Stress and Burnout in Certified Athletic Trainers

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Abstract: Medical personnel typically have demanding and intensified work environments. Due to these work duties work stress can frequently occur followed by burnout that leads to attrition from the respective profession. Athletic training is an occupation that has been shown to perform important and critical functions in the treatment of athletes. Due to this, it is an occupation that can incur significant amount of work stress leading to burnout. Despite the important nature and previous study of the problem, athletic trainers need to better gauge the influence of work stress on the career procession and migration. The purpose of this research was to better understand athletic trainer burnout at the intercollegiate level. In carrying forth this study, secondary and primary research were conducted. The mixed-method designed enabled valued insight to be gained. Key outcomes identified specific life-stressors and burnout factors pertinent to the athletic trainer profession in the collegiate setting.

Key words: Athletic training, burnout, life-stressors.

I. INTRODUCTION

Working as an athletic trainer in a collegiate setting has been found to be a satisfying, fulfilling, and worthwhile profession [1], [2], [3], [4]. The reliance that college athletes often have on their athletic trainer offers rewarding opportunities to the trainer in a number of circumstances including supporting athletes in times of disparity, injury, illness, and a variety of personal life experiences [5]. Yet, it has also been determined that working as a certified athletic trainer often in charge of hundreds of athletes and several athletic training students, can cause stress. Sometimes this stress is so severe that the athletic trainer experience burn out and decides to leave the profession. [1], [2], [3], [4].

Within research pertaining to college athletic trainers, subjects were found to have different experiences based off of institution, level of athletics, personality, gender, and the sport and staff they worked with. Because of the variety of trainer experiences, no two athletic trainers had the same perception of their career. A review of literature specific to factors contributing to stress and burnout in collegiate athletic training provided insight into these factors including lifestress, emotional exhaustion, depersonalization, and decreased personal accomplishment. Additionally, psychological and physical factors played a large influential role on athletic trainer job satisfaction, as well as their levels of stress and presence of burnout. The literature determined which psychological and physical contributors led to stress and burnout in athletic trainers, as well as identifying processes that can be done to avoid these from occurring.

The purpose of this research was to better understand athletic trainer burnout at the collegiate level. This investigation was carried forth in two tiers. Tier one consisted of a secondary research while survey research was the focus of Tier two.

II. SUMMARY RESEARCH

In an examination of stress and burnout in Certified Athletic Trainers (ATCs) at Division 1-A universities, [6] studied how stress negatively influenced human psychological and physical health. High levels of stress and burnout were found to be prevalent in the healthcare profession and linked to detrimental effects. The chronic stress that was involved with burnout causes included depersonalization, emotional exhaustion, and a lack of personal accomplishment. Understanding the factors related to burnout can assist ATCs in controlling their chronic stress and negative effects.

The subjects of this study included 118 ATC's working at NCAA Division I universities [6]. The researchers assessed hardiness, social support, athletic training problems, and perceived stress through questionnaires and surveys. Hardiness was examined through The Hardiness Test which is a 30-item instrument scaled on a 5-point Likert scale. Social Support was examined through the Social Support Questionnaire (SSQ), which is a 6-item tool assessed on a 6-point Likert scale. Looking at factors that could be viewed as stressful, an Athletic Training Issues Survey (ATIS) was utilized based off of the Coaching Issues Survey. This is a 30-item survey assessed on a 5-point Likert scale. Perceived stress of athletic trainers was examined through the Perceived Stress Scale (PSS) while consisted of 14-items and was measured on a 5-point Likert scale. The results of the study confirmed levels of hardiness, perceived stress, emotional exhaustion, depersonalization, and personal achievement of athletic trainers. The means of these results were showed with means of coaches (male vs. female), coach-teachers, higher education

workers, social service workers, mental health workers, and medical workers to give a better idea of how athletic trainers compare to other working professionals.

