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Stress Among NCAA Division II Head Coaches

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Health, Sport and Exercise Science with a concentration in Kinesiology Pedagogy

by

Dee Gerlach Central State University Bachelor of Business Administration, 1987 University of Central Oklahoma Master of Education in Education, 1999

December 2021 University of Arkansas

This dissertation is approved for reco	ommendation to the Graduate Council.
Cathy Lirgg, Ph.D.	-
Dissertation Chair	
Dean Gorman, Ph.D.	Douglas James Adams, Ph.D.
Committee Member	Committee Member
Paul Calleja Ph.D.	-
Committee Member	

Abstract

The purpose of this quantitative study was to identify factors that create stress among head coaches at the National Association Athletic Association Division II level. Data was collected through a demographic questionnaire and the Coaching Issues Survey (CIS), a tool used to measure specific factors that may create stress among coaches. The factors of the CIS include four subscales: Athlete-Concerns, Time-Role, Program-Success, and Win-Loss. Participants (N=416) consisted of head coaches representing the following sports: baseball, men's basketball, women's basketball, men's golf, women's golf, men's and women's golf, softball, women's tennis, and men's and women's tennis. The independent variables for this study were type of sport, years of coaching experience, age, gender, additional duties, and scholarship funding. The dependent variable was the score on the Coaching Issues Survey. Results showed that Program-Success was significantly higher than all other subscale mean scores for all participants. Head coaches with additional duties scored significantly higher than head coaches with no additional duties on total stress mean score, Time-Role, and Program-Success mean scores. Program-Success mean score was significantly higher for coaches without full scholarship funding compared to coaches with full scholarship funding. Head coaches aged 60 and over scored significantly lower in total stress mean score than all other age groups. Total stress mean score for head coaches by years of experience yielded no statistically significant difference. Lastly, female head coaches' scores were significantly higher on total stress mean score and all subscale mean scores except Program-Success; however, Program-Success showed the highest stress score for all participants. Data suggest that Program-Success is a stressful issue for head coaches of collegiate sports at the NCAA Division II level. Program-Success relates to coaching issues such as inadequate travel budgets for contests with highly competitive teams, being able to

recruit key personnel to improve success, and budget limitations that hamper recruiting. It is recommended to repeat the study by sending the survey to head coaches at the beginning of the school year and the conclusion of their sport season. This approach might highlight the assessment of all coaching issues throughout the school year including pre-season, recruiting, and post-season.

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level who strive every day to better themselves and their team. Thank you for making this study possible.

"Life is a Diamond, Play it Fair"

Dee Gerlach

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Stress Among NCAA Division II Head Coaches

Coaching is a highly stressful profession with burnout among coaches becoming an increasingly prominent concern among administrators, and most importantly, among coaches themselves (Kelley & Baghurst, 2009). Sources of occupational stress have been identified in other occupations that involve human interaction such as nursing, law enforcement, and teaching. Thus, it might be presumed that coaches, who constantly interact with a variety of people including athletes, parents, other coaches, athletic directors, and game officials experience high levels of occupational stress as well. Moreover, coaches might find themselves in the uncomfortable position of having to satisfy various, and possibly conflicting, requests of other people in addition to fulfilling their coaching duties (Frey, 2007).

This study identified factors that create stress for NCAA Division II coaches. Some of the responsibilities of a NCAA Division II coach include team success, fundraising, recruitment, budgets, coaching personnel, graduation rates, developing daily practices, player management, teaching responsibilities, and maintaining the facility. The pressures of these responsibilities, whether self-imposed or administratively imposed, can create stress and burnout ultimately pushing coaches out of the coaching profession entirely. With the increased pressures and stress related to job performance, it has become increasingly apparent that individuals are adversely affected by this type of environment. Often the end result is a phenomenon that has been termed burnout (Dale & Weinberg, 1989). Burnout has been most widely 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 & Jackson, 1981).

The phenomenon of burnout has primarily been studied in the human services. Human services involve occupations with high levels of human interaction such as counselors, law enforcement, nursing, and teaching. Burnout is a multidimensional syndrome that affects those working in helping professionals in which day-to-day interpersonal interaction is an integral part of their work (Maslach & Jackson, 1981). Burnout is a consequence of ongoing and prolonged stress. Stress can be viewed as a mismatch between the perceived demands of a situation and one's perceived capabilities and resources for meeting those demands (Lazarus, 1990; Smith, 1986).

Coaches at the collegiate level are competitive by nature and highly committed to self-imposed goals. Coaching has long been considered a stressful occupation with numerous identified stressors such as self-imposed and external pressure to win (Caccese & Mayerberg, 1984; Capel et al., 1987) Coaches explore ways to create advantages that will benefit their team and program. They seek players through recruitment that will take their team to the next level and motivate them through daily practices. These intrinsic characteristics when confronted with adversity may produce stress. This stress may evolve into burnout. Pines (1993) states, "While everyone can experience stress, burnout can only be experienced by people who entered their careers with high goals, expectations, and motivation – people who expected to derive a sense of significance from their work".

NCAA Background

A review of the literature revealed few studies that explored coaching stress and burnout in NCAA Division II athletics. Division II schools tend to be smaller regional public universities. Enrollment between the two divisions is vast, Division I institutions report a median enrollment

of 9,895 undergraduate students compared to Division II with 2,514 undergraduate students (National Collegiate Athletics Associaiton, 2019). Another difference is the number of athletic scholarships that are allowed between the two divisions. For instance, Division I football programs (FBS), the highest level, award 85 scholarships compared to 36 for Division II football programs. This study gathered data from head coaches in the sports of baseball, softball, and men's and women's basketball, tennis, and golf. The difference in the scholarships allowed per sport between the two divisions is not only evident in football, but also substantial in several other sports. Women's basketball at the Division I level are allowed 15 scholarships as opposed 10 at the Division II level and softball is similar with 12 allowable at Division I and 7.2 at Division II (College Athletic Scholarship Limits, 2019). These are allowable limits, not necessarily what is awarded per sport, for instance, my softball program was only funded for 5 athletic scholarships as opposed to the 7.2 that was allowed by the NCAA Division II scholarship limits.

Athletic budgets are minuscule compared to Division I because they are financed like other academic departments on campus. The difference among divisions emerges primarily in how schools choose to fund their athletic programs and in the national attention they command. Division II student-athletes are just as competitive and, in many cases, just as skilled as their Division I counterparts, but institutions in Division II generally don't have the financial resources to devote to their athletic programs or choose not to place such a heavy financial emphasis on them (National Collegiate Athletics Association, 2019). Division II coaches may be required to teach in and out of their playing season. Coaching staffs are primarily composed of graduate assistants and part-time volunteers. Coaching salaries at Division II level are proportionally smaller compared to Division I athletic programs.

Division II teams usually feature several local or in-state student-athletes. Few of the 110,000 student-athletes competing in Division II will receive a full grant-in-aid that covers all their expenses, but most of them will receive some athletics-based financial aid to help them through school. For the rest of their expenses, student-athletes use academic scholarships, student loans and employment earnings just like most other students attending the school (National Collegiate Athletics Associaiton, 2019). NCAA Division II athletics is comprised of 23 conferences and 310 schools. Division I athletics is comprised of 32 conferences and 335 schools (National Collegiate Athletics Associaiton, 2019). The requirements for universities to compete at the Division II level are like the Division I level. Division II schools are required to sponsor at least five sports for men and women, or four for men and six for women. Division I schools are required to sponsor at least seven sports for men and seven for women or six for men and eight for women. The requirements for sponsorship are comparable because the majority of Division II schools sponsor more than five sports per gender. The average number of sports sponsored by Division II schools is 14.

NCAA Division II Mission Statement

Each division within the NCAA proclaims a mission for participating student-athletes. The key terms in the Division II statement are learning, passion, service, resourcefulness, sportsmanship, and balance. "Life in the Balance" defines the philosophical foundation that represents the Division II story. It captures multiple facets of the Division II student-athlete experience: comprehensive learning and academic development, high-level athletics competition, and community engagement (National Collegiate Athletics Association, 2019).

Division II supports the educational mission of college athletics by fostering a balanced and inclusive approach in which student-athletes learn and develop through their desired academic pursuits, in civic engagement with their communities and in athletics competition. The Division II experience not only provides student-athletes the opportunity to earn scholarships based on their academic, athletic and leadership abilities, but it also offers the best championships-participant ratio among the NCAA's three divisions, and it prioritizes preparation for life beyond graduation. Division II gives student-athletes the unique opportunity to compete in the classroom, on the field, in their career, for their causes, and on their terms (National Collegiate Athletics Association, 2019).

Most previous studies explored coaching stress and burnout on the Division I level. Media coverage of the Division I level is far more prevalent than Division II and the average sports fan is more in tune with the high-profile sports such as Division I football, men's and women's basketball. One common factor between Division I and Division II athletics is competition. Coaches at both levels are highly competitive. The will to compete and win is inherent in the coaching profession, no matter what the division. Coaches reported that the greatest single stressor was "placing pressure on themselves to win" and Win-Loss ranked highest among all subscales (Kelly & Baghurst, 2009).

Recent research involving athletics has studied athlete burnout. This research extends from youth sports through college athletics and into professional athletics. While burnout has been defined in several ways, it can generally be viewed as a physical, social, and emotional withdrawal from a formerly enjoyable activity as a result of chronic stress and motivation concerns that is typically characterized by feeling of emotional exhaustion, reduced accomplishment, and depersonalization/devaluation (Gould & Whitley, 2009).

Purpose of the Study

The purpose of this study was to identify the factors that create stress among NCAA Division II head coaches. This study utilized the Coaching Issues Survey developed by (Kelly & Baghurst, 2009) to identify factors that create stress depending on the type of sport (e.g., team, individual, and dual individual sports), additional duties, scholarship funding, gender differences, age, and years of coaching experience. The identification of these factors may assist athletic administrators to aid in the reduction of stress among their coaching staff. One of the primary problems coaches cite when leaving a program, lack of athletic administrative support, can be controlled (Priest, 1990). Athletic administrators are in key leadership positions to influence whether coaches stay or leave their positions (Pastore et al., 1996).

Research Questions

The research questions of this study sought to identify the primary factors that create coaching stress among college coaches at the NCAA Division II level. The Coaching Issues Survey (CIS) was developed to measure sport/coaching-specific issues that may produce stress within the coaching role and situation. The survey consists of four separate but related subscales, Win-Loss, Time-Role, Program-Success, and Athlete-Concerns (Kelley & Baghurst, 2009).

The following research questions were created to determine specific variables that may cause stress for NCAA Division II head coaches.

(1) Which factor was deemed the most stressful among NCAA Division II head coaches: Athlete Concerns, Time-Role, Program Success, or Win-Loss?

- (2) Which factor was deemed the most stressful among NCAA Division II head coaches of team sports: Athlete Concerns, Time-Role, Program Success, or Win-Loss?
- (3) Which factor was deemed the most stressful among NCAA Division II head coaches of individual sports: Athlete Concerns, Time-Role, Program Success, or Win-Loss?
- (4) Which factor was deemed the most stressful among NCAA Division II head coaches of dual individual sports (men's and women's golf, and men's and women's tennis): Athlete Concerns, Time-Role, Program Success, or Win-Loss?
- (5) Which NCAA Division II head coaches experienced the most stress when compared by head coaches with additional duties and head coaches with no additional duties?
- (6) Which NCAA Division II head coaches experienced the most stress when compared by scholarship funding?
- (7) Which factor was deemed the most stressful among NCAA Division II head coaches when compared by gender: Athlete Concerns, Time-Role, Program Success, or Win-Loss?
- (8) Which NCAA Division II head coaches experienced the most stress when compared by sport?
- (9) Which NCAA Division II head coaches experienced the most stress when compared by age?

(10) Which factor was deemed the most stressful among NCAA Division II head coaches when compared by years of coaching experience: Athlete Concerns, Time-Role, Program Success, or Win-Loss?

Assumptions, Delimitations, Limitations, and Definition of Terms

Assumptions

Several assumptions need to be addressed.

- (1) It is assumed that the actual coach who was invited to participate in the study will complete the online surveys.
- (2) It is assumed that all participants will answer the surveys honestly.

Delimitations

The research delimitations for the study are as follows:

- (1) Participants will be NCAA Division II coaches in the United States only and cannot be generalized to other NCAA Divisions.
- (2) Participants complete the surveys during the allotted time frame.

Limitations

The research limitations for the study are as follows:

- (1) Survey research is inherently dependent on honest answers from the participants.
- (2) It is possible that an assistant coach completed the survey; however, the survey was sent to the email of the head coach.
- (3) Surveys were completed at various times in the season depending on the sport.

Definition of Terms

The following section provides terms and definitions to ensure understanding for the reader:

Athlete Concerns. Concerns related to interactions and working with athletes. (Kelley & Baghurst, 2009)

Burnout. A physical, social, and emotional withdrawal from a formerly enjoyable activity as a result of chronic stress and motivation concerns that is typically characterized by feeling of emotional exhaustion, reduced accomplishment, and depersonalization/devaluation (Gould & Whitley, 2009).

Coach. A person involved in the direction, instruction, and training of the operations of a sports team. (Wikipedia, n.d.)

Dual Sport. A coach responsible for two sports (men's and women's golf or men's and women's tennis).

Individual Sport. A coach responsible for one sport (men's golf, women's golf, or women's tennis).

Intercollegiate Sport. A sport played at the collegiate level for which eligibility requirements for participation by a student-athlete are established by a national association for the promotion or regulation of collegiate athletics. (Law Insider, n.d.)

National Collegiate Athletic Association (NCAA). A member-led organization dedicated to the well-being and lifelong success of college athletes. (National Collegiate Athletics Association, 2019)

Program-Success. Issues critical to an athletic program's success and planning. (Kelley & Baghurst, 2009)

Team Sport. A coach responsible for a team sport (men's basketball, women's basketball, baseball, or softball).

