MIXED METHODS ANALYSIS OF OCCUPATIONAL BURNOUT AND ENGAGEMENT EXPERIENCED BY CERTIFIED ATHLETIC TRAINERS IN HIGH SCHOOL SETTINGS

By

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To my Mom and Dad, both educators.
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Abstract of Thesis Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Master of Science

MIXED METHODS ANALYSIS OF OCCUPATIONAL BURNOUT AND ENGAGEMENT EXPERIENCED BY CERTIFIED ATHLETIC TRAINERS IN HIGH SCHOOL SETTINGS

By

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Using mixed-methods and purposeful sampling procedures, four ATCs working in the high school setting were identified as being in phase V or VI of burnout and four were identified as being occupationally engaged. All eight individuals were then interviewed on three separate occasions using a semi-structured approach. A grounded theory analysis was then conducted to identify the sources of stress, challenges and coping responses of these individuals and how their unique stressors changed and evolved over time. Burned out individuals listed 33 distinct stressors, 29 challenges and 46 coping strategies. Occupationally engaged individuals listed 19 stressors, 21 challenges and 40 coping strategies. Overall the athletic trainers in this sample coped consistently with their stressors with few mismatches with the controllability of the stressor and the coping strategy.
CHAPTER 1
INTRODUCTION

Over 20% of North American employees were in the most advanced phases of burnout according to Golembiewski, Boudreau, Munzenrider, & Lou (1996). Those in the helping professions who experience the “burnout” syndrome are more likely to demonstrate higher levels of absenteeism, lower job satisfaction, poor health, and perhaps diminished care to their clients. In all, a person experiencing burnout symptomology might be said to have a lower quality of life than a person who is not burned out. In the upcoming sections of this thesis I will elaborate on the burnout phenomena and also occupational engagement with respect to those in the helping and athletic training professions.

Definitions of Terms Related to the Constructs of Occupational Burnout, Occupational Engagement and Stress and Coping

To facilitate the reader’s understanding of the theories and constructs in this thesis, I will define some of the key terms and components used in the literature. This review will begin with definitions related to the components of occupational burnout, occupational engagement, psychological stress, and coping.

The term “burnout” originated from the popular lexicon and was used to describe a phenomenon that was happening to lawyers working with those at the poverty level (Maslach, 1993). The experiences of poverty lawyers working in legal services were similar to those that Maslach studied with health care professionals. Within the English language definitions of burnout are derived from the physical sciences and linked to the reduction of a fuel or substance through combustion (Oxford University Press, 2007). Thus the word burnout, developed in rocketry, was adopted to describe a person who has come to a point in their work where they have spent all their energy and do not feel any desire to continue in that pursuit. Freudenberger
(1974, 1975) similarly described burnout as exhaustion that is caused by excessive demands of energy and resources.

Occupational burnout, according to Maslach and Goldberg (1998), is comprised of three separate components: emotional exhaustion, depersonalization, and lack of personal accomplishment. Emotional exhaustion is defined by being emotionally taxed and lacking the emotional resources for replenishment, with its sources being work overload and personal conflict with either fellow employees or clients. Similar to the definition of rocket burnout, a person feels like his/her fuel is depleted and lacks the energy to face another day at work or another patient/customer. This is the basic stress component of occupational burnout in the Maslach model and may be exemplified by an athletic trainer (ATC) who feels chronically tired at work both emotionally and physically, and time off from work is not enough to restore the energy they need for their job.

The second component of the burnout syndrome, depersonalization, is defined as an adverse, unsympathetic or excessively detached response to other people. Depersonalization usually develops as a result of overloading emotional exhaustion and may be a self-protective mechanism. For instance, a person may distance his/herself emotionally from work in order to feel a sense of protection from disappointment and exhaustion (Maslach & Leiter, 1997). This represents the interpersonal component of burnout in the Maslach Model and may be exemplified by limited dialogue with clients or co-workers.

The third component of occupational burnout in the Maslach model (1993), is reduced personal accomplishment, and is characterized by a diminished sense of competency, self-efficacy, and productivity in the workplace. This self-evaluative portion of the Maslach model is represented by the reduced sense of personal accomplishment and may be demonstrated when an...
individual loses confidence in his/her abilities to treat injuries and feels helpless to have an impact in the field.

