techniques, less feedback, and exhibiting more autocratic behaviors.

Depersonalization was not significantly correlated with coaching behaviors. This result may be not surprising given the centrality of emotional exhaustion in the burnout phenomenon Leiter & Maslach, 2001; Maslach et al. 2001). According to Maslach et al. (2001), "exhaustion is the central quality of burnout and the most obvious manifestation of this complex syndrome" (p. 402). When people describe themselves or others as experiencing burnout, they are most often referring to the experience of exhaustion.

With regard to personal accomplishment, the results of this study revealed that personal accomplishment was significantly and positively correlated with coaches' behaviors of training and instruction, democratic behavior, social support, and positive feedback (r = .80, .57, .79, .77 respectively), and negatively correlated with autocratic behavior (r = -.45). Coaches with strong feelings of personal accomplishment were perceived as providing more training and instruction, more social support, and more feedback to their athletes. Additionally, they were perceived as showing more care and concern for their athletes, allowing athletes participation in decision making, and asking for athletes' opinions on important team matters. These results were in line with the findings of Vealey et al. (1998) who reported that coaches with stronger feelings of personal accomplishment were perceived by their athletes as having greater tendency to use praise, communicate effectively, and display empathy and fewer tendencies to use dispraise and an autocratic coaching style. The findings are however, different from those reported by Dale and Weinberg (1989) and Price and Weiss (2000). Price and Weiss (2000), for example, found no relationships between personal accomplishment and coaches leadership behaviors. Explanation for the discrepancy in results in the different studies might be a result of the use of different instruments, competitive levels, and units of analysis. Using different instruments to

measure the same phenomenon in the different studies may lead to discrepant findings and interpretations. In the current study, the LSS was utilized to assess athletes' perceptions of coaching behaviors, Dale and Weinberg (1989) used the Leader Behavior Description Questionnaire (LBDQ) to measure leadership behaviors, whereas, Vealey et al. (1998) used the Coaching Behavior Inventory (CBHI) in assessing athletes' perceptions of coaching behaviors. Methodological issues such as using different sample sizes and using individuals or teams as the unit of analyses may also lead to different findings. The levels of competition could account for the discrepant findings in the different studies. The demands and pressures on coaches may differ across divisions and levels of competitions. For example, hunt (1983) found that Division I coaches experienced more burnout than their Division III counterparts did. In contrast, Graf (1992) and Kelley et al. (1999) found no differences between NCAA Division I coaches and those working at other levels.

In addition to the correlational findings, an examination of the relative contributions of coaches' burnout (i.e., emotional exhaustion, depersonalization, and personal accomplishment) to coaches' leadership behaviors (i.e., training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback) accounted variance was carried out. The results from this analysis revealed that the three burnout variables accounted for 70% of the variance in training and instruction behavior, with personal accomplishment accounting the most (63%). The burnout variables accounted for 32% and 26% of the variance in democratic and autocratic behaviors respectively. Moreover, the three burnout variables accounted for 64% of the social support variance and 62% of positive feedback variance, with personal accomplishment being the most significant predictor accounting for 62% and 59% of the accounted variance respectively.

In conclusion, it appears that coaches in this study were not burnout and have high levels of personal accomplishment. This may led the coaches to exhibit more democratic and less autocratic behaviors, provide more training and instruction, more social support, and more feedback to their athletes. Another possible explanation of the findings of this study could be the time of the year the data were collected. For this study, data were collected during the summer semester after the competitive season ended (off-season), and perhaps this is when coaches show the lowest levels of burnout. Coaches most likely go through degrees of burnout, dependent upon time of the year. Some months they are not burned out, while in other months they may be at their limit of emotional exhaustion, depersonalization, and reduced feelings of personal accomplishment (Collins, 2002). A final explanation could be that the nature of sport and coaching profession especially at the collegiate level in Jordan, which provides greater prestige for college coaches, cause the coaches to feel less burned-out and in turn exhibit more democratic behavior and show more care and concern for their athletes.

Perceived Coach Behaviors and Athlete Satisfaction

The second set of hypotheses (2a – 2d) stated that athletes' satisfaction would be positively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and negatively correlated with autocratic behavior.

The resulting correlations (see Table 22) supported this hypothesis. All coaches' leadership behaviors were found to be significantly correlated with all athlete satisfaction variables. The correlations between athletes' training and instruction satisfaction and coaching

behaviors of training and instruction, democratic behavior, social support, and positive feedback were moderately high, positive, and significant (*r*'s = .59 to .66). Personal treatment satisfaction was positively and significantly correlated with training and instruction (*r* = .53), democratic behavior (*r* = .65), social support (*r* = .56), and positive feedback (*r* = .63). The correlations between team performance satisfaction and coaching behaviors of training and instruction, democratic behavior, social support, and positive feedback ranged from .38 to .56. These correlations were also significant. Autocratic behavior correlated negatively and significantly with all athlete satisfaction variables (*r*'s = -.35 to -.49).

The regression analyses also demonstrated unique contributions of coaching behaviors to the variance explained in athletes' satisfaction. Coaching behavior of training and instruction was found to be the most important contributor to athlete satisfaction. It accounted for 57% of the variance in athlete satisfaction with training and instruction, 52% of the variance in personal treatment satisfaction, 47% of the variance in satisfaction with team performance, and 38% of the variance in individual performance satisfaction. It looks obvious that training and instruction was identified as the leader behavior that contributed most to the relationship with athletes' satisfaction. Training and instruction is coaching behavior aimed at improving the athletes' performance by emphasizing and facilitating hard and strenuous training; instructing them in the skills, techniques, and tactics of the sport, and structuring and coordinating the members' activities (Chelladurai, 1996). It seems that college athletes in Jordan appreciate such a behavior exhibited by their coaches to improve their abilities and performance.

Democratic behavior was also identified as a significant predictor of athlete satisfaction. The results indicated that democratic behavior accounted for 5% of the variance in satisfaction with individual performance, 4% of the variance in satisfaction with training and instruction, and 3% of the variance in satisfaction with team performance. According to Chelladurai (1996), democratic coaches allow greater participation by the athletes in decisions pertaining to group goals, practice methods, and game tactics and strategies. It is not surprising that college athletes in Jordan desire and appreciate more involvement in the decisions pertaining to group goals, practice methods, and game tactics and strategies. Since the athletes' success or failure depends mostly on themselves, they may feel the need to be involved in the training process, and they seem to prefer coaches who let them express their ideas and set their own goals.

In addition to the training and instruction and democratic behaviors, the results also revealed that certain coaching behaviors were predictive of some athlete satisfaction subscales. A coach's social support behavior was predictive of athlete satisfaction with personal treatment accounting for 4% of the variance. Perhaps the coach's care and concern for the welfare of athletes, and the efforts made to produce positive group atmosphere generate this positive feeling among athletes. Although positive feedback accounted only for 1% of the variance in individual performance satisfaction, it was a significant predictor of individual performance satisfaction. It might be that the complements, recognition, and rewards athlete receive from his/her coach for good performance led to this feeling of satisfaction. Finally, autocratic behavior was found to be predictive of athletes' satisfaction with personal treatment. Since this behavior was correlated negatively with personal treatment satisfaction, it could be said that avoiding behaviors likely to be perceived as autocratic may increase athlete satisfaction.

The results of this study are consistent with the findings from Chelladurai (1984) and Chelladurai et al. (1988). Chelladurai et al. (1988), for example, assessed member satisfaction with leadership and satisfaction with personal outcome in Japanese and Canadian university

athletes. The results showed that high perceptions on four leadership behaviors (i.e., training and instruction, democratic behavior, social support, and positive feedback) and low perceptions on autocratic behavior were related to high satisfaction with leadership. The leadership variables jointly explained 41% and 57% of the variance in the Japanese and Canadian data, respectively. However, only the unique contributions of training and instruction and autocratic behavior in the Japanese data, and those of training and instruction and positive feedback in the Canadian data, were significant. Chelladurai (1984) found that satisfaction with leadership for basketball players produced significant relationships with training and instruction, democratic behavior, social support, and positive feedback. The greater the perceptions of the actual behaviors in these four dimensions relative to the athletes' preference, the higher was satisfaction with leadership. Analysis of the dimension of autocratic behavior indicated the opposite results, that is, the greater the perceptions of actual behaviors, the lower the satisfaction with leadership. Significant relationships were also found with wrestlers in the dimensions of training and instruction, and social support. An increase in the perception of these behaviors was related to an increase in the level of satisfaction with leadership. Finally, track and field players showed significance in only two dimensions, training and instruction and autocratic behavior.

However, the results of this study are somewhat at odds with the findings from Dwyer and Fischer (1990) research on wrestlers, Schliesman (1987) research on university track and field athletes, Riemer and Chelladurai (1995) research on college football players, and Weiss and Friedrichs (1986) research on basketball players. Dwyer and Fischer (1990) found that wrestlers' perceptions of positive feedback, training and instruction, and autocratic behavior were the best predictors of satisfaction with leadership. Dwyer and Fischer explained that wrestlers who perceived coaches as high on positive feedback, high on training and instruction, and low on autocratic behavior exhibited higher levels of satisfaction with coach's leadership behavior. Schliesman (1987) reported that only high perceptions of democratic behavior and social support were positively related to general satisfaction with leadership. Riemer and Chelladurai (1995) found that perceptions were significantly correlated with leadership satisfaction only in the cases of training and instruction and positive feedback.