The results of the study [6] showed that hardiness was an indicator for burnout in athletic trainers. Knowing this, the researchers recommended that athletic trainers focus on being hardy and thriving on their stressful challenges rather than dwelling on them and causing more stress for themselves. Additionally, this study found that low social support led to higher levels of stress. As such, it was recommended that athletic trainers focus on building up the best support system possible to avoid the occurrence of burnout.

A second study by [6] focused on the psychological and organizational factors related to burnout in athletic training. The purpose of this article was to investigate the relationship of five selected psychological and organizational variables to burnout in athletic trainers. The five variables selected were cognitive, affective, emotional, behavioral, and psychological symptoms of burnout. Previous research had determined these symptoms to be prime concerns for certified athletic trainers and can cause long-term job related problems if prominent.

The [6] study consisted of 332 full and part-time certified athletic trainers. Burnout was examined in all subjects via the Maslach Burnout Inventory (MBI) consisting of 22 questions separated in three subscales. The subscales included Emotional Exhaustion (9), Depersonalization (5), and Personal Accomplishment (9). Role conflict and role ambiguity were measured with a role questionnaire. The Rotter Internal-External Locus of Control Scale was used to measure locus of control. The results included an average score for locus of control (people's general perception of the contingent relationship between their behavior and events which follow their behavior) was 9.5 on a scale of 24. The average score of role conflict was 3.0 out of 7. For this subscale, a high score indicated a high level of role conflict. The average score of role ambiguity was 5.2 out of 7. For this subscale a lower score (1) represented a high level of role ambiguity. There was a great amount of variability in responses on number of athletes in an athletic trainer's direct care as well as the number of hours worked in direct contact with the athletes per week. The range for number of athletes under an ATCs direct care were between 0-1000. The range for the number of hours per week in direct contact with the athletes was between 3-90. Burnout in the given sample of ATCs in this study was generally low. The findings of the study indicated that the higher the level of role conflict, the greater the number of hours in direct contact with athletes each week, a presence of external locus of control, and higher role ambiguity, the higher the level of burnout in the ATCs. This information in important to know to understand the likelihood of an individual experiencing burnout, and the reasons behind the cause of burnout.

Burnout is a psychological syndrome made up of emotional exhaustion, depersonalization, and reduced personal accomplishment [7]. When professionals present with these symptoms, it can cause impairment in patient health care. An increase in burnout factors has been associated with higher work-related stressors. This study investigated which environmental factors are associated with predicting burnout, as well as how ATCs' level of burnout were related to other healthcare professionals. Participants of the study consisted of 206 ATCs working at NCAA institutions. Reference [7] focused on the assessment of burnout and the characteristics of burnout. The instrumentation used was the MBI-HSS. This instrument is measuring burnout factors which are emotional exhaustion, depersonalization, and reduced personal accomplishment. The MBI-HSS consists of 22 questions measured on a 7-point Likert scale. These questions are ranged from never feel the effects (0) and feel the effects every day

(6). Most participants in the study showed a low/average level of burnout. The data showed that 66 ATCs (32%) could be labeled as experiencing high, average, or low burnout. The remaining 140 (68%) had a varied level of EE, DP, and PA leading to an inability to categorize the subjects per MBI-HSS. The results indicated that athletic trainers reported lower overall levels of burnout factors which are lower EE, lower, DP, and higher PA compared with other healthcare professionals. The research suggested that subjects reported lower levels of burnout based upon their work setting. Trainers in the NCAA D-1 setting work with the same group of athletes on a daily basis, feel needed by their team, and contributing to the athlete's safety.

