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RESEARCH ARTICLE

Stress among NCAA Division II Head Coaches

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Abstract

This study examined the unique experiences of Division II coaches as they relate to the occurrence of stress and burnout. Coaches from 10 Div. II male and females sports responded to a survey concerning their coaching and non-coaching duties, dual-sport roles, support staff, scholarship funding, and family life, as well as to a coaching stress survey. While the subscale of Program-Success showed the highest amount of stress among the 4 subscales for all Div. II coaches, this was especially true for coaches who lacked scholarship funding. In addition, coaches who had additional duties also had higher Time-Role subscale stress scores than coaches without those duties. Good administrators should keep lines of communication with coaches open so that a discussion of specific factors creating stress within various programs can be heard and addressed.

1. Introduction

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 (National Collegiate Athletic Association) 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, 1984).

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, 1986). 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

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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) believes that while everyone can experience stress, burnout is most likely to be experienced experienced by people who enter their careers with high goals, expectations, and motivation. These are people who expect to get a sense of significance from their work.

Few studies have 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).

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 Associaiton, 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. In addition, 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. NCAA Division II athletics is comprised of 23 conferences and 310 schools. For comparison, Division I athletics is comprised of 32 conferences and 335 schools. The requirements for universities to compete at the Division II level not identical to 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. However, the actual sport sponsorship is 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 (National Collegiate Athletics Associaiton, 2019).

In light of the paucity of research looking specifically at coaches from a level other than Division I, the purpose of this study was to identify the primary factors that create coaching stress among college coaches from various sports at the NCAA Division II level. Other stress comparisons that may not be relevant in Division I were made: dual sport vs one sport coaches, scholarship opportunities (full vs partial), and coaches who have other duties vs those who only coach. Finally, differences related to gender, age, and coaching experience were also explored.

2. Method

2.1 Participants

Possible participants were head coaches at the NCAA Division II level in the 2019-2020 National Directory of College Athletics. After an extensive search, 1,933 sports programs from the 2019-2020 National Directory of College Athletics were identified. Men's sports represented 939 teams and women's sports

represented 994 teams. 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 Division II. A total of 416 NCAA Division II head coaches participated and completed the present study, resulting in a 24.4% return rate. Head coaches of sports represented in this study included baseball (n=68), men's basketball (n=67), women's basketball (n=79), men's golf (n=28), women's golf (n=15), men's and women's golf (n=30), softball (n=86), women's tennis (n=20, and men's and women's tennis (n=22). However, not all of the coaches were included in some of the statistical analyses because of missing data. All of these sports were conducted and/or completed in the spring semester that the data was collected.

2.2 Questionnaires

2.2.1 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). CIS consists of four separate subscales: Athlete-Concerns (6 items), Time-Role (9 items), Program-Success (7 items) , and Win-Loss(8 items). with Cronbach alpha over .70 for all subscales. 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 the 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 oneself to win. The Time-Role subscale examined issues such as not having enough time for recruiting and coaching responsibilities, the substantial number of hours working in a day, and not reaching coaching goals. The Program-Success subscale reflected 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. The four subscales were scored using a Likert scale, with 1 indicating no stress, 2 indicating low stress, 3 indicating moderate stress, 4 indicating high stress and 5 indicating extreme stress. Scores were obtained for each subscale separately and also for a total stress score by including the entire scale.

2.2.2 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. For statistical purposes, coaching experience was categorized into 4 levels: Novice (1-8), Competent (9-17), Advanced (18-26), and Proficient (>26). Age was similarly categorized into 5 levels: 20-29, 30-39, 40-49, 50-59, and 60 plus.

2.3 Procedure

Collection of data began after the approval of the surveys by an institutional review board. 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. Informed consent was implied with return of the questionnaire.

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.

2.4 Treatment of the Data

The Statistical Package for Social Sciences version 25 was used to analyze the descriptive statistics of the study. 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 differences in four subscales when examining additional duties, gender, age, and years of coaching experience, and scholarship opportunites. Independent t-tests were conducted when analyzing total stress scores for additional duties, type of sport, age, and coaching experience. Bonferroni's multiple comparisons were used when appropriate to the analysis.

3. Results

3.1 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 1. Years of coaching experience can be found in Table 2.

Table 1. *Descriptive Statistics for Participants (N=416)*

Participants	Frequency	Percentage of Participants
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
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. *Descriptive 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 (Competent)	149	35.8
18 – 26 (Advanced)	94	22.6
27+ (Proficient)	67	16.1
Not reported	12	2.8

3.2 Analyses of Individual, Team, and Dual-Sport Coaches

To determine which subscale was deemed the most stressful among NCAA Division II head coaches, a one-way repeated measures ANOVA was used. Because Mauchly's Test of Sphericity identified that the assumption of sphericity was being violated, a Huynh-Feldt adjustment was made. The results revealed a statistically significant difference in subscales mean scores $F(1,350) = 9.182$, $p < .01$). 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.

A one-way repeated measures ANOVA was used to compare subscale mean scores for head coaches of team sports, but due to significance in Mauchly's Test of Sphericity, a Huynh-Feldt adjustment was again made. 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 score for Program-Success ($M = 3.02$,$SD = .76$) was significantly higher than subscale the mean score 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 score for Athlete-Concerns($M = 2.83$, SD .63) and Time-Role ($M = 2.75$, $SD = .73$). A similar analysis was performed for individual sport coaches but no difference among the four subscales was found.

However, the ANOVA examining the four subscales for coaches of dual sports revealed a statistical difference, $F(3, 129) = 8.750$, $p < .001$. Bonferroni's multiple comparisons revealed the subscale mean

score for Program-Success (M = 2.86, SD = .87) was significantly higher than subscale mean score 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).