In the present study, the percent of the variance in athlete's satisfaction accounted for by their perceptions of their coaches' leadership behaviors is comparable to Chelladurai, et al.'s (1988) findings that this variable accounted for 41% and 57% of the variance in the satisfaction with leadership among Japanese and Canadian athletes, respectively. However, Weiss and Friedrichs (1986) found that only 7.2% of basketball players' satisfaction was explained by their perceptions of their coaches' leadership behaviors. Also, Schliesman (1987) reported that 18% and 17% of the accounted variance in track and field athletes' satisfaction with leadership was explained by democratic behavior and social support, respectively. The above comparisons should be viewed in light of the difficulty in comparing results across studies. For example, researchers have assessed satisfaction differently. Chelladurai (1984), Schliesman (1987), Dwyer and Fischer (1990), and Riemer and Chelladurai (1995) used a single item; Chelladurai et al. (1988) used a satisfaction scale that they developed themselves; Weiss and Friedrichs (1986) used a modified version of the Industrial Organization Recreations Scale; and the current study used the Athlete Satisfaction Questionnaire (ASQ), a sports-specific scale developed by Riemer and Chelladurai (1998), to assess athletes' satisfaction. This questionnaire has high internal consistency and perhaps will be used in future research. This would facilitate comparing findings across studies. Future research must examine the extent to which the leadership-satisfaction

relationship is a function of instrumentation (Dwyer & Fischer, 1990). In conclusion, to enhance athletes' satisfaction, coaches should focus on giving more training and instruction, rewarding good performances and allowing greater participation in decisions pertaining to group goals, practice methods, and game tactics and strategies. In addition, coaches should avoid behaviors likely to be perceived as autocratic.

Perceived Coach Behaviors and Athlete Burnout

The third set of hypotheses (3a – 3c) stated that athletes' levels of burnout would be negatively correlated with the perceived leadership behaviors of training and instruction, democratic behavior, social support, and positive feedback; and positively correlated with autocratic behavior.

The resulting correlations (see Table 27) supported this hypothesis. All coaches' leadership behaviors were found to be significantly correlated with all athlete burnout variables. The correlations between athletes' devaluation and coaching behaviors of training and instruction, democratic behavior, social support, and positive feedback were moderately high, negative, and significant (*r*'s = -.60 to -.70). Reduced sense of accomplishment was negatively and significantly correlated with training and instruction (*r* = -.63), democratic behavior (*r* = -.69), social support (*r* = -.70), and positive feedback (*r* = -.65). The correlations between emotional/physical exhaustion and coaching behaviors of training and instruction, democratic behavior, social support, and positive feedback ranged from -.58 to -.65. These correlations were also significant. Autocratic behavior correlated positively and significantly with all athlete burnout variables (*r*'s = .47 to .56).

In addition to the correlational findings, the regression analyses demonstrated unique contributions of coaching behaviors to the accounted variance in athletes' burnout. Specifically, the perceived coaching behavior of training and instruction was found to be the most important contributor to athlete burnout. It accounted for 33% of the variance in athlete reduced sense of accomplishment, 19% of the variance in emotional/physical exhaustion, and 8% of the variance in devaluation. Recall that training and instruction is coaching behavior aimed at improving the athletes' performance by emphasizing and facilitating hard and strenuous training, instructing them in the skills, techniques, and tactics of the sport, and structuring and coordinating the members' activities (Chelladurai, 1996). It seems that having a coach who provided more training and instruction could possibly reduce athletes' levels of burnout.

Perceived autocratic behavior was also found to be a significant contributor to all dimensions of athlete burnout; accounting for 18% of the variance in devaluation, 9% of the variance in athletes' emotional/physical exhaustion, and only 2% of the variance in athletes' reduced sense of accomplishment. In particular, autocratic behavior, which refers to coaching behavior that involves independent decision-making and stresses personal behavior authority (Chelladurai, 1996), was positively associated with athlete burnout, meaning that having a coach who controls all potentials of the athletes, makes decisions without asking for athletes' opinions, and monitors athletes' performance in order to detect mistakes could possibly help generate increased levels of burnout among athletes.

Democratic behavior was only identified as a significant predictor of athlete reduced sense of accomplishment and accounted for only 1% of the variance in reduced sense of accomplishment. Although the contribution of the perceived democratic behavior to the variance explained in athletes' reduced sense of accomplishment was small, this variable was of practical

importance according to the criteria established by Tate (1998) that a standardized coefficient of .01 or greater may be of practical importance. Therefore, one can say that coaches who exhibited a democratic behavior style and allow athletes participation in decision-making process may possibly help reduce athletes' reduced sense of accomplishment. In other words, athletes increased involvement in team decision-making appears to allow them to feel more liberated and more accomplished. Price and Weiss (2000) stated that "athletes liked playing, felt more proficient, and felt less burned-out when their coaches allowed them to determine their own goals, participate in team decisions, and provide input into training sessions" (p. 404).

The link between perceived coaches' behaviors and athletes' burnout found in this study supports previous research that found strong relationships among coaches' behaviors and athletes' burnout (e.g., Price & Weiss, 2000; Udry et al., 1997; Vealey et al., 1998). Udry et al. (1997) conducted in-depth retrospective interviews with athletes who experienced burnout or season-ending injuries. They found that positive influence from coaches (i.e., providing support, empathy, belief in athletes, instructions) was related to lower levels of burnout in junior-elite tennis players. In contrast, negative coach influence (i.e., pressure, unrealistic expectations, conflicting ideas, lack of confidence in athlete) was related to higher levels of athlete burnout. Price and Weiss (2000) found that coaches who were perceived as making fewer democratic and more autocratic decisions and giving less training and instruction, less social support, and less positive feedback were associated with athletes who reported higher levels of burnout and anxiety. Vealey et al. (1998) found that coaches with stronger feelings of personal accomplishment were perceived as having greater tendency to use praise, communicate effectively, and display empathy, and fewer tendencies to use dispraise and an autocratic coaching style. Also, coaches higher in emotional exhaustion gave less praise and more dispraise as well as made more autocratic decisions according to their athletes. Moreover, the relationship between athletes' burnout and coaches' leadership behaviors supports previous research that reported severe practice conditions as a main cause of burnout for college athletes (e.g., Raglin & Morgan, 1994; Silva, 1990). The perceived coaching behaviors found to be related to athlete burnout in the present study (e.g., autocratic behavior, less training and instruction) seem quite likely to contribute to athletes' perceptions of severe practice conditions.

The link between perceived coaching behaviors and athlete burnout expanded Chelladurai's (1980, 1999) theoretical model, which only specifies outcomes of athlete satisfaction and performance. Our results showed that coaching behaviors are associated with feelings of athletes' burnout, which is an important contributor to an athlete's continued involvement in sport. These results also support Horn's (1992) argument that coaching behaviors within Chelladurai's model should have an effect on athlete outcomes other than just performance and satisfaction. Understanding how coaching behaviors influence the psychological well-being of athletes will enable coaches and coach educators to perform and conduct themselves in a manner that maximizes athletes' sporting experiences (Price & Weiss, 2000). Overall, the findings from this study appear to support a relationship between perceived coaching behaviors and athletes' burnout. The results indicate that the coach plays an important role in influencing the levels of burnout felt by their athletes. A greater understanding of the mechanisms that influence burnout and satisfaction in athletes could facilitate the development of more effective coaching methods. In addition, recognizing the influence and importance of coaches in the lives of their athletes could help create strategies and interventions that may decrease negative outcomes such as stress, dropout, and burnout while increasing positive

outcomes such as enjoyment and satisfaction.

The Relationship between Athletes' Burnout and Satisfaction

The fourth hypothesis stated that athletes' satisfaction (i.e., training and instruction satisfaction, personal treatment satisfaction, team performance satisfaction, and individual performance satisfaction) would be negatively correlated with athletes' burnout (i.e., emotional/physical exhaustion, reduced sense of accomplishment, and devaluation).

The resulting correlations (see Table 31) supported this hypothesis. All four athlete satisfaction variables correlated negatively and significantly with all athlete burnout variables. Devaluation correlated negatively and significantly with all athlete satisfaction variables (*r*'s = -.63 to -.69). The correlations between athletes' reduced sense of accomplishment and athlete satisfaction variables were moderately high to strong and significant (*r*'s = -.66 to -.74), and emotional/physical exhaustion correlated negatively and significantly with all athlete satisfaction variables (*r*'s = -.61 to -.70).

Satisfaction has been found to be strongly related to burnout in the professional and educational literature; with dissatisfied employees more likely to report high levels of burnout than those who are satisfied (e.g., Abu-Bader, 2000; Lee & Ashford, 1993). For example, Abu-Bader (2000) found strong relationships between work satisfaction and burnout. Similarly, Lee and Ashford (1993) reported a negative relationship between satisfaction and emotional exhaustion compared with depersonalization or personal accomplishment.

In the sport literature, very little research could be found relating to the relationship between athletes' satisfaction and burnout. In fact, and to the best knowledge of the researcher, no studies have examined the link between athletes' satisfaction and burnout; therefore, one should be cautious when interpreting these results because the coexistence of burnout and satisfaction is not unusual (Onyett, Pillinger, & Muijen, 1997). Indeed, high levels of work commitment are considered by some theorists as a prerequisite to burnout, and are more likely to occur with relatively high levels of job satisfaction (Onyett et al., 1997). It is, however, important that future research measures burnout and satisfaction in both athletes and coaches in order to gain a more complete assessment.

