ORGANIZATIONAL FACTORS AND COACH BURN-OUT IN COLLEGIATE ATHLETICS

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ABSTRACT

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Burn-out was recently included in the World Health Organization's International Classification of Diseases (WHO, 2018) as an occupational phenomenon. Sport coaches' experiences of burn-out and stress have been studied within the field of sport and exercise psychology over the past several decades. The purpose of the current study was to examine the prevalence of coach burn-out, examine how organizational factors are associated with burn-out, and explore coaching stressors utilizing the Coaching Stressors Scale, a 12-item instrument developed by the researcher. Using Horn's (2002) Working Model of Coaching Effectiveness as the theoretical framework, coach demographics, organizational climate measures, perceived organizational support, perceptions of stress, turnover intention, resilience and burn-out were assessed. For measuring burn-out, the Maslach Burnout Inventory – Educators Survey was used. NCAA collegiate golf coaches (n = 96) in the United States were the sample participants. Descriptive statistics, correlation coefficients, and multiple regression analyses were conducted to assess the three purposes of the study. Based on these findings, coach burn-out prevalence was relatively low. However, several key organizational factors were significantly associated with burn-out. Additionally, the variables of workplace stress, perceived organizational support, and resilience were significant predictors of the three dimensions of burn-out. Future research should focus on coach burn-out measure development, longitudinal studies of burnout in coaches, and interventions that examines the role of sport organizations in expanding resilience and coach wellbeing.

This thesis is dedicated to my wife, Jenna, and my parents, Sheila and Norm.
Thank you for supporting this journey.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

Introduction

The landscape of collegiate athletics has shifted dramatically in the past several decades. With television rights, merchandise licensing fees, corporate sponsorships and media coverage all growing exponentially, the expectations for collegiate coaches of major sport programs to perform have also dramatically increased. Some collegiate athletic departments are generating millions of dollars in revenue while many others are struggling to keep up with the rising costs, all while embedded in the higher-education systems of the United States of America. Excellence in sports generates prestige, entertainment value, builds fan bases, and brings in revenue to an institution (Turner & Chelladurai, 2005). This commercialization and professionalization of college athletics has created a quagmire for administrators, coaches, support staff, and student-athletes. While this exposure and financial support can create indirect benefits to universities such as national attention, donations, and increases in applications and enrollment numbers, in many instances the athletic department has become the defining aspect of an institution (Goff, 2000; Hoffman, 2012).

Collegiate coaches are the leaders of these sport programs and responsible for the success of their student-athletes, both on and off the playing field. Coaches are tasked with multiple roles including technical, physical, organizational, and psychological aspects of their respective sport (Thelwell et al., 2008b). They also play an important role in promoting and developing social agendas, healthy lifestyles, youth engagement, inclusion, learning, and community initiatives (Fletcher & Scott, 2010). Considered performers themselves, coaching success is largely judged by the success of their athletes (Gould et al., 2002). Career advancement is also mainly predicated on win/loss percentages. Collegiate coaches recruit the student-athletes, are

responsible for development of the student-athletes, and attempt to unite these student-athletes into effective teams (Turner & Chelladurai, 2005). Given the multiple roles today's coaches are expected to fulfill, it's not surprising that many coaches report occupational stressors. Frey (2007) found that communicating with athletes, lack of control, recruiting, multiple role expectations, travel time, and administrative demands were just a few of the stressors reported by NCAA DI coaches. Additionally, coaches are often cited as the "problem-solver" of a sport program, instead of an individual capable of experiencing stress (Frey, 2007).

Hirko and colleagues (2013) compared the salary growth rate of NCAA Division I coaches with that of faculty and instructors at the same institutions using revenue theory of cost and resource dependency theory as the framework for their study. They concluded that tuition is increasing, faculty/instructor salaries are flat, and athletic coaching salaries have increased rapidly since 2008, emphasizing the importance of athletics over academics. Higher salaries are creating even greater expectations for success in major sport programs at the highest levels of NCAA DI athletics. In fact, the turnover rate for NCAA Football Bowl Division (FBS) head football coaches leaving their position (e.g. termination, retirement, resignation or promotion) has increased in the same period to about 25% per year, with a mean coaching shelf-life of just five years and decreasing (Daughters, 2013). Coaching turnover is an issue for major sport programs in collegiate athletics. In almost every instance, it is also highly costly in terms of financial, psychological, social, and organizational aspects of an athletic department. Therefore, as Turner and Chelladurai (2005, p. 194) declared: "every effort should be made to retain those (coaches) who have proven to be successful."

Today, college coaches are facing unprecedented challenges and pressures. Advances in technology have made coaches available year-round, 24 hours per day. E-mails, texts, phone

calls, social media posts, and incredibly demanding travel schedules for competition and recruiting have forced coaches to keep long, nontraditional hours (i.e. nights, weekends, holidays) (Dixon & Bruening, 2005). This "arms race" between athletic departments at the direction of university administrators has left those in the coaching profession faced with increased exposure to stressors. Coaches at all levels have identified the pressure to win and over-emphasis on winning as a negative aspect of coaching and a high source of stress (Kelley, 1994; Weiss et al., 1991). Additionally, winning is unpredictable (and uncontrollable) regardless of preparation and these pressures can cause decreased job satisfaction, and increased burn-out and turnover (Weiss & Stevens, 1993). Burned out coaches may negatively affect the coach-athlete relationship as well, leading to subsequent decreases in athletes' psychological and physical well-being, along with less effective instruction and feedback from coaches (Chelladurai, 1990; Raedeke et al. 2000). Fletcher and Scott (2010) reasonably suggested that burned out coaches may transmit their emotions to their athletes. Price and Weiss' (2000) findings showed that burned out coaches often gave less praise and social support, leading their athletes to lower enjoyment, higher anxiety, and higher levels of burnout. Identifying the factors that lead to burn-out can help coaches employ preventative measures to avoid these negative consequences (Hardin et al., 2015).

Because of the unprecedented demands placed on contemporary collegiate coaches, there are growing concerns about coaching stress and burn-out. Previous research has provided the framework for understanding both the symptoms and characteristics of coaches experiencing burnout. However, there is little information regarding some of the environmental causes of coach burn-out, specifically referencing organizational dynamics of respective athletic departmental and educational institution leadership. Therefore, the purposes of this study are to:

(1) Assess the prevalence of coach burn-out in collegiate coaches of non-revenue sport programs; (2) Examine relationships between organizational factors with coach burn-out; and, (3) Explore and analyze coaching stressors with the Coaching Stressors Scale.

CHAPTER 2

Literature Review

Burn-out was recently included in the 11th Revision of the World Health Organization (WHO) International Classification of Diseases (ICD-11) as an "occupational phenomenon" (World Health Organization, 2019). While it is not yet classified as a medical condition or mental disorder, the emergence of a focus on mental well-being in the workplace has allowed for an increased acknowledgement of burn-out as a factor or reason that an individual may contact health services. Since its scientific inception nearly five decades ago, burn-out has been a highly researched, and complex, topic of study. Freudenberger (1974) is the first known researcher to publish a paper in a psychological-related journal with burn-out as the focus. This seminal work was highly influential for future researchers. As a clinical psychologist, Freudenberger noticed and questioned the state of contemporary organizations and workplaces, and even began experiencing burn-out symptoms himself. He portrayed analogies to the building that is "burned out" …a once energetic, lively and hopeful structure that has become hollowed out as a shell of itself (Freudenberger, 1980). The fire is no longer lit and the individual cannot keep up with demanding resources. A curious aspect of burn-out is the idea that the most "dedicated and committed" workers are prone to the syndrome (Freudenberger, 1974). Perfectionists, high achievers, and some of the most compassionate, dedicated, and diligent employees tend to suffer from burn-out at higher rates than others (Maslach & Leiter, 1997). Quite properly, Freudenberger's (1980) classic book was titled "Burn-out: The high cost of high achievement." Consequently, rather than simply encouraging an employee to find a new job or career path, burn-out must be viewed as maladaptive and a key concern for organizations due to its implications on employee morale, turnover, well-being, and performance (Pervez &

Halbesleben, 2017). Thus, the purpose of this review is to provide a conceptualization of occupational burn-out, overview the literature related to burn-out, and present some of the critical issues and opportunities for burn-out as a construct in the field of organizational psychology.

Conceptualization of Burn-out

There are several key definitions of burn-out in the occupational and health psychology literature. Due to its updated classification, it is recommended to utilize the ICD-11 (World Health Organization, 2018) definition of burn-out as "a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed." Other subfields of psychology have used burn-out to describe maladaptive and chronic stress situations (e.g. sport psychology). While overtraining and domain-specific burn-out are important areas of study, for a clearer picture, the current section will focus on burn-out's classification as an occupational phenomenon. More precisely, this work-related syndrome is characterized by three dimensions. First, individual workers experience feelings of energy depletion, and emotional and physical exhaustion (Maslach et al., 2001). Second, they encounter increased psychological distance from their job (depersonalization), along with negative feelings and greater job-specific cynicism. Third, individuals confront self-perceptions of reduced professional efficacy and decreased sense of accomplishment (World Health Organization, 2018). It should be noted that the WHO (2018) recommends that burn-out "should not be applied to describe experiences in other areas of life," even though one's professional career influences significant markers of well-being such as global self-worth and self-esteem. The three dimensions of burn-out; exhaustion, depersonalization and reduced professional efficacy, were originally characterized through extensive interviews (Maslach, 1993). While there are plenty of critics of the three-dimension model in favor of a

more unidimensional model of burn-out, separate measurement of each dimension allows for a farther-reaching understanding of the antecedents and consequences of the construct.

Other definitions of burn-out exist outside of the ICD-11. Burn-out has been defined in the dictionary as: "an exhaustion of physical or emotional strength or motivation usually because of prolonged stress or frustration" (Merriam-Webster, 2019). Interestingly, the dictionary also offers a definition of burn-out as a verb (i.e. to suffer from). Maslach and Leiter (1997, p. 17) described the impact of burn-out as the "index of the dislocation between what people are and what they have to do. It represents an erosion in values, dignity, spirit, and will – an erosion of the human soul." Thus, the WHO (2018) conceptualization of burn-out as an occupational phenomenon, with slight modifications to the dimension of reduced professional efficacy, remains consistent with the previous classic work of Maslach (1982, p. 3), who defined burnout as "a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals who do 'people work' of some kind." Hence, early studies of burn-out focused on employees in fields of human service work (i.e. teacher, psychologist, counselor) and professional health care. More recent research and findings have indicated that burn-out can affect individuals in all industries and job types. With an operationalized definition of burn-out, scholars can now move forward more coherently and effectively in their work, one of the persistent difficulties that has existed when studying the phenomenon.

Models and Theoretical Frameworks of Burn-out

Several key models and frameworks have been utilized to support burn-out in the organizational psychology literature. Two dominant models include the conservation of resources, or COR, model (Hobfoll, 1989) and the job demands-resources model, an offshoot of

COR theory. The COR model is concerned with how individuals acquire, deplete, and protect psychological resources. For example, prolonged stress leading to burn-out can occur when workers exhaust resources, perceive threats to resources, and consider their return on investment of allocated resources (Hobfoll, 1989). Burn-out can occur when psychological resources are chronically lost or threatened after significant investment in a job or organization (Hobfoll & Freedy, 1993). The job demands-resources model, although met with its critics, states that individuals can experience burn-out when job demands and resources are not met with the same levels of outlay (Demerouti et al., 2001). Job demands can include the psychological costs and facets of a job that require energy. Job resources are defined as "objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies" (Hobfoll, 1989, p. 516). This model has been highly associated with the exhaustion and depersonalization dimensions of the burn-out concept, yet has shown little significant correlation with reduced professional efficacy (Pervez & Halbesleben, 2017). In addition, Schaufeli and Bakker (2004) argued that demands and resources may not be independent, as presented in the job resources-demands model, but rather share dependencies. For example, a work project may include high demands of an employee's psychological and physical energy, time, and decision-making. However, they may attain personal growth, job promotion, or goal achievement upon completion of the project. Furthermore, the job demands-control-support model has also been used as a supplementary consideration (Johnson & Hall, 1988). This model emphasizes the importance of workplace social support as a buffer or resource to job demands.

Two additional theoretical frameworks have posited the consideration of individual differences and interpersonal factors associated with occupational burn-out. First, the person-

environment fit theory continues to support possible antecedents or mediators of burn-out. This framework is defined as the "compatibility between an individual and a work environment that occurs when their characteristics are well matched" (Kristof-Brown et al., 2005, p. 281). Thus, well-matched alignments should be maximized while misalignments between an individual employee and the work environment should be considered before chronic stress and burn-out can occur. According to Leiter and Maslach (2003), there are six dimensions of the workplace environment that can determine the perceived fit of an employee: workload, perceived control, reward systems, community/social engagement, fairness, and value alignment. Work overload can lead to individuals feeling as if they need to stretch beyond their limits, with too few resources (i.e. time) and support. Autonomy and perceived control are key psychological needs for workers. Lack of choice, accountability, and problem-solving opportunities can lead to perceptions of distrust and a lack of respect from employers (Maslach & Leiter, 1997). Regarding reward systems, individuals may value different types of rewards and a lack of recognition can lead to employees feeling devalued. Everyone enjoys financial rewards, but feelings of importance and pride can lead to a job well done. Humans have a need for community and social engagement. A lack of community can result from reduced social contacts (flexible and remote schedules), isolation, and reduced time together due to being "busy." Chronic and unresolved conflict can also lead to "frustration, anger, fear, anxiety, disrespect, and suspicion" of co-workers (Maslach & Leiter, 1997, p. 14). Fairness is another expectation of organizations. Employers must consistently review policies related to promotion, tenure, pay, and evaluations to ensure equality and fair practices. Finally, the sixth dimension of perceived fit considers value alignment and/or conflict. Unfortunately, many organizations and employers operate with "Machiavellian milieu", where individuals lie, cheat, and steal to meet the expectations of the

job. When personal values conflict with organizational values, employees will lose motivation and respect for supervisors and administrators, causing moral erosion (Maslach & Leiter, 1997, p. 17). While each of these six dimensions may be weighted separately depending on individual differences such as personality or values, any combination of a misfit or misalignment can cause great stress that worsens with time. These processes can subsequently lead to symptoms of burn-out. In addition, while the number of hours worked per week can lead to more susceptibility to strain and illness (i.e. insufficient resources), individual differences such as an employee's schedule and work/home life balance are also significant factors (Van der Hulst, 2003; Langelaan et al., 2006).