The study of occupational engagement evolved as an attempt to find the opposite of burnout in the workplace and has reflected a general shift in psychology focused on positive aspects of human behavior (Seligman & Csikszentmihalyi, 2000). According to Schaufeli and Bakker (2004), the three major components of engagement are vigor, dedication, and absorption. High levels of energy and mental toughness in the workplace demonstrate vigor, personified by someone who perseveres in the face of difficult tasks and invests oneself personally in his/her work. An ATC might demonstrate vigor by meeting tasks head on with passion and enthusiasm while taking personal stake in accomplishing his/her job.

Dedication, another key component in Schaufeli and Bakker’s (2004) model of occupational engagement, is characterized by a person’s pride and enthusiasm in their work. A dedicated person believes that his/her work is significant and views it as a challenge. A severe injury sustained by an athlete would be viewed by a dedicated ATC as a challenge, and, a chance to show off his/her skills and abilities.

The third dimension of occupational engagement is absorption. A person who is totally engrossed in their work, to the point where they become absorbed in their tasks or lose track of time, would characterize absorption. An ATC experiencing absorption would be one who unknowingly works overtime because he/she gets a real sense of satisfaction when an injured athlete under his/her care returns to the playing field.

Two other concepts that the reader will encounter, represented as antecedents in Schaufeli and Bakker’s (2004) model of occupational engagement, are job demands and job resources. Job demands are the physical and psychological elements of an occupation that require constant effort (Schaufeli & Bakker, 2004). For instance, a physical demand in the
athletic training profession might involve taping an injured athlete or helping someone off the playing field. A psychological demand would be dealing emotionally with being yelled at by an abusive coach when an injured athlete is not recovering per the coach’s wishes.

Another important contextual element within Schaufeli and Baker’s (2004) model of occupational engagement is job resources characterized as the physical, organizational, psychological aspects of a job that reduce job demands, allow one to achieve work goals, or stimulate learning and development (Schaufeli & Bakker, 2004). A physical job resource would be the medical supplies (e.g. athletic tape and ice packs) that an ATC might need to do his/her job, while a psychological resource might include social support from other athletic trainers or other personnel. Job demands and job resources are theorized here to play important roles within the stress, burnout, and engagement process within the helping professions.

As the preceding discussion suggested, careful attention to defining and clarifying the nature of the constructs under investigation here is needed. With this in mind I will now begin to review and offer conceptual clarity to the stress and coping portion of my thesis. The reader should take in mind that the study of stress and coping dates back over 50 years and one is instructed to see Lazarus (1999) for a thorough review. The most widely accepted conceptual framework for the study of psychological stress is based on Lazarus and colleagues (1999) Cognitive, Motivational, Relational (C-M-R) theory of emotion, psychological stress, and coping. Lazarus posited that when a person encounters any given situation a cognitive process, called appraisal, occurs which is directly tied to stress emotions. According to Lazarus (1999), when a person makes an appraisal of a situation they are constructing a relational meaning about what that situation means to them in terms of their goals, ego involvement, and overall well-being. If a person’s goals are threatened within goal-relevant situations, a series of primary and secondary appraisal processes are predicted to occur to define the nature of the threat followed
by what can be done to reduce or ameliorate the situation. During secondary appraisal portion of the model, a person evaluates how they will deal with the stressor based on their own resources and capabilities. From this perspective, appraisal and coping mediate the relationship between a stressful situation and the emotions elicited by that situation. In addition, Lazarus and Folkman (1984) believe that stress, appraisal, coping and emotion are dynamic in nature and change over time as a situation unfolds. This latter point will be expanded upon in subsequent sections along with the theoretical and practical relevance of studying the stress process in a longitudinal manner.

Finally, coping as defined by Lazarus and Folkman (1984) is, “The 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” (p. 141). Several important issues can be discerned from this definition. First, the concept of cognitive appraisal is fundamental to Lazarus and Folkman’s (1984) definition and this will be discussed in more detail below. Second, coping efforts constantly change over time and occur within a specific context. From this perspective, individuals’ coping efforts subsequently impact the nature of the situation which then impacts the appraisal process. Finally, the C-M-R theory (Lazarus, 1999) is process oriented and coping strategies that work in one situation may not work in another so individuals might adopt different coping strategies within the same or different situations or their coping responses might simply change as the nature of the stressor changes. All of these issues will be discussed below.