Although no research was uncovered that empirically addressed this relationship in athletes, probably due to the indirect logical link between these variables, it seems to make sense that low levels of burnout would lead to higher levels of satisfaction among athletes. It is more likely that satisfied athletes to report lower levels of burnout than those who were dissatisfied. Athletes in this study reported being satisfied with coaches who provided more training and instructions, generous social support and feedback, and exhibited more democratic and less autocratic behaviors. This is possibly led to the feelings of being satisfied and less burned out. The prestige and recognition of being in a varsity team in the university could possibly be another explanation to the feelings of satisfaction and less burned out among athletes.

Conclusions

Based on the results of this study, the following conclusions were made:

1. There were significant relationships between coaches' leadership behaviors and coaches' burnout.
2. Among the burnout variables, personal accomplishment was the most important predictor of the coaches' leadership behaviors followed by emotional exhaustion.
3. There were significant relationships between perceived coaching behaviors and athletes satisfaction.
4. Among the coaches' leadership behaviors, training and instruction was the most important predictor of athletes satisfaction followed by democratic behavior, social support, autocratic behavior, and positive feedback.
5. There were significant relationships between perceived coaching behaviors and athletes burnout.
6. Among the coaches' leadership behaviors, training and instruction and autocratic behaviors were found to be important predictors of athlete burnout.
7. There were significant negative relationships between athletes' satisfaction and athletes' burnout.

Implications for Coaches

The findings of this study suggest that coaches should provide more training and instruction, feedback, and social support for their athletes, and allow athletes' to participate in the formulation of team goals, practice methods, and game strategies in order to increase the levels of satisfaction and decrease the levels of burnout among athletes. Moreover, a greater understanding of the mechanisms that influence burnout and satisfaction in athletes could help develop more effective coaching methods (Baker et al., 2000). The results of this study indicate that the coach plays an important role in influencing the athlete psychological responses (i.e., burnout and satisfaction). By recognizing the effects of the coach in athlete burnout and satisfaction, strategies and interventions can be created which may decrease negative outcomes such as stress, anxiety, and burnout while increasing positive outcomes such as satisfaction and enjoyment. Finally, recognizing the symptoms of burnout and understanding its process will enable the coaches and the athletes to effectively adapt for the changing environment. Hence, programs that help detect burnout while still in the early stages need to be introduced.

Recommendations for Future Research

Based on the literature review and the findings of this study, the following recommendations are presented:

1. This study involved only head coaches; however, athletes' relationships with other members of the coaching staff (e.g., assistant coaches, personal coaches, and other athletes) may play an equally important role in the dynamics of coach-athlete relationship. Gardner et al., (1996) reported that athletes' perceptions of head and assistant coach leadership differ in predictable ways and these distinctions deserve further attention in future research.

2. This study was conducted at a single point in time. Data gathered at several times during the competitive season may provide a more representative picture of coaches' and athletes' burnout throughout the year. Coaches and athletes may be burned out at certain times of the season. Therefore, longitudinal studies should be conducted to determine the onset of burnout overtime and to see if the behaviors change as the burnout changes.
3. Qualitative studies should also be implemented. Interviews with coaches, athletes, and managers may yield a more in-depth understanding of the burnout phenomenon.
4. Future research should study former coaches. These coaches may be the ones who were truly burned out. Their reasons for leaving the profession may be very different from those currently employed in coaching positions.
5. Future research should study the effect of athletes' burnout on athletes' performance.
6. Previous research (e.g., Price & Weiss, 2000; Vealey et al., 1998) was limited to female athletes and it is conceivable that the coach leadership behaviors-athlete outcomes links may vary depending on athletes' gender, age and competitive level. Therefore, future research should take these variables into consideration.
7. Future research should attempt to examine the relationship between coaches' leadership behaviors and athlete psychological outcomes in different sports. Each of these sports may have unique characteristics that could affect the leader-athlete relationship.
8. The lack of valid measurement instrumentation to assess burnout in athletes may be a major reason for the lack of research in this area. The Athlete Burnout Questionnaire (ABQ; Raedeke & Smith, 2001) demonstrated adequate validity and reliability in this study; however, research is needed to further examine the psychometric properties of the ABQ. In addition, the use of the recent developed Athlete Satisfaction Questionnaire (ASQ; Riemer & Chelladurai, 1998) will allow for further in-depth research of satisfaction in sport.
9. Comparative studies or cross-cultural studies between athletes and coaches from different cultural backgrounds should be conducted to determine the similarities and differences of characteristics of coaches and athletes in different nations.
10. Future research should examine the situational and personal demands of both individual and team sports to determine how the demands of particular sports contribute to athlete burnout.
11. Future research should consider Price and Weiss (2000) modification of the autocratic behavior scale of the LSS which yielded adequate internal consistency. Price and Weiss added three items to the autocratic behavior scale and managed to increase the internal consistency of this scale.

A Final Comment

The coach-athlete relationship is a crucial part of sport, and anecdotal evidence of many athletes indicates that this relationship is central to the ultimate quality and perceived success of their competitive sport careers (Vealey et al., 1998). This importance of coaches in the lives of their athletes motivated the present study to employing Chelladurai's and Saleh's (1980, 1990) multidimensional model of leadership to investigate the relationship between coaches' burnout, coaches' behaviors, and athletes' psychological outcomes (burnout and satisfaction).

The results from this study revealed meaningful relationships among levels of coach burnout, coach leadership behaviors, and athletes' psychological responses (burnout and satisfaction). In doing so, further support for the multidimensional model of leadership was provided as well as greater insight into the correlates of athlete burnout and satisfaction. In considering the coach and athlete together within the same study design, direct linkages could be identified for supporting the conceptual model and proposing practical implications concerning the promotion of positive experiences for both coaches and athletes in the sport context (Price & Weiss, 2000).

In conclusion, there is still much to be learned about burnout with athletes. The costs of burnout are great not only to the athletes but to the people around them and their athletic programs. Hopefully, the current study opens the doors for future research regarding additional factors that may be a source of stress and burnout among coaches and athletes. Finally, it is important to remember that it is through empirical validation of conceptual/theoretical models that progress can be made and effective programs to prevent burnout can be designed.

APPENDICES

APPENDIX A

LEADERSHIP SCALE FOR SPORTS
(COACH'S PERCEPTION OF OWN BEHAVIOR)

Leadership Scale for Sports
(Coach's Perception of Own Behavior)
Chelladurai & Saleh (1980)

Directions:

Each of the following statements describes a specific behavior that a coach may exhibit. For each statement there are five alternatives: 5 mean (always), 4 (often), 3 (occasionally), 2 (seldom), and 1 (never).

You are requested to indicate your characteristic behavior by circling the appropriate number. There is no right or wrong answers. Your spontaneous and honest response is important for the success of the study.

- **In coaching, I…**						
1.	See to it that athletes work to capacity.	1	2	3	4	5
2.	Ask for the opinion of the athletes on strategies for specific competitions.	1	2	3	4	5
3.	Help athletes with their personal problems.	1	2	3	4	5
4.	Compliment an athlete for good performance in front of others.	1	2	3	4	5
5.	Explain to each athlete the techniques and tactics of the sport.	1	2	3	4	5
6.	Plan relatively independent of the athletes.	1	2	3	4	5
7.	Help members of the group settle their conflicts.	1	2	3	4	5
8.	Pay special attention to correcting athletes' mistakes.	1	2	3	4	5
9.	Get group approval on important matters before going ahead.	1	2	3	4	5
10.	Tell an athlete when the athlete does a particularly good job.	1	2	3	4	5
11	Make sure that the coach's function in the team is understood by all athletes.	1	2	3	4	5
12.	Do not explain my actions.	1	2	3	4	5
13.	Look out for the personal welfare of the athletes.	1	2	3	4	5
14.	Instruct every athlete individually in the skills of the sport.	1	2	3	4	5
15.	Let the athletes share in decision making.	1	2	3	4	5
16.	See that an athlete is rewarded for a good performance.	1	2	3	4	5
17.	Figure ahead on what should be done.	1	2	3	4	5
18.	Encourage athletes to make suggestions for ways to conduct practices.	1	2	3	4	5
19.	Do personal favors for the athletes.	1	2	3	4	5
20.	Explain to every athlete what should be done and what should not be done.	1	2	3	4	5

21.	Let the athletes set their own goals.	1	2	3	4	5
22.	Express any affection felt for the athletes.	1	2	3	4	5
23.	Expect every athlete to carry out one's assignment to the last detail.	1	2	3	4	5
24.	Let the athletes try their own way even if they make mistakes.	1	2	3	4	5
25.	Encourage the athlete to confide in the coach.	1	2	3	4	5
26.	Point out each athlete's strengths and weaknesses.	1	2	3	4	5
27.	Refuse to compromise on a point.	1	2	3	4	5
28.	Express appreciation when an athlete performs well.	1	2	3	4	5
29.	Give specific instructions to each athlete on what should be done in every situation.	1	2	3	4	5
30.	Ask for the opinion of the athletes on important coaching matters.	1	2	3	4	5
31.	Encourage close and informal relations with athletes.	1	2	3	4	5
32.	See to it that the athletes' efforts are coordinated.	1	2	3	4	5
33.	Let the athletes work at their own speed.	1	2	3	4	5
34.	Keep aloof from the athletes.	1	2	3	4	5
35.	Explain how each athlete's contribution fits into the total picture.	1	2	3	4	5
36.	Invite the athletes home.	1	2	3	4	5
37.	Give credit when it is due.	1	2	3	4	5
38.	Specify in detail what is expected of athletes.	1	2	3	4	5
39.	Let the athletes decide on plays to be used in a game.	1	2	3	4	5
40.	Speak in a manner which discourages questions.	1	2	3	4	5
41.	Don’t take into account athletes’ suggestions when making decisions.	1	2	3	4	5
42.	Control what athletes can and cannot do.	1	2	3	4	5
43.	Make decisions regardless of what athletes think.	1	2	3	4	5

APPENDIX B

LEADERSHIP SCALE FOR SPORTS
(ATHLETE'S PERCEPTION OF COACH'S BEHAVIOR)

Leadership Scale for Sports
(Athlete's Perception of Coach's Behavior)
Chelladurai & Saleh (1980)

Directions:

Each of the following statements describes a specific behavior that a coach may exhibit. For each statement there are five alternatives, as follows: 5 mean (always), 4 (often), 3 (occasionally), 2 (seldom), and 1 (never).