A second theoretical framework related to burn-out is the social exchange theory. This theory postulates that an individual's relationships are also managed by a cost-benefit relationship (Emerson, 1976). Therefore, social exchange theory suggests that employees invest, maintain, or abandon workplace relationships based on their perceived benefits, constantly weighing the costs and rewards. Consistent feelings of inequity, power dynamics, or a lack of inherent relationship rewards can be associated with burn-out (Buunk & Schaufeli, 1993). This imbalance can go further than personal relationships with fellow employees. For example, an individual that perceives to be investing more effort into their employer or organization than they are receiving in return (i.e. praise, compensation) may also experience burn-out.

Signs and Symptoms of Burn-out

As stated in Freudenberger's (1974) early work on burn-out, individuals may experience a myriad of physical, psychological, and emotional symptoms. Physical signs may consist of exhaustion, fatigue, frequent headaches, sleeplessness, and frequent colds (Freudenberger, 1974; Shin et al., 2014). More serious functional problems related to the prolonged stress of

occupational burn-out include gastrointestinal illness, high blood pressure, muscle tension, and cardiovascular disease (Maslach & Leiter, 1997). Individuals may also turn to alcohol and marijuana for self-medication, leading to addictions and increased risk for chronic physiological conditions. Psychological and emotional symptoms may be more difficult to detect and can be severely detrimental to the individual employee's well-being. Examples of these types of burn-out symptoms include frustration, moodiness, paranoia, anger, negative risk-taking, lower motivation, emotional-blunting, overconfidence, irritation, crying more easily, apathy, depression, hostility, fear, anxiety and many others (Freudenberger, 1974; Pervez & Halbesleben, 2017; Maslach, 1998; Maslach & Leiter, 1997).

Measuring Burn-out

The Maslach Burnout Inventory (MBI; Maslach et al., 1996) has been the most widely used instrument for measuring burn-out since its inception in 1981. There are currently five versions of the MBI: human services, human services for medical personnel, educators survey, general survey, and general survey for students. A meta-analysis of 84 published studies found strong validity and reliability for the MBI across human services, educator, and general work populations (Wheeler et al., 2011). The MBI has strong correlations with the job demands and resources model of burn-out and measures the three dimensions of emotional exhaustion, depersonalization, and personal accomplishment. The MBI is considered a universal measure due to the nature of its development, including extensive in-depth interviews with workers and its adaptations to many different languages and professional contexts (Maslach & Schaufeli, 1993; Kokkinos, 2006; Jenaro et al., 2007). In a meta-analysis, Shin and colleagues (2014) found that 87.8 percent of the studies that met their criteria for inclusion used the MBI. An additional meta-review of burn-out studies specific to mental health providers found that of over 1,300

included articles, the MBI was employed 96.3 percent of the time (Dreison et al., 2018). Additional, albeit less common, measures for burn-out include: Burnout Measure, Copenhagen Burnout Inventory, and Shirom-Melamed Burnout Measure. Each of these measurements have been used in the burn-out literature, yet have gained relatively little traction or acceptance in the field of organizational psychology. Task and skill-specific burn-out measures (e.g. Athlete Burnout Questionnaire, Raedeke & Smith, 2009) have also been developed since the 1990s and tend to include the MBI's three dimensions.

Prevalence of Burn-out

Burn-out symptoms have been pervasive in human services populations, with some studies finding 20 to 35 percent prevalence in doctors and teachers (Pervez & Halbesleben, 2017). However, because of burn-out's lack of a current identification process, overall incidence rates remain malleable in nature. That is, unlike other mental conditions such as anxiety or depression, there are very few formal diagnoses for burn-out. For example, depending on the definition and measurement instrument used, burn-out rates can vary from 3 to 40 percent (Garrouste-Orgeas et al., 2015) and 10 to 69 percent (Elmore et al., 2016) within single studies. Ironically, mental health providers are considered one of the most at-risk workers, with widespread levels of 21 to 67 percent suffering from high levels of burn-out at any time during their careers (Morse et al., 2012). These providers are responsible for helping others who are also in adverse mental states, making the diagnosis and treatment of occupational burn-out a critical multi-level issue. The overlap of depression and burn-out symptoms has also led to unclear levels of prevalence.

Sources and Antecedents of Burn-out

Maslach and Leiter (1997) suggested that increases in occupational burn-out are due to job environments where human values are consistently placed behind profits and economic growth. Not much has changed since then. In fact, some would argue the American work setting has reached epidemic levels of stress and burn-out. Maslach and Leiter (1997) offered five major problems that have shifted the focus of workers, managers, and business leaders. First, short-term profits and stock performance have prevailed over long-term, foundational practices. Maslach and Leiter detailed: "rather than corporations existing to extend the capacity of people to earn a living and make significant accomplishments, people are sacrificing their livelihoods and their aspirations for the good of the corporation" (1997, p. 2). Second, organizations and companies are operating in an ever-more global economic structure. American workers are competing with workers in developing countries, where lower wages can be paid (Maslach & Leiter, 1997). It is estimated that by 2030, nearly 80% of the current service jobs will be obsolete. Globalization has created increased pressures and caused employees to work longer hours and organizations to give up employee benefits like health insurance and pension plans (Maslach & Leiter, 1997). Third, on a related note, technology has prominently impacted the work landscape in the United States, at an exponentially quicker pace in comparison to the latter part of the 20th century, when burn-out was first studied. Automation, machines and robots are causing downsizing, while the internet and smartphones have created less opportunities for personal contact. Workers are also left to doubt information technology and wonder if their lives are really that much better, many believing their jobs have just been rearranged. Fourth, Maslach and Leiter (1997) noted the redistribution of power, weakening of labor unions, and increased curriculum standards as diminishing the control employees feel in the workplace. Fifth, a failing

corporate citizenship and unethical behaviors have left employees feeling hopeless and helpless. Notably, CEOs and CFOs are making hundreds of times that of an hourly employee at most corporations in the United States (Maslach & Leiter, 1997). These five considerations are key macro-level sources of burn-out. It is no surprise that burn-out originated in the United States with Freudenberger, in one of the busiest economic cities in the world, New York City.

More micro-level sources and antecedents of burn-out are associated with job-related stressors. Burn-out has largely been considered a "human services" industry issue (Maslach et al., 2001). Caregiver positions such as teachers, nurses, and customer service workers may be at greater risk for suffering from occupational burn-out for a variety of reasons. First, these positions contain specific occupational stressors related to interpersonal conflicts, classroom discipline, pain, death, lack of decision latitude, workload, schedules and lack of supervisor support (Garrosa et al., 2010). Second, social exchange processes can lead to higher levels of burn-out due to a perceived lack of equity and investment in interpersonal relationships. For example, a teacher who puts in extra time and effort with a student who eventually fails a subject may have feelings of failure themselves, in addition to guilt and lowered professional efficacy (Bakker et al., 2000). While these vocations have been studied more in-depth, workers in all industries and job-type are susceptible to experiencing symptoms of burn-out.

Two additional affective sources of occupational burn-out are emotional labor and compassion fatigue. Emotional labor is defined as "the effort, planning, and control needed to express organizationally desired emotions during interpersonal transactions" (Morris & Feldman, 1996, p. 987). This construct is supported by four dimensions: amount or frequency of emotional display, intensity and duration of emotional display, emotion variety, and emotional dissonance (Morris & Feldman, 1996). These are critical dimensions in all occupations, but particularly

salient in high-contact jobs such as human services or medical professionals. In general, humans take on social roles and interact with people differently to create specific impressions (Hochschild, 1983). Jobs where employees are consistently changing social roles and exerting emotional labor are more susceptible to burn-out symptoms, especially the emotional exhaustion dimension (Zapf, 2002). In the same breath, compassion fatigue, or secondary traumatic stress (STS), is an emotional hardening or lessening over time. Employees may expend emotional and psychological resources when caring for their clients or patients for extended periods of time (Day & Anderson, 2011). Without proper self-care, workers in fields such as health care, education, and law are unable to meet these demands and may suffer from a cost of caring.

Consequences of Burn-out

Burn-out can cause pronounced harm to an individual's personal and professional life. Interestingly, burn-out has had counterintuitive relationships with job performance, with burned-out employees rating themselves significantly lower than their supervisor ratings (Pervez & Halbesleben, 2017). Burn-out has been significantly linked to depression, with negative mental health consequences (Bianchi et al., 2015). Depression can lead to higher levels of cortisol, a hormonal biomarker for stress. Longer working hours have also been found to lead to cardiovascular disease, exhaustion, reduced immune system functionality, and issues with sleep (Vente et al., 2003; Van der Hulst, 2003). Burn-out and depression have an interesting "chicken-and-egg" complexity. Many of the same symptoms of burn-out also align with depression. This can lead to a common assumption that burn-out is an individual, rather than organizational or societal, problem, assigning blame to the individual in lieu of examining multi-level issues (Maslach & Leiter, 1997). A "blaming the victim cycle" supposes that individuals who experience burn-out are weak, unreasonable, or have mental health or home issues. Again, the

WHO (2019) classification is imperative as it treats burn-out as a medical condition and occupational phenomenon. Many clinical psychiatrists and psychologists view burn-out as a psychiatric disorder, although it is not officially recognized by the most recent edition of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-5, 2013). Another key consequence of burn-out is the "cascade effect" that moves between levels of society, economies, policies, industries, organizations, departments, and finally, down to the individual (Maslach & Leiter, 1997). Consequently, a burned-out supervisor can create strains in a bidirectional manner.

Depression and Burn-out

As noted earlier, burn-out and depression intersect in many significant ways. After all, Freudenberger (1974, p. 161) did state that "the person looks, acts and seems depressed" when describing behavioral symptoms of burn-out. For the past five decades, researchers have debated the parallels of depression and burn-out before settling on acknowledging the commonality, but seeing them as distinctive constructs (Pervez & Halbesleben, 2017). The two constructs are largely considered maladaptive responses to stress. Burned-out individuals tend to feel "helpless, hopeless, and powerless", akin to the learned helplessness theory proposed by Seligman (Schaufeli & Buunk, 2003, p. 399; Seligman, 1972). Many studies have found connections between the symptoms of depression and burn-out (Bianchi et al., 2015). Schaufeli and colleagues (1993) did find a positive correlation between burn-out and depression, yet no studies have compared the two constructs together directly with temporal considerations. While depression has been well defined by the APA (2013), burn-out is still seen as a symptom of chronic stress. The fields of organizational and clinical psychology need to further address both the similarities and differences between burn-out and depression. More longitudinal research is

necessary for understanding the cause-effect relationships of stress, depression, and burn-out. For example, if burn-out is classified as an occupational phenomenon but leads to emotional distress in other areas of an individual's life, further classification as a unique psychiatric disorder may be necessary. Similarly, if an individual with previous depression or anxiety diagnoses becomes burned-out at a new job, more temporal studies can tease out the antecedents, individual differences, mediators, and moderators of burn-out. Scholars remain uncertain about how burn-out as a process differs from depression as a process, and how the state of being burnt-out differs from a state of depression (Bianchi, et al., 2015). These similarities need to be addressed in future studies of occupational burn-out.

Physiological Considerations

An important meta-review was conducted to compare burn-out with 38 different biomarkers involved in such functions as immune system, hypothalamus-pituitary-adrenal axis, autonomic nervous system, metabolic processes, hormones, sleep and more (Danhof-Pont et al., 2011). There were no significant relationships or correlations for burn-out biomarkers. Interestingly, Danhof-Pont and colleagues (2011) indicated that the lack of a coherent conceptualization of burn-out and longitudinal studies were key problems in conducting the analysis. Since burn-out is caused by chronic stress, the hormone cortisol would be an obvious place to start for physiological measurement. However, no significant relationship has been found for burn-out and cortisol (Pervez & Halbesleben, 2017). Additionally, the examination of other stress-variables such as heart-rate variability, brain-derived neurotrophic factor (BDNF), and hippocampal have shown no consistent support for distinctiveness to burn-out (Orosz, et al., 2017). A lack of sleep has shown evidence as a factor contributing to burn-out, although the studies contained relatively small sample sizes. As technological advances progress, items like

wireless sensors could attend to an individual's stress levels in relation to key occupational dynamics such as temporal stress, co-worker proximity, meetings, and other daily workplace activities (Kozlowski, 2015). Organizations could then better understand individual stressors and assist in mitigating these situations, possibly reducing emotional exhaustion and overall levels of burn-out. For burn-out to standalone as an occupational phenomenon, more work-specific physiological and biomarker information is necessary for consideration and acceptance by the fields of clinical and organizational psychology.

Preventing Burn-out

Burn-out related intervention studies have mostly focused on the individual level (68 percent), with 84 percent of these studies providing a significant reduction in one of the three burn-out measure dimensions (Awa et al., 2010). Although few studies have intervened at the organizational level, those that have offered refresher sessions and refresher courses showed remarkable success and longevity (Rowe, 2000). Common interventions have included coworker support groups, mental health awareness, stress-reduction workshops, and continued education opportunities (Dreison et al., 2018). In addition, many interventions have led to lower levels of negative psychological and emotional outcomes, as well as increased positive support from supervisors and co-workers. In the mental health provider field specifically, effect sizes for burn-out interventions were significant, albeit small, ranging from .13 to .22 (Dreison et al., 2018). Accordingly, burn-out and stress interventions in the workplace are fundamental for reducing negative symptoms of these phenomena. Resilience, self-care and coping skills training are excellent avenues for organizational psychology to pursue in terms of research and consulting. Resilience training programs typically include opportunities for improving self-awareness, self-regulation, optimism, mental agility, character strengths, empathy, and communication (Pervez

& Halbesleben, 2017). Self-care offers techniques for employees to deal with chronic stress in productive ways, including proper rest and recovery, exercise, and hobbies (Kravits et al., 2010). Using a self-care approach, Rupert and Kent (2007) investigated cognitive strategies related to burn-out. To combat emotional exhaustion, professionals focused on maintaining a sense of control, reflection, work-life balance, and self-regulation techniques. For less depersonalization, cognitive strategies also included maintaining a professional identity and values (Rupert & Kent, 2007).

Coping, which has been found to be a critical strategy in reducing burn-out, is defined as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141). In a meta-analysis, Shin and colleagues (2014) found that the use of more problem-focused coping interventions can improve skills such as developing new interests, clarifying career goals and values, and avoiding activities that are incongruent with preferences. More intervention studies are necessary to both alleviate burn-out and its symptoms, along with identifying antecedents and work-place stressors. An example of a perceived antecedent to burn-out is a process called primary nursing, where responsibilities are redesigned and rotated. However, despite perceptions of increased autonomy and choice, burn-out levels did not decrease because of increased levels of stress in other areas of the job (Akinlami & Blake, 1990). Therefore, not all interventions are helpful and more evidence-based designs aimed at the causes of burn-out in the workplace should be used.