**Model of Burnout**

Perhaps the most noted and knowledgeable scholar on the study of occupational burnout is Christina Maslach who, over the course of her career, has developed a comprehensive model of occupational burnout, as well as multiple measures to assess this construct. I will now
elaborate on Maslach, Jackson, and Leiter’s (1996) model to include the antecedents, components and outcomes of the burnout syndrome.

Maslach and Goldberg (1998) postulate that the combination of imbalance and conflict within a job setting lead to a person experiencing burnout. The imbalance occurs when job demands are high and job resources are low (see Figure 1-1). Job demands, ever present over time, become chronic in nature, and job resources whether depleted or absent are insufficient to deal with the demands on a continual basis. Another key theme within this model includes conflict which could result from conflict with coworkers, clients, or managers. High job demands, low job resources, and conflict in the workplace are precursors to the exhaustion component of the burnout syndrome.

Adopting a stage model of the burnout syndrome, emotional exhaustion that results from the combination of conflict and an imbalance between job demands and job resources is the first component of burnout to manifest itself in an individual (Leiter & Maslach, 1988, Maslach & Jackson, 1981). Exhaustion is the most salient of the burnout components and the one most often described by those experiencing burnout (Maslach, Schaufeli, & Leiter 2001). Although exhaustion is the most powerful dimension of burnout, its manifestation alone is not the sole requirement for explaining or diagnosing burnout. According to Maslach et al. (2001) emotional exhaustion prompts an individual to withdraw emotionally and psychologically from his/her work presumably as a coping mechanism. A human service professional would distance themselves emotionally from those that are under their care as the demands of constant attention become too great.

The second component to develop in Maslach’s model (1996), depersonalization, develops as an immediate reaction to someone who is experiencing exhaustion. In order to manage the increased demands of those they are providing service for, exhausted individuals
treat people as impersonal objects, therefore distancing themselves from the cause of their exhaustion (Maslach et al., 2001). This detachment shifts over time negatively; practitioners begin to dislike their patients instead of showing concern for their welfare (Maslach, 1993). Burnout research across a varying array of occupations and settings has shown a strong relationship between exhaustion and depersonalization (Bernhard, 2007; Jenaro, Flores & Arias, 2007; Kanste, Miettunen, & Kyngäs, 2006; Lindblom, Linton, Fedeli, & Bryngelsson, 2006; Peery, 2007; Templeton & Satcher, 2007). Some of these studies will be discussed later.

The third component of burnout according to Maslach et al. (1996) is a reduced sense of personal accomplishment or inefficacy in the workplace (Leiter, 1993). This reduced sense of accomplishment or competence could also be characterized by feelings of inadequacy and ineffectiveness. Maslach et al. (2001) surmise that inefficacy arises from a lack of job resources where exhaustion and cynicism are a result of job demands and conflict.

As an individual’s burnout experience progresses and changes over time, exhaustion, depersonalization, a diminished sense of accomplishment and low self-efficacy are predicted to lead to specific cognitive, behavioral, and health consequences. A burned out employee is likely to show reduced commitment to the organization, high absenteeism, turnover, and physical illnesses as a result of this syndrome (Maslach & Goldberg, 1998). These costs, as outlined in Figure 1, affect both the organization and the individual. A person feeling ineffectual in their job and depleted might not want to come in to work leading to eventual job turnover (Maslach et al., 2001). Those who do work are not as effective in their jobs and may make the working environment stressful for others (Rowe & Sherlock, 2005). Job demands that lead to burnout in health care workers can include emotionally charged contact with those they care for (Dierendonck, Schaufeli, & Buunk, 2001), heavy workload, and lack of family time (Spickard, Gabbe, & Christensen, 2002). The level of care that patients receive from “burned out” health
care workers is also affected and could lead to serious errors that lead to malpractice suits (Spickard et al., 2002). These consequences of burnout affect not only the individual suffering from it but also the organization for which they work and the patients or customers.

Figure 1-1. Adapted model of burnout. Dashed arrows show paths surmised by Maslach et al. (2001) (Leiter, 1993; Maslach & Goldberg, 1998; Maslach et al., 1996, 2001).