Please indicate your coach's actual behavior by circling the appropriate number. Answer all items even if you are unsure of any. Please note that you are rating your present coach.

My coach:						
1.	Sees to it that athletes work to capacity.	1	2	3	4	5
2.	Asks for the opinion of the athletes on strategies for specific competitions.	1	2	3	4	5
3.	Helps athletes with their personal problems.	1	2	3	4	5
4	Compliments an athlete for good performance in front of others.	1	2	3	4	5
5.	Explains to each athlete the techniques and tactics of the sport.	1	2	3	4	5
6.	Plans relatively independent of the athletes.	1	2	3	4	5
7.	Helps members of the group settle their conflicts.	1	2	3	4	5
8.	Pays special attention to correcting athletes' mistakes.	1	2	3	4	5
9.	Gets group approval on important matters before going ahead.	1	2	3	4	5
10.	Tells an athlete when the athlete does a particularly good job.	1	2	3	4	5
11.	Makes sure that the coach's function in the team is understood by all athletes.	1	2	3	4	5
12.	Does not explain his/her actions.	1	2	3	4	5
13.	Looks out for the personal welfare of the athletes.	1	2	3	4	5
14.	Instructs every athlete individually in the skills of the sport.	1	2	3	4	5
15.	Lets the athletes share in decision-making.	1	2	3	4	5
16.	Sees that an athlete is rewarded for a good performance.	1	2	3	4	5
17.	Figures ahead on what should be done.	1	2	3	4	5
18.	Encourages athletes to make suggestions for ways to conduct practices.	1	2	3	4	5
19.	Does personal favors for the athletes.	1	2	3	4	5
20.	Explains to every athlete what should be done and what should not be done.	1	2	3	4	5
21.	Lets the athletes set their own goals.	1	2	3	4	5
22.	Expresses any affection felt for the athletes.	1	2	3	4	5

23.	Expects every athlete to carry out one's assignment to the last detail.	1	2	3	4	5
24.	Lets the athletes try their own way even if they make mistakes.	1	2	3	4	5
25.	Encourages the athlete to confide in the coach.	1	2	3	4	5
26.	Points out each athlete's strengths and weaknesses.	1	2	3	4	5
27.	Refuses to compromise on a point.	1	2	3	4	5
28.	Expresses appreciation when an athlete performs well.	1	2	3	4	5
29.	Gives specific instructions to each athlete on what should be done in every situation.	1	2	3	4	5
30.	Asks for the opinion of the athletes on important coaching matters.	1	2	3	4	5
31.	Encourages close and informal relations with athletes.	1	2	3	4	5
32.	Sees to it that the athletes' efforts are coordinated.	1	2	3	4	5
33.	Lets the athletes work at their own speed.	1	2	3	4	5
34.	Keeps aloof from the athletes.	1	2	3	4	5
35.	Explains how each athlete's contribution fits into the total picture.	1	2	3	4	5
36.	Invites the athletes home.	1	2	3	4	5
37.	Gives credit when it is due.	1	2	3	4	5
38.	Specifies in detail what is expected of athletes.	1	2	3	4	5
39.	Lets the athletes decide on plays to be used in a game.	1	2	3	4	5
40.	Speaks in a manner which discourages questions.	1	2	3	4	5
41.	Don’t take into account athletes’ suggestions when making decisions.	1	2	3	4	5
42.	Control what athletes can and cannot do.	1	2	3	4	5
43.	Make decisions regardless of what athletes think.	1	2	3	4	5

APPENDIX C

ATHLETE BURNOUT QUESTIONNAIRE

Athlete Burnout Questionnaire

Thomas Raedeke and Alan Smith (2001)

Directions:

Please read each statement carefully and decide if you ever feel this way about your current sport participation. Your current sport participation includes all the training you have completed during this season. Please indicate how often you have had this feeling by circling a number 1 to 5, where 1 means, "I almost never feel this way" and 5 means, "I feel that way most of the time." There are no rights or wrong answers, so please answer each question as honestly as you can. Please make sure you answer all items. If you have any questions, feel free to ask.

	How often do you feel this way?	**Almost Never**	**Rarely**	**Some times**	**Frequently**	**Almost Always**
1.	I'm accomplishing many worthwhile things in [***sport***].	1	2	3	4	5
2.	I feel so tired from my training that I have trouble finding energy to do other things.	1	2	3	4	5
3.	The effort I spend in [***sport***] would be better spent doing other things.	1	2	3	4	5
4.	I feel overly tired from my [***sport***] participation.	1	2	3	4	5
5.	I am not achieving much in [***sport***].	1	2	3	4	5
6.	I don't care as much about my [***sport***] performance as I used to.	1	2	3	4	5
7.	I am not performing up to my ability in [***sport***].	1	2	3	4	5
8.	I feel "wiped out" from [***sport***].	1	2	3	4	5
9.	I'm not into [***sport***] like I used to be.	1	2	3	4	5
10.	I feel physically worn out from [***sport***].	1	2	3	4	5
11.	I feel less concerned about being successful in [***sport***] than I used to .	1	2	3	4	5
12.	I am exhausted by the mental and physical demands of [***sport***].	1	2	3	4	5
13.	It seems that no matter what I do, I don't perform as well as I should.	1	2	3	4	5
14.	I feel successful at [***sport***].	1	2	3	4	5
15.	I have negative feelings toward [***sport***]	1	2	3	4	5

APPENDIX D

ATHLETE SATISFACTION QUESTIONNAIRE

Athlete Satisfaction Questionnaire

Riemer and Chelladurai (1998)

Directions:

In this section, several items related to athletic participation are listed. Against each item, a response format ranging from 1 (not at all satisfied) to 7 (extremely satisfied) is provided. Please indicate how satisfied you are with each of the following aspects of your sport. Your honest and spontaneous response to each and every item is vital to the success of the study. Do not think about any one item for too long.

	I am satisfied with	**Not at all Satisfied**		**Moderately Satisfied**			**Extremely Satisfied**	
1.	how the team works (worked) to be the best	1	2	3	4	5	6	7
2.	the team's overall the performance this season.	1	2	3	4	5	6	7
3.	the extent to which the team is meeting (has met) its goals for the season.	1	2	3	4	5	6	7
4.	the recognition I receive (received) from my coach.	1	2	3	4	5	6	7
5.	the friendliness of the coach towards me.	1	2	3	4	5	6	7
6.	the level of appreciation my coach shows (showed) when I do (did) well.	1	2	3	4	5	6	7
7.	my coach's loyalty towards me.	1	2	3	4	5	6	7
8.	the extent to which the coach is (was) behind me.	1	2	3	4	5	6	7
9.	the training I receive (received) from the coach during the season.	1	2	3	4	5	6	7
10.	the instruction I have received from the coach this season.	1	2	3	4	5	6	7
11.	the coach's teaching of the tactics and techniques of my position.	1	2	3	4	5	6	7
12.	the degree to which I have reached (reached) my performance goals during the season.	1	2	3	4	5	6	7
13.	the improvement in my performance over the previous season.	1	2	3	4	5	6	7
14.	the improvement in my skill level.	1	2	3	4	5	6	7

APPENDIX E

MASLACH BURNOUT INVENTORY

Maslach Burnout Inventory

Maslach, Jackson, and Schwab (1996)

The purpose of this survey is to discover how educators view their job and the people with whom they work closely.

On the following page there are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way *about your job.* If you have *never* had this feeling, write a "0" (zero) in the space before the statement. If you have had this feeling, indicate *how often* you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

Example:

HOW OFTEN:	0 Never	1 A few times a year or less	2 Once a month or less	3 A few times a month or less	4 Once a week	5 A few times a week	6 Every day

HOW OFTEN

0-6

Statement:

I feel depressed at work.

If you *never* feel depressed at work, you would write the number "0" (zero) under the heading "HOW OFTEN." If you *rarely* feel depressed at work (a few times a year or less), you would write the number "1". If your feelings of depression are fairly frequent (a few times a week, but not daily) you would write a "5."

Published by:
Consulting Psychologists Press, Inc. (CPP).
3803 E. Bayshore Road,
Palo Alto, California 94303.

Maslach Burnout Inventory - Educators Survey

HOW OFTEN:	**0**	**1**	**2**	**3**	**4**	**5**	**6**
	Never	A few times a year or less	Once a month or less	A few times a month or less	Once a week	A few times a week	Every day

HOW OFTEN 0 – 6	**Statements:**
1……	I feel emotionally drained from coaching.
2……	I feel used up at the end of the workday.
3……	I feel fatigued when I get up in the morning and have to face another day on the job.
4……	I can easily understand how my students/athletes feel about things.
5……	I feel I treat some students/athletes as if they were impersonal objects.
6……	Working with people all day is really a strain for me.
7……	I deal very effectively with the problems of my students/athletes.
8……	I feel burned out from coaching.
9……	I feel I'm positively influencing other people's lives through coaching.
10…….	I've become more callous toward people since I took this job.
11…….	I worry that this job is hardening me emotionally.
12…….	I feel very energetic.
13…….	I feel frustrated by coaching.
14…….	I feel I'm working too hard on coaching.
15…….	I don't really care what happens to some students/athletes.
16…….	Working with people directly puts too much stress on me.
17…….	I can easily create a relaxed atmosphere with my students/athletes.
18…….	I feel exhilarated after working closely with my students/athletes.
19…….	I have accomplished many worthwhile things in this job.
20…….	I feel like I'm at the end of my rope.
21…….	In coaching, I deal with emotional problems very calmly.
22…….	I feel students/athletes blame me for some of their problems.