It has also been suggested in the literature that superior distinctions should be made between acute and chronic levels of occupational burn-out (Pervez & Halbesleben, 2017). Chronic conditions have been studied at higher rates due to the original conceptualization of

burn-out as a long-term stress syndrome (Maslach, 1982). However, by studying acute levels of burn-out, or work staleness, individuals and organizations may be able to intercede sooner and apply stress-reduction techniques to assist in alleviating long-term symptoms. A more progressive approach can also assist mental health providers in diagnosis and treatment, rather than waiting for individuals to reach a certain "threshold" of burn-out. Interestingly, few studies have looked at home life as an influence on burn-out. Work-family conflict and support has been shown to operate in a bidirectional manner. Rupert and colleagues (2009) found that conflict in either the home or work domain can lead to higher levels of overall stress and burn-out. However, family support has been a marker for lessened emotional exhaustion at work. The role of family and home life should be investigated further including multi-level and longitudinal study designs.

Coach Burn-out

While commonly studied from an occupational perspective, athlete and coaching burn-out research among sport and exercise psychology professionals has increased during the past several decades. Coach burn-out research has gained popularity due to the increase in demands and expectations from athletic departments which have caused some coaches to leave their profession by choice (Raedeke, 2004). The symptoms of coach burn-out can include: emotional stress, physical exhaustion, cynicism, depersonalization, illness, poor nutrition, boredom, decreased self-esteem, mood swings, emotional detachment, drug/alcohol abuse and reduced performance accomplishment (Goodger et al., 2007; Kania, Meyer, & Ebersole, 2009). Raedeke, Lunney & Venables (2002, p. 181) defined sport burn-out as "a withdrawal from sport noted by a reduced sense of accomplishment, devaluation/resentment of sport, and physical/psychological exhaustion."

Studying coach burn-out has become critical due to the potential repercussions of the coach negatively affecting the athletes they supervise and lead, like other human service occupations that demand direct and intense communication with people over extended periods of time (Raedeke, Granzyk & Warren, 2000). One of the seminal studies on coach burn-out was Kelley's Model of Stress Burn-out (1994). As mentioned in the Introduction section, Kelley found that the pressure to win along with time demands, lack of compensation, inequity, and lack of administrative support were the top causes of coach burn-out. While the effects of coach burn-out can hinder athlete performance, the importance of studying burn-out also stems from its direct impact on coaches and their respective careers. Schaufeli and Buunk (2003) conducted a review and found five categories of symptoms related to burn-out: affective (depression, hostility), cognitive (helplessness, cynicism, memory loss), physical (exhaustion, illness), behavioral (absenteeism, impaired performance), and motivational (disillusionment, lack of enthusiasm). These burnout symptoms can lead to coaching attrition and expertise developmental issues among collegiate coaches (Kosa, 1990).

The concept of burn-out in coaches and sport practitioners has largely been based on the work of Maslach and Jackson (1984). Early coach burn-out research focused on the intense levels of chronic stress involved with the profession (Smith, 1986). Many stress frameworks are indicative of coach burn-out symptoms. However, several burn-out studies have found that chronic stress alone has not been proven to sufficiently cause burn-out (Raedeke, Granzyk, & Warren, 2000). Consequently, Freudenberger and Richelson (1980, p. 13) believe that only highly committed people will experience burn-out and thus define the syndrome as a "state of fatigue or frustration brought about by devotion to a cause, way of life, or relationship that failed to produce the expected reward." Pines (1993, p. 38) stated, "while everyone can experience

stress, burn-out 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." Thus, much of Raedeke and colleagues' (2000; 2002; 2004) work has studied the link between burn-out and commitment, including the Coaching Commitment Model. This model includes three commitment profiles: attracted, entrapped, and less interested. Coaches with attraction characteristics reported higher benefits and satisfaction, with lower perceived costs and attractive alternatives. Entrapped coaches reported higher burn-out and lower commitment than attracted coaches. Less interested coaching professionals scored lower in the areas of benefits, satisfaction, and investments and higher on attractive alternatives (Raedeke et al., 2002). The work of H. Kelley (1983) and Johnson (1982) addresses the construct of an individual's commitment level as *wanting* to be involved or *having* to be involved. This investment model also suggests that the more individuals are invested and the less attractive the alternative options, the stronger their professional commitment will be (Rusbult, 1988). Raedeke's (1997) commitment model suggests that athletes and coaches who feel entrapped will be more likely to experience burn-out because these individuals may feel that they have invested too much time and energy to quit, others expect them to continue coaching, and they may not perceive attractive alternatives. Entrapped coaches "may be committed in the sense that they intend to maintain involvement…they may not, however, demonstrate a strong desire to do so" (Raedeke, Granzyk & Warren, 2000, p. 89). Therefore, the commitment framework approach remains a stronghold for both future research and attempts to alleviate some of the symptoms of coach burn-out. More recent studies of coach burn-out delve into the demands of the occupation and potential consequences related to these demands (Goodger et.al, 2007). Frequent travel, expectations to

win, and strain on personal relationships have also been cited as the greatest demands related to coach burn-out (Lai & Wiggins, 2003).

Organizational Stressors

Organizational stressors are "the environmental demands experienced by an individual associated with an organization", while strain is an "individual's negative psychological, physical, and behavioral responses to stressors" (Fletcher, Hanton, & Mellalieu, 2006, p. 329). Demands may be considered physical, psychological, social, or organizational tasks of a job that require sustained effort and depletion of job resources (Schaufeli & Bakker, 2004). Job resources reduce job demands, help achieve goals, and stimulate growth and development. While simply increasing job-related resources seems like a logical solution to occupational burn-out and employee turnover intention, decreasing job demands may have a more salient impact on these factors (Schaufeli & Bakker, 2004). In a study of US professional soccer athletes, travel, drafting and contracts, team issues, salaries, and coach issues were first-order themes of organizational stressors, showing that coaches and athletes are highly impacted by organizational issues (Kristiansen et al., 2012). Organizational norms and expectations can cause increases in perceived job strain including: leadership behaviors, feelings of entrapment, work overload, and an external locus of control (Ryska, 2009). Research also shows that coach burn-out may increase if the coach does not feel their work is valued, acknowledged, well-regarded, or does not receive adequate remuneration related to the quality of their work (McLaine, 2005). Spector (1994) cites nine facets of job satisfaction: salary, promotion, supervision, benefits, contingent rewards, conditions, coworkers, work environment, and communication. Decrements in one or more of these areas can lead to long-term occupational strain. A case study by Levy et al. (2009) found that an elite level aquatic sport coach experienced administrative (18.6%), work overload

(12.9%), competition environment (8.6%), athlete issues (8.6%), and team atmosphere (8.6%) organizational stressors most often during a 28-day period. Hence, environmental factors embedded in both college athletic departments and higher education institutions may play a role in influencing coach burn-out. Cunningham & Sagas (2002) explored the organizational intent to leave among NCAA DI assistant coaches and found that the climate and culture of the athletic departments significantly affects how a coach experiences the quality of work within an organization. Organizational culture is the "deep-rooted values and beliefs held and practiced by members of an organization" (Weese, 1996, p. 198). Culture reflects the identity of an organization and can influence the activities and productivity of its employees. For example, Weese (1996) found a strong positive correlation ($r = .77$) between culture strength and organizational effectiveness. Surprisingly, researchers have conducted limited work to contribute to this line of thinking (Ervin, 2015). The few studies completed in this realm have indicated the factors of organizational support, flexibility and control, quality of supervision, salary, employee relations, and recognition are critical factors in predicting coach well-being and retention (Knight et al., 2013). In a taxonomic classification of 34 studies related to organizational stressors in sport, Arnold & Fletcher (2012) synthesized the presence of predominant categories including: leadership/personnel issues, cultural/team issues, logistical/environmental issues, and performance/personal issues. Subcategories included: external expectations, support staff, performance feedback, roles, cultural norms, finances and career transitions (Arnold & Fletcher, 2012). Gender differences are also salient in experiencing organizational stressors. Kelley and Baghurst (2009) surveyed NCAA DIII athletic coaches and revealed that males perceived the pressure to win as the most stressful coaching issue while females were more concerned about recruiting issues.

A theory in the field of organizational psychology, Person-Environment (P-E) Fit Theory, suggests that a misalignment or lack of congruity between the organization and the employee may create excess occupational strain (Ryska, 2009). More specifically, large gulfs between the employee's goals, leadership styles, values, skills, attitudes, and the expectations of the work environment (i.e. administrative leadership style, norms, culture, resources, demands, etc.) can cause long-term "P-E misfit" (Ryska, 2009). Ryska (2009) found that collegiate coaches who prioritize public relations and prestige goals within their sport programs reported higher occupational burn-out than coaches pursuant to personal growth and support of excellence in their athletes. Leadership behaviors were also salient with different levels of reported occupational burn-out.

Lazarus' (1990) work utilizes the transactional appraisal theory to describe occupational burn-out. Employees may appraise their abilities and resources in determining their adequacy to meet the task demands of the position (Lazarus, 1990). For example, a coach may perceive a lack of time resources with the excess of job tasks to be completed as an increase in stressors. Long-term stressors can create occupational strain and feelings of burn-out. The consequences of encountering these stressors will depend upon the individual's perceptions and appraisal of both positive and negative demands against perceived personal resources (Lazarus, 1999). In his work as a sport psychology and business executive consultant, Jones (2002) considered organizational issues to be a relationship between demands, supports, and constraints. The performance environment was considered along with the individual performers to maximize support and minimize constraints (Jones, 2002). Athletic administrators can provide organizational and social support to coaches to achieve "environmental mastery" (Ryff & Keyes, 1995, p. 720) which is summarized as "the competence to manage the environment effectively to control and use it and

its opportunities, or to form surroundings that help one to fulfill personal needs and values." Consequently, personal coach characteristics, such as disposition, trait anxiety, and coping, are critical to the successful navigation of their environment and should be examined concomitantly.

Organizational justice is another critical construct to understanding organizational stressors. Ha & Ha (2015) suggest that perceptions of fairness can influence an employees' effort and willingness to cooperate with organizational goals. Adams' (1963) theory of inequity addresses these perceptions as comparing the ratio of an employees' input (contributions) to their outputs (rewards). An equal ratio would create employee satisfaction and overall harmony within the organization (Ha & Ha, 2015). In the case of collegiate athletics, resource allocation within athletic departments has become a topic of discussion worth noting. Coaches of revenue sports may feel they are treated with fairness while non-revenue sport coaches may perceive inequity in the sport organization (Ha & Ha, 2015). Just as student-athletes expect to be treated fairly and with respect, coaches have similar needs that contribute to their overall effectiveness and continued participation. Bradford and Keshock (2011) found that non-revenue sport coaches were more likely to experience emotional exhaustion and depersonalization and higher levels of burn-out overall in comparison to coaches of revenue sports.

Coping

Coping is all conscious and deliberate attempts to manage appraised demands (Lundqvist & Sandin, 2014; Allen & Shaw, 2009). Accordingly, it is critical to assess aspects of coping to determine effective methods or strategies (Lundqvist & Sandin, 2014). Most methods of coping occur during stressful competitive aspects of a coach's schedule (Levy et al., 2009). Awareness and proactive measures taken by both administrators and coaches may alleviate the cyclical nature of perceived stress and long-term strain. An inability to properly cope with organizational

stressors can cause a coach to perform less effectively and experience negative affective emotions (Fletcher & Fletcher, 2005). Some coping strategies include cognitive and emotional control or behavioral strategies (Knight et al., 2013). Interestingly, Hanton and colleagues (2012) found that athletes perceived organizational stressors as mostly threatening, some even harmful, with few reports of being viewed as a challenge. Therefore, athletes (and coaches) are cognizant of these organizational stressors and generally appraise them as negative, possibly due to the lack of control they may have over the situation. Proper coping strategies can ameliorate these negative effects. However, two coaches may employ different coping strategies to the same situation and view an occupational demand differently (e.g. challenge or threat), enacting effort or resources used, subsequently leading to divergent impacts on performance and well-being (Fletcher & Scott, 2010). Assessing personal characteristics must be prioritized as a salient factor in measuring coach burn-out. Vealey and colleagues (1992) concluded that high trait anxiety scores were directly related to all three subscales of the MBI. Nonetheless, coaches must cope to overcome a myriad of issues while also maintaining their own optimal psychological and emotional levels (Thelwell et al., 2008b).

Perceived Organizational Support

Perceived organizational support is an organizational psychology and management construct defined as the degree to which employees perceive their employer to be concerned with their well-being and to value their contributions to the organization (Eisenberger et al., 1986; Eisenberger et al., 2004). Perceived organizational support can refer to the personification of an organization by the employee, drawing on affective emotions such as equitable compensation, assistance during times of need, creation of a stimulating work environment, and adequate and safe working conditions. Aube et al. (2007) found that higher levels of perceived organizational

support was linked to greater commitment, sense of belonging, and pride in an employees' organization.