Time-Role. Issues related to the time required to fulfill the role of collegiate coach and potential conflicts involved in that role. (Kelley & Baghurst, 2009)

Win-Loss. Issues that surround winning and losing. (Kelley & Baghurst, 2009)

Significance of the Study

This study may enlighten college coaches, athletic administrators, and future coaches about stress factors that may cause burnout among NCAA Division II coaches. This study may assist athletic administrators in preventing stress and burnout among the athletic coaching staff ultimately reducing turnover and increasing cohesiveness among the coaching staff. One of the primary problems coaches cite when leaving a program, lack of athletic administrative support, can be controlled (Priest, 1990). Athletic administrators are in key leadership positions to influence whether coaches stay or leave their positions (Pastore et al., 1996).

The review of literature revealed few studies conducted in the past decade and even fewer involving coaches at the Division II level. Several studies over the past 30 years focused primarily on Division I and high school settings with dual role responsibilities. This study focused on Division II head coaches only because the Division II level is very different than Division I and III.

Although coaching has long been considered a highly stressful occupation and, more recently, one in which burnout is an increasingly common phenomenon, little attention has been devoted to systematically understanding the many concerns coaches face (Kelley & Baghurst, 2009). This intention of this study was to further the deficient research in factors that create stress among sport coaches specifically at the NCAA Division II level.

Review of Literature

This chapter contains a review of literature explaining previous research regarding stress, job stress, coaching, coaching issues, intercollegiate coaching, high school coaching, athlete burnout, and burnout. The literature review includes four key areas: 1) Burnout as a Phenomenon, 2) Stress and Burnout among Sport Coaches, 3) Stress and Burnout by Competitive Level, and 4) Additional Variables of Stress and Burnout.

Burnout as a Phenomenon

Early studies of the term burnout are associated with volunteers and professionals working with alternative self-help or crisis intervention institutions. The discovery quickly broadened into studies involving anyone associated with the human service profession. The human service profession is a broad spectrum of the work force and the initial research collected by (Maslach, 1976) consisted of personal interviews, observations, and questionnaire data from professionals working directly with human services. The professionals comprised in the study were prison personnel, physicians, social workers, poverty lawyers, clinical psychologists, childcare workers, psychiatrists and psychiatric nurses. It was through this research that (Maslach & Jackson, 1981) developed a scale known as the Maslach Burnout Inventory. This scale was designed to measure different aspects of burnout. The three major subscales that materialized from the research data were emotional exhaustion, depersonalization, and personal accomplishment.

Maslach and Jackson (1981) referred to the phenomenon as the burnout syndrome and a new definition emerged among the human services profession. Burnout is a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do 'people-

work' of some kind. The three key aspects noted of the burnout syndrome are increased feelings of emotional exhaustion, the development of negative, cynical attitudes and feelings about one's clients, and the tendency to evaluate oneself negatively, particularly with regard to one's work with clients.

Human relationships in the coaching profession can consist of several roles such as a parent figure, teacher, administrator, manager, psychologist, disciplinarian, fundraiser, and a recruiter for the program. Human relationships are central to the coaching profession (Caccese & Mayerberg, 1984). One of the first research studies involving college coaches by Caccese & Mayerberg (1984) studied the level of perceived burnout between male and female college head coaches at the NCAA (National Collegiate Athletics Association and AIAW (Association for Intercollegiate Athletics for Women) Division I level. The research team used the Maslach Burnout Inventory (Maslach & Jackson, 1981) as the instrument to retrieve data and reported significant differences between males and females on the subscales of Emotional Exhaustion and Personal Accomplishment. The results revealed that neither male nor female coaches were excessively burned out when the means of the subscales were compared to the scale median associated with the Maslach Burnout Inventory, meaning the subscale means were to the low end of the burnout continuum. The following information will be discussed in more detail about the importance of the early studies and how they led to the research involving the coaching profession.

Freudenberger (1974) and his peers while working at a free clinic began talking about a concept known as burnout. They began with simple questions such as "What is burnout?" "What are the signs of burnout?" and "Why is it so common among the staff at the free clinic?" Freudenberger began exploring deeper questions such as "Does it affect a paid staff member the

same as a volunteer member?" "What can a staff do about burnout once it has been identified?" "What are some preventative measures that can be taken to avoid the situation?"

In 1974, the dictionary defined burnout as "to fail, wear out, or become exhausted by making excessive demands on energy, strength, or resources." (Freudenberger, 1974). A more recent definition describes the phenomenon in a more personal context. Merriam-Webster (2019) defines it as "the condition of someone who has become very physically and emotionally tired after doing a difficult job for a very long time." A full definition describes it as "exhaustion of physical or emotional strength or motivation usually as a result of prolonged stress or frustration.". Freudenberger (1974) describes the signs of burnout in two dimensions, physical and behavioral. The physical signs described were feeling of exhaustion and fatigue, being unable to shake a lingering cold, suffering from frequent headaches and gastrointestinal disturbances, sleeplessness and shortness of breath. In short, one becomes too somatically involved with one's bodily functions. The behavioral signs consisted of a staff member's quickness to anger and his instantaneous irritation and frustration responses are the signs. With the ease of anger may come a suspicious attitude, a kind of suspicion and paranoia that may lead to a feeling of omnipotence. The commonality of burnout among free clinic staff was asked "Who is prone to burnout?"

Freudenberger's response was the dedicated and the committed. We work too much, too long and too intensely. We feel pressure from within to work and help and we feel a pressure from the outside to give. When the staff member then feels an additional pressure from the administrator to give even more, he is under a three-pronged attack (Freudenberger, 1974). This study closely relates to the coaching profession. The pressure from within to win, the pressure

from outside of the program to win and the ultimate pressure from your athletic director to win creates the recipe for burnout over a long period of time.

Freudenberger's discovery of the term burnout sparked the interest of Maslach and several of her coworkers at the University of California in Berkeley. Their collaboration of interviews, observations, and questionnaire data consisted of over 200 professionals in the human service profession. They found that these professional groups coped with stress by distancing or detaching themselves from their clients and ultimately creating a cynical or negative attitude toward their own clients, the very clients they were supposed to be helping through their own profession. The professional groups consisted of prison personnel, physicians, social workers, poverty lawyers, clinical psychologist, childcare workers, psychiatrists and psychiatric nurses. There is no doubt that these professionals deal with the continual emotional stress from clients while trying to retain their objectivity and concern for the client. This repetitive atmosphere can cause burnout over a long period of time. The research also found that burnout correlates with several other damaging effects such as mental illness, marital conflict, alcoholism, and suicide. The intent of this research was to uncover the interpersonal stresses of these groups, discover any preparation training that these groups were receiving to cope with stress, and identify the techniques used by these professionals to detach themselves from their clients. Basically, "What can be done to prevent the destructive process of burnout?" (Maslach, 1976).

The research findings presented several ideas to reduce the occurrence burnout. Some positive alternatives to combat emotional exhaustion would be regular vacations, physical exercise, reduce the staff to client ratio, provide alternative work opportunities for the staff, reduce hours spent working directly with clients, provide discussion groups to gain advise and

share their emotions with other professionals, and preparation training pertaining to working closely with people day after day. Some of the professionals interviewed thought burnout was inevitable and it was just a matter of time before they moved on to a different role or profession. Maslach came away with a different view, "Steps can be taken to reduce the occurrence of burnout because many of its causes are rooted not in the permanent traits of people, but in specific social and situational factors that can be changed." (Maslach, 1976).

In order to change these factors, researchers needed some way to measure and assess the aspects of the burnout syndrome. Maslach & Jackson (1981) developed the Maslach Burnout Inventory (MBI) using previous exploratory research completed by (Freudenberger, 1974; Maslach & Jackson, 1981; Pines et al., 1982). This information from these researchers provided examples of the attitudes and feelings that reflected the "burnout syndrome" of the human services professional. The items were presented as statements about personal feelings or attitudes toward subjects for whom they provided care. The statements were rated on two different dimensions: frequency and intensity. The initial MBI form consisted of 47 items administered to a variety of human service professionals consisting of police, counsellors, teachers, nurses, social workers, psychiatrists, psychologists, attorneys, physicians, and agency administrators (Maslach & Jackson, 1981). After factor analysis the items were reduced to 25 items measuring both frequency and intensity which were administered to a new sample of human service professionals. The results from the first and second set of data were very similar thus combining the two samples for a (n = 1025), 54 per cent female and 46 per cent male. The three major subscales that emerged from the data were emotional exhaustion, depersonalization, and personal accomplishment. Reliability coefficients were only calculated on the second sample to reduce the risk of inflating the reliability estimates. Cronbach's coefficient alpha was used to measure

internal consistency which yielded reliability coefficients of 0.83 for frequency and 0.84 for intensity of the 25-item scale. Data from the test-retest reliability resulted in coefficients significantly beyond the 0.001 level. Validity was measured using both convergent validity and discriminant validity. Convergent validity was demonstrated by external validation of personal experience, dimensions of the job experience, and personal outcomes. Discriminant validity was demonstrated through the comparison of scores between the MBI, Social Desirability Scale (SD), and the JDS (Job Diagnostic Survey). The Maslach Burnout Inventory became the primary instrument to assess burnout among a wide range of human service workers and an instrument used to measure perceived burnout among college coaches (Maslach & Jackson, 1986).

Stress and Burnout Among Sport Coaches

One of the first studies by Caccese & Mayerberg (1984) measured perceived burnout among college coaches. This study was intended to initiate the empirical literature on burnout among college coaches. The study focused on gender differences and perceived burnout among head coaches at the NCAA (National Collegiate Athletic Association) and the AIAW (Association for Intercollegiate Athletics for Women). The research team suggested that coaching is a volatile position involving a number of pressures such as the need to continuously interact personally with players, the pressure to have a winning team, and the need to handle defeat. Their focus on gender differences among college coaches was due to the increase in the number of female coaches at the collegiate level and the importance of female teams. They referred to the increase and importance as a "recent phenomenon" on the college level. One explanation of the phenomenon would be the passage of Title IX of the Education Amendments of 1972 which protects people from discrimination based on sex in education programs or activities which receive Federal financial assistance (U.S. Department of Education, 2019). This

legislation provided females the opportunity to participate in collegiate athletics and with that increase in female programs provided an increase in coaching opportunities for female coaches. This increase in female collegiate coaches allowed the study to not only retrieve data about burnout among collegiate coaches but also the differences in perceived burnout between male and female coaches.

The results of the study reported that females, compared to males, more frequently felt frustrated by their job and more intensely felt burned out from their work; further, they less frequently felt they had accomplished worthwhile things in their job, and less intensely felt they dealt with emotional problems calmly (Caccese & Mayerberg, 1984). The study did not allow for any answers to the question why females experienced burnout at a higher frequency and intensity rate than their male counterparts. The research team did provide some speculative reasons for the differences among male and female coaches. One reason revealed through the personal data sheet was that female coaches were younger and have been coaching for fewer years. Thus, they are presumably less experienced and have had less opportunity to learn how to cope with the stresses inherent in coaching. Other speculations included the following: female coaches felt more stress because they were trying harder, trying to prove that female athletic teams could perform well, were deserving of financial support, were deserving of respect, and so forth; females were less likely to have had mentors or role models in the sports arena to identify with as they were maturing; due to the difference in socialization between the sexes, females may not have been as well prepared as youngsters to handle the rigors of competition, and possibly the fact that females were simply more willing to admit that they were burned out, fatigued, frustrated, and so forth. The study opened the door for future research about burnout in education and athletic occupations involving human relations, possible reasons why coaches experience

burnout, why is there a difference between genders, and identifying ways to reduce stress and burnout.

The psychological aspect of burnout in athletics began with Smith (1986) who incorporated the phenomenon of burnout – as well as what is known about its antecedents and consequences – within a cognitive-affective model of stress (Smith, 1980, 1985). Smith (1986) explored implications of this model for preventing and coping with burnout, and to address a number of conceptual issues, methodological problems, and empirical questions concerning athletic burnout. The researcher attempted to look at the relationships among situational, cognitive, physiological, and behavioral components of stress and burnout using a parallel cognitive-affective framework. The situational component involves interactions between environmental demands and personal and environmental resources. Stress results from an imbalance between demands and resources. The cognitive appraisal of the situation involves at least four different appraisal elements: appraisal of the demands, appraisal of the resources available to deal with them, appraisal of the nature and likelihood of potential consequences if the demands are not met, and the personal meaning of those consequences for the person.

Smith (1986) posited the meanings attached to the consequences derived from the person's belief system. The imbalance between demands and resources over a long period of time can give rise to a number of cognitions that have been identified in burnout victims.

Cognitive appraisal of demands, resources, and consequences resulted in perceived overload.

Some burnout perceptions associated with cognitive appraisal consisted of perceived overload, low control, few meaningful accomplishments, and a lack of meaningfulness in the activity.

They expected that burned out athletes, coaches, trainers, administrators would begin to question the value and significance of their efforts and begin to perceive their situation as an aversive

treadmill. The physiological component is the physical response of the individual after their cognitive appraisal of the situation. At the physiological level, chronic stress produces tension, fatigue, and irritability. Victims of burnout begin to feel emotionally depleted and have difficulty experiencing positive emotions. The behavioral component is the individual's attempt to cope with the preceding components. The behavioral consequences of burnout involve a decreased level of efficiency and a psychological if not physical withdrawal from the activity. Each of these four components can be affected by motivational and personality factors. Motivational and personality variables can be viewed as predispositions to seek out certain situations and goals and to perceive, think, and respond emotionally and behaviorally in certain ways. Personality probably has its greatest effects at the level of cognitive appraisal (Smith, 1986).

Kelly et al. (1999) developed a sport and coaching specific instrument to measure issues that produce stress and burnout among coaches. The Coaching Issues Survey is a 30-item scale designed to assess the tendency for coaches to appraise specific coaching issues as stressful (see Appendix A). However, coaching was becoming a highly stressful profession with burnout among coaches becoming an increasingly prominent concern among administrators, and most importantly, among coaches themselves (Kelly & Baghurst, 2009). Therefore, the development of a reliable and valid instrument was needed to expand on the limited research conducted in stress and burnout among coaches. The Coaching Issues Survey (CIS) was developed to measure sport/coaching specific issues that may produce stress within the coaching role and situation (Kelly & Baghurst, 2009).