APPENDIX F

DEMOGRAPHIC QUESTIONNAIRE FOR ATHLETES

Demographic Questionnaire for Athletes

Please answer the following questions.

1. University: _____
2. Gender: ☐ Male ☐ Female.
3. Age: _____ years.
4. Please indicate your sport: _____
5. Please indicate how long you have been in this sport: _____ Years.
6. Please indicate the number of years that you have participated in any type of organized sport: _____years.
7. Are you? ☐ Freshman ☐ Sophomore ☐ Junior ☐ Senior.
8. On the average, how many hours per week do you spend on your sport (include meetings, games, and workouts): _____hours.
9. Do you participate in more than one sport? ☐ Yes ☐ No

   If yes, specify _____

Thank you for your help

APPENDIX G

DEMOGRAPHIC QUESTIONNAIRE FOR COACHES

Demographic Questionnaire for Coaches

Please answer the following questions.

1. University: _____
2. Gender: ☐ Male ☐ Female.
3. Age: _____ years.
4. What sport you coach? _____
5. Years coaching at university: _____ years.
6. Total years in coaching: _____ years.
7. Highest degree of education:
   ☐ Community college degree ☐ Bachelor degree
   ☐ Masters degree ☐ Doctorate degree
   ☐ Other
8. Average hours per week that you are in direct contact with your athletes:
   _____
9. Do you coach more than one sport at university? ☐ Yes ☐ No
   If yes, please specify _____
10. Do you have other responsibilities other than coaching? ☐Yes ☐No
    If yes, what are these responsibilities?

_____

_____

_____

Thank you for your help

APPENDIX H

COACH INSTRUMENTS (ARABIC VERSION)

بسم الله الرحمن الرحيم

عزيزي المدرب/ عزيزتي المدربة

تحية طيبة وبعد ،

أنا زياد لطفي الطحاينة، طالب في برنامج الدكتوراة في جامعة ولاية فلوريدا في الولايات المتحدة الامريكية، وكجزء من متطلبات البرنامج أقوم بإعداد أطروحة دكتوراة بهدف التعرف على تأثير الاحتراق النفسي والسلوك القيادي للمدرب على مستويات الرضا والاحتراق النفسي عند اللاعبين في المنتخبات الجامعية.

ولتحقيق ذلك فقد تم إعداد هذا الاستبيان كوسيلة لجمع المعلومات والبيانات اللازمة. والمرجو منك ان تساهم في إنجاح هذا البحث وذلك بالموافقة على المشاركة وتعبئة الاستبانة المرفقة واعادتها للباحث، وانني اذ اشكر لكم تعاونكم البناء سلفا لارجو ان اطمئنكم بأن جميع البيانات التي سيتم جمعها سوف تعامل بسرية تامة ولن تستخدم إلا لأغراض البحث العلمي فقط كما وسيتم معالجتها إحصائيا بشكل عام ولن يكون هناك أية إشارة لك كفرد.

لمزيد من المعلومات يرجى الاتصال بالباحث على هاتف (02/7279562) أو على البريد الإلكتروني saifziad@yahoo.com ، كما ويمكن الاتصال بالأستاذ المشرف الدكتور أوبري كنت على البريد الإلكتروني kent@coe.fsu.edu

شاكراً لكم حسن تعاونكم

معلومات عامة

يرجى التكرم بالاجابة على الاسئلة التالية:

1. الجامعة _____
2. الجنس ☐ ذكر ☐ أنثى
3. العمر _____سنة
4. نوع اللعبة التي تقوم بتدريبها _____
5. عدد سنوات الخبرة في الجامعة _____
6. عدد سنوات الخبرة بشكل عام _____
7. المؤهل العلمي ☐ دبلوم ☐ بكالوريوس ☐ ماجستير ☐ دكتوراة ☐ أخرى
8. عدد الساعات التي تقضيها في الاتصال مع اللاعبين اسبوعيا (بما في ذلك المباريات والتدريب والاجتماعات...) _____
9. هل تدرب اكثر من لعبة على مستوى المنتخب الجامعي ☐ نعم ☐ لا
   اذا كانت الاجابة نعم ، رجاء حدد اللعبة _____
10. هل لديك مسؤوليات أخرى غير التدريب ☐ نعم ☐ لا
    اذا كانت الاجابة نعم ، رجاء حدد _____

مقياس السلوك القيادي

التعليمات:-

كل عبارة من العبارات التالية تصف سلوكاً يمكن ان يمارسه المدرب مع لاعبيه. اقرأ كل عبارة ثم صف الى أي مدى تمارس السلوك الوارد في تلك الجملة. والمرجو منك ان تستجيب على كل فقرة بوضع إشارة (x) تحت إحدى درجات المقياس التدريجي الموجود إلى جانب كل عبارة.

- الرجاء الإجابة على جميع الأسئلة مع ملاحظة انك تصف سلوكك كمدرب. كما ويرجى ملاحظة ان كل فقرة تبدأ بـ (أنا في التدريب ..)

الرقم	العبارة	دائماً	غالباً	أحياناً	نادراً	مطلقا لا
	أنا في التدريب ..					
1	أرى بان اللاعبين يعملون كل حسب قدرته					
2	أطلب رأي اللاعبين في الاستراتيجيات المتبعة في مسابقات محددة.					
3	أساعد اللاعبين في مواجهة مشاكلهم الشخصية.					
4	أثني على اللاعب لأدائه الجيد أمام الآخرين					
5	أوضح لكل لاعب النواحي الفنية والخططية للعبة.					
6	أخطط بشكل مستقل نسبياً عن اللاعبين.					
7	أساعد أعضاء الفريق في حل نزاعاتهم.					
8	أبدي اهتماماً واضحاً في تصحيح أخطاء اللاعبين.					
9	أحصل على موافقة اعضاء الفريق في الامور المهمة قبل المضني قدما في التنفيذ.					
10	أخبر اللاعب عندما يقوم بأداء عمل جيد.					
11	أتأكد بان دوري في الفريق واضح ومفهوم من قبل جميع افراد الفريق.					
12	لا أوضح أعمالي للفريق					
13	أهتم بالمصالح الشخصية للاعبين					
14	أعلم كل لاعب بشكل منفرد على المهارات الخاصة باللعبة					
15	أسمح للاعبين بالمشاركة في صنع القرار					
16	أعمل على مكافأة اللاعب عندما يكون أداؤه مميزاً					
17	أخطط لما يجب عمله مستقبلاً					
18	أشجع اللاعبين على تقديم اقتراحاتهم حول الطرق والاساليب المستخدمة في التدريب					
19	أقوم بتقديم خدمات شخصية للاعبين					
20	أوضح لكل لاعب ما يجب عمله وما لا يجب عمله					
21	أترك اللاعبين يضعون أهدافهم بأنفسهم					
22	أعبر عن شعوري بالعاطفة تجاه اللاعبين					

الرقم	العبارة	دائماً	غالباً	أحياناً	نادراً	مطلقا لا
	أنا في التدريب ...					
23	أتوقع من كل لاعب ان ينجز المهمة الموكلة اليه بشكل كامل.					
24	أدع اللاعبين يحاولون تنفيذ المهمات بطريقتهم الخاصة حتى لو ارتكبوا بعض الأخطاء.					
25	اشجع اللاعبين على الثقة بالمدرب					
26	أشير الى نقاط القوة والضعف عند كل لاعب					
27	أرفض المساومة على مسألة/ نقطة ما					
28	أعبر عن إعجابي وتقديري باللاعب عندما يكون أداء اللاعب جيداً					
29	أعطي تعليمات محددة لكل لاعب بخصوص ما يجب عمله في كل موقف.					
30	أطلب رأي اللاعبين في الأمور التدريبية المهمة.					
31	أشجع إقامة علاقات حميمة وغير رسمية مع اللاعبين.					
32	أعمل على تنسيق جهود اللاعبين في الفريق.					
33	ادع اللاعبين يعملون حسب سرعتهم الخاصة					
34	ابقى متحفظاً او بمعزل عن اللاعبين.					
35	أوضح كيف ان مساهمة كل لاعب تتلاءم مع الإطار العام (الصورة الكلية للفريق)					
36	أدعو اللاعبين لزيارتي في البيت.					
37	أمنح المكافأة عندما تستحق					
38	أحدد بالتفصيل ما هو متوقع من اللاعبين					
39	أدع اللاعبين يقررون طريقة اللعب في المباراة.					
40	أتحدث بأسلوب لا يشجع على طرح الأسئلة.					
41	لا آخذ بعين الاعتبار اقتراحات اللاعبين عند اتخاذ القرارات.					
42	أسيطر على ما يمكن للاعبين عمله.					
43	أتخذ قراراتي بغض النظر عما يظنه اللاعبين.					