A study by [8] investigated the prevalence of burnout of athletic trainers by gender within different occupational settings. The purpose of this study of 934 athletic trainers who participated in the study worked at colleges, universities, secondary schools, and clinics. The instrumentation included a demographic questionnaire, the Stress Appraisal Measure, the Maslach Burnout Inventory (MBI), Occupational Engagement, health complaints, and exercise behavior. The demographic questionnaire consisted of age, sex, race, ethnic background, number of clients served, and how many other ATCs worked with the respondent. The Stress Appraisal Measure (SAM) consisted of four items relating to total stressfulness measured on a 5-Point Likert scale. MBI consisted of 22 items in 3 subscales (emotional exhaustion, personal accomplishment, and depersonalization). Occupational Engagement was assessed through the Occupational Engagement Survey (OES). The OES consisted of 24 items on 3 subscales (vigor, absorption, and dedication). Items were scored on a 7-point frequency scale (0-never; 6-always). Health complaints were assessed with the SCL-90-R. This measures psychological and physical health symptoms. Exercise behavior is measured with the Leisure-Time Exercise Questionnaire (LTEQ). The LTEQ is a 3-item scale that assess how much exercise and effort one exerts. Out of 934 participants, 17.2% were found to be in the advanced stages of burnout, low levels of burnout, and high degrees of occupational engagement. Those ATCs working in the collegiate and university settings scored higher levels of burnout than those working in other settings. The MBI showed that college & university ATCs showed higher levels of depersonalization, and emotional exhaustion. Compared to ATCs in other settings, the showed lower levels of personal accomplishment. These results showed a low prevalence of burnout in athletic trainers, but occupational differences and sex differences were observed. Women and those working in college and university settings showed higher results in burnout measurements. Females also scored higher on emotional exhaustion than the males did. Women are also found to experience less vigor and heightened symptoms of burnout.

The purpose of a study by [9] examined the levels of Work-Family Conflict (WFC) in ATCs' careers at the Division I-A level. Work-Family Conflict arises when the time devoted to a job and professional responsibilities interfere with family-related responsibilities. Time constraints and expectations of athletic trainers typically make work and family life difficult to manage. Athletic Trainers experience long work hours, travel, lack of schedule control, and a number of professional responsibilities that tend to lead to dissatisfaction and burnout in the profession. The aim of the investigations is to determine the prevalence of WFC factors in ATCs and the prestigious level as well as predicting and contributing factors. For the purpose of this study, a total of 587 ATCs participated in the study. This included 324 men, and 263 women. The ATCs in the study represented all 10 NATA Districts and were employed at Division I-A universities all which sponsored football. There were 12 respondents who agreed to take part in in-person, in-depth interviews. The method of instrumentation was a survey for the participants

which took about 10-15 minutes to complete and included 2 sections. Section 1 contained 20 demographic character questions, while Section 2 contained 53 items discussing Work-Family Conflict (WFC) and variables linked to WFC. The survey questions were scored on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Demographic responses of the study showed that the average years of experience was 8, 12.6% (204) were head athletic trainers, and 5.8% (34) were associate athletic trainers. Overall, results indicated that 59.3% (356) had Master's degrees, and 79% (464) were between the ages of 20 and 35 years old. The average number of work hours per week ranged from 62±14, with 8±4 travel days per month during in-season months. A total of 68% (395) of the respondents reported a score of 5 or higher indicating that they "Often have to miss important family activities because of their job." Of the respondents, 50% (296) gave a score of 5 or higher indicating that "There is a conflict between my job and the commitment and responsibilities I have to my family." Results of the study indicated that ATC's at the Division I-A level were experiencing WFC. The most prevalent factors contributing to WFC in ATCs was the hours worked and the travel responsibilities. Other factors that also contributed to WFC were lack of flexibility and control over work schedules. Based on the results, the researcher indicated that a more accurate description of the study should be Work-Life Conflict, rather than Work-Family Conflict, based on the lack of differences in single ATC's, and those with families and children.