Research studies involving collegiate coaches within the last fifteen years is limited comprising a mixture of coaches at the NAIA and NCAA Division I, II, and III levels. The NCAA Division II branch is deficient in both quantitative and qualitative research regarding

coaching stress and burnout. A dissertation by Kamphoff (2006) surveyed 121 females that had left the coaching profession within the last ten years. The participants consisted of female coaches at the NCAA Division I, II, and III level. The majority of the coaches had experience at the NCAA Division I level (59.5%), followed by 26.4% at the Division III level and the Division II level represented 11.6% of the total participants. The study explored several reasons why women chose to leave the coaching profession at the collegiate level compared to other studies that only explored one main reason. The author related our patriarchal society to the ideologies of male dominance in sport which implies the inferiority of women in sport. The research demonstrated an increase in the participation rates of female athletes but the decline of female coaches. The author implied this relationship was due to the reflection of patriarchal ideologies within collegiate athletics and affects the work of women coaches. She focused on a former coaches' perspective not a current coaches' perspective using a mixed method approach and the study was conducted from a feminist point of view.

The instruments in the Kamphoff (2006) study consisted of a demographic's questionnaire, open-ended questions, the Perceived Hindrance Survey, and personal interviews. The Perceived Hindrance Survey was adapted from two other studies and addressed reasons women may leave the coaching profession (Everhart & Chelladurai, 1998; Kampoff and Gill, 2006). It was clear that throughout this study the two methods (i.e., survey and interviews) produced different findings regarding why women leave the coaching profession. In fact, when comparing the Perceived Hindrance Scale findings with the interview findings, only six areas overlap: 1) low salary, 2) lack of administrative support, 3) coaching conflicts with family, 4) time commitment, 5) pressure to win, and 6) difficulties with parents. The open-ended survey findings revealed about 18% of the participants left U.S. collegiate coaching for positive reasons

(i.e., opportunity for a promotion or to pursue further education) and few studies have acknowledged that female coaches may be leaving the coaching profession for positive reasons. Most of the participants responded negatively including lack of administrative support, difficulty balancing coaching, recruiting, and life, and burnout. The patriarchal implication was apparent in the open-ended responses referring to gender discrimination and homophobia.

Further, Kampoff's (2006) personal interview findings revealed three general themes: (1) Gender disparities in women's work (lack of adequate resources, compensation, duties, and lack of administrative support), (2) Technical demand of coaching (recruiting, time commitment, pressure to win, dealing with athletes and parents, and coaching women), and (3) College coaching and normalized sexualities (need to hide their sexual orientation, negative recruiting, discrimination of lesbian coaches). The participants were asked to provide advice to future female coaches and recommendations for change and how to improve the college atmosphere to better meet the needs of female coaches. The suggestions given were as follows: 1) salary, 2) recruiting, 3) coaches associations and unions, 4) family, 5) negotiations and coaching contracts, and 6) life after coaching.

The Kampoff (2006) study added to current literature because is linked the patriarchal nature of our society to collegiate sports and a women's decision to leave the coaching profession. It was clear within this study that the patriarchal nature of U.S. collegiate sport impacted these participants' decisions to leave the profession. The study was unique because it focused on former female coaches that have terminated their coaching career and provided recommendations for future research in the area of females coaching on the collegiate level. Although it was strictly from a feminist point of view and all the participants were female the findings shed a light on the conflicting coaching issues that females experience with collegiate

coaching. It explains some valid issues, but the study did not introduce ways to cope with these issues and manage the stress of the coaching profession.

Most research has explored the causes of stress and ultimately burnout among college coaches but a small study by Frey (2007) wanted to better understand coaches' experiences with stress, the perceived effects of stress on their coaching performance, and their coping strategies. The study only consisted of 10 NCAA Division I head coaches with at least five years of experience from three universities and different geographical areas of the United States. This qualitative approach was conducted through face to face and phone interviews. The open-ended questions allowed the coaches to express their experiences with stress, perceptions as to how their own stress might have affected their athletes' performance and what steps they took to manage stress. The results produced five major dimensions including contextual factors, sources of stress, negative responses to stress and effects of stress on coaching performance, managing stress, and sources of enjoyment.

Many of Frey's (2007) findings support Smith's (1986) cognitive-affective model of stress. Contextual factors revealed that the environment surrounding most of the coaches was very successful noting top ranked teams and individual national champions. Coaches discussed the expectations that came with being consistently successful and the feeling that they had to always maintain or supersede previous performances. Success, however, was also seen as a positive factor because it increased support from administrators and facilitated the recruiting process. Communicating with athletes was considered the highest source of stress followed by lack of control over athletes, recruiting, and the pressure of having so many roles and responsibilities. The research suggested that consistent behavior and effective stress management

are not only helpful for the coach's confidence and anxiety control but might also help his or her athletes feel more confident and under control in high-pressure situations (Frey, 2007).

Frey's (2007) research suggested many forms of coping strategies to manage stress; cognitive, emotional, and behavioral. One cognitive strategy was to focus on the things they could control rather than the things that were out of their control. Coaches frequently talked about recognizing and focusing on the factors they could control. Some emotional coping strategies mentioned by several coaches included participating in activities that were noncompetitive to balance the competitive nature of their career thus creating an emotional balance. Other coaches stated how grateful they were to have the social support of family, friends, their coaching staff, administration, and support from other coaches. Behavioral strategies used by some coaches were exercise, reading, getting a massage to manage stress.

Sources of enjoyment were divided by Frey (2007) into interpersonal/personal and task related. Interpersonal sources of enjoyment expressed by the coaches were watching the development of their players not only athletically but academically and emotionally. One coach mentioned the enjoyment of being able to give back to the sport that she felt had taught her so much about life and how to deal with the stress and pressure of everyday life. Task-related sources of enjoyment referred to specific tasks related to coaching duties. Common sources of enjoyment from coaching included recruiting, strategizing, seeing athletes improve, and developing relationships with athletes. This qualitative study shed some light on particular sources of stress that coaches may encounter, their responses to those stressors, the different ways they have found to manage stress, and sources of enjoyment from their career to counterbalance the stress of coaching at the collegiate level. The coping strategies mentioned in

the study could benefit future and less experienced coaches but more importantly how did these coaches acquire the coping strategies mentioned in the study.

A multivariate study by Ryska (2009) investigated the relationship between leadership styles, program goals, and burnout of NCAA Division I head sport coaches. The researcher suggested the adoption of an organizational behavior approach to the prediction of burnout, such as Person-Environment (P-E) Fit Theory, that may provide a clearer picture of occupational stress reported by intercollegiate coaches (Ryska, 2009). Organizational behavior research provides insight into how these two factors may influence the levels of occupational burnout experienced by sport coaches. Studies by Caplan & Harrison, (1993) and Harrison, (1978) proposed that job-related burnout largely results from the misalignment of personal occupational attributes and situational characteristics of the work environment. Basically, someone's personal attributes may either facilitate or hinder the completion of one's occupational goals which constitutes the relative P-E fit between personnel and their work setting. Excessive occupational strain typically results from a relatively high degree of P-E misfit (Harrison, 1985). The thrust of occupational stress research indicates that burnout among sport coaches may, in part, result from the particular leadership styles coaches employ to achieve program goals. A better understanding of this interaction may benefit sport psychologists, athletic directors, and workplace counselors as they help coaches excel within their demanding profession (Ryska, 2009).

The relationship between perfectionism and burnout in intercollegiate college coaches was explored through a study by Tashman and colleagues. The main purpose of the study was to test models of burnout in order to examine the relationship between burnout and perfectionism in collegiate coaches. The participants consisted of college coaches in the state of Florida, head and assistant coaches. The measurements used were the MBI, the Perfection Inventory (PI), and

the Perceived Stress Scale (PSS). The findings provided further support for Kelley et al. (1999) model of coach burnout in which personal/situational variables were proposed to have both direct and indirect effects on burnout, specifically with respect to maladaptive (negative) forms of perfectionism (Tashman et al., 2010).

In a recent study, Pearson (2018) investigated issues that might contribute to high stress levels among intercollegiate head swimming coaches. The population of this qualitative study included intercollegiate head swimming coaches from the NCAA Divisions I, II, and III. The study concluded that "Time-Role" was found to be the most stressful subscale of the Coaching Issues Survey (CIS) for intercollegiate head swimming coaches (Pearson, 2018). The Time-Role subscale concerned issues required of coaches to fulfill the role of collegiate coach, and potential conflicts involved in that role (Kelly & Baghurst, 2009). There were no significant differences found by level of competitive division within the NCAA, age of an intercollegiate head swimming coach, and years of experience as an intercollegiate head swimming coach. One conclusion pointed to a theme throughout the literature: female coaches report higher levels of stress than male coaches. Specifically, female intercollegiate head swimming coaches reported experiencing more stress than their male colleagues (Pearson, 2018).

Stress and Burnout by Competitive Level

High School

The competitive level and coaching responsibilities of some high schools can be similar to NCAA Division II programs due to coaches sharing multiple roles such as teaching and/or administrative duties. The following studies investigated high school coaches of individual and

team sports relating to role conflict and role ambiguity, coping strategies, coaching behaviors, and differences in sport classification.

Role Conflict and Role Ambiguity. A study by Capel et al. (1987) investigated the relationship of role conflict, role ambiguity, and six demographic variables to burnout in head high school basketball coaches. This is one of the first studies that explored the factors of role conflict and role ambiguity in high school coaches. The basis of the two factors relates back to the study completed by Katz and Kahn in (1966) that studied role conflict, role ambiguity and methods used to cope with them even before Freudenberger first identified burnout in 1974 (Capel et al. 1987). Katz and Kahn (1978) followed with other studies investigating the major contributors of job-related stress. The studies found role conflict was identified and found to be especially high in positions in which individuals dealt simultaneously with people inside and outside the organization. The most frequent forms of role conflict were identified as qualitative (tasks that are too difficult) and quantitative (too many tasks) overload.

The participants of the study by Capel et al. (1987) consisted of head coaches of high school girls' and boys' basketball teams. The measures included the Maslach Burnout Inventory and the Role Questionnaire developed by Rizzo, House, & Lirtzman (1970). The Role Questionnaire comprised 14 items, 8 of which gave information on role conflict and 6 on role ambiguity. Role conflict occurs in coaching as the coach is working with athletes and school personnel as well as with parents and boosters. Role conflict is a major source of conflict experienced by coaches. The study reported low to medium levels of burnout, consistent with Caccesse & Mayerberg (1984) but Capel et al.'s (1987) study indicated that role conflict and role ambiguity consistently contributed significantly more to the variance in burnout than did any of the other variables.

Role overload is also major source of conflict experienced by coaches. At the high school level, coaches may be doing not only the coaching but also many organizational and administrative tasks, which can cause overload. Further, the coach who is also a teacher experiences an overload of demands on his or her time and effort during the competitive season. Coaches in the Capel et al. (1987) study indicated that extended responsibilities contributed to overload.

Role ambiguity described by Kahn et al. (1964) occurs when the role player lacks the information necessary to perform a role adequately. Role ambiguity may arise when there is no clear explanation of how coaching will be evaluated. Coaches need to know if performance is measured solely by the win-loss record and, if not, what other criteria are being used. The lack of direction from administrators, inadequate job descriptions, or unclear evaluation procedures may contribute to role ambiguity for high school coaches (Capel et al., 1987).

Coping Strategies. Kosa (1990) explored the relationship between coping strategies used by teacher/coaches with low-level burnout and high-level burnout. The instrument used to measure coping strategies was the Jaloweic Coping Strategies Inventory (Jaloweic & Powers, 1981) which included problem-focused coping, tension-releasing coping, and morale-maintaining coping. The level of burnout was measured using the MBI (Maslach & Jackson, 1986) including emotional exhaustion frequency and intensity, depersonalization frequency and intensity, and personal accomplishment frequency and intensity. The results of Kosa's study of 193 public high school teacher/coaches revealed moderate levels of burnout in each of the dimensions of frequency and intensity of the MBI. The findings dealing with coping strategies suggested that the use of problem-focused coping may alleviate depersonalization and feelings of low personal accomplishment and that the use of tension-releasing coping may be positively

related to emotional exhaustion and depersonalization which resulted in higher levels of burnout. The author suggested the teacher/coach should attend stress-management interventions not only for themselves but to better understand others around them (Kosa, 1990).

A study by Drake & Hebert (2002) used an interview-based, qualitative case study research design. Their goal was to describe and reconstruct the thoughts and perceptions of female teacher-coaches about job-related stress, and strategies for managing and avoiding burnout. The researchers purposely chose two experienced female teacher-coaches because previous data suggested that female teacher-coaches respond to stress differently than their male counterparts. The teacher-coaches participated in interviews over a 4-month period and described conflicts and stressors similar to those reported in previous studies. They also described a pattern of stress over each academic year, pressures of balancing a career and personal life, and strategies they used to manage stress and avoid burnout. Both participants identified three coping strategies: personal release, organizational skills, and learning from mentors. At the times of intense stress, their preferred strategy was a "personal release," or a means to separate themselves physically and/or mentally from work. The second coping strategy to avoid burnout was learning to be organized, one coach claimed, "staying organized was crucial to her survival". The third strategy was described as learning from mentors. Both participants described significant teacher-coach mentors who had helped them achieve success and maintain the desire to remain in the profession.

Coaching Behavior. Price & Weiss (2000) studied the relationship among coach burnout, coaching behaviors, and athletes' psychological responses using Chelladurrai's (1980, 1990) multidimensional model of leadership as a theoretical framework. The participants included 15 head coaches and 193 female soccer players at the high school level. One of the

measures used to gather data from coaches was a modified version of the MBI, Maslach Burnout Inventory-Educators Survey (MBI-ES) for use with educational populations (Maslach & Jackson, 1986). To assess athlete's perceptions of their coaches' behaviors, the researcher used the 40-item Leadership Scale for Sports (LSS; Chelladurai & Saleh, 1980). Results revealed that coaches higher in emotional exhaustion were perceived by their teams as providing less training, instruction, social support, and making fewer autocratic and greater democratic decisions.