مقياس الاحتراق النفسي

يحتوي هذا القسم على (22) عبارة متعلقة بشعورك نحو مهنتك، يرجى قراءة كل عبارة بحرص وانتباه، وتقرير فيما إذا كنت تحمل هذا الشعور نحو عملك أم لا، وذلك بوضع دائرة حول الرقم الذي يدل على عدد المرات التي انتابك فيها هذا الشعور والتي تتدرج من (صفر- 6).

وبالنسبة لدلالة الأرقام في المقياس فيرجى ملاحظة مايلي:-

- ان الرقم (صفر) يعني انك لا تعاني من الشعور مطلقاً.
- ان الرقم (1) يعني ان الشعور يتكرر مرات قليلة خلال السنة.
- ان الرقم(2) يعني ان الشعور يتكرر مرة واحدة او اقل في الشهر.
- ان الرقم (3) يعني ان الشعور يتكرر مرات قليلة خلال الشهر.
- ان الرقم (4) يعني ان الشعور يتكرر مرة في كل أسبوع.
- ان الرقم (5) يعني ان الشعور يتكرر مرات قليلة خلال الأسبوع.
- ان الرقم (6) يعني ان الشعور يتكرر كل يوم.

واليك مثال على كيفية الإجابة:

الرقم	العبارة	التكرار
*	اشعر بالحيوية والنشاط	0, 1, 2, 3, 4, 5, 6

فإذا لم تشعر بالحيوية والنشاط مطلقاً تضع دائرة حول رقم (صفر) وإذا شعرت بالحيوية والنشاط باستمرار فتضع دائرة حول رقم (6) وهكذا.

صفر	1	2	3	4	5	6
لا تعاني من الشعور مطلقاً	مرات قليلة خلال السنة	مرة او اقل في كل شهر	مرات قليلة خلال الشهر	مرة في كل أسبوع	مرات قليلة خلال الأسبوع	كل يوم

الرقم	العبارة	تكرار الشعور						
1	اشعر بأنني مستنزف انفعالياً من جراء ممارسة مهنة التدريب.	6	5	4	3	2	1	0
2	اشعر ان طاقتي مستنفذة مع نهاية يوم العمل.	6	5	4	3	2	1	0
3	عندما استيقظ من نومي واعرف ان علي مواجهة يوم عمل جديد اشعر بالإرهاق.	6	5	4	3	2	1	0
4	أستطيع ان افهم مشاعر طلابي/ اللاعبين نحو الأشياء بسهولة.	6	5	4	3	2	1	0
5	اشعر بأنني أتعامل مع بعض الطلبة/اللاعبين وكأنهم أشياء لا بشر.	6	5	4	3	2	1	0
6	حقاً، ان التعامل مع اللاعبين طوال يوم العمل يسبب لي الإجهاد والتعب.	6	5	4	3	2	1	0
7	اتعامل بفعالية عالية مع مشاكل طلابي/ اللاعبين.	6	5	4	3	2	1	0
8	اشعر بالاحتراق النفسي من ممارستي لهذه المهنة.	6	5	4	3	2	1	0
9	اشعر أنني أؤثر إيجابيا في حياة كثير من الناس من خلال ممارستي لمهنة التدريب.	6	5	4	3	2	1	0
10	أصبحت اكثر قسوة وصلابة تجاه الناس بعد التحاقي بهذه المهنة.	6	5	4	3	2	1	0
11	أخشى ان يكون عملي هو السبب في قسوة عواطفي.	6	5	4	3	2	1	0
12	اشعر بالحيوية والنشاط.	6	5	4	3	2	1	0
13	اشعر بالإحباط من ممارستي لمهنة التدريب.	6	5	4	3	2	1	0
14	اشعر أنني اعمل في هذه المهنة بإجهاد كبير.	6	5	4	3	2	1	0
15	حقيقة، لا اهتم او اكترث بما يحدث مع طلابي/ اللاعبين من مشاكل.	6	5	4	3	2	1	0
16	ان العمل بشكل مباشر مع الناس يوقع بي ضغوطاً شديدة.	6	5	4	3	2	1	0
17	أستطيع بكل سهولة ان اخلق جوا نفسياً مريحاً مع طلابي/ اللاعبين.	6	5	4	3	2	1	0
18	اشعر بالسعادة والراحة بعد العمل عن قرب مع طلابي/ اللاعبين.	6	5	4	3	2	1	0
19	لقد أنجزت أشياء كثيرة ذات قيمة وأهمية في هذه المهنة.	6	5	4	3	2	1	0
20	اشعر وكأنني على حافة الهاوية من ممارستي لهذه المهنة.	6	5	4	3	2	1	0
21	أتعامل بكل هدوء مع المشاكل الانفعالية والعاطفية أثناء ممارستي لهذه المهنة.	6	5	4	3	2	1	0
22	اشعر بان الطلبة/ اللاعبين يلومونني على بعض مشاكلهم.	6	5	4	3	2	1	0

APPENDIX I

ATHLETES INSTRUMENTS (ARABIC VERSION)

بسم الله الرحمن الرحيم

عزيزي اللاعب/ عزيزتي اللاعبة

تحية طيبة وبعد ،

أنا زياد لطفي الطحاينة، طالب في برنامج الدكتوراة في جامعة ولاية فلوريدا في الولايات المتحدة الامريكية، وكجزء من متطلبات البرنامج أقوم بإعداد أطروحة دكتوراة بهدف التعرف على تأثير الاحتراق النفسي والسلوك القيادي للمدرب على مستويات الرضا والاحتراق النفسي عند اللاعبين في المنتخبات الجامعية.

ولتحقيق ذلك فقد تم إعداد هذا الاستبيان كوسيلة لجمع المعلومات والبيانات اللازمة. والمرجو منك ان تساهم في إنجاح هذا البحث وذلك بالموافقة على المشاركة وتعبئة الاستبانة المرفقة واعادتها للباحث، وانني اذ اشكر لكم تعاونكم البناء سلفا لارجو ان اطمئنكم بأن جميع البيانات التي سيتم جمعها سوف تعامل بسرية تامة ولن تستخدم إلا لأغراض البحث العلمي فقط كما وسيتم معالجتها إحصائيا بشكل عام ولن يكون هناك أية إشارة لك كفرد.

لمزيد من المعلومات يرجى الاتصال بالباحث على هاتف (02/7279562) أو على البريد الإلكتروني saifziad@yahoo.com ، كما ويمكن الاتصال بالأستاذ المشرف الدكتور أوبري كنت على البريد الإلكتروني kent@coe.fsu.edu

شاكراً لكم حسن تعاونكم

معلومات عامة

يرجى التكرم بالاجابة على الاسئلة التالية:

1. الجامعة _____
2. الجنس ☐ ذكر ☐ أنثى
3. العمر _____ سنة
4. نوع اللعبة التي تمارسها _____
5. عدد سنوات ممارستك للعبة في الجامعة _____
6. عدد سنوات ممارستك للعبة بشكل عام _____
7. المستوى الدراسي ☐ اولى ☐ ثانية ☐ ثالثة ☐ رابعة
8. عدد الساعات التي تقضيها في ممارسة لعبتك اسبوعيا (بما في ذلك المباريات والتدريب والاجتماعات)

_____

9. هل تمارس اكثر من لعبة على مستوى المنتخب الجامعي ☐ نعم ☐ لا

اذا كانت الاجابة نعم ، رجاء حدد اللعبة _____

مقياس السلوك القيادي

التعليمات:-

كل عبارة من العبارات التالية تصف سلوكاً يمكن ان يمارسه المدرب مع لاعبيه. اقرأ كل عبارة ثم صف الى أي مدى يمارس مدربك السلوك الوارد في تلك الجملة. والمرجو منك ان تستجيب على كل فقرة بوضع إشارة (x) تحت إحدى درجات المقياس التدريجي الموجود إلى جانب كل عبارة.

- الرجاء الإجابة على جميع الأسئلة مع ملاحظة انك تصف سلوك مدربك الحالي.

الرقم	العبارة	دائماً	غالباً	أحياناً	نادراً	مطلقا لا
	مدربي/ مدربتي ...					
1	يرى بان اللاعبين يعملون كل حسب قدرته					
2	يطلب رأي اللاعبين في الاستراتيجيات المتبعة في مسابقات محددة.					
3	يساعد اللاعبين في مواجهة مشاكلهم الشخصية					
4	يثني على اللاعب لأدائه الجيد أمام الآخرين					
5	يوضح لكل لاعب النواحي الفنية والخططية للعبة					
6	يخطط بشكل مستقل نسبياً عن اللاعبين					
7	يساعد أعضاء الفريق في حل نزاعاتهم					
8	يبدي اهتماماً واضحاً في تصحيح أخطاء اللاعبين					
9	يحصل على موافقة اعضاء الفريق في الامور المهمة قبل المضي قدما في التنفيذ.					
10	يخبر اللاعب عندما يقوم بأداء عمل جيد.					
11	يتأكد بان دوره في الفريق واضح ومفهوم من قبل جميع افراد الفريق					
12	لا يوضح أعماله للفريق					
13	يهتم بالمصالح الشخصية للاعبين					
14	يعلم كل لاعب بشكل منفرد على المهارات الخاصة باللعبة					
15	يسمح للاعبين بالمشاركة في صنع القرار					
16	يعمل على مكافأة اللاعب عندما يكون أداؤه مميزا					
17	يخطط لما يجب عمله مستقبلاً					
18	يشجع اللاعبين على تقديم اقتراحاتهم حول الطرق والاساليب المستخدمة في التدريب					
19	يقوم بتقديم خدمات شخصية للاعبين.					