Organizational Climate

As suggested by Ervin (2015, p. 189), "the intense pressure to win and compete in the arms race of college athletics may be a contributing factor to why coaches choose to leave the organization and the profession, and consequently has developed a need to understand the climate within college athletic departments." Defining organizational climate has been controversial due to the contextual nature of both the words "organizational" and "climate" within a specific domain or profession. Schneider (2000, p. xvii) defines organizational climate as the "representation and the descriptions of things that happen to employees in an organization." Organizational climate can also be described as a set of values, norms, and beliefs of a specific organization that guide interactions with peers, management, and clients (Svyantek & Bott, 2004). For this study, the authors chose to examine organizational climate due to the more behaviorally oriented nature of climates to provide opportunities for creativity, innovation, safety, and service in the workplace (Patterson et al., 2005). Organizational climate also represents employees' perceptions of organizational policies, practices, and procedures, causing subsequent patterns of interactions and behaviors supporting the opportunities (Patterson et al., 2005). Many dimensions of organizational climate have been developed due to the complex nature of applying the concept to different areas of interest. Schneider (1990, p. 383) has suggested that "the dimensions of organizational climate will differ depending on the purpose of the investigation and the criterion of interest," which in this study will look at the context of collegiate athletics in the United States. Thumin and Thumin (2011, p. 106) suggest that "climate is the most important single measure of the broader concept called 'culture' and that without

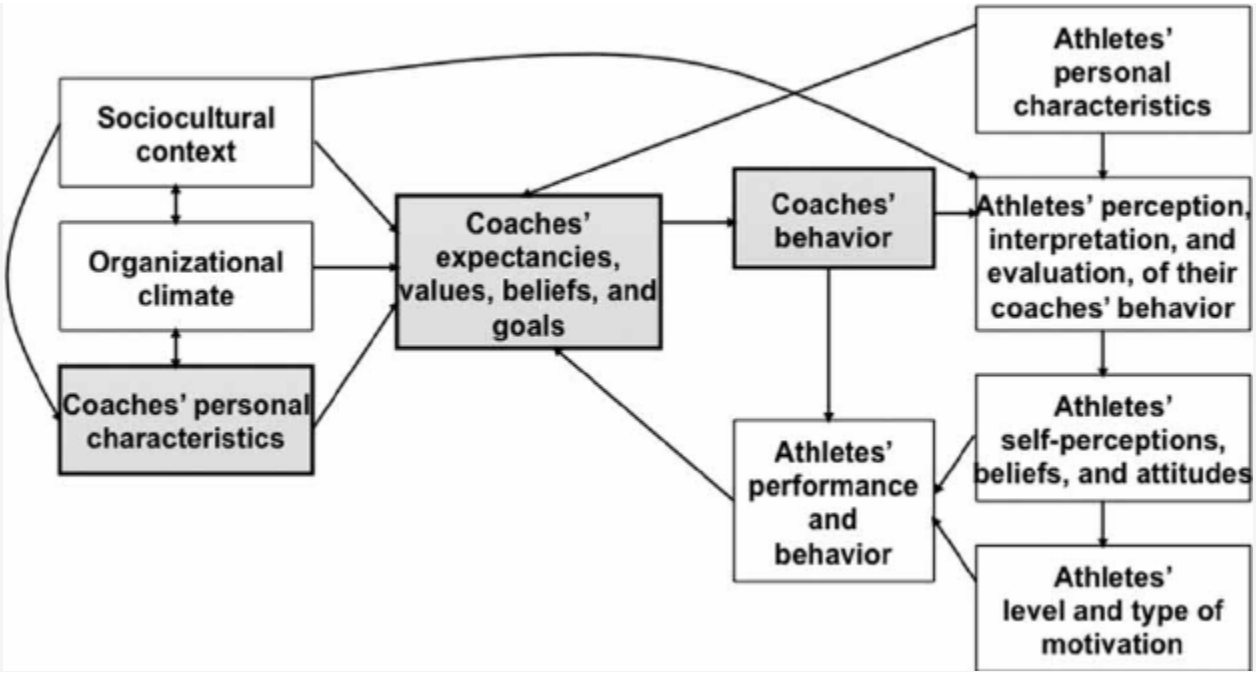
measuring the aggregate perceptions of stakeholder groups, it would be difficult, probably impossible, to obtain a meaningful, realistic picture of an organization's culture." They further describe organizational climate in terms of the total reflection of employees' perceptions and descriptions of their work environment impacting employees' satisfaction, commitment, and performance (Thumin & Thumin, 2011). Thus, further examination of organizational climate within athletic departments and higher education institutions is vital to examining the prevalence of coach burn-out, improving methods of coping with organizational stressors, and subsequently improving coach job satisfaction, effectiveness, and well-being.

The Working Model of Coaching Effectiveness

The Working Model of Coaching Effectiveness (Horn, 2002) will be used as the theoretical model for this study. Several studies have shown that sport organizations' practices and culture influence a coaches' experiences and overall effectiveness (Gould et al., 2002; West et al., 2001). According to the Working Model of Coaching Effectiveness (see Figure 1.), coaches operate in a reciprocal and systematic manner where they are affected by society, culture, sport organizations, and athletes, and in turn they influence each of these factors. Allen and Shaw (2009) point out that coaches are people with psychological needs such as personal growth and well-being. Positive support from sport organizations is critical for coaching effectiveness (Allen & Shaw, 2009). As Hardy, Jones, and Gould (1996, pp. 239-240) mentioned, "elite athletes do not live in a vacuum; they function within a highly complex social and organizational environment, which exerts major influences on them and their performances." According to Horn's Model, the same thing can be assumed about coaches. Respectfully, sport management researchers have mostly focused on governance-level issues while sport psychology researchers have generally examined individual-level factors (Fletcher & Wagstaff, 2009). Thus,

this “blind spot” offers the opportunity to elucidate some of the phenomenon related to the coach as a performer in competitive sport organizations. As Ravizza (1988, p. 248) recommended, sport psychology professionals should pay careful attention to perpetually changing “organizational politics” in elite sport. Therefore, using Horn’s Working Model of Coaching Effectiveness as the theoretical framework as a heuristic model, the left side of the model will be the focus of the current study. More specifically, Organizational Climate, Coaches’ Personal Characteristics, and Coaches’ Expectances, Values, Beliefs, and Goals will be examined.

Figure 1. **Working Model of Coaching Effectiveness** (Horn, 2002)



Conceptual Framework

The relationship between organizational factors and coach burn-out in collegiate athletics is complex and essentially undiscovered. Allen and colleagues (2003) proposed the presence of organizational climate factors in relation to a coaches’ intent to leave the profession or current organization. Their work suggests that critical human resource development practices within

sport organizations can improve climates and therefore strengthen the relationships of administrators and coaches. However, athletic departments must have the initiative and resources to implement these practices, and employees (e.g. coaches) must be able to perceive these practices and view the work environment as being dedicated to the development of its employees (Allen, Shore & Griffeth, 2003).

Previous research has provided the framework for understanding both the symptoms and characteristics of coaches experiencing burn-out. However, there is little information regarding some of the environmental causes of coach burn-out, specifically referencing organizational dynamics of respective athletic departmental and educational institution leadership. Therefore, the purposes of this study are to:

1. Survey the prevalence of coach burn-out in collegiate golf coaches.
2. Examine relationships between organizational factors with coach burn-out.
3. Explore and analyze coaching stressors with the Coaching Stressors Scale.

CHAPTER 3

Method

Subjects

The participants in this study were National Collegiate Athletic Association (NCAA) golf coaches employed at higher education member institutions in the United States during the 2017-2018 academic year. Golf coaches were surveyed in this study because of the author's own experience as a coach and familiarity with the stressors of collegiate coaching. Golf rejoined the Olympics in 2016 and most athletes attend NCAA institutions as a training ground for elite level amateur and professional events. Collegiate golf coaches were also surveyed in this study because of the author's connections within the collegiate golf world and likelihood of successfully recruiting coaches to participate.

Procedure

Institutional Review Board approval for this study was received from Michigan State University. An online survey format was utilized for convenience and accurate completion of the survey. A cover letter explaining the purpose of the study was emailed to all 2016-17 NCAA Men's & Women's Golf coaches in the United States from May 15 to June 15, 2017 (N = 3,255). The survey consisted of agreeing to a consent statement (Appendix A), followed by the completion of demographics (Appendix B) and all instruments. Overall, the survey took approximately 15-20 minutes to complete. Participants were thanked for their time and contribution to the advancements in coaching science from the completion of this study.

Sample Characteristics

A total of 96 (37 females) NCAA golf coaches participated in the study by returning completed surveys. Regarding race, 94.8% of participants identified as White/Caucasian, 2.1%

Black/African-American, 1.0% Asian, and 2.1% as Other or multiracial. Coaching titles consisted of 70.8% of participants having the professional role of Head Coach, 19.8% Assistant Coach, 5.2% Associate Head Coach, and 4.2% Director of Golf. Participants represented all three NCAA Divisions with 46.9% coming from Division I, 22.9% from Division II, and 30.2% in Division III. Overall collegiate golf coaching experience ranged from 0 to 41 years with a mean of 9.07 years. Coaches reported being classified as a full-time (72.9%) or part-time employee (27.1%) at their institution. Related to the highest level of education attained, 5.2% had completed Some College, 51.0% completed a Bachelor's Degree, 38.5% obtained a Master's Degree, and 5.2% had completed a Doctoral Degree. Participants reported being in their current coaching position for an average of 7.2 years (Range = 0 to 41 years), and with their current Athletic Director for 4.1 years (Range = 0 to 25 years). The mean annual salary for the sample was $44,096.81 (USD) with a range from $1,400 to $210,000. For marital status, 34.4% identified as Single, 62.5% Married, 1.0% In A Relationship, and 2.1% abstained from the question. Coaches stated their average weekly hours in-season hours spent coaching as 46.35 hours with a range of 8 to 90 hours, with 40% reporting coaching 50 hours or more per week.

Measures

Coach demographic and background information. Participants were surveyed regarding gender, race, coaching title, coaching level, coaching experience in years, coaching position classification (full or part-time), highest level of education, annual coaching salary (USD), coaching experience in current position, coaching experience with current athletic director, marital status, weekly hour spent coaching, and team's win/loss percentage from the previous season. As a note, the final demographic information (Appendix B), the coach's team win/loss percentage from the previous season contained considerable missing data and was thus removed

from analyses. The original purpose of inclusion in the demographic/background information was to examine relationships between the level of team "success" a coach may have with burn-out and stressors.

Organizational Climate Measure. Based on the Competing Values model (Quinn & Rohrbaugh, 1981; 1983), organizational effectiveness is best conceptualized as constructs that reflect both internal and external loci, and flexibility and control domains. Therefore, Patterson and colleagues (2005) sought to identify specific dimensions of climate that individuals could assess at different levels of an organization. For this study, the author selected four dimensions/subscales of the Organizational Climate Measure (OCM) using a 1 to 4 scale (Appendix C), with higher scores being associated with higher and more productive organizational climate perceptions from supervisees/employees. Supervisory Support, Welfare, Performance Feedback, and Pressure to Produce were all seen as relevant measurements in relation to the purpose of examining organizational stress in coaching collegiate athletics. Overall, the reliability and agreement of scales has shown strong internal consistency and psychometric properties. All items were modified for phrasing to include the context of collegiate athletics and coaching.

The Supervisory Support subscale (Cronbach's = 0.88; Average Agreement = 0.83) encompasses five questions regarding the level of perceived supervisory support in an organizational on a scale of 1 to 4 (1 – Definitely False, 2 – Mostly False, 3 – Mostly True, 4 – Definitely True). An example item is: *Supervisors in my athletic department show an understanding of the coaches who work for them.* The Welfare subscale (Cronbach's = 0.91; Average Agreement = 0.77) includes four items related to an individual's perception of welfare and well-being within their organization on a scale of 1 to 4 (1 – Definitely False, 2 – Mostly

False, 3 – Mostly True, 4 – Definitely True). An example item is: *My athletic department tries to look after coaches.* The Performance Feedback subscale (Cronbach's = 0.78; Average Agreement = 0.75) contains five items on a scale of 1 to 4 (1 – Definitely True, 2 – Mostly True, 3 – Mostly False, 4 – Definitely False) reverse scored based on wording of the items. An example item is: *In my athletic department, a coach's performance is measured on a regular basis.* Finally, the Pressure to Produce subscale (Cronbach's = 0.79; Average Agreement = 0.83) includes five items on a scale of 1 to 4 (1 – Definitely True, 2 – Mostly True, 3 – Mostly False, 4 – Definitely False) reverse scored based on wording of the items. Higher scores indicate a greater perceived "pressure to produce" by the participant. A sample item is: *Coaches in my athletic department are under pressure to meet targets.*

Survey of Perceived Organizational Support. Perceived Organizational Support (POS) refers to "employees' perception concerning the extent to which the organization values their contribution and cares about their well-being" (Eisenberger, ud.edu). The Survey of Perceived Organizational Support (SPOS) assesses employee well-being and the reciprocal relationships between employee perceptions and their commitment to the organization. For the purposes of this study, the short 8-item version of the scale (Appendix D) was used as it shows high internal reliability with the original 36-item scale. The assessment includes a Likert scale of 0 to 6 (0 = strongly disagree; 6 = strongly agree) and four items (3, 7, 17, and 23) are reversed scored. A sample item includes the statement "The organization values my contribution to its well-being" (Item 1).

Workplace Stress Scale. The Workplace Stress Scale was developed by The Marlin Company and the American Institute of Stress (AIS) in 1998. The 8-item questionnaire (Appendix E) is widely used in occupational settings. Items are assessed on a Likert scale of 1

(Never) to 5 (Very Often), with higher total scores corresponding to high levels of perceived workplace stress. The question stem asks the participant: “Thinking about your current job, how often does each of the following statements describe how you feel?” AIS stated that this scale should be only a screening tool for further investigation on its website, stress.org. Thus, there are no psychometric properties available for The Workplace Stress Scale.

Maslach Burnout Inventory Educators Survey. The Maslach Burnout Inventory (MBI) Educators Survey (Appendix F) is based on the original Maslach Burnout Inventory and designed to be used in educational settings. Since collegiate athletic coaches are highly embedded in academic institutions and there is not a current psychometrically sound coach burn-out instrument, the MBI Educators Survey was utilized to assess levels of burn-out in the sample. The MBI Educators Survey has three core aspects: emotional exhaustion, depersonalization, and a lack of personal accomplishment (MBI Manual, 2018). Emotional exhaustion scale “assesses feelings of being emotionally overextended and exhausted by one's work”, depersonalization scale “measures an unfeeling and impersonal response toward students”, and a lack of personal accomplishment scale “assesses feelings of competence and successful achievement in one's work with students” (MBI Manual, 2018, p. 31). MBI Educators Survey is assessed on a 0 to 6 scale (0 = never, 6 = every day), with the stem of “how often…” in 22 items. There is not a composite “burn-out” score due to the nature of the three scales. Higher scores on the emotional exhaustion and depersonalization scales represent higher levels of burn-out, while lower scores on the lack of personal accomplishment scale is also associated with higher levels of burn-out. The MBI Educators Survey has been used in hundreds of peer reviewed studies and shown strong reliability and validity, following the initial publishing of the Maslach Burnout Inventory (MBI) in 1981.

Turnover Intention Scale. The Turnover Intention Scale (TIS) (Appendix G) was developed by Roodt (2004) to "ascertain the extent to which you intend to stay at an organization." For the purposes of this study, TIS was employed to examine possible relationships between burn-out and turnover intentions among collegiate golf coaches. The six-item (TIS-6) version for the current study has shown strong reliability (Cronbach alpha = 0.80) and could significantly determine "leavers" versus "stayers" in a longitudinal manner (validity) (Bothma & Roodt, 2013). TIS-6 assesses how often an individual has considered "leaving their job" or "dreaming about getting another job" in the past nine months. A Likert scale of 1-5 distinguishes between 1 (never) and 5 (always) with two items (3 and 7) using the slightly rephrased descriptors. Higher scores indicate higher levels of an intention to leave an organization.

Connor-Davidson Resilience Scale. The Connor-Davidson Resilience Scale (CD-RISC) (Appendix H) has three versions, including 25-item, 10-item, and 2-item scales. For the purposes of this study, the investigators utilized the 10-item scale. CD-RISC has been widely used in various populations since its development in 2003. The 10-item brief scale has shown strong psychometric properties (Cronbach alpha = 0.81) across both highly functioning and individuals with mental health conditions (Davidson & Connor, 2017). Subscales are addressed, but the instrument developers do not recommend separate scoring on these factors. Thus, the total scores for the 10-items range from 0-40, with each item presented on a Likert scale from 0 to 4. Higher scores represent higher levels of self-perceived resilience. A sample question includes: *"I can deal with whatever comes my way"* with a scale from 0 (Not true at all) to 4 (True nearly all the time). Previous studies using CD-RISC 10 have found demographic factors accounting for 10% variance or less (Davidson & Connor, 2017).