Differences in Sport Classification. Sport classifications is unique way to investigate the levels of stress and burnout among high school coaches. Bradford & Keshock (2011) investigated the level (degree) of burnout experienced by high school varsity coaches as a function of sport classification and whether that level differs between current and former coaches. The sports were classified as minor or major. A minor sport was defined as a sport recognized by the Florida High School Activities Association that competes in four or fewer classifications at the state championship series of competition whereas a major sport was a sport that competes in more than four classifications at the state championship series of competition. Thus, cross country, golf, swimming and diving, tennis, track and field, weightlifting, and wrestling were considered minor sports; baseball, basketball, football, soccer, softball, and volleyball were considered major sports. The findings revealed that the type of sport coached is a major factor in burnout level experienced by current or former varsity head coaches based on the issue of personal accomplishment. A higher level of burnout was more likely to be experienced by minor sport coaches than major sport coaches or coaches who coached both classifications of sports. Some potential explanations for these findings are that minor sport coaches are not typical head coaches who are in the profession for the long term. Consistent with previous research, former head coaches experienced higher levels of emotional exhaustion that current coaches and

former coaches had higher levels of burnout in the areas of personal accomplishment than current coaches. The researchers cited possible reasons for these findings could include lack of player talent, availability of adequate facilities, and frequency and quality of performance evaluations of coaches given by administrators during the tenure of their coaching experiences.

College

Collegiate studies consisted of Junior College, NAIA, and NCAA Divisions I, II, and III.

The following studies investigated collegiate coaches of individual and team sports relating to perceived level of burnout, dual role positions, coaching behavior, and competitive level.

Perceived Level of Burnout. An early study by Pastore & Judd (1992) examined the perceived level of burnout in coaches of women's teams at the junior college level. The random sample of coaches was limited to women's basketball and volleyball teams and the measure used the measure used was the MBI. The responding coaches between the two sport teams consisted of 53 percent basketball and 47 percent volleyball. The gender of the respondents for basketball was 62 percent male and 38 percent female. The volleyball respondents were reversed at 58 percent female and 42 percent male. Results showed that coaches were less burned out when compared with the norm which was consistent with previous studies including Caccese & Mayerberg (1984).

Data showed that volleyball coaches, when compared to the basketball coaches, experienced more fatigue and frustration by their job. However, the volleyball coaches appeared to have a better understanding and approach to their athletes than the basketball coaches, but this was possibly due to when the questionnaires were sent to the coaches. The volleyball coaches received the questionnaires at the end of their season as the basketball coaches were just

beginning their season creating the opportunity for volleyball coaches to score higher on the personal accomplishment subscale. Another interesting result of the study, when comparisons were made by sport, was that basketball coaches scored higher on four of the five depersonalization subscale items even though the questionnaires were administered during the beginning of their season. The authors speculated that women's basketball had become a higher profile team sport creating more pressure to win and produce revenue. The researchers found female coaches reported higher levels of burnout when compared to their male counterparts, a result consistent with several studies (Caccesse & Mayerberg, 1984; Dale & Weinberg, 1989; Pastore & Judd, 1992). A follow-up study by Pastore and Judd will be discussed later in the chapter to address gender differences and coaching burnout.

Dual Role Positions. An early study by Kelly & Gill (1993) was completed to further the research on Smith's (1986) theoretical model. The secondary purpose was to investigate burnout among coaches with the dual role of teaching and coaching at the collegiate level. The intent of the study was to examine head coaches at the NCAA Division III and NAIA competition level with a dual role of teaching and coaching. However, most of the male coaches (78%), did not have an additional coaching responsibility compared to the majority of the female coaches (55%) with an additional teaching or administrative responsibility. The measures used were the Maslach Burnout Inventory (MBI-ES), Perceived Stress Scale, Coaching Problems Survey, Social Support Questionnaire, Teacher/Coach Survey, and the Coaching Issues Survey.

The results of the study strongly supported Smith's (1986) proposed relationship between cognitive stress appraisal and the behavioral consequences of burnout. Perceived stress, coaching issues, and coaching problems are all interrelated and cover the broad spectrum of personal and professional stress. The appraisal of stress, whether general or specifically related to coaching or

the dual role of teacher-coach, predicted a greater sense of emotional exhaustion, the need to depersonalize students and athletes, and a reduced sense of meaning for the participants in this study. Stress from a wide variety of coaching issues (e.g., budget considerations, coach-athlete relationships, personal coaching expectations) contributed to higher levels of burnout for the participants in this investigation. The second purpose of this study was to investigate burnout among coaches with the dual role of teaching and coaching at the collegiate level. In contrast to previous investigations (Caccese & Mayerberg, 1984; Dale & Weinberg, 1989), the results of this study suggested that burnout among collegiate coaches is a significant problem. Most teacher-coachers in the study were suffering from moderate to high levels of burnout.

The authors suggested several reasons for the results including using a modified version of the MBI (MBI-ES) which could be a more sensitive burnout measure. Also, the participants were all basketball coaches with similar responsibilities compared to previous studies using a variety of sports, and data was collected at the most stressful point in the season for all the coaches compared to other studies collection of data throughout several sport seasons. Lastly, teacher-coaches, unlike many other helping professionals, have times during the year that are highly stressful (e.g., conference playoffs), but they also have times when stress is likely to be very low (e.g., off-season, summers). In one sense, this study supported the proposal that high stress levels are a precursor to burnout. In another sense, the elevated burnout levels in the teacher-coaches may reflect a temporarily stressful period rather than an enduring and escalating syndrome. The authors also suggested future research should collect data from the coaches for an entire year or competitive season (Kelley & Gill, 1993).

Coaching Behavior. A study by Vealy et al. (1998) combined the influence of perceived coaching behaviors on burnout and competitive anxiety with college athletes. The secondary

purposes of the study was to examine the links between coach burnout and perceived coach behavior as well as to examine the influence of athlete competitive anxiety on athlete burnout. The results found that coaches with stronger feelings of personal accomplishment were perceived by their athletes as having a greater tendency to use praise, communicate effectively, and display empathy and less of tendency to use dispraise and an autocratic coaching style. Coaches higher in emotional exhaustion and depersonalization were perceived by their athletes to use more dispraise and be more autocratic, while using less praise and displaying less empathy and communication ability.

Competitive Level. A collegiate study by Kelly et al. (1999) was an expansive endeavor over several divisions including NCAA Divisions I, II, III, and NAIA but was limited to stress and burnout among tennis coaches at the collegiate level. The study used several different types of measures including the Maslach Burnout Inventory (MBI-ES), Perceived Stress Scale, Coaching Issues Survey, Hardiness Scale, Leadership Behavior Description Questionnaire, and the SCAT-Coach. The study found few significant gender differences among the study variables, although the general pattern of descriptive gender differences in coaching issues, perceived stress, and emotional exhaustion was consistent with previous findings. The findings revealed no differences between NCAA Division I coaches and those working at other levels. This finding contrasts with earlier work by Hunt (1984), who found that Division I coaches experienced more burnout that their Division III counterparts.

Additional Variables of Stress and Burnout

Gender Differences

Pastore & Judd (1993) sought to determine if significant gender differences existed in perceived burnout levels of coaches of women's teams in two-year colleges. A secondary purpose of the study was to explore the relationship between the coaches' levels of burnout with age and years of coaching experience. The secondary purpose of the study was chosen to advance past research, where burnout had been said to increase with time and male coaches have been older and more experienced than female coaches (Caccese & Mayerberg, 1984; Dale & Weinberg, 1989).

Pastore & Judd (1993) focused on male and female coaches of women's team sports. The sports consisted of basketball, volleyball, tennis, and cross-country and consistent with the previous study the data was collected from the junior college level using the Maslach Burnout Inventory (MBI) as the instrument. The results of the study did not help clarify the reasons for gender differences in burnout among coaches. The secondary purpose of the study, to explore the relationship between the coaches' levels of burnout with age and years of coaching experience indicated that coaches' emotional exhaustion levels seemed to decrease with age and years of coaching experience, whereas their personal accomplishment levels increased slightly.

Depersonalization levels appeared to be highest among coaches who were in the 32-43 years age category with 16 or more years of coaching experience.

Administrative Support

Limited research exists examining athletic administrators and their role to reduce stress and burnout among college coaches. An early article by Priest (1990), a director of athletics, conveyed some ideas on how athletic administrators can increase retention rates at the collegiate level. Athletic administrators play a key role in creating a positive working environment in the athletic department and administrators who maintain a democratic leadership style and possess certain personal characteristics can help retain quality coaches in our profession. The author listed five categories that characterize an effective administrator. Communication skills are an effective way to open lines of communication and express their expectations in a clear and concise manner; fairness policies for men's and women's program, for all sport teams, should be equitable. Coaches respect an athletic director who confronts problems directly, obtains the facts, and then makes a decision. Good administrators are understanding and caring about people. Effective leadership is facilitated through a democratic management style. Recent research reveals that organizations that involve their employees in planning and decision-making experience more success than those who operate on an autocratic basis.

One study that directly related college coaches and athletic administrative support was the development of a questionnaire by Pastore et al. (1996). The study examined the perceptions of coaches to identify and assess the important areas in which athletic administrators may provide support. Principal components analysis yielded six components: Game Management, Decision Making, Nondiscriminatory Work Environment, Job Benefits/Salary, Program Support, and Evaluation. Overall, the identification of the areas in which athletic administrators may provide support for their coaches is necessary for encouraging them to remain in their professions.

Coaches' Leadership Styles

A study by Dale and Weinberg (1989) investigated the relevance of a coaches' leadership behavior and a coaches' perceived burnout. The participants were a mixture of high school coaches in Texas and NCAA Division I coaches from the Southeast and Southwest Conferences. The study used the Maslach Burnout Inventory (Maslach & Jackson, 1986) and the Leader Behavior Description Questionnaire (Hemphill, 1950). Stogdill & Coons (1957) revised and shortened the Leader Behavior Description Questionnaire into two leadership style categories: consideration-oriented and initiating-structure oriented. Consideration-oriented coaches tend to be genuinely concerned with their players and attempt to be caring, warm, and approachable. Initiating-structure oriented coaches are more concerned about goal attainment through planning and scheduling.

Results showed coaches with the consideration-oriented style scored significantly higher on the frequency and intensity dimension on both the emotional exhaustion subscale and the depersonalization subscale of the Maslach Burnout Inventory. Additionally, the results supported previous research investigating helping professionals. Consideration-oriented style coaches are subject to burnout because they displayed a constellation of attributes that are like those exhibited by individuals in other helping professions (Dale & Weinberg, 1989; Maslach & Jackson, 1981).

A large study conducted by Vealy et al. (1992) included 381 high school coaches and 467 college coaches representing ten different sports. The measures included the Maslach Burnout Inventory and the Trait Anxiety Inventory (Spielberger et al. 1970). Trait anxiety was included as a variable of interest in the study due to Smith's (1986) contention that personality factors

may influence the cognitive appraisal of situational factors that lead to burnout. The main objective of the study was to examine intrapersonal and situational predictors of coaching burnout. Findings suggested that coaches were likely candidates for burnout because their work emphasizes interpersonal interaction with others in a socially evaluative environment that is often stressful and demanding. The results of the study provide evidence that some high school and college coaches experience significant levels of burnout and that various intrapersonal factors are predictive of this burnout.

Summary

A review of literature revealed several studies associated with stress and burnout beginning with burnout among human service professionals and culminating with the development of an assessment inventory to measure attitudes and feelings associated with stress and burnout. The Maslach Burnout Inventory became the primary instrument to assess burnout among a wide range of human service workers (Maslach & Jackson, 1981). One of the first studies connecting the stress and burnout among human service professionals to stress and burnout among college coaching was conducted by Caccese & Mayerberg (1984) that inferred human relationships in the coaching profession can consist of several roles such as a parent figure, teacher, administrator, manager, psychologist, disciplinarian, fundraiser, and a recruiter for the program. Human relationships are central to the coaching profession. The study found that female coaches experienced more stress and felt they had accomplished fewer worthwhile things in their job. Caccese & Mayerberg (1984) speculated several reasons for the gender differences in perceived burnout among college coaches which opened the door for future studies exploring stress and burnout among college coaches.

Subsequent studies explored stress and burnout among high school and college coaches comparing variables such as personality traits, role conflict, role overload, gender, perceived stress and burnout, coping strategies, perfectionism, coaching behavior, competitive level, and coaches' leadership styles. Studies using variables such as role conflict and role overload were comparable to this study due to the fact that several coaches at the NCAA Division II level have additional duties coupled with their coaching responsibilities. Capel et al. (1987) found that role conflict occurs in coaching as the coach is working with athletes and school personnel as well as with parents and boosters. Role conflict is a major source of conflict experienced by coaches. Role overload is also major source of stress experienced by coaches. At the high school level, coaches may be doing not only the coaching but also many organizational and administrative tasks, which can cause overload. Further, the coach who is also a teacher experiences an overload of demands on his or her time and effort during the competitive season. Coaches in the study indicated that extended responsibilities contributed to overload.

The review of literature revealed the development of the Coaching Issues Survey (CIS), a coaching specific instrument to measure issues that produce stress and burnout among coaches, provided researchers the ability to gather quantitative data and expand on the limited research conducted in stress and burnout among coaches (Kelly & Baghurst, 2009). Although few researchers have used the instrument investigating coaches in the United States, it is proven to be a reliable and valid instrument to measure sport/coaching specific issues that may produce stress within the coaching role and situation.

The review of the literature revealed few studies have explored coaching stress in NCAA Division II coaches and a lack of empirical research specific to NCAA Division II head coaches.

This study was intended to further the deficient research in factors that may cause stress for head coaches at the NCAA Division II level.

Methods

This chapter detailed the participants of the study, data collection instruments, procedures, and analytical strategy used in the study. This study was conducted to clarify the research and enlighten head coaches and athletic administrators on the factors that may cause stress among NCAA Division II head coaches.