Reference [10] examined the burnout of Graduate Assistant Certified Athletic Trainers (GAATs) at the Division I level and identified the personal and situational variables associated to this. Study participants included 201 Graduate Assistantship Athletic Trainers (GTAAs) at the Division I level. Burnout of GAATs was measured using the ATBI (Athletic Training Burnout Inventory). The ATBI consisted of 62 items representing 4 constructs scored on a 6-Point Likert scale ranging from 1 (never true) to 6 (always true). Also used was an Emotional Exhaustion/Depersonalization (EEDP) construct was utilized consisting of 18 questions, a Time Commitment (TC) construct consisting of 4 questions, an Administrative Responsibility (AR) construct consisting of 9 questions, and lastly an Organizational Support (OS) including 19 questions. The results showed that the GAATs averaged 39.0-13.5 hours per week in their clinical settings. The survey results indicated that TC was the greatest source of burnout in the participants, followed by OS, EEDP, and AR. There has been limited data on burnout in GAATs, but results have indicated that role overload and excessive time commitments in this young population can lead to burnout. The excessive stressed experienced by GAATs can potentially jeopardize the health of the individual themselves, as well as the quality of patient care the student-athletes are receiving. GAATs are there to gain a more adequate level of experience and become better acquainted with the roles and responsibilities of a full-time athletic trainer at the prestigious collegiate level [10]. Gaining knowledge of the burnout prevalence in GAATs can be beneficial for future ATC's pursuing this route to practice effective organization and stress management for the high academic and clinical demands to come.

Occupational stress, burnout, engagement, and health complaints of athletic trainers were looked at on a national level [8]. Study participants included 934 ATCs averaging 33.84±8.29 in age. Of the sample, 293 worked in the collegiate/university setting, 276 worked in secondary school/youth setting, and 365 worked in the clinical/industrial setting. All individuals averaged 90 patients/clients. The instrumentation used for this study was a demographic information section, Maslach Burnout Inventory (MBI), Occupational Engagement Scale, and the somatization scale of the Symptom Checklist (SCL-90). The MBI showed that depersonalization

scores were 6.21±5.11, Emotional Exhaustion scores were 16.34±0.24, and Personal Accomplishment scores were 36.45±7.14. Female ATCs, and those working in the college/university setting scored significantly higher on burnout. The scores of burnout and engagement on ATC's were overall low, but there were still a substantial portion of the individuals who were considered to be burned out in the profession.

Based on the various studies studied in this literature review, specific life-stressors and burnout factors were identified. Consequently, the following summarized key outcomes generated from the literature review.

Life-Stress

Life stress that evolved into burnout is a common occurrence in a number of professionals [11]. Stress is not a result of the events that occur within a certified athletic trainer's life, but rather how these professionals deal with and react to certain stressors and events. Stressors that ATCs experience are low pay, long work hours, lack of autonomy, administrative influences, ever-changing schedules, and difficult athletes and coaches. When a number of life stressors begin building up, it takes a toll on an individual's body. As discussed by [11], responses to stress utilize almost all systems within the body including the heart, blood vessels, immune system, lungs, digestive system, sensory organs, and the brain. The body modifies itself in order to deal with the extreme stress it endures. When certified athletic trainers deal with high amounts of stress for long periods of time, it can lead to burnout. Reference [11] stated that burnout is a state of physical and emotional depletion resulting from high levels of stress. When individuals experienced burnout it took an increasingly negative toll on the body. Reference [11] indicated that components associated with being in a state of burnout include: emotional exhaustion, depersonalization, reduced personal accomplishment, role conflict, role ambiguity, and role overload. With these components becoming present in a young professional's life, it lead to a decrease in interest and enjoyment in the profession before their career even begins.

Personal and situational variables that relate directly to perceived stress for ATCs are hardiness, social support, and other athletic training problems. According to [6], hardiness is a personality construct that reflects control, commitment, and challenge. Control in an ATCs' life relates to the ability to influence the course of events that occur throughout their day and the overall power an individual has to deal with the circumstances and instances that occur. Commitment is being dedicated to one's job and responsibilities to keep all student-athlete's healthy. Being committed to the athletic training profession is the willingness to do whatever it takes to provide the best possible care to one's team. Challenges in athletic training are inevitable, and it is important to see them as a positive rather than a negative. When things continue to change, it may cause stress but it keeps the job from getting boring. If ATCs continue to do things the same day-by-day there will be no excitement in coming to work. It is important to try new types of treatments and rehabilitation plans with athletes. When things become repetitive, the excitement begins to be extracted. It is valuable for ATCs personal career enjoyment to provide a variety of treatments and rehabilitation exercises, but it also makes an outstanding difference to student-athletes to not be given the same attention day after day.