Coaching Stressors Scale. The Coaching Stressors Scale (CSS) (Appendix I) was developed for the current project to assess the level of coaching-specific, work-related stressors. CSS is a 12-item measure with the question stem of "How often has each of the following aspects of the coaching profession produced occupation stress within the past twelve months?" The factors included Administrative Tasks, Fundraising, Interpersonal Team Issues, Parental Factors, Practice Plans/Competitive Preparation, Pressure to Win, Recruiting, Student-Athlete Relationships, Supervisor/Athletic Department Issues, Time Demands, Travel, and Work/Personal Life Balance. Participants responded on a sliding Likert scale from 1 to 7 (1 = never, 4 = sometimes, 7 = always). The Coaching Stressors Scale is an exploratory assessment developed by the author and does not have psychometric properties available now.

Data Analysis

Descriptive statistics were conducted on the sample for all demographics and measures. Inferential statistics were examined for correlation coefficients of demographic characteristics, burn-out and the organizational assessments. Additionally, multiple regression analyses were conducted for significance of predictor variables of each of the three criterion variables of burn-out. Qualitative aspects of the exploratory Coaching Stressors Scale were also analyzed for future psychometric purposes and scale development.

CHAPTER 4

Results

The current study had three purposes. These included to: (1) survey the prevalence of coach burn-out in collegiate golf coaches; (2) examine relationships between organizational factors with coach burn-out; and (3) explore and analyze coaching stressors with the Coaching Stressors Scale. To address these purposes the results will be organized by first presenting descriptive statistics on all the major variables assessed in the study. These descriptive statistics will reveal the prevalence of burn-out in collegiate coaches (Purpose 1) and the coaching stressors experienced by the respondents (Purpose 3). Finally, inferential statistics were used to examine Purpose 2 – the relationship between organizational stressors and burnout.

Descriptive Statistics

Organizational Climate Measure. Four subscales of the Organizational Climate Measure (OCM) were assessed. The Supervisory Support subscale is measured with four items on a 1 to 4 scale, with higher scores representing greater levels of perceived Supervisory Support. Participants reported a mean of 3.30 (SD = .598) on a scale ranging 1.00 to 4.00, showing relatively high levels of supervisory support. For the subscale of Welfare, participants felt that this area was also relatively strong, reporting a mean of 3.221 (SD = .620). Next, coach perceptions of Performance Feedback were assessed revealing slightly lower scores than the first two characteristics of organizational climate, with a mean for this category of 2.97 (SD = .590). Finally, the organizational climate measure of Pressure to Produce had a mean of 2.59 (SD = .394) and a unique range of 1.8 to 3.6 relative to the other three OCM scales (ranges = 1 to 4).

Survey of Perceived Organizational Support. Perceived Organizational Support was measured using the 8-item Survey of Perceived Organizational Support on a 0 to 6 rating scale. Participants reported a mean score of 4.521 (SD = 1.346) on a scale ranging from 0 to 6, indicating an overall moderate to strong level of perceived organizational support. It should be noted that the range for the sample was 0 to 6, indicating that both strong and weak organizational support was evident in the findings.

Workplace Stress Scale. Workplace Stress was measured on a 5-point Likert scale, with higher scores indicating increased levels of perceived stress from work. The coach participants assessed their workplace stress as relatively low to moderate, with a mean score of 2.120 (SD = .646) and a range of 1.00 to 4.13. These findings suggest that the participants perceived relatively low levels of occupational stress.

Maslach Burnout Inventory Educators Survey. The Maslach Burnout Inventory (MBI) Educators Survey has three distinct subscales/dimensions. When reporting Burn-out/Emotional Exhaustion (8 items), participants indicated a mean of 1.41 (SD = 1.142) and range of 0 to 5.38 on a scale that ranged from 0 to 6. Burn-out/Depersonalization (5 items) had a mean of .91 (SD = .924) and range of 0 to 4.40 on a scale that ranged from 0 to 6. Burn-out/Personal Accomplishment (9 items) indicated a mean of 5.02 (SD = .724) and a range of 3 to 6, on a scale that ranged from 0 to 6. Overall, the results pertaining to these subscales allowed the investigator to address Purpose 1 which focused on assessing the level of burn-out in collegiate golf coaches. Specifically, low levels of occupational burn-out were found as lower levels of Emotional Exhaustion and Depersonalization represent lower levels of burn-out, while higher scores in the dimension of Personal Accomplishment indicate lower levels of burn-out in the sample. In comparison to available normative data of postsecondary educators (MBI, 2018), the current

sample reported lower levels of burn-out in each dimension, when compared to means of 2.06 (Emotional Exhaustion), 1.11 (Depersonalization), and 4.89 (Personal Accomplishment). Frequency quartiles for each dimension are presented below (see Figure 2), demonstrating low levels of burn-out for the sample. However, higher levels of burn-out for individual participants are areas of concern from a well-being perspective. Thus, MBI recommended critical boundaries for each dimension will be examined later in this chapter.

Figure 2. Burn-out Frequencies and Quartiles

Statistics

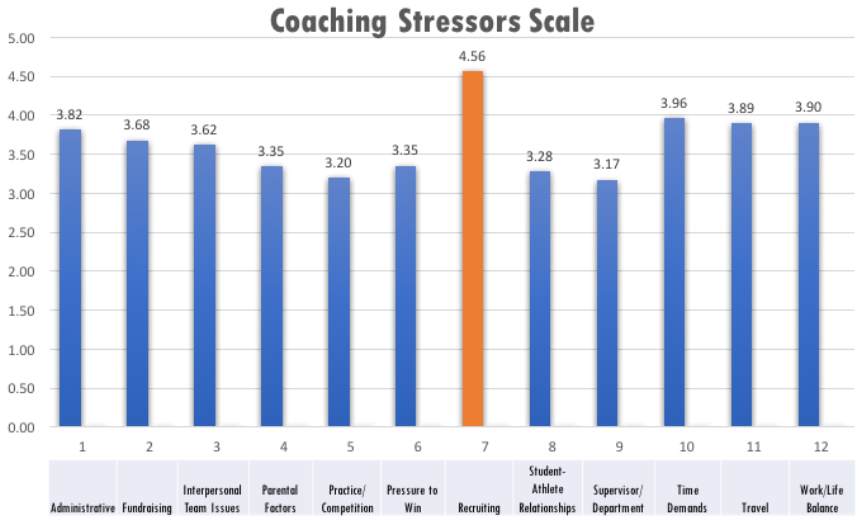
		MBI – Burn-out Depersonalization	MBI – Burn-out Personal Accomplishment	MBI – Burn-out Emotional Exhaustion
N	Valid	96	96	96
	Missing	0	0	0
Mean		.9104	5.0245	1.4099
Std. Deviation		.92355	.72442	1.14159
Minimum		.00	3.00	.00
Maximum		4.40	6.00	5.38
Percentiles	25	.2000	4.5175	.5600
	50	.7000	5.2500	1.1750
	75	1.2000	5.6300	2.0000

Turnover Intention Scale. The Turnover Intention Scale (TIS) assesses participants using a six-item instrument on a 1-5 scale, with higher scores showing a higher intention to leave their current organization or position. Overall, the sample revealed a mean of 2.021 (SD = .772) and a range of 1 to 4. This suggests that most of the sample consider themselves "stayers" at their current organization, based on the past year.

Connor-Davidson Resilience Scale. The Connor-Davidson Resilience Scale (CD-RISC) employs a 10-item scale to measure coping skills and resilience in participants, with scores ranging from a low of 1 to a high of 4. The coach sample in this study reported strong levels of coping and resilience, with a mean score of 3.23 (SD = .517) and a range of 2 to 4.

Coaching Stressors Scale. Purpose 3 of this study was examined by assessing the participants on the Coaching Stressors Scale (CSS). This scale was developed for the current project to assess the level of coaching-specific, work-related stressors, using a 12-item, 7 point Likert scale. Coaches reported a mean score of 3.615 (SD = .930) and a range of 1 to 5.75 for all items, falling nearly in the center of the scale (4.00, denoted with "Sometimes") which ranges from a low of 1 to a high 7. Of the 12 items, which are typical job responsibilities of athletic coaches, Recruiting (m = 4.56), Time Demands (m = 3.96), and Work/Personal Life Balance (m = 3.90) were the highest rated areas of coaching stress. Supervisor/Athletic Department Issues (m = 3.17), Practice Plans/Competitive Preparation (m = 3.20), and Student-Athlete Relationships (m = 3.28) were rated as three lowest areas of coaching stress, respectively in that order (See Figure 3).

Figure 3. Coaching Stressors Mean Bar Graph



Inferential Statistics: Correlational Analysis between Variables

Overall, this study provided for an analysis of 24 distinct variables. A correlation coefficient analysis was used to determine statistically significant relationships between variables for further analysis. The respective significant relationships are referred to in this section. Using a Pearson Correlation, 2-tailed significance test, correlation coefficient strengths and direction are also estimated using Cohen's (1988) guidelines statistical power in behavioral sciences of small (.10 - .29), medium (.30 - .49), and large (greater than .50).

Coach demographic and background information. Gender and Burn-out/Emotional Exhaustion were significant and positively associated ($r = .245$, $p < .05$ level), suggesting that female coaches in the sample experienced higher levels of emotional exhaustion in comparison to male coaches. Race did not provide additional analyses as there were no statistically significant relationships based on the parameters, possibly due to the rather homogenous racial identities of the sample. The level of coaching (NCAA DI, DII, or DIII) was significantly related to annual coaching salary and marital status, providing evidence of higher coaching salaries at the DI level, which would be expected.

The variable number of years coaching collegiate golf was also significantly and positively associated with the demographic variables of highest level of education, annual coaching salary, coaching experience in current position, current coaching experience with current Athletic Director, and marital status. These are expected relationships due to the factor of time spent in a career also being associated with other life events and experiences. Number of years of coaching collegiate golf shared significant relationships with several key individual and organizational factors. First, number of years of coaching collegiate golf was correlated with the

Supervisory Support ($r = -.262$, $p < .01$), Welfare ($r = -.338$, $p < .01$), and Perceived Organizational Support ($r = -.296$, $p < .01$), showing that with an increase in years of experience, there were slightly lower perceptions of these dimensions of organizational support. Second, the variable number of years of coaching collegiate golf was positively correlated at a significant level with Workplace Stress ($r = .216$, $p < .05$) and Burn-out/Depersonalization ($r = .245$, $p < .05$). These positive relationships provide a corresponding increase in both workplace stress and depersonalization perceptions as a coach attains more years of experience coaching collegiate golf.

Highest education level was correlated with several key indicators of organizational support and individual stress perceptions. Education level (1 to 5 progressive scale) was positively associated with average weekly hours spent coaching ($r = .238$, $p < .05$) and Burn-out/Emotional Exhaustion ($r = .202$, $p < .05$). These results indicate dynamics between attaining higher levels of education and both spending more time coaching and higher levels of burn-out/emotional exhaustion.

Annual coaching salary was connected to several key variables in a significant manner. From the sample, there was a positive correlation between annual coaching salary and number years of coaching ($r = .397$, $p < .01$) as previously mentioned, as well as average weekly hours spent coaching ($r = .383$, $p < 0.01$). Regarding individual and organizational perceptions, annual coaching salary (USD) was positively associated with Pressure to Produce ($r = .251$, $p < .05$) and Burn-out/Depersonalization ($r = .251$, $p < .05$) subscales. Interestingly, the higher a coach's reported annual salary, the stronger the correlation with perceived expectations of performance outcomes and burn-out/depersonalization.

Coaching experience in the participant's current position was also analyzed for significant correlations. This variable was strongly and significantly associated with the number of years of collegiate golf coaching experience ($r = .772$, $p < .01$) and coaching experience with their current Athletic Director ($r = .431$, $p < .01$). Coaches in this study noted a significant positive relationship with Workplace Stress ($r = .345$, $p < .01$), suggesting a greater amount of perceived stress the longer a coach stays in a position. Coaching experience in their current position was also associated in negative significant correlations with Supervisory Support ($r = -.400$, $p < .01$), Welfare ($r = -.462$, $p < .01$), Performance Feedback ($r = -.259$, $p < .05$), and Perceived Organizational Support ($r = -.357$, $p < .01$). These links are interesting takeaways from this sample as coaches with longer tenures appeared to perceive less support and feedback from their athletic department. Strikingly, coaching experience with their current Athletic Director did not flesh out these same associations and was not significantly correlated to any of the individual or organizational factors of stress, burn-out, or resilience.

The variable of average weekly hours spent coaching (in-season) was significantly associated with other demographic variables (some previously mentioned) such as highest level of education ($r = .238$, $p < .05$) and annual coaching salary ($r = .383$, $p < .01$). Furthermore, the average weekly hours spent coaching (in-season) variable was positively correlated with Burn-out/Depersonalization ($r = .316$, $p < .01$), showing that the greater number of hours spent coaching (in-season), the higher the perceptions of depersonalization. Additionally, the higher the levels of education and annual salary also show a moderate and significant positive response to the average weekly hours spent coaching. This phenomenon could be explored in future studies to explore these analogies being better explained by personality and individual factors.

Organizational Climate. Organizational Climate Measures shared significant relationships with other subscales and organizational factors. Supervisory Support was highly positively correlated with both the Welfare ($r = .842$, $p < .01$) and Performance Feedback ($r = .690$, $p < .01$). Moreover, Supervisory Support showed internal consistency with Perceived Organizational Support ($r = .718$, $p < .01$) and negative significant relationships with Workplace Stress ($r = -.564$, $p < .01$), Burn-out/Depersonalization ($r = -.288$, $p < .01$), Burn-out/Emotional Exhaustion ($r = -.252$, $p < .05$), and Turnover Intention ($r = -.498$, $p < .01$). These associations are critical as they confirm the importance of perceptions of supervisory and organizational support, with higher levels indicating lower levels of burn-out, stress, and turnover intentions in this sample. Welfare and Performance Feedback are also strongly related ($r = .687$, $p < .01$). The fourth subscale employed for this study, Pressure to Produce, did not bear out significance with any of the other three respective subscales as part of the Organizational Climate Measures. Welfare was positively correlated with Perceived Organizational Support ($r = .809$, $p < .01$), while sharing negative significant correspondence with the organizational factors of Workplace Stress ($r = -.639$, $p < .01$), Burn-out/Depersonalization ($r = -.370$, $p < .01$), Burn-out/Emotional Exhaustion ($r = -.288$, $p < .01$), Turnover Intention ($r = -.547$, $p < .01$), and Coaching Stressors ($r = -.218$, $p < .05$). Like Supervisory Support, Welfare considers the organizational level of concern for its employees. Therefore, these results suggest that there is strong internal consistency and higher levels of Welfare for coaches at the administrative and institutional levels may lead to less perceived stress, burn-out, and turnover intentions. Performance Feedback was significantly and positively correlated with Perceived Organizational Support ($r = .700$, $p < .01$) and Burn-out/Personal Accomplishment ($r = .237$, $p < .05$). Additionally, Performance Feedback also showed medium and large negative associations at levels of significance with Workplace

Stress ($r = -.593$, $p < .01$), Burn-out/Depersonalization ($r = -.332$, $p < .01$), Burn-out/Emotional Exhaustion ($r = -.353$, $p < .01$), and Turnover Intention ($r = -.599$, $p < .01$). Further, Performance Feedback was the only subscale of the OCM that resulted in a significant correlation with Burn-out/Lack of Personal Accomplishment, albeit a small association accounting for less than 5 percent of the variance. Finally, the OCM subscale of Pressure to Produce showed significant positive relationships with annual coaching salary ($r = .251$, $p < .05$), Workplace Stress ($r = .257$, $p < .05$), and Burn-out/Emotional Exhaustion ($r = .202$, $p < .05$). Thus, these correlations may signify the impacts of a Pressure to Produce and higher salary environment(s) leading to higher levels of stress and burn-out, although, again the percent of variance accounted for is small.