Participants

The participants of the study were head coaches at the NCAA Division II level. The coaches were selected from the 2019-2020 National Directory of College Athletics. The head coaches represented in the survey included baseball, men's basketball, women's basketball, men's golf, women's golf, men's and women's golf, softball, women's tennis, and men's and women's tennis. All of these sports are conducted and/or completed in the spring semester when the data was collected. Future research will explore sports conducted and completed in the fall semester. The inclusion of both team and individual sports is designed to add depth and strengthen the research of this study. The researcher identified 1,933 sports programs from the 2019-2020 National Directory of College Athletics. Men's sports represent 939 teams and women's sports represent 994 teams. Demographic data of team and individual sports are reported in Table 1. Several of the men's and women's individual sports were represented by one coach responsible for both programs. Due to the dual coaching model only 1,703 coaches represented the 1,933 sports programs in the study. A total of 416 NCAA Division II head coaches participated and completed the study resulting in a 24.4% return rate.

Table 1 *NCAA Division II Sport and Gender*

Team	Men's Teams	Women's Teams
Basketball	306	306
Golf	221	195
Tennis	152	208
Baseball	260	
Softball		285
Totals	939	994

Questionnaires

Coaching Issues Survey

The Coaching Issues Survey (CIS) was developed to measure sport/coaching issues that may produce stress within the coaching role and situation (Kelley & Baghurst, 2009). The four separate, but related subscales of Athlete-Concerns, Time-Role, Program-Success, and Win-Loss demonstrated high internal consistency and good stability over time. All alpha coefficients exceed the .70 criterion suggested by (Nunnally, 1978). The initial reliability and validity evidence suggest that the CIS can be a valuable measure of potentially problematic issues for coaches, facilitating the investigation of stress and burnout in coaching. The individual subscale questions consisted of (6) from Athlete-Concerns, (9) from Time-Role, (7) from Program-Success, and (8) from Win-Loss. Cronbach's Alpha of internal consistency of the four subscales were calculated as: Athlete-Concerns (6 items = .74), Time-Role (9 items = .87), Program-Success (7 items = .77), and Win-Loss (8 items = .90) (see Appendix B).

The Athlete-Concerns subscale included issues such as a player's ability to execute the fundamental skills or game plan, the injury to one of the starters, and understanding my athletes'

emotional responses and motivations. The Win-Loss subscale reflected issues related to the expectations to winning a variety of contests, handling defeat, and placing pressure on myself to win. The Time-Role subscale involved issues such as not having enough time for recruiting and my coaching responsibilities, the substantial number of hours working in a day, and not reaching my coaching goals. The Program-Success subscale contained issues related to not being able to hire adequate assistant coaches and support staff, inadequate travel budget for contests with highly competitive teams, budget limitations hampering recruiting, and the ability to recruit key personnel for team success (Kelley & Baghurst, 2009).

Demographic Questionnaire

The demographics survey asked the participants to indicate their age, gender, race/ethnicity, marital status, children/dependents, educational level, coaching experience, salary range, non-coaching duties, scholarship funding, and coaching support staff (see Appendix C).

Procedure

The collection of data began with the approval of the surveys by an institutional review board (see Appendix D). The survey packet consisted of The Coaching Issues Survey and the demographics survey. Participants were pre-contacted through email describing the nature and importance of the survey for the success of the study. The survey link and the initial information were emailed two days later. A reminder and thank you letter with the survey link were emailed four days after the initial email explaining the research study. Non-respondents received an email reminder every week for 16 weeks with the survey link included in the email (see Appendix E).

Data was collected over a period of 16 weeks beginning in early March and concluding in mid-July. Initially the survey period would have concluded early June but due to the COVID-19 pandemic, data collection was extended to try to increase coaches' response rates.

Treatment of the Data

The Statistical Package for Social Sciences (SPSS) version 25 was used to analyze the descriptive statistics of the study. Descriptive statistics were generated on the variables of the study relative to the Coaching Issues Survey and the demographics survey for the purpose of characterizing levels of stress among NCAA Division II head coaches. A series of one-way repeated measures (ANOVA) were used to explore the significant differences between the four subscale scores of all participants, head coaches of team sports, head coaches of individual sports, and head coaches of dual individual sports. A series of multivariate analysis of variance (MANOVA) were used to explore the significant differences of the four subscales scores between head coaches when compared by gender, age, and years of coaching experience. Independent samples t-tests were used to compare total stress mean scores of head coaches when compared by additional duties and scholarship funding, these tests were followed by (MANOVA) and follow-up (ANOVA) analysis to explore the significant differences of the four subscales between the groups.

Results

The purpose of this quantitative study was to identify factors that create stress among NCAA Division II college coaches. The identification of these factors could assist athletic administrators to aid in the reduction of stress among their coaching staff. One of the primary problems coaches cite when leaving a program, lack of athletic administrative support, can be controlled (Priest, 1990). Athletic administrators are in key leadership positions to influence whether coaches stay or leave their positions (Pastore et al., 1996).

The Coaching Issues Survey (CIS) was used to identify these factors that create coaching stress among head coaches at the NCAA Division II level. The Coaching Issues Survey (CIS) was developed to measure sport/coaching-specific issues that may produce stress within the coaching role and situation. The survey consists of four separate but related subscales, Athlete-Concerns, Time-Role, Program-Success, and Win-Loss (Kelley & Baghurst, 2009). Additionally, a demographics questionnaire was used to collect descriptive statistics of the participants.

This chapter features the results that identify factors that create stress among NCAA Division II head coaches of team sports, individual sports, and dual individual sports. Several variables were explored including additional duties required by head coaches, scholarship funding, gender, age, and years of coaching experience. Demographics and descriptive statistics of the participants are included with results from research questions and exploratory analysis of additional demographic categories analyzed for stress.

Demographics and Descriptive Statistics

Data was collected over a period of 16 weeks beginning in early March and concluding in mid-July. Demographic and descriptive statistics of the participants in the study are listed in Table 2.

Table 2Descriptive Statistics for Participants

Participants	nts Frequency		
Gender			
Male	280	67.3	
Female	136	32.7	
Marital Status			
Married	303	72.8	
Single	83	19.7	
Divorced	25	6.0	
Not Reported	6	1.4	
Children/Dependents	287	69.0	
Highest Education Level			
Undergraduate Degree	130	31.3	
Master's Degree	269	64.7	
Doctorate	5	1.2	
Not Reported	12	2.9	
Age			
20-29	25	6.0	
30-39	109	26.2	
40-49	114	27.4	
50-59	98	23.6	
60-69	50	12.0	
Above 70	8	1.9	
Not Reported	12	2.9	

Table 2 (Cont.)

Participants	Frequency	Percentage of Participants
Ethnicity		
African American	28	5.9
Asian	4	.8
Hispanic	12	2.5
Native American	3	.6
White	347	73.2
Preferred not to answer	10	2.1
Not reported	12	2.9

Roughly two thirds of the participants were male, 72.8% were married, and 69.0% reported having children and/or dependents. The average age of the participants was 52 with 77.2% of the participants ranging from the age of 30 - 59.

Table 3 describes the years of coaching experience. The most reported years of total coaching experience was 9-17, with most of the participants, 68.5% ranging from 6-25 years of total coaching experience. Sixteen of the coaches reported more than 36 years of total coaching experience.

Table 3Descriptive Statistics for Participants by Years of Coaching Experience (N = 416)

Years of coaching experience	Frequency	Percentage of Participants
1 – 8 (Novice)	94	22.6
9 – 17 (Advanced)	149	35.8
18 – 26 (Competent)	94	22.6
27+ (Proficient)	67	16.1
Not reported	12	2.8

The demographic of the participants per sport is represented in Table 4. Of the 1,933 sport teams, 1,157 (60%) represented team sports and 776 (40%) represented individual sports. Due to the dual coaching model, 230 head coaches were identified as head coaches of dual individual sport teams thus reducing the number to 1,703 head coaches of the 1,933 sport teams eligible to participate in the study. A total of 416 head coaches participated in the study for a 24.4% rate of response. The rate of response for coaches of team and individual sports was comparable to the eligible participants of head coaches of team and individual sports. Of the 1,157 head coaches of team sports, 300 head coaches participated representing 72.1% of the eligible participants with a response rate of 26%. Comparatively, of the 546 head coaches of individual sports, 116 head coaches participated representing 27.9% of the eligible participants with a response rate of 21.2%. A total of 416 head coaches participated in the study but due to the nature of the study involving stress, participants were allowed to skip questions that might be uncomfortable or difficult to answer. Therefore, the total participants included in the research findings was less than 416.

Table 4Descriptive Statistics for Participants per Sport (N = 416)

Participants	Frequency	Percentage of Participants
Team Sport		
Men's Basketball	67	16.1
Women's Basketball	79	19.0
Baseball	68	16.3
Softball	86	20.7
Total	300	72.1

Table 4 (Cont.)

Participants	Frequency	Percentage of Participants
Individual Sport		
Men's and Women's Golf	30	7.2
Men's Golf	28	6.7
Women's Golf	15	3.6
Men's and Women's Tennis	22	5.3
Men's Tennis	1	.2
Women's Tennis	20	4.8
Total	116	27.9

Research Question Test Results

The research questions of this study sought to identify the factors that create coaching stress among college coaches at the NCAA Division II level. The Coaching Issues Survey (CIS) was developed to measure sport/coaching-specific issues that may produce stress within the coaching role and situation. The survey consists of four separate but related subscales, Athlete-Concerns, Time-Role, Program-Success, and Win-Loss (Kelley & Baghurst, 2009). The four subscales were scored using a Likert-type Scale measurement, 1 indicated no stress, 2 indicated low stress, 3 indicated moderate stress, 4 indicated high stress and 5 indicated extreme stress. The following research questions were created to determine specific variables that may cause stress for NCAA Division II head coaches.

Research Question 1: Which subscale was deemed the most stressful among NCAA

Division II head coaches: Athlete Concerns, Time-Role, Program Success, or Win-Loss? A

one-way repeated measures ANOVA was used to compare subscale mean scores for all

participants, but due to Mauchly's Test of Sphericity the assumption of sphericity being violated

p < .001, a Huynh-Feldt adjustment was made. The results revealed a statistically significant difference in subscales mean scores F(1,350) = 9.182, p < .01).

With further exploratory analysis, an outlier was found in the Time-Role subscale questions, (Not successfully fulfilling my responsibilities outside of my coaching duties, teaching). Only 45 of the participants specified that they are assigned teaching duties. After further analysis, the Program-Success subscale was still found to be significantly higher than the Athlete-Concerns, Time-Role, and Win-Loss subscales.

Bonferroni's multiple comparisons revealed the subscale mean score for Program-Success (M = 2.95, SD = .78) was significantly higher than all other subscales mean scores, Athlete-Concerns (M = 2.76, SD = .65), Time-Role (M = 2.72, SD = .76), and Win-Loss (M = 2.81, SD = .86). No significant differences were found between Win-Loss, Time-Role, and Athlete-Concerns subscales. The means, standard deviations, and pairwise comparisons are reported in Table 5.

Table 5 *Means, Standard Deviations, and Pairwise Comparisons of Subscales for all Participants*

Subscale	n	M	SD	Ath-Conc	Time-Role	Win-Loss
Ath-Conc	351	2.76	.65			
Time-Role	351	2.72	.76			
Prog-Suc	351	2.95	.78	[.077, .289]***	[.130, .329]***	[.018, .261]*
Win-Loss	351	2.81	.86			

Note. Ath-Conc = Athlete-Concerns; Prog-Suc = Program Success.

^{*}*p* < .05. ****p* < .001.

Research Question 2: Which subscale was deemed the most stressful among NCAA Division II head coaches of team sports: Athlete Concerns, Time-Role, Program Success, or Win-Loss? A one-way repeated measures ANOVA was used to compare subscale mean scores for head coaches of team sports, but due to Mauchly's Test of Sphericity the assumption of sphericity being violated p < .001, a Huynh-Feldt adjustment was made. The results revealed a statistically significant difference in subscale mean scores F(1, 254) = 25.608, p < .001. Bonferroni's multiple comparisons revealed the subscale mean scores for Program-Success (M = 3.02, SD = .76) was significantly higher than subscale mean scores for Athlete-Concerns (M = 2.83, SD = .63) and Time-Role (M = 2.75, SD = .73). The subscale mean score for Win-Loss (M = 2.97, SD = .82) was significantly higher than the subscale means scores for Athlete-Concerns (M = 2.83, SD = .63) and Time-Role (M = 2.75, SD = .73). The means, standard deviations, and pairwise comparisons are reported in Table 6.

Table 6 *Means, Standard Deviations, and Pairwise Comparisons of Subscales for Head Coaches of Team Sports*

Subscale	n	М	SD	Ath-Conc	Time-Role	Win-Loss
Ath-Conc	255	2.83	.63			
Time-Role	255	2.75	.73			
Prog-Suc	255	3.02	.76	[.060, .319]**	[.147, .382]***	
Win-Loss	255	2.97	.82	[.025, .248]**	[.081, .343]***	

Note. Ath-Conc = Athlete-Concerns; Prog-Suc = Program Success. **p < .01. ***p < .001.

Research Question 3: Which subscale was deemed the most stressful among NCAA

Division II head coaches of individual sports: Athlete Concerns, Time-Role, Program

Success, or Win-Loss? A one-way repeated ANOVA was performed to determine if there was a statistically significant difference in subscale mean scores between the head coaches of

individual sports. Mauchly's Test of Sphericity results show that the assumption of sphericity was not violated p = .177. The results are listed in Table 7. The Sphericity Assumed calculation revealed no statistically significant difference within the subscale mean scores of head coaches of individual sports F(3, 147) = 2.549, p = .058. The means and standard deviations are reported in Table 8.