3.3 Secondary Analyses

3.3.1 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 = .58), t(340) = -3.141, p < .01.

Further analysis explored the subscale mean differences between head coaches with no additional duties and head coaches with additional duties. A one-way MANOVA was significant, Wilks' Lambda = .913, F(4, 337) = 7.978, p < .001. A follow-up ANOVA 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)

3.3.2 Scholarship Funding

An independent samples t-test, t(345) = -1.694, p = .091 found no difference in total stress score between head coaches with full scholarship funding (M = 2.72, SD = .60) and head coaches without full scholarship funding (M = 2.85, SD = .62).

However, when examining the subscales, the one-way MANOVA was significant, 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 F(1, 345) = 15.217, p < .001. Those without full scholarships (M = 3.05, SD = .77) had higher Program-Success stress scores than did those with full scholarships (M = 2.68, SD = .76).

3.3.3 Gender Comparisons

A one-way MANOVA yielded was significant for gender, Wilks' Lambda = .960, F(4, 346) = 3.642, p < .01. A follow-up ANOVA was significant for each three of the subscales: 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.

Female head coaches (M = 2.99, SD = .82) scored significantly higher on the Win-Loss subscale than did male head coaches (M = 2.72, SD = .87). Also, the Time-Role subscale mean score for female head coaches (M = 2.90, SD = .68) was significantly higher than for male head coaches (M = 2.63, SD = .78). Lastly, the Athlete-Concern subscale 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).

3.3.4 Age Comparisons

A one-way ANOVA revealed that there was a statistically significant difference in total stress mean scores by age, F(4, 337) = 8.213, p < .001.

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 = .60), head coaches aged 40 – 49 (M = 2.91, SD = .54), and head coaches aged 50 – 59 (M = 2.85, SD = .54).

Further analysis explored the subscale mean differences of head coaches when compared by age. A one-way MANOVA yielded was significant, Wilks' Lambda = .839, F(16, 1021) = 3.763, p < .001. A follow-up ANOVA revealed a significant differences in all four subscales: 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 of all age ranges except ages 20 – 29.

3.3.5 Coaching Experience Comparisons

The years of coaching experience were divided into 4 groups: Novice (1-8 yrs.), Competent (9-17 yrs.), Advanced (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 $F(3, 338) = 1.214$, $p > .305$. However, when the subscales were examined, the one-way MANOVA yielded a was significant, Wilks' Lambda = .895, $F(12, 886) = 3.171$, $p < .001$. The follow-up ANOVA 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 advanced head coaches (M = 2.95, SD = .85) and Win-Loss subscale mean score for proficient head coaches (M = 3.10, SD =.92).

3.3.6 Total Stress by Type of Sport

A one-way ANOVA revealed that there was a statistically significant difference in total stress scores for type of sport, $F(8, 341) = 4.833$, $p < .001$. 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).

4. Discussion

The foremost research question examined which subscale was deemed the most stressful among NCAA Division II head coaches. The 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). The 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 has previously been found to be a result of perceived unequal or inadequate provision of budgetary support, lack of resources, money, scholarship, and budgetary issues. (Robbins, Gilbert, & Clifton, 2015).

When broken down by individual, team , or dual-sport coaches, 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. 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, Nichols, Marchant, and Polman (2009) and Thelwell et al. (2008) 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 highest stressors among sport coaches. The finding that Program Success was

most stressful in this study may reflect the unique 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 versus those of Division I coaches from earlier studies..

In the Division II coaching model, NCAA Division II head coaches are often 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 found 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 scores for head coaches with additional duties was significantly higher than head coaches with no additional duties. Additional descriptive analyses 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) have been found to lead to the perception that resources are insufficient to satisfy demand, thereby resulting in increased levels of stress and the experience of burnout (Tashman et al., 2010). While burnout was not a variable in this study, it remains a possibility from stress levels experienced.

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. Also, the Program-Success subscale score was significantly higher for coaches without full scholarship funding. Two of the highest individual subscale questions for the Program-Success subscale were questions concerning budget limitations hampering recruiting and being able to recruit the key personnel that the 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, 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).

One interesting finding of this study was that head coaches aged 60 and over scored significantly lower in total stress mean score than all other age groups. Head coaches aged 60 and over also 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.

Surprisingly, the results for total stress mean score of head coaches compared by years of experience contradicted 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 advanced (18-26 yrs) and proficient head coaches (>26 yrs). These results support a previous study (Malinauskas, Malinnauskiene, & Dumciene, 2010) 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. 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.

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 and 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).

Female head coaches scored significantly higher on total stress mean score and all subscale mean scores except Program-Success, although the Program-Success subscale produced the highest stress 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 & Judd, 1992). Women have also reported a higher tendency than men to find coaching issues stressful (Kelly, Eklund, & Ritter-Taylor, 1999; Pearson, 2018). However, from the results of this study, both men and women seem to have equally high stress related to program success, as shown by the non-significant Program-Success subscale scores. This finding is understandable in that program success is likely tied to job security and men and women would be equally affected.

This was the first study completed using only head coaches at the NCAA Division II level. However, several suggestions for future research can be made. It may be useful to send the survey at the beginning of the school year and again at the end of the sport season to encompass pre- and post-season issues. Also, the inclusion of all sports, not just spring sports, may magnify other issues. In addition, identifying and analyzing perceptions of coaches who coach the opposite gender may provide different results. Finally, in view of the recent changes in NCAA at all levels, other issues that may provide additional stress may be of interest to research at all levels. These include the creation of the transfer portal, the forced adoption of the name, image and likeness policy, and the emergence of social media within sport programs and athletic departments.

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