Perceived Organizational Support. As previously mentioned, Perceived Organizational Support had large positive correlation coefficients with Supervisory Support, Welfare, and Performance Feedback dimensions of Organizational Climate Measures. Perceived Organizational Support also resulted in medium/large negative and significant associations with Workplace Stress ($r = -.709$, $p < .01$), Burn-out/Depersonalization ($-.514$, $p < .01$), Burn-out/Emotional Exhaustion ($r = -.394$, $p < .01$), Turnover Intention ($-.637$, $p < .01$), and Coaching Stressors ($-.349$, $p < .01$). Perceived Organizational Support was positively correlated with Burn-out/Personal Accomplishment ($r = .224$, $p < .01$). Hence, increased levels of Perceived Organizational Support were largely associated with lower levels of Workplace Stress, Turnover Intentions, and Burn-out. Personal Accomplishment shared a positive correlation with Perceived Organizational Support, aligning with lower levels of burn-out.

Workplace Stress. The Workplace Stress Scale is a screening tool used to measure overall perceived workplace-related stress. Since there are no psychometric properties available for this instrument, it is important not to overemphasize the associations with this scale and significantly

related variables. However, it is possible to ascertain that Workplace Stress has significant and positive relationships with both number of years of collegiate golf coaching experience ($r = .216$, $p < .05$) and experience in their current coaching position ($r = .345$, $p < .01$). Other significant workplace positive correlations included Burn-out/Depersonalization ($r = .593$, $p < .01$), Burn-out/Emotional Exhaustion ($r = .710$, $p < .01$), Turnover Intentions ($r = .725$, $p < .01$), and Coaching Stressors ($r = .489$, $p < .01$). Furthermore, Workplace Stress was negatively correlated with Supervisory Support ($r = -.564$, $p < .01$), Welfare ($r = -.639$, $p < .01$), Performance Feedback ($r = -.593$, $p < .01$), Perceived Organizational Support ($r = -.709$, $p < .01$), Burn-out/Personal Accomplishment ($r = -.324$, $p < .01$), and Coping/Resilience ($r = -.213$, $p < .05$).

Burn-out. Thus far, we have mentioned the three dimensions of burn-out, according to the Maslach Burnout Inventory (MBI Manual, 2018), their respective descriptive statistics, and several associations with variables within the sample of this study. Next, each of the three dimensions will be examined for significant correlation coefficients as well as critical boundaries, of which the formulas are provided in the MBI Manual (2018). The MBI Manual (2018) uses the profiles of Engaged, Ineffective, Overextended, Disengaged, and Burn-out on a continuum (See Table 1.), based on within-sample critical boundaries analysis. These profiles were developed by Leiter and Maslach (2016) as a more nuanced approach to analyzing and detecting patterns of the burn-out experience. Thus, an individual could score high in one dimension for burn-out and relatively low or moderate in the other two dimensions. For example, an Overextended individual may report high levels of emotional exhaustion and low to moderate levels in depersonalization and personal accomplishment. Critical boundaries analysis represents standardized values using z-scores from normalized MBI research data. From a psychopathology

perspective, these profiles should be viewed as dimensions rather than categories, depending on the symptoms and timing of burn-out.

Table 1. Pattern of MBI Subscales Across Patterns

Profile Types	**Exhaustion**	**Depersonalization**	**Personal Accomplishment**
Engaged	Low	Low	High
Ineffective	Low to Moderate	Low to Moderate	Low
Overextended	High	Low to Moderate	Low to Moderate
Disengaged	Low to Moderate	High	Low to Moderate
Burnout	High	High	Low

Burn-out/Depersonalization was positively and significantly associated with the coaching demographic variables of number of years of collegiate golf coaching experience ($r = .245$, $p < .05$), annual coaching salary ($r = .251$, $p < .05$), and average weekly hours spent coaching (in-season) ($r = .316$, $p < .01$). Although these are small to low levels of association, we can point to consistency in these relationships in that higher levels of this dimension of burn-out

corresponded to higher markers of tenure, salary, and number of weekly hours. This will be an important distinction up for discussion in Chapter 5 and aligns with the conceptual tenet of commitment as an integral piece of burn-out as a theoretical framework. Burn-out/Depersonalization shared negative and significant relationships with the organizational factors of Supervisory Support ($r = -.288$, $p < .01$), Welfare ($r = -.370$, $p < .01$), Performance Feedback ($r = -.332$, $p < .01$), Perceived Organizational Support ($r = -.514$, $p < .01$), and Burn-out/Personal Accomplishment ($r = -.378$, $p < .01$). Additionally, Burn-out/Depersonalization was positively, largely, and significantly correlated with the organizational factors of Workplace Stress Scale ($r = .593$, $p < .01$), Burn-out/Emotional Exhaustion ($r = .724$, $p < .01$), Turnover Intention ($r = .586$, $p < .01$), and Coaching Stressors ($r = .445$, $p < .01$).

The formula for providing critical boundary conditions of the MBI's Burn-out/Depersonalization levels is represented as Mean + (1SD * 1.25). For the current sample, this would be .91 + (.924 * 1.25) or 2.065. Therefore, of the 96 participants in the current sample, a critical boundary would include all participants at a reported level of 2.065 or higher for the Burn-out/Depersonalization subscale. As a note, these individuals are not labeled as "burned-out", but rather may fit any of the burn-out profiles on a continuum provided by the MBI Manual, with these coaches being characterized as a minimum of ineffective, overextended, disengaged, and/or burn-out. Nonetheless, we found a critical boundary to include 9 coaches, or 9.4% of the sample, that reported high levels of Burn-out/Depersonalization.

Burn-out/Emotional Exhaustion was significantly and positively associated with Gender ($r = .245$, $p < .05$) and Highest level of education ($r = .202$, $p < .05$), indicating slightly higher levels of this marker in female participants and those with higher education levels. Regarding organizational variables, Burn-out/Emotional Exhaustion significant and negative correlations

with Supervisory Support (r = -.252, p < .05), Welfare (r = -.288, p < .01), Performance Feedback (r = -.353, p < .01), Perceived Organizational Support (r = -.394, p < .01), Burn-out/Lack of Personal Accomplishment (r = -.376, p < .01), and Coping/Resilience (-.290, p < .01). These negative associations point to the importance of organizational factors of support for coaches in the sample. Also, interestingly, the personal factor of Coping/Resilience, had a small, yet significant, negative correlation with Burn-out/Emotional Exhaustion. That is, the higher levels of perceived resilience, the lower levels of this reported burn-out dimension. Of note, Burn-out/Emotional Exhaustion reports were positively corresponding to Pressure to Produce (r = .202, p < .05), Workplace Stress (r = .710, p < .01), Burn-out/Depersonalization (r = .710, p < .01), Turnover Intention (r = .660, p < .01), and Coaching Stressors (r = .418, p < .01). These small, medium, and large respective associations are meaningful relative to this sample as they point to higher levels of pressure and stress align with burn-out and turnover intentions. Again, we are not able to distinguish between correlation and causation in this study. However, these are critical factors for future research in coach burn-out.

The formula for providing critical boundary conditions of the MBI's Burn-out/Emotional Exhaustion levels is represented as Mean + (1SD * .5). For the current sample, this would be 1.41 + (1.142 * .5) or 1.981. Therefore, of the 96 participants in the current sample, a critical boundary would include all participants at a reported level of 1.981 or higher for the Burn-out/Emotional Exhaustion subscale. A critical boundary to include 27 coaches, or 28.1% of the sample. Interestingly, this represents a marked increase from the previously mentioned critical boundary for Burn-out/Depersonalization (9.4% of the sample).

Burn-out/Personal Accomplishment "assesses feelings of competence and successful achievement in one's work with students", or student-athletes in this study (MBI Manual, 2018,

p. 31). Therefore, lower scores indicate higher levels of burn-out. Regarding demographic variables, Burn-out/Personal Accomplishment was only significantly associated with a participant's highest level of education ($r = -.220$, $p < .05$), or the more education attained, the lower the levels of Burn-out/Lack of Personal Accomplishment, or greater levels of burn-out. Although it is a rather small relationship, this phenomenon could be further explored. Burn-out/Personal Accomplishment was positively and significantly correlated with Performance Feedback ($r = .237$, $p < .01$), Perceived Organizational Support ($r = .224$, $p < .01$), and Coping/Resilience ($r = .386$, $p < .01$). Thus, higher levels of Burn-out/Personal Accomplishment were also significantly related to perceived levels of increased organizational support and personal resilience. Burn-out/Personal Accomplishment corresponded negatively to Workplace Stress ($r = -.324$, $p < 01$), Burn-out/Depersonalization ($r = -.378$, $p < .01$), Burn-out/Emotional Exhaustion ($r = -.376$, $p < .01$), and Turnover Intention ($r = -.423$, $p < .01$). These medium strength associations show that Personal Accomplishment perceptions may be improved less perceived stress, thus leading to lower levels of other markers of burn-out and turnover intentions.

The formula for providing critical boundary conditions of the MBI's Burn-out/Personal Accomplishment levels is represented as Mean + (1SD * .10). For the current sample, this would be 5.02 + (.724 * .10) or 5.092. Therefore, of the 96 participants in the current sample, a critical boundary would include all participants at a reported level of 5.092 or lower for the Burn-out/Personal Accomplishment subscale, 37 coaches, or 38.5% of the sample. Interestingly, this represents an increase from the previously mentioned critical boundaries for Burn-out/Depersonalization (11.5% of the sample) and Burn-out/Emotional Exhaustion (28.5%). Based on the critical boundaries for each of three MBI-ES dimensions, it makes sense to analyze

the number of participants that meet the critical boundary criterion for all three measures of burn-out. Overall, five participants met the critical boundary conditions for all three MBI dimensions (5.21%), 17 for two dimensions (17.71%), 29 for one dimension (30.21%), and 45 for zero dimensions (46.88%). Therefore, 51 participants met the critical boundary conditions for one or more dimensions of burn-out (53.13%), and 22 participants met at least two dimensions (22.92%). While the MBI-ES does not directly indicate whether an individual is burnt-out, the critical boundaries analysis provides for a more in-depth understanding of the potential prevalence of burn-out and its symptoms, which was Purpose 1 of the current study.

Turnover Intention. Turnover Intention was not significantly associated with any of the coach demographic and background measures. However, Turnover Intention shared medium to large statistically significant correlations with several key markers of individual and organizational psychosocial factors. First, Turnover Intention was found to be positively correlated with Workplace Stress ($r = .725$, $p < .01$), Burn-out/Depersonalization ($r = .586$, $p < .01$), Burn-out/Exhaustion ($r = .660$, $p < .01$), and Coaching Stressors ($r = .350$, $p < .01$). Second, Turnover Intention also shared significant relationships with the Organizational Climate Measures of Supervisory Support ($r = -.498$, $p < .01$), Welfare ($r = -.547$, $p < .01$), and Performance Feedback ($r = -.599$, $p < .01$). These are fascinating findings in that higher levels of turnover intentions appear to be marked by lower perceptions of key aspects of organizational climate for the current sample. Third, Turnover Intention also corresponded with Perceived Organizational Support ($r = -.637$, $p < .01$), Burn-out/Personal Accomplishment ($r = -.423$, $p < .01$), and Coping/Resilience ($r = -.237$, $p < .01$) at levels of significance.

Coaching Stressors. Reports of Coaching Stressors were significantly associated with Welfare ($r = -.218$, $p < .01$), Perceived Organizational Support ($r = -.349$, $p < .01$), Workplace

Stress (r = .489, p < .01), Burn-out/Depersonalization (r = .445, p < .01), Burn-out/Emotional Exhaustion (r = .418, p < .01), and Turnover Intention (r = .350, p < .01). There were several areas of missing data due to possible limitations of using a slider scale, placing the instrument at the end of the survey, and ambiguous directions. Nonetheless, the results are helpful in the further development of a measure for stressors and burn-out for athletic coaches. Furthermore, an open-ended question at the end of CSS allowed for participants to "please list any additional coaching stressors". Ten participants responded to this question (See Table 2).

Table 2. Coaching Stressors Scale - Qualitative Content Analysis

Coaching Stressors Scale - Qualitative Analysis
"Zero admin support" - Participant 16
"Facility issues" - Participant 19
"NCAA Compliance" - Participant 21
"Part time vs full time" - Participant 39
"I believe athletic administrators are much more likely to care about the needs of the student/athletes than the coaches who work for them. I believe it is the coaches job to worry about the athletes and the administration's job to worry about its coaches. The athletes have enough people worrying about their wellbeing." - Participant 49
"The new calendar requirements (compliance)" - Participant 53
"Budget items" - Participant 64
"Coaching and traveling on same day" - Participant 75
"Varying levels of student skills" - Participant 78
"Being a part time coach with a full-time job elsewhere and trying to do a superior job coaching" - Participant 96

Multiple Regression Analysis

Those organizational factor variables that were significantly correlated with each of the three criterion variables of burn-out were entered as predictors into respective multiple

regression models using the standard method. For the Burn-out/Depersonalization criterion variable, Supervisory Support, Welfare, Performance Feedback, Perceived Organizational Support, and Workplace Stress were entered as predictors. A significant model merged: $F(5, 90) = 11.856$, $p < .0005$. The model explains 36.4% of the variance in Burn-out/Depersonalization (Adjusted R squared = .364). Table 3 gives information about regression coefficients for the predictor variables entered in the model. Perceived Organizational Support (negative) and Workplace Stress (positive) were significant predictors in relation to Burn-out/Depersonalization with workplace stress having the highest standardized beta and perceived organizational stress the second highest. Supervisory Support, Welfare, and Performance Feedback, all measures of organizational climate, were not significant predictors and had relatively low standardized beta weights.