Table 7 *Test of Assumption of Sphericity (Head Coaches of Individual Sports)*

Subscales	•		
Mauchly's W	Approx. Chi-Squared	df	Significance
.852	7.646	5	.177

Table 8 *Means and Standard Deviations of Subscales for Head Coaches of Individual Sports*

Subscale	n	M	SD
Athlete-Concerns	50	2.57	.71
Time-Role	50	2.67	.85
Program-Success	50	2.65	.73
Win-Loss	50	2.40	.83

Research Question 4: Which subscale was deemed the most stressful among NCAA Division II head coaches of dual individual sports (men's and women's golf, and men's and women's tennis): Athlete Concerns, Time-Role, Program Success, or Win-Loss? A one-way repeated measures ANOVA was performed to determine if there was a significant difference in subscale mean scores between the head coaches of dual individual sports. Mauchly's Test of Sphericity results show that the assumption of sphericity was not violated p = .078. The results are listed in Table 9. The Sphericity Assumed calculation revealed a statistically significant difference within the subscale mean scores of head coaches of dual individual sports F(3, 129) = 8.750, p < .001. Bonferroni's multiple comparisons revealed the subscale mean score for

Program-Success (M = 2.86, SD = .87) was significantly higher than subscale mean scores for Athlete-Concerns (M = 2.58, SD = .67), Time-Role (M = 2.55, SD = .88), and Win-Loss (M = 2.31, SD = .79). Also, the subscale mean score for Athlete-Concerns (M = 2.58, SD = .67) was significantly higher than subscale mean score for Win-Loss (M = 2.31, SD = .79). The means, standard deviations, and pairwise comparisons are reported in Table 10.

Table 9 *Test of Assumption of Sphericity (Head Coaches of Dual Individual Sports)*

Subscales			
Mauchly's W	Approx. Chi-Squared	df	Significance
.789	9.908	5	.078

Table 10 *Means, Standard Deviations, and Pairwise Comparisons of Subscales for Head Coaches of Dual Individual Sports*

Treatricated Spo						
Subscale	n	M	SD	Ath-Conc	Time-Role	Win-Loss
Ath-Conc	44	2.58	.67			[.002, .532]*
Time-Role	44	2.55	.88			
Prog-Suc	44	2.86	.87	[.001, .554]*	[.034, .580]*	[.242, .847]***
Win-Loss	44	2.31	.79			

Note. Ath-Conc = Athlete-Concerns; Prog-Suc = Program Success. *p < .05. ***p < .001.

Research Question 5: Which NCAA Division II head coaches experienced the most stress when compared by head coaches with additional duties and head coaches with no additional duties? An independent samples t-test was conducted to compare total stress mean scores between head coaches with no additional duties and head coaches with additional duties. There was a statistically significant difference in total stress mean score for head coaches with no additional duties (M = 2.73, SD = .63) and head coaches with additional duties (M = 2.94, SD = .63)

.58), conditions; t(340) = -3.141, p < .01. Levene's test for equality of variances was non-significant, F(1, 340) = .035, p = .85, and the assumptions for homogeneity of variance was met.

Further analysis explored the subscale mean differences between head coaches with no additional duties and head coaches with additional duties. A one-way MANOVA yielded a significant main effect for type of duties assigned, Wilks' Lambda = .913, F(4, 337) = 7.978, p < .001. A follow-up ANOVA for type of duties assigned subscales revealed a significant difference in the Time-Role and Program Success subscale mean scores, Time-Role F(1, 340) = 26.656, p < .001 and Program-Success F(1, 341) = 5.402, p = .021. Bonferroni's multiple comparisons revealed the Time-Role subscale mean score for head coaches with additional duties (M = 2.97, SD = .72) was significantly higher than the Time-Role subscale mean score for head coaches with no additional duties (M = 2.55, SD = .75). Additionally, the Program-Success subscale mean score for head coaches with additional duties (M = 3.07, SD = .78) was significantly higher than the Program-Success subscale mean score for head coaches with no additional duties (M = 2.87, SD = .78). The means and standard deviations are reported in Table 11. Pairwise comparisons are reported in Table 12.

Table 11 *Means and Standard Deviations of Subscales for Head Coaches by Assigned Duties*

Subscale	Duties Assigned	n	M	SD
Athlete-Concerns	No Duties	203	2.74	.66
	Additional Duties	139	2.81	.64
Time-Role	No Duties	203	2.55	.75
	Additional Duties	139	2.97	.72
Program-Success	No Duties	203	2.87	.78
	Additional Duties	139	3.07	.78
Win-Loss	No Duties	203	2.75	.90
	Additional Duties	139	2.90	.81

Table 12Pairwise Comparisons of Subscales for Head Coaches by Assigned Duties

		Additional Duties	
No Duties	Athlete-Concerns	Time-Role	Program-Success
Athlete-Concerns			
Time-Role		[579,259]***	
Program-Success			[369,031]*
Win-Loss			

Note. *p < .05. ***p < .001.

Research Question 6: Which NCAA Division II head coaches experienced the most stress when compared by scholarship funding? An independent samples t-test was conducted to compare total stress mean scores between head coaches with full scholarship funding and head coaches without full scholarship funding. There was not a significant difference in head coaches with full scholarship funding (M = 2.72, SD = .60) and head coaches without full scholarship funding (M = 2.85, SD = .62) conditions; t(345) = -1.694, p = .091.

Further analysis explored the subscale mean differences between head coaches with full scholarship funding and head coaches without full scholarship funding. A one-way MANOVA yielded a significant main effect for scholarship funding, Wilks' Lambda = .943, F(4, 342) = 5.127, p = .001. A follow-up ANOVA to compare scholarship funding subscales revealed a significant difference in the Program-Success subscale mean scores F(1, 345) = 15.217, p < .001.

Bonferroni's multiple comparisons revealed the Program-Success subscale mean score for head coaches without full scholarship funding (M = 3.05, SD = .77) was significantly higher than the Program-Success subscale mean score for head coaches with full scholarship funding (M = 2.68, SD = .76). The means and standard deviations are reported in Table 13. Pairwise comparisons are reported in Table 14.

Table 13 *Means and Standard Deviations of Subscales for Head Coaches by Scholarship Funds*

Subscale	Duties Assigned	n	M	SD
Athlete-Concerns	Full Scholarships	92	2.75	.62
	Not Full Scholarships	255	2.77	.67
Time-Role	Full Scholarships	92	2.63	.74
	Not Full Scholarships	255	2.76	.77
Program-Success	Full Scholarships	92	2.68	.76
	Not Full Scholarships	255	3.05	.77
Win-Loss	Full Scholarships	92	2.82	.92
	Not Full Scholarships	255	2.81	.84

Table 14Pairwise Comparisons of Subscales for Head Coaches by Scholarship Funds

Not Full Scholarships					
Full Scholarships	Athlete-Concerns	Time-Role	Program-Success	Win-Loss	
Athlete-Concerns					
Time-Role					
Program-Success			[547,180]***		
Win-Loss					
3.7 dedude 001					

Note. ***p < .001.

Research Question 7: Which subscale was deemed the most stressful among NCAA Division II head coaches when compared by gender: Athlete Concerns, Time-Role, Program Success, or Win-Loss? A one-way MANOVA yielded a significant main effect for gender type, Wilks' Lambda = .960, F(4, 346) = 3.642, p < .01. A follow-up ANOVA to compare gender subscales revealed a significant difference in the Athlete-Concerns, Time-Role, and Win-Loss subscale mean scores. Athlete-Concerns F(1, 349) = 10.668, p = .001, Time-Role F(1, 349) = 9.825, p < .01, and Win-Loss F(1, 349) = 8.352, p < .01.

Bonferroni's multiple comparisons revealed the Win-Loss subscale mean score for female head coaches (M = 2.99, SD = .82) was significantly higher than the Win-Loss subscale

mean score for male head coaches (M = 2.72, SD = .87), the Time-Role subscale mean score for female head coaches (M = 2.90, SD = .68) was significantly higher than the Time-Role subscale mean score for male head coaches (M = 2.63, SD = .78), and the Athlete-Concern subscale mean score for female head coaches (M = 2.92, SD = .60) was significantly higher than the Athlete-Concerns subscale mean score for male head coaches (M = 2.69, SD = .66). The means and standard deviations are reported in Table 15. Pairwise comparisons are reported in Table 16.

Table 15 *Means and Standard Deviations of Subscales for Head Coaches by Gender*

Subscale	Gender	n	M	SD
Athlete-Concerns	Male	235	2.69	.66
	Female	116	2.92	.60
Time-Role	Male	235	2.63	.78
	Female	116	2.90	.68
Program-Success	Male	235	2.90	.81
	Female	116	3.05	.73
Win-Loss	Male	235	2.72	.87
	Female	116	2.99	.82

Table 16Pairwise Comparisons of Subscales for Head Coaches by Gender

	Female Subscales				
Male Subscales	Athlete- Concerns	Time-Role	Program-Success	Win-Loss	
Athlete-Concerns	[381,095]**				
Time-Role		[436,100]**			
Program-Success					
Win-Loss				[469,089]**	

Note. **p < .01.

Research Question 8: Which NCAA Division II head coaches experienced the most stress when compared by sport? A one-way ANOVA was performed to compare the dependent variable of total stress mean score and the independent variable of head coaches by sport. The one-way ANOVA revealed that there was a statistically significant difference in total stress mean scores F(8, 341) = 4.833, p < .001. Levene's test for equality of variances was non-significant, F(8, 341) = .77, p = .63, and the assumptions for homogeneity of variance was met.

Bonferroni's multiple comparisons revealed the total stress mean score for head coaches of men's basketball (M = 2.92, SD = .59) was significantly higher than the total stress mean score for head coaches of men's and women's golf (M = 2.39, SD = .70). The total stress mean score for head coaches of women's basketball (M = 3.03, SD = .52) was significantly higher than the total stress mean score for head coaches of baseball (M = 2.68, SD = .59), head coaches of men's golf (M = 2.44, SD = .70), and head coaches of men's and women's golf (M = 2.39, SD = .70). The total stress mean score for head coaches of softball (M = 2.92, SD = .56) was significantly higher than head coaches of men's golf (M = 2.44, SD = .70) and head coaches of men's and women's golf (M = 2.39, SD = .70). The means and standard deviations are reported in Table 17. Pairwise comparisons are reported in Table 18.

Table 17 *Means and Standard Deviations of Subscales for Head Coaches by Sport*

Sport	n	M	SD
Men's Basketball	61	2.92	.59
Women's Basketball	62	3.03	.52
Baseball	59	2.68	.59
Softball	76	2.92	.56
Men's Golf	20	2.44	.70
Women's Golf	14	2.61	.64
Women's Tennis	14	2.73	.54
Men' and Women's Golf	25	2.39	.70
Men's and Women's Tennis	19	2.82	.59

Table 18Pairwise Comparisons of Total Stress Mean Scores for Head Coaches by Sport

	Baseball	Men's Golf	M & G Golf
Men's Basketball			[.079, .978]**
Women's Basketball	[.003, .692]*	[.098, 1.0724]**	[.190, 1.087]***
Softball		[.001, .953]*	[.094, .967]**

Note. *p < .05. **p < .01. ***p < .001.

Research Question 9: Which NCAA Division II head coaches experienced the most stress when compared by age? A one-way ANOVA was performed to compare the dependent variable of total stress mean score and the independent variable of head coaches by age. The one-way ANOVA revealed that there was a statistically significant difference in total stress mean scores F(4, 337) = 8.213, p < .001. Levene's test for equality of variances was non-significant, F(4, 337) = 2.35, p = .054, and the assumptions for homogeneity of variance was met.

Bonferroni's multiple comparisons revealed the total stress mean score for head coaches aged 60 and over (M = 2.36, SD = .75) was significantly lower than the total stress mean score for head coaches aged 20 - 29 (M = 2.81, SD = .55), head coaches aged 30 - 39 (M = 2.91, SD = .55)

.60), head coaches aged 40 - 49 (M = 2.91, SD = .54), and head coaches aged 50 - 59 (M = 2.85, SD = .54). The means and standard deviations are reported in Table 19. Pairwise comparisons are reported in Table 20.

Further analysis explored the subscale mean differences of head coaches when compared by age. A one-way MANOVA yielded a significant main effect for head coaches by age, Wilks' Lambda = .839, F(16, 1021) = 3.763, p < .001. A follow-up ANOVA to compare head coaches by age subscales revealed a significant difference in the Athletic-Concerns, Time-Role, Program-Success, and the Win-Loss subscale mean scores. Athlete-Concerns F(4, 337) = 5.539, p < .001, Time-Role F(4, 337) = 7.737, p < .001, Program-Success F(4, 337) = 2.763, p < .05, and Win-Loss F(4, 337) = 8.246, p < .001.

Bonferroni's multiple comparisons revealed the Athlete-Concern subscale mean score for head coaches aged 60 and over (M = 2.38, SD = .78) was significantly lower than the Athlete-Concern subscale mean score for head coaches of all other age ranges except ages 20 - 29. The Time-Role subscale mean score for head coaches aged 60 and over (M = 2.23, SD = .85) was significantly lower than Time-Role subscale mean scores for head coaches of all other age ranges. The Program-Success subscale mean score for head coaches aged 60 and over (M = 2.61, SD = .90) was significantly lower than the Program-Success subscale mean scores for head coaches in the 30 - 39 and 40 - 49 age ranges. The Win-Loss subscale mean score for head coaches aged 60 and over (M = 2.22, SD = .82) was significantly lower than the Win-Loss subscale mean scores for head coaches aged 60 and over (M = 2.22, SD = .82) was significantly lower than the Win-Loss subscale mean scores for head coaches of all age ranges except ages 20 - 29. The means and standard deviations are reported in Table 21. Pairwise comparisons are reported in Table 22.