Social support networks for ATCs are incredibly valuable. Having the ability to gain outside ideas from other ATCs can assist each individual with getting the broadest spectrum of

athletic training knowledge possible. Being willing to get ideas from others who practiced at other institutions can make all the difference. Most Division I collegiate institutions develop a diverse staff made up of ATCs from numerous institutions to expand the level of skills and knowledge being passed around. With the profession of athletic training being on a "who-you-know" basis, it is important to gain professionals from external sources who can increase the professional connection chain.

Burnout Factors

Burnout is seen as stress-related exhaustion [12]. With all the life-stressors beaming down on certified athletic trainers, burnout is one of the primary concerns of these health care professionals. Literature suggests that there is not a single definition that is accepted, but rather each and every one suggests stress-related initiations. There are many factors that are discussed when determining a fitting definition of burnout in certified athletic trainers. Reference [12] suggested that there are five categories included in the varied definitions of burnout including cognitive, affective, emotional, behavioral, and physical symptoms.

Emotional exhaustion. Emotional exhaustion refers to becoming overextended with the taxing amount of responsibilities being placed on the health care professional. Emotional demands for ATCs are high because their primary responsibility is caring and serving each individual athlete, coach, and administrator associated with their assigned athletic team. Pleasing others is a difficult ask to succeed at all the time. With the chain of command of athletic teams reaching far higher than the head coach, there are numerous individuals that an athletic trainer may be responsible for reporting too.

In order for an ATC to become highly successful in their job, and avoid causing unhappiness and emotional exhaustion, they need to possess an internal locus of control. An internal locus of control is when the ATC believes that events are contingent based upon their actions [12]. When ATCs have this understanding, they will focus more on bettering their actions and communication skills in times of problems rather than blaming it on external forces. An external locus of control is when it is believed that a situation occurs based on fate rather than an individual's actions.

Depersonalization. Depersonalization is defined as the development of negative and cynical attitudes toward patients [13]. This negative attitude towards an individual's profession, leads to an overbearing, impersonal, and dehumanizing perception of their career. When ATCs become detached from their job, and began to think negatively of what they have to do on a daily basis, depersonalization is setting in. A career should lead to high levels of satisfaction to be ultimately rewarding. This dimension of burnout indicated when ATCs begin distancing themselves from their job. They may still be physically there every day for each practice and competition, but they are mentally absent and distant. Depersonalization can ultimately appear like symptoms of depression and hopelessness in sight of their career. When individuals appear hopeless and helpless, their enthusiasm and motivation are low, initiating the burnout process further [14]. For most athletic trainers, the teams and coaches they work with are co-workers, friends, and 'family'. ATCs spend countless hours with these individuals and the relationships between them become very close. When depersonalization sets in, athletic trainers begin seeing their team and staff as objects and numbers, rather than people [14]. Once a trainer can no longer have a positive image of the team, and have a reason to become motivated for work on a daily basis, the desire to continue in the profession will diminish.

Low levels of personal accomplishment. Decreased personal accomplishment is a negative evaluation of one's self, being dissatisfied with personal job accomplishments, and having a sense of diminished competence [13]. According to [14], decreased personal accomplishment is related to the perception of control, and the motivation to be in control. When ATCs have decreased personal accomplishment levels and have difficulties with coping and feel helpless, they will have a challenging time with demanding situations that cross their paths. At this dimension of burnout, athletic trainers will make the attempt to avoid unwanted threats. In order to deal with challenging situations, they utilize avoidance as their method of coping. With athletic training be an ever-changing, always surprising profession, you never know what is going to happen on a daily basis. When ATCs reach this dimension of burnout, their defensive, avoiding, and helpless attitude patterns will have detrimental career effects and ultimately lead to career burnout.