Table 3. Unstandardized and Standardized Coefficients - Burn-out/Depersonalization Model

Variable	***B***	***SE B***	***Standardized Beta***	***p***
Workplace Stress	.719	.170	.503	<.005
Perceived Organizational Support	-.267	.109	-.389	.017
Supervisory Support	.223	.244	.145	.363
Performance Feedback	.116	.196	.074	.558
Welfare	.140	.271	.094	.607

For the Burn-out/Emotional Exhaustion criterion variable, Supervisory Support, Welfare, Performance Feedback, Pressure to Produce, Perceived Organizational Support, Workplace Stress, and Coping/Resilience were entered as predictors. A significant model merged: $F(7, 88) =$

16.818, p < .0005. The model explains 53.8% of the variance in Burn-out/Emotional Exhaustion (Adjusted R squared = .538). Table 4 gives information about regression coefficients for the predictor variables entered in the model. Coping/Resilience (negative) and Workplace Stress (positive) were significant predictors in relation to Burn-out/Emotional Exhaustion with workplace stress having the highest standardized beta weight and contributing most the to the significant regression equation. Supervisory Support, Welfare, Performance Feedback, Pressure to Perform, and Perceived Organizational Support, were not significant predictors and had a low standardized beta weight.

Table 4. Unstandardized and Standardized Coefficients - Burn-out/Emotional Exhaustion Model

Variable	***B***	***SE B***	***Standardized Beta***	***p***
Workplace Stress	1.493	.192	.845	<.005
Coping/Resilience	-.312	.161	-.142	.055
Welfare	.457	.287	.248	.114
Supervisory Support	.113	.260	.059	.666
Performance Feedback	-.077	.218	-.040	.725
Pressure to Produce	.059	.220	.021	.788
Perceived Organizational Support	.002	.117	.002	.986

For the Burn-out/Performance Accomplishment criterion variable, Performance Feedback, Perceived Organizational Support, Workplace Stress, and Coping/Resilience were entered as predictors. A significant model merged: F(4, 91) = 6.111, p < .0005. The model explains 17.7% of the variance in Burn-out/Personal Accomplishment (Adjusted R squared = .177). Table 5 gives information about regression coefficients for the predictor variables entered in the model.

Coping/Resilience (positive) was the only significant predictor in relation to Burn-out/Emotional Exhaustion and had the highest standardized beta weight. Performance Feedback, Perceived Organizational Support, and Workplace Stress were not significant predictors, although workplace stress had a relatively high beta weight.

Table 5. Unstandardized and Standardized Coefficients - Burn-out/Personal Accomplishment Model

Variable	***B***	***SE B***	***Standardized Beta***	***p***
Coping/Resilience	.467	.136	.333	.001
Workplace Stress	-.244	.154	-.217	.117
Performance Feedback	.033	.165	.027	.840
Perceived Organizational Support	.015	.083	.027	.860

CHAPTER 5

Discussion

The purpose of the current study was to expand the coach burn-out literature, adopting a cross-disciplinary approach integrating theories and assessments from sport psychology, sport management, and organizational psychology. Horn's (2002) *Working Model of Coaching Effectiveness* was used as the main theoretical framework for this study. The three purposes of the study were to examine the prevalence of burn-out in collegiate golf coaches, assess organizational factors and their relationships with individual demographic characteristics and perceptions, and explore the use of a Coaching Stressors Scale. Each of these purposes will be analyzed in the following paragraphs.

First, it was hypothesized that the prevalence of burn-out would be like other coach samples and those that used the MBI-ES with other educational samples. The MBI-ES does not provide an index score due to the nature of the three subscales. However, we can analyze each scale individually. As the MBI Manual (2018) explicitly states there are no definitive scores that definitively classify a person as experiencing "burn-out." Rather, based on normative and relative (within-sample) data, the seriousness of concern is left to the individual and those significant others who can take corrective steps. This ambiguity will be addressed in the subsequent Limitations and Future Directions/Recommendations sections of this manuscript. Nonetheless, according to normative data from the MBI-ES of post-secondary teacher samples, the means are represented by 2.36 for Emotional Exhaustion, 2.20 for Depersonalization, and 4.89 for Personal Accomplishment. The current study sample attained means of 1.41 for Emotional Exhaustion, .91 for Depersonalization, and 5.02 for Personal Accomplishment. Thus, relative to normative data, the current sample reported lower levels of burn-out overall than other

post-secondary samples. Regarding the critical boundary conditions reported in the Inferential Statistics section, a total of five participants (5.21%) from the current sample met this criteria for all three burn-out measures. Overall, we can report a relatively low-level of coach burn-out in our sample. However, 5.21% aligns with levels of occurrences of many mental health disorders (e.g. mild depression 5% prevalence; Comer, 2019) and more recent research using the MBI profiles (4-8% Burn-out) (Leiter & Maslach, 2016). Additionally, extrapolated out from our collegiate golf population of approximately 3,300 coaches, we can approximate 172 coaches dealing with high levels of burn-out and severe occupational stress, impacting thousands of student-athletes daily. Burn-out is maladaptive in that the individual is committed and passionate about their sport and helping student-athletes develop (Raedeke, 2004). Simply accepting that coaches will leave the profession is not enough. Organizations must do more to keep the passionate and committed coaches and provide strategies and resources to alleviate symptoms of burn-out.

Second, it was hypothesized that there would be significant relationships between measures of burn-out and individual perceptions of stress with organizational factors such as support, stress, and turnover intention. Each of these statistically significant associations can be found in the results section of this manuscript. It is important to note, again, that correlations do not prove causation. However, we can gather the overall importance of the individual coach's perceptions of support, welfare, resilience, pressure to produce, feedback, as each relates to reported burn-out and turnover intentions. These significant relationships show the critical nature of a systems-level approach to coaching effectiveness. Additionally, the coach is part of the organization and thus provides a reciprocal relationship, or reflection, back to their athletic departments and institutions. Both the organization and the individual coach are responsible to

each other. In conducting multiple regression analyses for each of the three dimensions of burn-out, perceptions of Workplace Stress and Perceived Organizational Support were significant predictors of Burn-out/Depersonalization and Burn-out/Emotional Exhaustion, while Coping/Resilience was a significant predictor of Burn-out/Personal Accomplishment. Again, we can infer, based on the direction, strength, and significance levels of these associations, that the organization certainly plays a role in employee well-being, and employee resilience is also salient in examining work-related stressors for collegiate coaches.

Third, the exploratory nature of the Coaching Stressors Scale was moderately effective. There were several key limitations and weaknesses of the implementation of this instrument. The placement (last section of the survey), style (slider scale), and ambiguous directions were a few of the main limitations. As it was exploratory and developmental, the psychometric properties were not the main purpose of the current study. There was a significant amount of missing data (18.75%) and any inferences should be extremely cautionary. However, there were a few key takeaways from introducing the Coaching Stressors Scale. Most of the 12 stressors fell in the middle of the scale, with respective means close to 3.50, near the "sometimes" marker on the scale. The stressor of "Recruiting" had the highest level reported stress. This can be helpful for future studies to examine this phenomenon and further development of similar instruments. Additionally, the open-ended responses (n = 10) also add a qualitative approach to the current study. Here we learned that there may be some missing categories such as Compliance, Facilities, Budget, and Travel. Participant 49's quote about the role of the athletic department administration is salient to the current study and sheds light on the importance of the organization in coach's perceptions. Athletic Departments and Sport Organizations should consider how they allocate resources, both financial and human factors. While the amount of

missing data does not allow for the proper calculation of psychometric procedures, the addition of the Coaching Stressors Scale was productive, fruitful, and value-adding for future research considerations.

Limitations

There were several key limitations that should be considered with the current study. First, like other studies of coach burn-out, this study utilized a quantitative, cross-sectional design. It has been recommended to use more balanced methodological approaches that encompasses the enduring aspects of the burn-out experience (aka time, test-retest, or longitudinal analyses) (Olusoga et al., 2019). Thus, a longitudinal approach, either wholly or partially, would allow for higher research quality. While the current study provides utility, and extends the understanding of coach burn-out and organizational factors, following coaches over an entire season or following up with a cross-sectional sample to see how many coaches remained in their current position, switched jobs, left the profession, or endured and recovered from burn-out would be extremely helpful.

A second limitation is the homogenous nature of the sample which limits the generalizability of the results and implications. Although the sample did include collegiate coaches at different NCAA levels and a reasonable gender split, racial diversity was virtually non-existent.

Third, several of the instruments used for the measures in the study were reworded to reflect the context of college athletics. While this is a common practice in sport psychology due to bringing in theories and assessments from the social sciences, rephrasing of instruments is an important distinct characteristic to acknowledge for future research lines either through replication or meta-analyses. For example, approximately 25% of coach burn-out studies have

used the MBI-ES version (Olusoga et al., 2019). Thus, even within those studies, there could be significant differences in the phraseology of the instruments.

The timing of the survey completion could be considered a limitation. The survey was emailed to participants during the month of August, the pre-season for collegiate golf in the United States. With the cross-sectional nature of this study, we could not capture the differences between mid-August and the first week of October, which is the peak in-season for college golf, a time when coaches may "feel" the most stress and burn-out symptoms. The nature of this timing was due to meeting the progress requirements of the author's graduate program. However, the timing may be beneficial as coaches' reports are not skewed or unnecessarily inflated. Plus, it's difficult to contact coaches "in-season" as they are much less likely to respond.

A fifth limitation was the use of self-report measures which has been criticized on interpretative grounds as some past researchers have made overly strong conclusions from this methodology. Within-person changes are an important piece of this puzzle (longitudinal studies), and can provide consistency to measuring internal experiences. Hence, the author is clear to note "perceived" and "perceptions" of this "sample" repeatedly throughout this manuscript to assist with attenuation and clearly demarcate the boundaries of the data. Another example is the use of the Turnover Intention Scale. A deeper methodological approach would be to follow-up one year or more later to see which coaches did leave their current position and the reasons for attrition (Raedeke, 2004). However, despite these precautions, the use of all self-report measures is a fair limitation of the current study. Finally, while Horn's (2002) *Working Model of Coaching Effectiveness* encompasses the systems-level approach to coaching effectiveness, the complexity of systems should not be over- (or under-) emphasized. The current study aimed to link organizational factors with coach-level psychosocial and demographic characteristics relative to

stress and burn-out in college athletics. A true multi-level approach may also encompass sociocultural and athlete perspectives (e.g. “What are the experiences for athletes that play for coaches who perceive more/less organizational support?”).

Future Research Directions

There are many opportunities for successful and high quality research on coach burn-out. To begin, there is a strong need for more interdisciplinary research related to coach burn-out. For example, the fields of sport and exercise psychology, sport management, organizational psychology, clinical psychology and cognitive psychology each have sophisticated theoretical underpinnings, constructs, and models to explain the phenomenon of burn-out. However, as in most fields, this scholarly work stays within silos. By exploring these fields and working in cross-disciplinary research teams, we can further understand burn-out and its symptoms.

Next, a coach burn-out measure should be developed for use across diverse disciplines, sport types, and sport levels. For example, a little league baseball coach will have some similar stressors to a collegiate baseball coach, yet, they will also have categorically different stressors and stress dimensions based on professional and occupational expectations of these positions. Furthermore, according to Olusoga and colleagues (2019), there have been seven different burn-out measures used in peer-reviewed, published studies. Most have utilized the MBI (85%) and its five versions, while others have used the “Coach Burnout Questionnaire” (12.5%), described as an adopted version of the Athlete Burnout Questionnaire (ABQ) (Raedeke & Smith, 2001), and for which the factor structure has been questioned. An additional instrument, the Job Burnout Scale, has been used in one published study. Arguments for using each of these seven different instruments typically depended on the context of the study. There is a clear need for more of a global burn-out index, as developed by Raedeke and Smith in the ABQ, whereby the user is

provided with a burn-out index (total score), which is currently not available for respective versions of the MBI due to the nature of the three-scale development. For example, users of the ABQ are provided a total burn-out index that can be easily interpreted for researchers across studies. Perhaps a more global index for Sport Coach & Leader burn-out assessment would be most beneficial due to the growth of sport and exercise professional opportunities. For example, a burn-out index that could encompass a head coach, athletic trainer, and athletic director would be most effective, despite acknowledgement of the challenges associated with instrument development and psychometric properties.

Third, as previously mentioned, consideration of study design should be given more critical analysis. Longitudinal, other-report measures, and qualitative methodologies may assist with better understanding coach burn-out and its implications for individual coaches, athletes, and other sport and exercise participants. The current literature on coach burn-out is skewed towards quantitative (84.45%) and cross-section (80%) designs (Olusoga et al., 2019).

Furthermore, studying the implications of coach burn-out and its impact on athlete performance and psychosocial well-being should be examined further. A handful of early studies (e.g. Price & Weiss, 2000) examined athletes' responses to coach burn-out such as athlete enjoyment, anxiety, perceived competence, and burn-out. These outcomes, along with the greater costs of burn-out at the individual, familial, organizational, and societal levels could add to the literature.

Next, a greater emphasis on prevention and treatment of coach burn-out should not only be explored, but implemented at all levels of sport and exercise. This study, for example was designed to examine and highlight the role of the organization in adding, ameliorating, or reducing long-term stress in coaches. Now, it is also important to be aware of normative levels of

"fatigue" and stress symptoms related to the profession of coaching. Elite level coaches have reported vulnerable feelings associated with seeking help and admitting struggles (Olusoga & Kentta, 2017). These sport cultural norms are dangerous and if they stop coaches from seeking help with feelings of burn-out it can not only affect the coach's health, but the quality of experience for student-athletes. Coaches should have access to similar mental health resources as student-athletes and other athletic employees. Coach education regarding mental health, well-being, self-regulation, and awareness, which the United States Olympic Committee has recently taken up, provides strategies for coaches to apply during these more stressful occasions. The profession of elite coaching also has an issue with neglecting wellbeing, overemphasizing performance, and underemphasizing explicit areas of self-care such as sleep, energy, physical activity, and work/home life balance. A growing concern is that many see these same issues filtering down to lower levels of youth and scholastic sports. We expect our coaches to be "tough", workaholics, and be available 24/7. This lifestyle is not sustainable for many individuals, despite their passion and commitment to their athletic programs. Sport administrators and organizations can make these expectations, self-care strategies, and norms more appropriate by following national guidelines and explicitly stating their own policies related to work (e.g. email policies, weekly hour expectations). As we learned in the current study, 31.5% of the sample reported working 60 hours or more per week in-season. While these were self-reports, it speaks to the crisis we have in collegiate athletics, and in the United States workforce in general.