Table 19 *Means and Standard Deviations of Total Stress for Head Coaches by Age*

Ages	n	M	SD
20 – 29	23	2.81	.55
30 - 39	95	2.91	.60
40 - 49	98	2.91	.54
50 - 59	80	2.85	.54
60 and over	46	2.36	.75

Table 20Pairwise Comparisons of Total Stress Mean Scores for Head Coaches by Age

Ages	20 - 29	30 - 39	40 - 49	50 – 59
60 and over	[875,0243]*	[853,255]***	[846,250]***	[799,183]***

 $\overline{Note. *p < .05. ***p} < .001.$

Table 21 *Means and Standard Deviations of Subscales for Head Coaches by Age*

Subscale	Age	n	M	SD
Athlete-Concerns	20 - 29	23	2.73	.61
	30 - 39	95	2.91	.66
	40 - 49	98	2.82	.58
	50 - 59	80	2.78	.59
	60 and over	46	2.38	.78
Time-Role	20 - 29	23	2.90	.77
	30 - 39	95	2.88	.75
	40 - 49	98	2.84	.65
	50 - 59	80	2.62	.73
	60 and over	46	2.23	.85
Program-Success	20 - 29	23	3.08	.64
	30 - 39	95	3.00	.78
	40 - 49	98	3.02	.77
	50 - 59	80	3.00	.74
	60 and over	46	2.61	.90

Table 21 (Cont.)

Subscale	Age	n	M	SD
Win-Loss	20 - 29	23	2.54	.84
	30 - 39	95	2.86	.83
	40 - 49	98	2.95	.82
	50 - 59	80	3.00	.83
	60 and over	46	2.22	.82

Table 22Pairwise Comparisons of Mean Subscales for Head Coaches by Age (60 and over)

	20 - 29	30 - 39	40 - 49	50 - 59
Athlete- Concerns		[850,220]***	[760,114]**	[733,065]**
Time- Role	[-1.20,143]**	[-1.03,284]***	[986,244]***	[780,012]*
Program- Success		[788,001]*	[800,017]**	
Win- Loss		[-1.05,218]***	[-1.14,311]***	[-1.20,342]***

Note. *p < .05. **p < .01. ***p < .001.

Research Question 10: Which subscale was deemed the most stressful among NCAA Division II head coaches when compared by years of coaching experience: Athlete Concerns, Time-Role, Program Success, or Win-Loss? The years of coaching experience were divided into 4 groups: Novice (1-8 yrs.), Advanced (9-17 yrs.), Competent (18-26 yrs.), and Proficient (27+ yrs.). A one-way ANOVA was performed to compare the dependent variable of total stress mean score and the independent variable of years of coaching experience. The one-way ANOVA revealed no statistically significant difference in total stress mean scores F(3, 338) = 1.214, p > .305. Levene's test for equality of variances was non-significant, F(3, 338) = 1.28, p = .281, and the assumptions for homogeneity of variance was met.

A one-way MANOVA yielded a significant main effect for years of coaching experience, Wilks' Lambda = .895, F(12, 886) = 3.171, p < .001. A follow-up ANOVA to compare years of coaching experience subscales revealed a significant difference in the Win-Loss subscale mean scores F(3, 338) = 6.354, p < .001.

Bonferroni's multiple comparisons revealed the Win-Loss subscale mean score for novice head coaches (M = 2.51, SD = .79) was significantly lower than the Win-Loss subscale mean score for competent head coaches (M = 2.95, SD = .85) and Win-Loss subscale mean score for proficient head coaches (M = 3.10, SD = .92). The means and standard deviations are reported in Table 23. Pairwise comparisons are reported in Table 24.

Table 23Means and Standard Deviations of Subscales for Head Coaches by Years of Coaching Experience

Subscale	Gender	n	M	SD
Athlete-Concerns	Novice	84	2.68	.69
	Advanced	121	2.81	.66
	Competent	82	2.80	.57
	Proficient	55	2.75	.72
Time-Role	Novice	84	2.68	.82
	Advanced	121	2.84	.76
	Competent	82	2.70	.68
	Proficient	55	2.59	.81
Program-Success	Novice	84	2.94	.77
	Advanced	121	2.96	.81
	Competent	82	2.94	.75
	Proficient	55	2.96	.82
Win-Loss	Novice	84	2.51	.79
	Advanced	121	2.80	.85
	Competent	82	2.95	.85
	Proficient	55	3.10	.92

Table 24Pairwise Comparisons of Subscales for Head Coaches by Years of Coaching Experience

Win-Loss Subscale	Advanced	Competent	Proficient
Novice		[789,089]**	[981,198]***

Note. **p < .01. ***p < .001.

Discussion

The purpose of this study was to identify the factors that create stress among NCAA Division II college coaches of team, individual, and dual individual sports. The results of the study were generated using the Coaching Issues Survey (CIS). The Coaching Issues Survey was developed to measure sport/coaching-specific issues that may produce stress within the coaching role and situation. The survey consists of four separate but related subscales, Win-Loss, Time-Role, Program-Success, and Athlete-Concerns (Kelley & Baghurst, 2009).

The first research question explored which subscale was deemed the most stressful among NCAA Division II head coaches. Program-Success subscale was significantly higher than all other subscale mean scores for all the participants. Program-Success subscale factors contained issues critical to an athletic program's success and planning such as recruiting, budget, and facility hassles (Kelley & Baghurst, 2009). Program-Success subscale questions with the highest mean results of this study dealt with being able to recruit key personnel for success, budget limitations hampering recruiting, and inadequate travel budget for contests with highly competitive teams. Stress is also experienced as a result of perceived unequal or inadequate provision of budgetary support, lack of resources, money, scholarship, and budgetary issues. (Robbins et al., 2015).

These findings complement a previous study by Pearson, 2018, who found Time-Role and Program-Success subscales were found to be significant. Both indicated more than moderate stress in intercollegiate head swimming coaches. Furthermore, these results contradict earlier studies related to the Time-Role subscale. Levy et al. (2009) and Thelwell et al. (2008) who found factors such as preparation for training sessions, transport problems, traveling long

distances, communicating with management, tiredness, and not spending enough time with family to be stressors among sport coaches. These results may reflect the perceived stress of Division II head coaches and the lack of adequate funding in travel budgets, recruiting budgets, and scholarship funding at the Division II level.

The fifth and sixth research questions were centered toward the uniqueness of the NCAA Division II coaching model. Some NCAA Division II head coaches are assigned additional duties such as teaching and/or administrative responsibilities and most sport programs are not fully funded in scholarship monies. Of the participants in this study, 41% were responsible for duties other than coaching and 74% of the programs were not fully funded. The results suggest that the total stress mean scores of head coaches with additional duties were significantly higher than head coaches with no additional duties. Further analysis revealed the Time-Role and Program-Success subscale mean scores for head coaches with additional duties was significantly higher than head coaches with no additional duties. Additional analysis revealed that only 11% of the participants were responsible to teaching duties reflecting the possibility that athletic programs have moved away from the dual teaching/coaching model but replaced the responsibilities with administrative roles in the athletic department or duties on campus.

The Time-Role subscale factors contained issues related to the time required to fulfill the role of collegiate coach and potential conflicts involved in that role with time limitations and role strain (Kelly & Baghurst, 2009). Some of the significant factors in the Time-Role subscale in this study included not reaching my coaching goals, substantial number of hours spent working in a day, not having enough time for recruiting, not having enough time to devote to my coaching responsibilities, my career as a coach interfering with family and/or social life, and the travel required to recruit quality athletes. In a qualitative study by Olusoga et al. (2009) coaches

described how the need to prioritize administrative duties was stressful in that it took away from what they felt was more important (i.e., coaching and working with their athletes). The amount of time taken away from coaching responsibilities may create frustration and stress among coaches with additional duties.

Interestingly, the Program-Success subscale mean score for head coaches with additional duties suggest higher stress levels than head coaches with no additional duties. This finding implies that the stress of being able to recruit key personnel, budget limitations on recruiting, and inadequate travel budgets increase the stress levels of head coaches with additional duties even though they could justify the lack of program success due to the time and energy spent on completing additional duties. This could be explained by the effect of perceived stress and perfectionism. The maladaptive forms of perfectionism (i.e., self-evaluative perfectionism) lead to the perception that resources were insufficient to satisfy demand, thereby resulting in increased levels of stress and the experience of burnout (Tashman et al., 2010).

As for scholarship funding, the NCAA Division II scholarship limits per sport are as follows: Men's and Women's Basketball are allowed 10, Baseball 9, Softball 7.2, Men's Golf 3.6, Women's Golf 5.4, and Women's Tennis is allowed 6 scholarships. (O'Rourke Patrick, 2021). These limits are permitted by sport but not always fully funded per sport. NCAA Division II athletic programs are not required to fully fund the scholarship monies per sport. The results of this study revealed a higher total stress mean score for head coaches without full scholarship funding than head coaches with full scholarship funding but not at a significant level.

Further analysis revealed the Program-Success subscale mean score to be significantly higher for coaches without full scholarship funding. Two of the highest individual subscale

question mean scores for the Program-Success subscale were questions concerning budget limitations hampering recruiting and being able to recruit the key personnel that my team needs to be successful. These results suggest that head coaches of sport programs that are not fully funded in scholarship monies experience more stress due to the fact they struggle recruiting against peer programs that might be fully funded in scholarship monies. Not only are head coaches competing for recruits against peer programs, but they are also competing against NCAA Division I, NAIA (National Association of Intercollegiate Athletics), and the NJCAA (National Junior College Athletic Association). All three of these associations have higher scholarship limits than the NCAA Division II limits (O'Rourke Patrick, 2021). As has previously been found, stress is also experienced as a result of perceived unequal or inadequate provision of budgetary support, lack of resources, money, scholarship, and budgetary issues. (Robbins et al., 2015).

The ninth and tenth research questions compared stress levels of head coaches by age and years of coaching experience. Of the participants aged 60 and over, 39% were head coaches of dual individual sports and 48% were head coaches of team sports. Head coaches aged 60 and over scored significantly lower in total stress mean score than all other age groups. There was no significant difference in the other age groups.

After further analysis, head coaches aged 60 and over scored significantly lower than the other age ranges in all subscale scores except the Program-Success subscale mean score, where they were only significantly lower in two other age ranges and not significantly lower than the 50 – 59 age range. These results suggest older coaches may have developed coping skills and/or created a social support structure around them to reduce stressors. Another possible explanation could be that head coaches are entering the profession at a later age possibly as a second or third

career choice and possess coping skills from previous experiences. Lastly, head coaches aged 60 and over may have already raised their children and no longer feel the stress of raising children, marital issues, spending time away from family for recruiting, and traveling for their sport season.

Surprisingly, the results for total stress mean score of head coaches compared by years of experience contradict the results of head coaches by age. The total stress mean score for head coaches by years of experience yielded no statistically significant difference but further analysis revealed a significant difference in the Win-Loss subscale. The results showed that the Win-Loss subscale mean score for novice head coaches (1 – 8 yrs.) was significantly lower than competent and proficient head coaches. These results support a previous study that suggests coaches with only short-term work experience (less than 10 years is not very long in the coaching profession) are not as sensitive to the pressures from the people surrounding them and the stress of work. Consequently, their stress levels may be lower (Malinauskas et al., 2010). The results may reflect the collegiate coaching philosophy that head coaches are not judged on program success and win loss until after they have had the chance to recruit, bring in their own players, and implement their coaching system. Sometimes this process may take five to six years depending on the state of the program when the head coach was hired.

Another explanation could reflect previous studies that showed that coaches reported the greatest single stressor was "placing pressure on themselves to win" (Kelley & Baghurst, 2009). This explanation coincides with the earlier research by Lackey (1986) that suggests a social shift toward a greater emphasis on winning. It may be that coaches are responding to this societal focus on winning, which may in turn compound the pressure they are experiencing. Further examination suggests that these coaches also struggle with issues of recruitment limitations with

budgets, time constraints, and performance inconsistencies by both players and officials (Kelley & Baghurst, 2009). The fact that coaches working for more than 10 years typically show higher levels of burnout supports the statement that coaches working for a long time are unable to adapt to ever-more-demanding requirements; they may be unable to overcome competition and consequently surrender to the pressure imposed by the people surrounding them (Malinauskas et al., 2010).

The eighth research question compared stress levels of head coaches by sport.

Interestingly, head coaches of women's basketball scored significantly higher than head coaches of baseball, men's golf, and men's and women's golf in total stress scores. Women's basketball total stress scores were higher than men's basketball and softball but not at a significant level. In a previous study by Pastore & Judd (1992), the authors speculated that women's basketball had become a higher profile team sport creating more pressure to win and produce revenue. These results seem to contradict a previous study that found higher levels of burnout was more likely to be experienced by minor sport coaches than major sport coaches (Bradford & Keshock, 2011).

Research questions two, three, and four explored the stress levels by type of sport, team, individual, and dual individual sport. The Program-Success subscale was found to be significantly higher than all other subscale scores in both head coaches of team sports and dual individual sports (e.g., men's and women's golf and men's and women's tennis). Head coaches of an individual sport (e.g., men's golf, women's golf, and women's tennis) revealed no significant differences within subscale mean scores. The head coaches of the dual individual sports may experience the added pressure of recruiting and budget constraints of coaching two intercollegiate sports as opposed to the responsibility of just one sport.

It is also significant to note that the Win-Loss subscale mean score for head coaches of team sports was significantly higher than Athlete-Concerns and Time-Role subscales. This may reflect the idea that team sports such as basketball are a higher profile sport and perceived as a revenue for the athletic department. Of the 30 items on the Coaching Issues Survey, coaches reported that the greatest single stressor was "placing pressure on themselves to win" and Win-Loss ranked highest among all subscales (Kelley & Baghurst, 2009).

The seventh research question compared stress levels of head coaches by gender. The female head coaches scored significantly higher on total stress mean score and all subscale mean scores except Program-Success, although the Program-Success subscale was the most significant subscale for all the participants. These results are consistent with previous studies. Female coaches have reported higher levels of burnout when compared to their male counterparts (Pastore and Judd, 1992). Women have also reported a higher tendency than men to find coaching issues stressful (Kelly et al., 1999; Pearson, 2018).