III. PRIMARY RESEARCH

Purpose

Research has indicate that psychological stress and coping resources can influence a certified athletic trainer's level of burnout. Every ATC is different and presents with different demographics, different coping resources, and different stressors. Looking at individuals from the same institution all working different sports can give an accurate indication of who is more prevalent to experience burnout in the NCAA D-1 collegiate environment. The purpose of this component is to determine which factors lead to burnout, and which factors help prevent burnout. If this can be determined, all ATC's can utilize this information to help themselves in avoiding the psychological downfall of burnout and increased stress. The reasoning behind the investigation of burnout in ATC's was to determine the willingness and reasoning behind leaving their once felt professional passion.

Research Questions

- 1. "In Division I Athletic Training, what sports present with the highest level of burnout?"
- **2.** "Are Certified Athletic Trainers more likely to present with symptoms of burnout when they are in-season with their current sport, or out of season?"
- **3.** "Do Division I Certified Athletic Trainers utilize proper burnout prevention methods?"

Methods

The subjects involved in this study encased 12 certified athletic trainers working at the Division 1-A NCAA collegiate level. The subjects ranged from ages 23-35 years old. The participants in the study were assessed for stress and burnout factors through the utilization of The Stress and Burnout Questionnaire (SBQ). The SBQ consisted of 25 items on a 0-2 Likert Scale (Score 0=for experiencing this only occasionally, Score 1=this is true quite frequently (weekly), Score 2=this is true often (usually daily) which can total up to a maximum of 50 points. The SBQ also includes a Burnout Prevention Assessment, individuals possessed a wide range of preventative measures in place, adequate measures but should adopt more, and make an adoption of these preventative measures a priority. Also included in the data collection was a demographics section including age, sport assignment, years of experience, and average hours worked per week.

IV. RESULTS

With burnout being a prominent characteristic of Division I Athletics' ATCs, a stress and burnout questionnaire was administered to the 12 subjects of East Carolina University. There are 11 athletic teams at East Carolina University, and 12 Certified Athletic Trainers on staff. When the survey was taken, four sports were considered "Out of Season." These sports consisted of Swimming & Diving, Volleyball, Soccer, and Football. Of the out of season sports, there were five ATC's. There were seven "In Season" sports which consisted of Women's Basketball, Men's Basketball, Baseball, Softball, Track & Field, Tennis, and Cheerleading. Of these seven sports, there were seven ATC's who were surveyed. Of the five ATCs who were considered out of season at the time, the average score was 17.5 out of 50. The seven ATCs who were considered in season averaged a score of 28 out of 50. The survey data can be found in Table I of the Appendix.

As found in the literature review, athletic training is a very demanding profession that requires a significant amount of hours, responsibilities, and stressors. From the collected data, the 12 subjects averaged 70 hours a week in the office. The data showed that 50% of the subjects had less than 6 years of experience as a certified athletic trainer.

To determine how well athletic trainers at the Division I level of collegiate athletics take care of themselves and how well they equip themselves to prevent burnout, I utilized a Burnout Prevention Assessment questionnaire. The highest possible score of the Burnout Prevention Assessment was 55. The higher score, the better the burnout prevention the ATC has. Of the five ATCs who were considered to be out of season, the average score was 31.8. The average burnout prevention score of the in season ATCs was much lower at 17.7.

V. DISCUSSION

With the data gathered from the SBQ and the demographic portion of the study, it shows that ATCs possess a higher level of stress when they are working an in-season sport. In-season sports require a much larger work hour regimen than out of season sports. When considered in season the practice hours per week are set at 20 hours, while out of season sports are limited to 8 hours per week. The results indicate that overall stress levels are higher with younger, less experienced athletic trainers who work higher intensity sports.