الرقم	العبارة	دائماً	غالباً	أحياناً	نادراً	مطلقا لا
	مدربي/ مدربتي ...					
20	يوضح لكل لاعب ما يجب عمله وما لا يجب عمله					
21	يترك اللاعبين يضعون أهدافهم بأنفسهم					
22	يعبر عن شعوره بالعاطفة تجاه اللاعبين					
23	يتوقع من كل لاعب ان ينجز المهمة الموكلة اليه بشكل كامل.					
24	يدع اللاعبين يحاولون تنفيذ المهمات بطريقتهم الخاصة حتى لو ارتكبوا بعض الأخطاء.					
25	يشجع اللاعبين على الثقة بالمدرب					
26	يشير الى نقاط القوة والضعف عند كل لاعب					
27	يرفض المساومة على مسألة/ نقطة ما					
28	يعبر عن إعجابه وتقديره باللاعب عندما يكون أداء اللاعب جيداً					
29	يعطي تعليمات محددة لكل لاعب بخصوص ما يجب عمله في كل موقف.					
30	يطلب رأي اللاعبين في الأمور التدريبية المهمة.					
31	يشجع إقامة علاقات حميمة وغير رسمية مع اللاعبين.					
32	يعمل على تنسيق جهود اللاعبين في الفريق.					
33	يدع اللاعبين يعملون حسب سرعتهم الخاصة					
34	يبقى متحفظاً او بمعزل عن اللاعبين.					
35	يوضح كيف ان مساهمة كل لاعب تتلاءم مع الإطار العام (الصورة الكلية للفريق)					
36	يدعو اللاعبين لزيارته في البيت.					
37	يمنح المكافأة عند تستحق					
38	يحدد بالتفصيل ما هو متوقع من اللاعبين					
39	يدع اللاعبين يقررون طريقة اللعب في المباراة.					
40	يتحدث بأسلوب لا يشجع على طرح الأسئلة.					
41	لا يأخذ بعين الاعتبار اقتراحات اللاعبين عند اتخاذ القرارات.					
42	يسيطر على ما يمكن للاعبين عمله.					
43	يتخذ قراراته بغض النظر عما يظنه اللاعبين.					

مقياس الاحتراق النفسي عند الرياضيين

تعليمات

هذا الاستبيان مصمم للتعرف على مستويات الاحتراق النفسي لدى الرياضيين ويشتمل على خمس عشرة عبارة. الرجاء قراءة كل عبارة من العبارات التالية بعناية ثم ضع إشارة (X) في المكان المناسب لحالتك تحت إحدى درجات المقياس التدريجي الموجود الى جانب كل عبارة.

يرجى ملاحظة ان كلمة **الرياضة** الواردة في العبارات تشير الى اللعبة التي تمارسها، كما ويرجى ملاحظة انه لا توجد هناك عبارات صحيحة او خاطئة.

الرقم	العبارة	دائماً	غالباً	احياناً	نادراً	مطلقا لا
1	انا أحقق العديد من الأشياء الجديرة بالاهتمام في (الرياضة)					
2	أشعر بالتعب الشديد من جراء التدريب بحيث أنني لا أجد طاقة للقيام بأية أعمال أخرى					
3	الجهد الذي أبذله في (الرياضة) سيكون افضل لو بذلته في عمل أشياء أخرى					
4	أشعر بإرهاق شديد من جراء مشاركتي في (الرياضة)					
5	انا لا أحقق الكثير في (الرياضة)					
6	لا أهتم كثيرا بأدائي الرياضي كما كنت معتادا في السابق					
7	أدائي في (الرياضة) أقل من قدراتي الحقيقية					
8	أشعر بأنني (محطم) من (الرياضة)					
9	أنا لست كما يجب أن أكون في (الرياضة)					
10	أشعر بأنني منهك جسديا من ممارسة (الرياضة)					
11	أشعر بأنني أقل اهتماما بالنجاح في (الرياضة) عما كنت عليه سابقا					
12	أنا منهك من المتطلبات العقلية والبدنية المتعلقة (بالرياضة)					
13	يبدو أنه مهما عملت ، فان أدائي ليس كما يجب أن يكون					
14	أشعر بالنجاح / أبدو ناجحا في (الرياضة)					
15	عندي مشاعر سلبية تجاه (الرياضة)					

مقياس الرضا عند الرياضيين

تعليمات

في هذا الجزء هناك عدد من العبارات المرتبطة بمشاعر اللاعبين ومدى رضاهم وأمام كل عبارة من العبارات مقياس مدرج من 1 (غير راضي على الإطلاق) إلى 7 (راضي تماما) .

والمرجو منك أن تقرأ كل فقرة بعناية ثم تجيب بوضع دائرة حول الرقم الذي يشير إلى مدى رضاك عن الفقرة. الرجاء الإجابة بصدق على المقياس مع ضرورة ملاحظة أنه لا توجد هناك إجابات صحيحة وأخرى خاطئة. كما ويرجى ملاحظة ان كل فقرة تبدأ بعبارة (**انا راضٍ عن...**)

الرقم	العبـــــــارة	راضي تماما			راضي بشكل متوسط			غير راضي على الإطلاق
		7	6	5	4	3	2	1
	انا راضٍ عن...							
1	كيفية عمل الفريق ليكون الأفضل.							
2	الاداء العام للفريق هذا الموسم.							
3	المدى الذي وصل اليه الفريق في تحقيق أهدافه هذا الموسم.							
4	التقدير الذي أناله (نلته) من مدربي.							
5	صداقة المدرب نحوي.							
6	مستوى التقدير الذي يبديه المدرب نحوي عندما أقوم بعمل جيد.							
7	مدى إخلاص/ ولاء المدرب تجاهي.							
8	مدى دعم المدرب لي ووقوفه ورائي.							
9	التدريب الذي أتلقاه (تلقيته) من المدرب في هذا الموسم							
10	التعليمات والتوجيهات التي تلقيتها من المدرب في هذا الموسم.							
11	أسلوب تعليم المدرب للمهارات الفنية والخططية المتعلقة بمركزي في اللعب.							
12	الدرجة التي وصل إليها أدائي في تحقيق الأهداف هذا الموسم.							
13	التحسن في أدائي خلال الموسم السابق.							
14	التحسن في مستواي المهاري الذي وصلت اليه.							

APPENDIX J

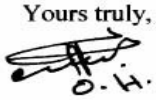
TRANSLATION VERIFICATION LETTERS

Date: July11, 2003

Subject: Translation Verification for Research Instruments

This is to verify the Arabic translation of the research instruments, Leadership Scale for Sports (LSS), Athlete Burnout Questionnaire (ABQ), Athlete Satisfaction Questionnaire (ASQ), and Maslach Burnout Inventory (MBI). The translation is as accurate, fluent, and compatible as the original English statements.

Yours truly,



Omar Hindawi, Ph.D.
Assistant Professor
College of Physical Education and Sport Sciences
The Hashemite University
Zarqa, Jordan
ohindawi@hu.edu.jo

Date: July 9, 2003

Subject: Translation Verification for Research Instruments

This is to verify the Arabic translation of the research instruments, Leadership Scale for Sports (LSS), Athlete Burnout Questionnaire (ABQ), Athlete Satisfaction Questionnaire (ASQ), and Maslach Burnout Inventory (MBI) done by Mohammad Al-Share'. The translation is as accurate, fluent, and compatible as the original English statements.

Yours truly,

Abdullah Abu-Tineh, Ph.D.
Assistant Professor, Educational Leadership.
College of Educational Sciences
The Hashemite University
Zarqa, Jordan
abdullah_fsu@yahoo.com

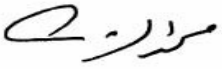
Date: July 5, 2003

Subject: Translation of Research Instruments

This is to verify the Arabic translation of the research instruments, Leadership Scale for Sports (LSS), Athlete Burnout Questionnaire (ABQ), Athlete Satisfaction Questionnaire (ASQ), and Maslach Burnout Inventory (MBI).

I am fluent in the Arabic and English languages, and this is a true and accurate translation of these documents.

Yours,



Mohammad Al-Share'
M.A. English Language and Literature
P.O. Box 910076
Irbid, Jordan

APPENDIX K

AUTHORIZATION TO USE LEADERSHIP SCALE FOR SPORTS

T · H · E
OHIO
STATE
UNIVERSITY

College of Education
Sport & Exercise Sciences
School of Physical Activity
and Educational Services

341 Larkins Hall
337 West 17th Avenue
Columbus, OH 43210-1284

Phone 614-292-7701
FAX 614-688-3432

April 7, 2003

Ziad Al-Tahayneh
189 Crenshaw Ct. # 6
Tallahasses, FL 32310

Hi, Ziad:

Thank you for your interest in my work.

You have my permission to use the Leadership Scale for Sport.

You may also translate it into the Arabic language. If you do, please send me copy of the Arabic version.

All the best with your research.

Sincerely,

P. Chelladurai, Ph.D.
Professor

APPENDIX L

AUTHORIZATION TO USE ATHLETE BURNOUT QUESTIONNAIRE

EAST CAROLINA UNIVERSITY

Department of Exercise and Sport Science
School of Health and Human Performance
East Carolina University
Minges Coliseum • Greenville, NC 27858-4353
252-328-4632 office • 252-328-4654 fax • www.ecu.edu/exss/

April 7, 2003

Ziad Al-Tahayneh
189 Crenshaw Ct #6
Tallahassee, FL 32310

Hi Ziad

You have my permission to translate the ABQ to the Arabic language. Good luck with your research. I look forward to hearing how your research progresses.