Finally, burn-out should be viewed with a clinical lens. As such, we should ask the question in sport and exercise psychology, is this topic of study beyond our ethical scope of practice and competence? Burn-out shares many symptoms with other mental health conditions

such as depression, anxiety, and somatic disorders (DSM-V, 2013). While there are currently no biomarkers of stress (e.g. cortisol levels) that are directly associated with occupational burn-out, more recent evidence suggests that individuals with high levels of burn-out experience changes in brain anatomy associated with the amygdala, which plays a key role in human emotions and behavior regulation (Golkar et al., 2014). Lower levels of focus, executive functioning, attention, and memory have also been correlated with higher levels of burn-out. Thus, cognitive and neurological processes and burn-out implications should be studied further (Deligkaris et al., 2014).

The classification of Occupational Burn-out as an "occupational phenomenon" in the World Health Organization's International Classification of Diseases - 11, represents tremendous progress (World Health Organization, 2018). Additionally, the World Health Organization "is about to embark on the development of evidence-based guidelines on mental well-being in the workplace." WHO views burn-out as specific to occupational experiences, and should not be used to "describe experiences in other areas of life" (World Health Organization, 2018). The DSM-V pays little attention to employment or occupational issues, affording these issues three paragraphs total and one specific to "Other Problems Related to Employment" (APA, 2013, p. 723). These problems include "work environment; unemployment; recent change of job; threat of job loss; job dissatisfaction; stressful work schedule; uncertainty about career choices; sexual harassment on the job; other discord with boss or significant others in the work environment; hostile work environments; and other psychosocial stressors related to work" (APA, 2013, p. 723). The purpose of listing each of this is to provide context regarding the clinical nature of burn-out. Thus, these issues overlap with what we know about coach burn-out and stress. By expanding this section, and, in the author's view, creating a DSM section explicitly focused on

Occupational conditions, burn-out will be better understood and given legitimacy within clinical psychology. Moreover, Comer's (2015) foundational textbook for psychopathology offers three pages (of 650+) for occupational stress. Adults in the United States spend approximately one-third (minimum) of their lives preparing, commuting, and/or participating in work-related activities. It's time for burn-out to be a clinical diagnosis to assist with education, psychotherapy, strategies, and reduce stigma.

Summary

The purpose of this study was to assess the prevalence of coach burn-out in collegiate golf coaches, analyze organizational factors that may be associated with coach burn-out, and explore a scale related to coaching stressors. Since some of the seminal studies of coach burn-out were published in the 1980s, burn-out in coaching populations has seen a sharp increase in interest in the past decade (Olusoga et al., 2019). However, there is still much more work to be done in this area. As an example, Olusoga and colleagues (2019) found 45 peer-reviewed, published research articles that met their inclusion criteria. This is relatively small compared to other key issues in the sport and exercise psychology literature. Therefore, this study adds to the literature on burn-out prevalence, stress-based perspectives of burn-out, and viewing burn-out as a clinical syndrome and mental condition.

APPENDICES

APPENDIX A

Consent Form

Thank you for your interest in our survey. Our goals are to learn more about how coaches interact within their environment and some of the stressors involved with the profession. The results from this survey will help researchers understand more about coaching science, and will help practitioners make informed decisions about the effects of the athletic environment on the well-being of coaches. Your participation in this study is important and very much appreciated!

This survey should take you about 20-25 minutes to complete, but could take a little longer based on your responses to the questions about the team (or teams) that you coach.

The next screen will have an informed consent agreement. You must read it and then indicate your agreement in order to begin the survey.

After that, you will be asked a series of questions about your perceptions, your job, and the coaching profession. Your perceptions matter, so please answer all questions as honestly as possible.

Again, we thank you! Your responses will help to improve the profession of coaching!
The following is meant to inform you about this survey, so that you may decide whether or not to give consent to participate. You will be asked for your consent at the bottom of this page. **You will not be able to participate without giving your consent.**

Michael J. Mignano
Institute for the Study of Youth Sports
Department of Kinesiology
Michigan State University

PARTICIPANT CONSENT FORM
You are being asked to participate in a research study. Researchers are required to provide a consent form to inform you about the research study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

1. PURPOSE OF RESEARCH
You are being asked to participate in a research study of collegiate golf coaches in the United States of America. You have been selected as a possible participant in this study because of your status as a member of an NCAA collegiate golf coaching staff. From this study, the researchers hope to learn more about coaching effectiveness and the environmental stress factors related to the coaching profession.
Your participation in this study will take about 20-25 minutes.

2. WHAT YOU WILL DO
For this study, you will be asked questions related to your occupational experiences as a collegiate golf coach on the next several pages. Please answer honestly and to the best of your

ability. *Your answers will provide the researcher with critical information to making advancements in the field of coaching science.*

3. POTENTIAL BENEFITS

You will not directly benefit from your participation in this study. However, your participation in this study may contribute to the understanding of the coaching profession and associated environmental stressors.

4. POTENTIAL RISKS

There are no foreseeable risks associated with participation in this study.

5. PRIVACY AND CONFIDENTIALITY

The data for this project will be kept confidential. The primary researcher ensures that all possible steps will be taken to anonymously code respondent's data. In no way will the identity or status of a respondent be divulged in any stage of this research project. Information about you will be kept confidential to the maximum extent allowable by law. All data will be stored by the primary researcher and will not be distributed to any other individuals other than the following.
Dr. Dan Gould, Primary Investigator
Michael Mignano, Primary Researcher & Graduate Student
Michigan State University IRB
In addition:
The results of this study may be published or presented at professional meetings, but the identities of all research participants will remain anonymous.
Since the data is being collected via the internet, your email address will only be utilized for project participation statistics.

6. YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

Participation is voluntary. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. You have the right to say no. You may change your mind at any time and withdraw. You may choose not to answer specific questions or to stop participating at any time.

7. COSTS AND COMPENSATION FOR BEING IN THE STUDY

You will not receive money or any other form of compensation for participating in this study.

8. CONTACT INFORMATION

If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the researcher (Michael Mignano, Graduate Student: Department of Kinesiology, IM Sports Circle, 308 West Circle Drive, East Lansing, MI 48824; mignano1@msu.edu; (231) 580-6217).

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

9. DOCUMENTATION OF INFORMED CONSENT

By completing the following survey, you are agreeing to participate in the study and consenting to the previous statements.
Click "I AGREE" to proceed, or "I DO NOT AGREE" to decline participation in this study.

APPENDIX B

Demographic Information

Q1 What is your gender?
- o Male (1)
- o Female (2)
- o Prefer not to answer (3)

Q2 What is your race? (Check all that apply)
- ▢ White/Caucasian (1)
- ▢ Black/African American (2)
- ▢ American Indian or Alaska Native (3)
- ▢ Asian (4)
- ▢ Native American or Other Pacific Islander (5)
- ▢ Other (6)

Q3 What is your current coaching title?
- o Director of Golf (1)
- o Head Coach (2)
- o Associate Head Coach (3)
- o Assistant Coach (4)
- o Volunteer Assistant Coach (5)

Q4 What level are you currently coaching?
- o NCAA DI (1)
- o NCAA DII (2)
- o NCAA DIII (3)

Q5 How many years of collegiate golf coaching experience do you have?

_____

Q6 What is your current coaching position classification?
- o Full-Time (1)
- o Part-Time (2)
- o Volunteer (3)

Q7 What is your highest level of education? (Completed)
- o High School (1)
- o Some College (2)
- o Bachelor's Degree (3)
- o Master's Degree (4)
- o Doctoral Degree (5)

Q8 What is your annual coaching salary? ($)
_____

Q9 What is your coaching experience in your current position? (Years)
_____

Q10 What is your coaching experience with your current Athletic Director? (Years)
_____

Q11 What is your marital status?
- o Single (1)
- o Married (2)
- o In a Relationship with Partner (3)

Q12 What are your average weekly hours spent coaching? (In-Season)
_____

Q13 What was your team's Win/Loss percentage during the 2016-17 season? (%)
_____

APPENDIX C

Organizational Climate Measure

Directions: Please rate the following statements based on your current coaching position and employment within your current athletic department/supervisor.

1-4, Definitely False, Mostly False, Mostly True, Definitely True

Supervisory Support Subscale

	DF	MF	MT	DT
Supervisors here are really good at understanding coach's problems	1	2	3	4
Supervisors show that they have confidence in the coaches they manage	1	2	3	4
Supervisors here are friendly and easy to approach	1	2	3	4
Supervisors can be relied upon to give good guidance to coaches	1	2	3	4
Supervisors show an understanding of the coaches who work for them	1	2	3	4

Welfare Subscale

My athletic department pays little attention to the interests of coaches	1	2	3	4
My athletic department tries to look after coaches	1	2	3	4
My athletic department cares about its coaches	1	2	3	4
My athletic department tries to be fair in its actions towards coaches	1	2	3	4

Performance Feedback Subscale

Coaches usually receive feedback on the quality of work they have done	1	2	3	4
Coaches don't have any idea how well they are doing their job	1	2	3	4
In general, it's hard for coaches to measure the quality of their performance	1	2	3	4
Coaches performance is measured on a regular basis	1	2	3	4
The way coaches do their job is rarely assessed	1	2	3	4

Pressure to Produce Subscale

Coaches are expected to do too much in a day	1	2	3	4
In general, coaches' workloads are not particularly demanding	1	2	3	4
Management require coaches to work extremely hard	1	2	3	4
Coaches here are under pressure to meet targets	1	2	3	4
The pace of work in my athletic department is pretty relaxed	1	2	3	4

APPENDIX D

Survey of Perceived Organizational Support

Directions: Please indicate the degree of your agreement or disagreement with each statement by clicking on the circle that best represents your point of view about your athletic department.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Agree	Slightly Agree	Moderately Agree	Strongly Agree
My athletic department values my contribution to its well-being.	0	1	2	3	4	5	6
My athletic department fails to appreciate any extra effort from me.	0	1	2	3	4	5	6
My athletic department would ignore any complaint from me.	0	1	2	3	4	5	6
My athletic department really cares about my well-being.	0	1	2	3	4	5	6
Even if I did the best job possible, my athletic department would fail to notice.	0	1	2	3	4	5	6
My athletic department cares about my general satisfaction at work.	0	1	2	3	4	5	6
My athletic department shows very little concern for me.	0	1	2	3	4	5	6
My athletic department takes pride in my accomplishments at work.	0	1	2	3	4	5	6

APPENDIX E

Workplace Stress Scale

Directions: Thinking about your current coaching position, how often does each of the following statements describe how you feel?

	Never	Rarely	Sometimes	Often	Very Often
Conditions at work are unpleasant or sometimes even unsafe.	1	2	3	4	5
I feel that my job is negatively affecting my physical or emotional well-being.	1	2	3	4	5
I have too much work to do and/or too many unreasonable deadlines.	1	2	3	4	5
I find it difficult to express my opinions or feelings about my job conditions to my superiors.	1	2	3	4	5
I feel that job pressures interfere with my family or personal life.	1	2	3	4	5
I have adequate control or input over my work duties.	1	2	3	4	5
I receive appropriate recognition or rewards for good performance.	1	2	3	4	5
I am able to utilize my skills and talents to the fullest extent	1	2	3	4	5

APPENDIX F

Maslach Burnout Inventory Educators Survey

Review Copy: MBI for Educators Survey

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

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

(Administrative use only)

EE Total score: _____ DP Total score: _____ PA Total score: _____

EE Average score: _____ DP Average score: _____ PA Average score: _____

66

APPENDIX G

Turnover Intention Scale

The following section aims to ascertain the extent to which you intend to stay at the organisation.

Please read each question and indicate your response using the scale provided for each question:

DURING THE PAST 9 MONTHS…..

1	How often have you considered leaving your job?	**Never**	1-------2-------3-------4-------5	**Always**
3R	To what extent is your current job satisfying your personal needs?	**To no extent**	1-------2-------3-------4-------5	**To a very large extent**
4	How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?	**Never**	1-------2-------3-------4-------5	**Always**
6	How often do you dream about getting another job that will better suit your personal needs?	**Never**	1-------2-------3-------4-------5	**Always**
7	How likely are you to accept another job at the same compensation level should it be offered to you?	**Highly unlikely**	1-------2-------3-------4-------5	**Highly likely**
8R	How often do you look forward to another day at work?	**Never**	1-------2-------3-------4-------5	**Always**

APPENDIX H

Connor-Davidson Resilience Scale

Connor-Davidson Resilience Scale 10 (CD-RISC-10) ©

initials ☐☐☐ *ID#* ☐☐☐☐☐☐☐ *date* ☐☐/☐☐/☐☐☐☐ *visit* ☐☐ *age* ☐☐

*Please indicate how much you agree with the following statements as they apply to you over the last **month**. If a particular situation has not occurred recently, answer according to how you think you would have felt.*

		not true at all (0)	rarely true (1)	sometimes true (2)	often true (3)	true nearly all the time (4)
1.	I am able to adapt when changes occur.	☐	☐	☐	☐	☐
2.	I can deal with whatever comes my way.	☐	☐	☐	☐	☐
3.	I try to see the humorous side of things when I am faced with problems.	☐	☐	☐	☐	☐
4.	Having to cope with stress can make me stronger.	☐	☐	☐	☐	☐
5.	I tend to bounce back after illness, injury, or other hardships.	☐	☐	☐	☐	☐
6.	I believe I can achieve my goals, even if there are obstacles.	☐	☐	☐	☐	☐
7.	Under pressure, I stay focused and think clearly.	☐	☐	☐	☐	☐
8.	I am not easily discouraged by failure.	☐	☐	☐	☐	☐
9.	I think of myself as a strong person when dealing with life's challenges and difficulties.	☐	☐	☐	☐	☐
10.	I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	☐	☐	☐	☐	☐

Add up your score for each column 0 +____ +____ +____ +____

Add each of the column totals to obtain CD-RISC score =_____

01-01-17

APPENDIX I

COACHING STRESSORS SCALE

Directions: Thinking about your current coaching position, how often has each of the following aspects of the coaching profession produced occupational stress within the past 3 months?

	Never						All the Time
Administrative Tasks	1	2	3	4	5	6	7
Fundraising	1	2	3	4	5	6	7
Interpersonal Team Issues	1	2	3	4	5	6	7
Parental Factors	1	2	3	4	5	6	7
Practice Plans/Competitive Preparation	1	2	3	4	5	6	7
Pressure to Win	1	2	3	4	5	6	7
Recruiting	1	2	3	4	5	6	7
Student-Athlete Relationships	1	2	3	4	5	6	7
Supervisor/Athletic Department Issues	1	2	3	4	5	6	7
Time Demands	1	2	3	4	5	6	7
Travel	1	2	3	4	5	6	7
Work/Personal Life Balance	1	2	3	4	5	6	7

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