The questionnaire results of both the SBQ, and Burnout Prevention Assessment indicate that individuals who are working an in-season sport are being exposed to more stressors. The excessive amount of hours and responsibilities being placed on the ATC results in more time spent caring about the student-athletes, and less time focusing on taking care of one's self, as noted in the high average scores on the Burnout Prevention Assessment questionnaire. The results show that ATCs need to do a better job at utilizing burnout prevention measures. Approaches in which athletic trainers can do this is to plan more efficiently. Weekly, individuals need to write out their weekly schedule including times where they can do something for themselves. This break can include a short session of physical activity, a lunch break, or a quick 30 minute relaxation session in their office. Division I athletic trainers typically dedicate the majority of their day to their student-athletes regularly. They tend to forget about themselves and their health while focusing on others. It is increasingly important to not let one's career spin out of control allowing individuals to lose a clear perspective on why they chose to become an athletic trainer in the first place. Allowing for "me-time" throughout the day, in the morning, or in the evening can prevent athletic trainers from letting their job take over their life.

The completed data incorporated within the study adequately answers the research questions put in place. When asking which sports in Division I athletic training present with this highest prevalence of burnout, the answer is unknown. More adequate research needs to be conducted with a larger participant pool, but from the results Baseball, Softball, Track & Field, and Cheerleading/Tennis presented with this highest level of burnout. This is true for the institution examined, but could differ elsewhere. The results suggest that these sports, which are all inseason, came back with the highest score on the burnout questionnaire. The results also show that ATCs are not adamant about utilizing proper burnout prevention techniques and taking care of their bodies like they should. Based on this, when sports tend to pick up in the in-season with higher hours, more travel, more responsibilities, and more stressors, athletic trainers tend to get overwhelmed and consumed with their work decreasing the time they have to take care of themselves, There is no answer to which sport presents with the highest level of burnout, but based on the literature and results of the current study the more determining factor comes back to demographics and personality characteristics of the athletic trainer. Some individuals, who have been practicing athletic training for a longer time period, have gotten into a routine and react and adapt better to stressful circumstances. Others, who are just getting into the profession and are in their first few years of practice, may still find this overwhelming. Based on the literature and the details of the study, we can learn how to adequately prepare ourselves for the possibility of burnout in the athletic training profession. There are a lot of detailed answers that remain unknown, but the information gathered is highly beneficial for practicing ATCs and future ATCs to be aware of.

VI. CONCLUSION

ATCs are valued assets to Division I Collegiate athletic teams. We provide medical prevention, assessment, and treatment to all individuals as well as sidelining as psychologists, mentors, and role models. The importance of what we do with athletes is very broad, and it is highly important that those who practice athletic training at a higher level do so in a controllable and managerial way. ATCs need to learn how to be great at their job, while still allowing it to be personally satisfying. If both of these cannot be accomplished there will be a lower number of practicing athletic trainers, or unhappy and burnt out athletic trainers. Neither of these characteristics present as a successful individual, so the ultimate goal is to help ATCs understand how to avoid becoming burnt out in this demanding profession, to allow athletic training to continue to expand throughout collegiate athletics.

Future implications of this study would be to evaluate a larger pool of certified athletic trainers. The reasoning behind only looking at East Carolina University's staff athletic trainers was the accessibility of study participants which would also lead to more accurate data if the participant pool increased. Having this additional data would open up the opportunity to compare results of Division I ATCs who work in various sports and universities.

APPENDIX

A. Figures and Tables
Table I

The Stress and Burnout Questionnaire (SBQ). The SBQ consisted of 25 items on a 0-2 Likert Scale (Score 0=for experiencing this only occasionally, Score 1=this is true quite frequently (weekly), Score 2=this is true often (usually daily). Total maximum of 50 points.