Sincerely,

Tom Raedeke

APPENDIX M

AUTHORIZATION TO USE ATHLETE SATISFACTION QUESTIONNAIRE

YAHOO! Mail

From: "Harold Riemer" <Harold.Riemer@uregina.ca>
Date: Thu, 1 May 2003 06:46:24 -0600
To : "Ziad Tahayneh" <saifziad@yahoo.com>
Subject: Re: asq

Hello Ziad:

I am excited about your project to translate the ASQ into Arabic. I hope all will go well. If I can be of any assistance, please let me know. I would welcome a summary of your results when you are finished.

All the best,

Harold A. Riemer, Ph.D.
Associate Professor, Sport & Recreation Administration
Graduate Co-ordinator
Faculty of Kinesiology & Health Studies
University of Regina
3737 Wascana Parkway
Regina, SK Canada S4S 0A2

Telephone: (306) 585 4372
Facsimile: (306) 585 4854
Email: Harold.Riemer@uregina.ca
Web Site: http://uregina.ca/~riemerh/index.htm

On Sun, 27 Apr 2003 22:35:07 -0700 (PDT) Ziad Tahayneh <saifziad@yahoo.com> wrote:

Dr. Riemer
Hello,

First of all I would like to thank you for your call in which you grant me the permission to translate and use the ASQ in my study.

As I told you in my letter I would appreciate to have your permission in writing in order to document it in my dissertation. E-mail will be good if it states the permission to translate the ASQ into Arabic language.

Your help is highly appreciated. Again thank you very much Dr. Riemer.

Best Regards,

Ziad Al-Tahayneh
saifziad@yahoo.com

APPENDIX N

AUTHORIZATION TO USE MASLACH BURNOUT INVENTORY

Ziad Al-Tahayneh
189 Crenshaw Ct. #6
Tallahassee, FL 32310

PERMISSION AGREEMENT FOR RESEARCH EDITION TRANSLATION

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6.1 Test users should evaluate the available written documentation on the validity and reliability of tests for the specific use intended.

6.3 When a test is to be used for a purpose for which it has not been validated, or for which there is no supported claim for validity, the user is responsible for providing evidence of validity.

6.5 Test users should be alert to probable unintended consequences of test use and should attempt to avoid actions that have unintended negative consequences."

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CPP, INC.

By Eliza M'Dare
Authorized Representative

Date 5/20/03

I AGREE TO THE ABOVE CONDITIONS

By Ziad Tahayneh
Ziad Al-Tahayneh

Date 5/5/03

APPENDIX O

HUMAN SUBJECTS COMMITTEE APPROVAL LETTER

Florida State
UNIVERSITY

Office of the Vice President
For Research
Tallahassee, Florida 32306-2763
(850) 644-8673 · FAX (850) 644-4392

APPROVAL MEMORANDUM

Human Subjects Committee

Date: 2/14/2003

Ziad Al-Tahayneh
189 Crenshaw Ct. #6
Tallahassee, FL 32310

Dept.: **Sport Management**

From: **David Quadagno, Chair** DQ/ph

Re: **Use of Human Subjects in Research**
Influence of Coaching Behaviors and Burnout on Burnout and Satisfaction In College Athletes

The forms that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be exempt per 45 CFR § 46.101(b) 2 and has been approved by an accelerated review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If the project has not been completed by **2/13/2004** you must request renewed approval for continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the project to the Committee for approval. Also, the principal investigator must promptly report, in writing, any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is IRB00000446.

Cc: Dr. Aubrey Kent
HSC No. 2003.040

APPENDIX P

SAMPLE RECOMMENDATION LETTER

Florida State
UNIVERSITY

College of Education • Tallahassee, Florida 32306-4280
Department of Sport Management, Recreation Management
and Physical Education
(850) 644-4813
FAX: (850) 644-0975

June 4, 2003

Attn: President of the Hashemite University

Dear Sir,

Mr. Ziad Al-Tahayneh is working on his Ph.D. program in our department of Sport Management, Recreation Management and Physical Education at Florida State University.

Currently, he is working on his dissertation entitled, *The effects of coaches' behaviors and burnout on the psychological responses of athletes.* To collect his data he is visiting Jordan in July 2003.

Any help given to him to collect the necessary data will be much appreciated.

Ziad is a very good student.....and your country rightfully can be proud of him

Please accept my sincere appreciation in advance for your help and support of this academic endeavor.

Yours truly,

Aubrey Kent, Ph.D.
Major Professor and Adviser
Sport Management
Florida State University
College of Education
kent@coe.fsu.edu

APPENDIX Q

COVER LETTER FOR COACHES

Dear coach:

My name is Ziad Al-Tahayneh. I am a graduate student under the direction of Dr. Aubrey Kent in the Department of Sport Management, Recreation Management and Physical Education at Florida State University. As part of my doctoral studies, I am investigating the influence of coaching behaviors and coaching burnout on Athletes' burnout and satisfaction

I am requesting your participation, which will involve completion of two short paper and pencil surveys, one related to coaching behaviors entitled Leadership Scale for Sports (LSS) and the other related to coaches' burnout entitled Maslach Burnout Inventory (MBI), in addition to a short demographic questionnaire concerning age, experience, marital status…Completion of these surveys will take approximately 15 minutes and will be conducted in one session.

Your participation in this study is completely voluntary. You may refuse to participate and/or withdraw from participation at any time without prejudice or penalty. Full confidentiality to the extent allowed by law is insured. The anonymity of your responses is guaranteed. No information will be shared with anyone associated with the team, including administrators, colleagues, and athletes. In addition, your position will not be affected as a result of your (non) participation or responses.

Furthermore, you will be assigned an anonymous code number and your identity will remain confidential. The responses will be evaluated collectively and then reported in a form of doctoral dissertation, a partial requirement for my doctoral degree. The final results may be published in a journal, however confidentiality will remain. The data will be only available to the principal investigator and his major advisor. A copy of the findings will be sent to you if you wish.

Although there may be no direct benefit to you, the possible benefits are identifying areas that are of concern to both athletes and coaches, gaining insight into factors that have a positive and negative effect on the athletes' sport experience, and assisting athletic directors in the planning of avoidance strategies and reducing or eliminating those factors that manifest burnout in coaches and athletes at the collegiate level.

If you have any questions concerning the research study, please call me any time at (850) 443-9861, or e-mail me at zla4013@garnet.acns.fsu.edu. Also, you can call Dr. Aubrey Kent at (850) 644-7174 or e-mail him at kent@coe.fsu.edu

Return of the questionnaire will be considered your consent to participate. **Thank you very much for participating in this study.**

Sincerely yours,
Ziad Al-Tahayneh
189 Crenshaw Ct. # 6
Tallahassee, FL 32310

APPENDIX R

COVER LETTER FOR ATHLETES

Dear Athlete:

My name is Ziad Al-Tahayneh. I am a graduate student under the direction of Dr. Aubrey Kent in the Department of Sport Management, Recreation Management and Physical Education at Florida State University. As part of my doctoral studies, I am investigating the influence of coaching behaviors and coaching burnout on Athletes' burnout and satisfaction.

If you decided to participate, you will be asked to complete a version of the questionnaire entitled Leadership Scale For Sports assessing your perceptions of your coach's leadership behaviors. In addition, you will be asked to complete a short survey called the Athlete Burnout Inventory and a survey called Athletes Satisfaction Questionnaire. The completion of the surveys will take approximately 30 minutes and will be conducted in one session.

Your participation in this study is completely voluntary. You may refuse to participate and/or withdraw from participation at any time without prejudice or penalty. Full confidentiality to the extent allowed by law is insured. The anonymity of your responses is guaranteed. No information will be shared with your coach or fellow teammates. In addition, your position on the team will not be jeopardized or affected as a result of your (non) participation or responses.

Furthermore, you will be assigned an anonymous code number and your identity will remain confidential. The responses will be evaluated collectively and then reported in a form of doctoral dissertation, a partial requirement for my doctoral degree. The final results may be published in a journal, however confidentiality will remain. The data will be only available to the principal investigator and his major advisor. A copy of the findings will be sent to you if you wish.

Although there may be no direct benefit to you, the possible benefits are identifying areas that are of concern to both athletes and coaches, gaining insight into factors that have a positive and negative effect on the athletes' sport experience, and assisting athletic directors in the planning of avoidance strategies and reducing or eliminating those factors that manifest burnout in coaches and athletes at the collegiate level.

If you have any questions concerning the research study, please call me any time at (850) 443-9861, or e-mail me at zla4013@garnet.acns.fsu.edu. Also, you can call Dr. Aubrey Kent at (850) 644-7174 or e-mail him at kent@coe.fsu.edu

Return of the questionnaire will be considered your consent to participate. **Thank you very much for participating in this study.**

Sincerely yours,

Ziad Al-Tahayneh
189 Crenshaw Ct. # 6
Tallahassee, FL 32310

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BIOGRAPHICAL SKETCH

Ziad Altahayneh was born on September 9, 1965 in Irbid, Jordan. He completed the elementary, middle, and high schools in Jordan. In 1984, he entered the Yarmouk University in Jordan and in 1988 graduated with honors with a Bachelor of Arts degree with a major in physical education and a minor in education. In 1991, while teaching as an elementary school physical education teacher and coaching soccer at different local clubs in Jordan, he entered the Graduate College at University of Jordan and in 1995 he received his Masters degree in sports administration.

Ziad continued his professional career as a physical education teacher and soccer coach until the Hashemite University in Jordan awarded him a full scholarship to pursue the Ph.D. degree in 2000. He received his Ph.D. from Florida State University in November 2003.

Ziad is married to Huda Tahayneh and has two sons, Sief and Mohammad, and one daughter, Salam.