Conclusions

The purpose of this study was to identify the factors that create stress among NCAA Division II head coaches. The study examined coaching issue factors related to type of sport coached (e.g., team, individual, and dual individual), head coaches with additional duties, scholarship funding, age, years of coaching experience, and gender. The data suggests that Program-Success is a stressful issue for head coaches of collegiate sports at the NCAA Division II level. Program-Success relates to coaching issues such as inadequate travel budgets for contests with highly competitive teams, being able to recruit key personnel to improve success, and budget limitations that hamper recruiting. The results involving head coaches with additional

duties suggest higher total stress mean scores, higher Time-Role subscale mean scores, and higher Program-Success subscale mean scores than head coaches without additional duties. In addition, Program-Success was found to be significant with head coaches of programs lacking in scholarship funding.

The data for participants aged 60 and over suggests coaches experience less total stress than the other age groups. The results involving head coaches and their years of experience suggests that Win-Loss is a stressful issue for head coaches depending on their years of experience. In addition, the results suggest head coaches of women's basketball experience more total stress than head coaches of baseball, men's golf, and men's and women's golf. Consistent with previous studies, the data suggests that female head coaches experience more total stress and higher subscale scores in Athlete-Concerns, Time-Role, and Win-Loss than their male counterparts. The results both supported and contradicted previous research involving stress among collegiate head coaches. Further research could benefit coaches at the collegiate level and administrators to aid in the reduction of stress among their coaching staff.

Recommendations

Results of the current study support past research but also sheds some light on subtle differences at the NCAA Division II level. This was the first study completed using only head coaches at the NCAA Division II level. The following recommendations might increase the identification of factors that create stress among NCAA Division II head coaches:

1. Repeat the study by sending the survey to head coaches at the beginning of the school year and at the conclusion of their sport season. This approach might highlight the

- assessment of all coaching issues throughout the school year including pre-season, recruiting, and post-season.
- 2. Repeat the study with the additional variables of ethnicity differences, support staff, and coaching staff.
- 3. Repeat the study with a mixed-method design including open-ended questions to attain issues not related to the Coaching Issues Survey.
- 4. Design a qualitative study focused on the older coaches in the previous study aimed at reasons for low stress levels and coping strategies developed during their coaching experience.

Considering the recent changes in the NCAA rules and regulations, the possible shift in the dynamic of the Division II teaching/coaching model, and the impact of social media, the researcher would like to briefly discuss the following topics that may create stress among head coaches:

- The creation of the transfer portal and the forced adoption of the name, image and likeness policy are recent changes to NCAA rules and regulations that affect NCAA Divisions I, II, and III.
- The possible shift from the dual role of teacher/coach responsibilities to administrative/coach responsibilities.
- The emergence of social media within sport programs and athletic departments.

Future research is needed to explore the impact of these changes on head coaches at the NCAA level and answer the following questions:

- Has the creation of the transfer portal added stress related to coaching issues or has it created another avenue to recruit future players?
- Have athletic administrators created or reduced stress by replacing the teacher/coach role with added administrative responsibilities?
- Has the impact of social media created stress related to coaching issues or has it enabled sport programs to recruit key personnel to improve program success?

Summary

In summary, the purpose of this study was to investigate the factors that cause stress among NCAA Division II head coaches. The factors in this study related to concerns about athletes, the time required to fulfill coaching duties, running a successful program, and the pressure imposed to have a winning program. While the study supported some previous research, the findings suggest that head coaches at the Division II level are just as competitive as their peers at other levels but might have to deal with a few more obstacles to have a successful program by their own competitive standards. They know the personnel they need to have to produce championship teams but struggle with the resources available to produce those teams year after year. They don't have the luxury of having quality backup personnel to their starting players due to the lack of scholarship funding or the travel budget to go play highly competitive teams within their own region.

Athletics can be the window in which an institution may be viewed, and this former coach always felt as if I were one the panes of the window. Even head coaches on the same

coaching staff wanted to have the brightest pane in the window. A coach is not only representing their university and their team, but they are also exposing themselves to public opinion and how the public perceives their work ethic, knowledge of the sport, and their ability to produce championship teams. These kinds of outside and self-imposed pressure may create stress among coaches and lead coaches to feel like they are not reaching their coaching goals. This kind of pressure is not equal to other staff and faculty on a campus, it is doubtful that a general education professor would lose their position if half of their students failed one of their classes.

This study illustrates some factors that cause stress among head coaches at the NCAA Division II level, but how can athletic administrators relieve some of the stress. Like most things is this world, it comes down to resources and funds. The first thing that needs to happen is developing an open line of communication between coaches and administrators discussing some of the factors that are creating stress with each program. With the new NCAA regulations in the future there might be new ways to increase scholarship funding and utilize different resources to improve recruiting efforts. No matter what happens in the future, the competitive nature of coaches will continue to thrive. Why play the game if you are not going to keep score?

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Appendices

Appendix A: Coaching Issues Survey

Coaching Issues Survey

Please rate the **DEGREE** to which each issue described below causes you or produces stress in your coaching situation during your season.

DEGREE

1 = No	Stress, $2 = Low Stress$, $3 = Moderate Stress$, $4 = High Stress$, $5 = Extreme Stress$
1	_Understanding my athletes' emotional responses and motivations.
2	Not having enough time to devote to my coaching responsibilities.
3	The traveling required to recruit quality athletes.
4	Other sports or campus events conflicting with my team's use of facilities.
5	Personality conflicts with my players.
6	Not successfully fulfilling my responsibilities outside of my coaching duties (teaching).
7	Not being able to hire adequate assistant coaches and support staff.
8	Not having time for myself.
9	Inadequate travel budget for contests with highly competitive teams.
10	Making decisions which are not popular with my players.
11	My career as a coach interfering with family and/or social life.
12	Not reaching my coaching goals.
13	Not knowing the criteria by which I will be judged.
14	The expectation to win a contest in which my team is predicted to win by a close score.
15	Injury to one of my starters or top players.
16	Placing pressure on myself to win.
17	Being able to recruit the key personnel that my team needs to be successful.

18	The expectation to win a contest in which my team is predicted to win by a large margin.
19	Players' inconsistency in executing the fundamental skills or game plan.
20	Not having enough time for recruiting.
21	The expectation to win a contest in which my team is predicted to lose by a close score.
22	Being concerned that my players might not return to school for the next term.
23	Inconsistent judgment calls during a contest.
24	Momentum turning against my team in a contest.
25	_ Handling defeat.
26	Budget limitations hampering recruiting.
27	The expectation to win a contest in which my team and the opposing team are evenly matched.
28	Substantial number of hours spent working in a day.
29	Not successfully fulfilling my responsibilities outside of my coaching duties (e.g., speaking engagements, committee assignments, etc.).
30.	Being a source of help to my athletes.

Appendix B: Survey Items According to Subscale

Subscale Questions of Coaching Issues Survey

Factor Analysis

<u>Athlete – Concern Objectives</u>

- 1 Understanding my athletes' emotional responses and motivations.
- 5 Personality conflicts with my players.
- 10 Making decisions which are not popular with my players.
- 15 Injury to one of my starters or top players.
- 19 Players' inconsistency in executing the fundamental skills or game plan.
- 30 Being a source of help to my athletes.

<u>Time – Role Objectives</u>

- 2 Not having enough time to devote to my coaching responsibilities.
- 3 The traveling required to recruit quality athletes.
- 6 Not successfully fulfilling my responsibilities outside of my coaching duties (teaching).
- 8 Not having time for myself.
- 11 My career as a coach interfering with family and/or social life.
- 12 Not reaching my coaching goals.
- 20 Not having enough time for recruiting.
- 28 Substantial number of hours spent working in a day.
- 29 Not successfully fulfilling my responsibilities outside of my coaching duties (e.g., speaking engagements, committee assignments, etc.).

<u>Program – Success Objectives</u>

- 4 Other sports or campus events conflicting with my team's use of facilities.
- 7 Not being able to hire adequate assistant coaches and support staff.
- 9 Inadequate travel budget for contests with highly competitive teams.
- 13 Not knowing the criteria by which I will be judged.
- 17 Being able to recruit the key personnel that my team needs to be successful.
- 22 Being concerned that my players might not return to school for the next term.
- 26 Budget limitations hampering recruiting.

Win – Loss Objectives

- 14 The expectation to win a contest in which my team is predicted to win by a close score.
- 16 Placing pressure on myself to win.
- 18 The expectation to win a contest in which my team is predicted to win by a large margin.
- 21 The expectation to win a contest in which my team is predicted to lose by a close score.
- 23 Inconsistent judgment calls during a contest.
- 24 Momentum turning against my team in a contest.
- 25 Handling defeat.
- 27 The expectation to win a contest in which my team and the opposing team are evenly matched.

Appendix C: Demographic Questionnaire

Demographic Questionnaire

The following questions are for demographic purposes only. 1. What is your gender? ____ Male _____ Female _____ Do not identify 2. What is your marital status? ____ Married _____ Single ____ Divorced 3. Do you have any children and/or dependents? If so, how many? 4. What is your age? 5. What is your educational level? _____ Undergraduate Degree ____ Masters Degree ____ Doctorate 6. What is your salary range? _____ 20,000 – 29,999 ____ 30,000 – 39,999 ____40,000 - 49,999 ____ 50,000 - 59,999 _____ 60,000 – 69,999 _____ 70,000 – 79,999 _____ 80,000 – 89,999

	90,000 – 99,999
	100,000 or above
7.	Are you responsible for any non-coaching duties?
	No other duties
	Teaching Load
	Administrative Duties
	Campus Duties
	Please Specify Other Duties
8.	What is your ethnicity/race do you most identify?
	White/Caucasian
	Black/African American
	Native American/Native Alaskan
	Native Hawaiian/Pacific Islander
	Asian
	Hispanic/Latino
	Other
	Prefer not to answer
9.	What sport(s) do you presently coach?
	Men's Basketball
	Women's Basketball
	Men's Baseball
	Women's Softball
	Men's and Women's Golf
	Men's Golf
	Women's Golf
	Men's and Women's Tennis
	Men's Tennis
	Women's Tennis

10. Does your program receive the full amount of scholarship funds allowed by NCAA Division II regulations? (Ex. Baseball is allowed 9 full scholarships, does the program receive that amount to use toward athletic scholarships?) Yes or No
11. How long have you coached at your present institution?
12. How long have you been a college coach?
13. Have you coached at different levels? If so, what other levels?
NCAA Division I
NCAA Division III
Junior College
High School
Only NCAA Division II
Other
14. How would you describe your coaching support staff? (Please check all that apply)
Full-time paid assistant (If so, how many?)
Graduate assistant (If so, how many?)
Student assistant (If so, how many?)
Volunteer assistant (If so, how many?)
No assistant on staff
15. If your coaching support staff employs a full-time or part-time paid assistant, how is the position funded?
Athletics Department
College of Education
Private fund-raising effort
Other (Please specify)

Appendix D: Institutional Review Board Approval Letter



To: Dee Ann Gerlach

From: Douglas James Adams, Chair

IRB Committee

Date: 03/03/2020

Action: Exemption Granted

Action Date: 03/03/2020
Protocol #: 2001246249

Study Title: Stress among NCAA Division II Head Coaches

The above-referenced protocol has been determined to be exempt.

If you wish to make any modifications in the approved protocol that may affect the level of risk to your participants, you must seek approval prior to implementing those changes. All modifications must provide sufficient detail to assess the impact of the change.

If you have any questions or need any assistance from the IRB, please contact the IRB Coordinator at 109 MLKG Building, 5-2208, or irb@uark.edu.

cc: Dean Richard Gorman, Investigator

Appendix E: Consent to Participate in a Research Study

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Title: Stress among NCAA Division II Head Coaches

Principal Investigator: Dee Gerlach

Assistant Professor, Health and Kinesiology Northeastern State University 600 N. Grand Tahlequah, OK 74464 918-931-7818 gerlach@nsuok.edu

Faculty Sponsor: Dr. Dean Gorman

Professor, Health, Human Performance, & Recreation University of Arkansas HPER 0308W Fayetteville, AR 72701 479-575-2890 dgorman@uark.edu

Purpose: My name is Dee Gerlach and I am an assistant professor of Health and Kinesiology at Northeastern State University. I am conducting a research study examining the factors that create stress among NCAA Division II head coaches. The research study may identify factors that create stress depending on the type of sport, gender differences, duration of coaching experience, and coaching support staff.

This study focuses solely on NCAA Division II head coaches. I am interested in this division because I spent 12 years coaching at this level and I feel the research is lacking in the area of NCAA Division II head coaches. I truly understand the importance of your time and energy but this may assist athletic administrators at this level to aid in the reduction of stress among their coaching staff.

Discomforts and Risks: There are no risks in participating in this research beyond those experienced in everyday life. Participation in the study is voluntary and refusing to participate will not adversely affect any other relationship with the University or the researchers.

Cost or Compensation: There is no charge for participation in this study.

Duration and Benefits: The survey will take approximately 10-15 minutes of your time and there are no risks or costs for your participation. I would appreciate your willingness to participate in the study which could possibly benefit you and your athletic administrators in the future.

Your consent to participate will be implied by opening the survey, completing it, and submitting the online survey. Please try to complete the survey in the next 1 to 2 weeks if possible, to ensure that the data was collected during or immediately after you're playing season.

Statement of Confidentiality: Your participation in the survey will be confidential. All information will be kept confidential to the extent allowed by law and University policy. I sincerely appreciate your time. My contact information is below if you have any questions.

Right to Ask Questions: This project has been approved by the University of Arkansas Institutional Review Board (IRB). If you have questions or concerns about your rights as a research participant, please contact Ro Windwalker, the University's Human Subjects Compliance Coordinator, at 479-575-2208 or irb@uark.edu.

By clicking on the link below, you indicate that you have read this consent form and wish to participate in the study.

Survey Link

Principal Investigator: Dee Gerlach

Assistant Professor, Health and Kinesiology Northeastern State University 600 N. Grand Tahlequah, OK 74464 918-931-7818 gerlach@nsuok.edu

Faculty Sponsor: Dr. Dean Gorman

Professor, Health, Human Performance, & Recreation University of Arkansas HPER 0308W Fayetteville, AR 72701 479-575-2890 dgorman@uark.edu