SPORT	SEASON	Burnout Prevention	SBQ
Men's & Women's	Out of Season	34	26
Swimming & Diving			
Women's Volleyball	Out of Season	40	12
Women's Soccer	Out of Season	34	22
Football (1)	Out of Season	27	15
Football (2)	Out of Season	24	12
Women's Basketball	In Season	25	21
Men's Basketball	In Season	17	21
Baseball	In Season	14	30
Softball	In Season	16	37
Men's & Women's	In Season	24	24
Track & Field/XC (1)			
Men's & Women's	In Season	10	30
Track & Field/XC (1)			
Men's & Women's	In Season	18	33
Tennis/Cheerleading			

REFERENCES

- [1] Barrett JJ, Gillentine A, Lamberth J, & Daughtrey CL. (2002). Job satisfaction of NATABOC certified athletic trainers at Division One National Collegiate Athletic Association institutions in the Southeastern Conference. *International Sports Journal*, *6*(2), 1-13. 27.
- [2] Herrera R & Lim JY. (2003, October 13). Job satisfaction among athletic trainers in NCAA Division 1 AA institutions. *Sport Journal*, 6(1). Retrieved from: http://www.thesportjournal.org/article/job satisfaction -among -athletic- trainers-ncaa-di visi on -iaa- institutions.
- [3] Pitney W.A., Ilsley, P., & Rintala, J. (2002). The professional socialization of certified athletic trainers in the National Collegiate Athletic Association Division 1 context. *Journal of Athletic Training*, 37(1), 63-70.
- [4] Pitney, W. (2006). Organizational influences and quality-of-life issues during the professional socialization of certified athletic trainers working in the National Collegiate Athletic Association Division I Setting. *Journal of Athletic Training*. 41(2): 189-195.
- [5] Lloyd, J. (2012, March 26). Athletic trainers play key roles for college and high school athletes. *Daily Herald*. Retrieved from: http://www.heraldextra.com/sports/athletic-trainers-play-key-roles-forcollege-and-high-school/article_ca9a2772-7742-11e1-aa92-001871e3ce6c.html
- [6] Hendrix, A., Acevedo, E., & Herbert, E. (2000). An examination of stress and burnout in certified athletic trainers at Division I-A Universities. *Journal of Athletic Training*. *35*(2), 139-144

- [7] Kania, M., Meyer, B., & Ebersole, K. (2009). Personal and environmental characteristics predicting burnout among certified athletic trainers at National Collegiate Athletic Association Institutions. *Journal of Athletic Training*, 44(1), 58-66.
- [8] Giacobbi, P. (2009). Low burnout and high engagement levels in athletic trainers: Results of a nationwide random sample. *Journal of Athletic Training*. 44(4), 370-377.
- [9] Mazerolle, S., Bruening, J., & Casa, D. (2008). Work-Family Conflict, Part I: Antecedents of Work Family Conflict in National Collegiate Athletic Association Division I-A Certified Athletic Trainers. *Journal of Athletic Training*, 43(5), 505-512.
- [10] Mazerolle, S., Monsma, E., Dixon, C., & Mensch, J. (2012). An assessment of burnout in graduate assistant athletic trainers. *Journal of Athletic Training*, 47(3), 320-328.
- [11] Addis, R. (2006). Burnout among undergraduate athletic training students. Retrieved from: http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CB4Q FjAA&url=http%3A%2F%2Flibweb.calu.edu%2Fthesis%2Fumi-cup 1023.pdf&ei=fUk9VajxEsShNpq1gdgJ&usg= AFQjCNEJGIkdpBSudI3irxsCr7ddhbhbLQ
- [12] Capel, S. (1986). Psychological and organizational factors related to burnout in athletic trainers. *Research Quarterly for Exercise and Sport*, *57*(4), 321-328.
- [13] Lindley, T. (2011). Prioritizing your life: Can you succeed as an athletic trainer and have work-life balance? Retrieved from: http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CCoQFjAC&u=http%3A%2F%2Fwww.watainc.org%2Fuploads%2Fpdfs%2FAnnual%2520Meeting%2F2011%2520Annual%2520Meeting%2Flindley.pdf&ei=8Eg9VZaMsGYNqHWgeAP&usg=AFQjCN7JtLdWBNsmLfuwZmK3EE7xJ mg
- [14] Lee, R. & Ashforth, B. (1990). On the meaning of Maslach's three dimensions of burnout. *Journal of Applied Psychology*, 75(6), 743-747.



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