With regard to the personal health of the burned out employee, these individuals are likely to suffer mental and physical health risks. Overwhelming stressors that lead to burnout tax the individual to a point where they are unable to cope and as a result their physical health suffers. Golembiewski et al. (1996) found that the more advanced the burnout phase the more physical symptoms were reported. This pattern was replicated not only in North America but in other sites as well; Belarus, Japan, and China for example. This also holds true of a person’s mental health. Those individuals experiencing the more advanced phase of burnout reported more mental health problems.
Model of Occupational Engagement

While theory and research was being advanced on the study of occupational burnout during the 1980s and 90s, another group of scholars were proposing a dimensional structure of affective experience (Watson & Clark, 1992; Watson, Clark, & Tellegen, 1988). These scholars posited that affective experience were orthogonal states as either positive or negative. Within the occupational psychology literature, Maslach and Leiter (1997) proposed that the three elements of burnout—exhaustion, depersonalization, and lack of personal accomplishment, had the opposites of energy, involvement, and efficacy, and that these comprised occupational engagement. Schaufeli and Bakker (2004) predicted that occupational engagement is made up of the two aspects of vigor and determination, whose opposites are the burnout dimensions of exhaustion and depersonalization. A third aspect of engagement, absorption, is uniquely associated with engagement and does not have an opposite burnout dimension. Schaufeli and Bakker also believe that engagement, while being the positive antithesis of burnout is in fact an independent state and the two are moderately to highly related in a negative direction.

In the Maslach Model (1996), burnout is the result of an imbalance resulting from heavy job demands and limited job resources. In contrast, occupational engagement is proposed to be the result of physical, psychological, social or organizational resources available to the employee (Bakker, Demerouti, & Schaufeli, 2003). These job resources provide support for achieving work goals, reducing job demands, and stimulating personal growth and development. Schaufeli and Bakker (2004), as depicted in Figure 2, predict that burnout and engagement are mediators between job demands and health problems and job resources and turnover intention, respectively. This model was simultaneously developed and tested with two samples of adults. The job resources tested were performance feedback, social support from colleagues, and supervisory coaching as predictors of occupational engagement. Model testing using structural equation
modeling procedures showed support for the hypothesis that occupational engagement was a mediator between job resources and turnover intention.

Another study looked at the personal resources of self-efficacy, organizational-based self-esteem, and optimism and their relationship with engagement (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Dutch employees at six divisions of an electrical engineering and electronics company were administered a questionnaire via the company’s intranet. The questionnaire assessed job demands, job resources, personal resources and exhaustion and engagement and the data were analyzed using structural equation modeling. Job demands were assessed with questions about workload (Bakker, Demerouti, & Verbeke, 2004), emotional demands (Bakker et al., 2003), emotional dissonance (Zapf, Vogt, Seifert, Mertini, & Isis, 1999), and organizational changes (Bakker et al., 2003). Job resources were assessed with questions about autonomy (Bakker et al., 2004), social support (Bakker et al., 2004), supervisory coaching (Le Blanc, 1994), and opportunities for professional development (Bakker et al., 2003). Personal resources were assessed with questions about self-efficacy (Schwarzer & Jerusalem, 1995), and organizational self-esteem (Pierce, Gardner, Cummings & Dunham, 1989). Exhaustion was measured with a Dutch version (Schaufeli & Van Dierendonck, 2000) of the MBI-GS (Maslach et al., 1996) and work engagement by a nine item version of the Utrecht Work Engagement scale (Schaufeli, Bakker, & Salanova, 2006). Results from a confirmatory factor analysis showed that personal resources mediated the relationship between job resources and engagement and were negatively related to exhaustion. So it might be said that certain job resources foster the development of personal resources that ultimately result in increased occupational engagement.

Physical and psychological job resources are the antecedents to occupational engagement while those who are engaged are likely to show greater resilience under a variety of different circumstances. A person highly involved and enthusiastic about their work will show
determination and dedication, be totally immersed in various occupational tasks and derive a sense of pleasure and satisfaction from their work (Maslach et al., 2001). Having the physical resources to meet job demands increases a person’s perception that they can control their work environment (Xanthopoulou et al., 2007) that ultimately leads to greater confidence to persevere and accomplish challenging tasks (Luthans, Avey, Avolio, Norman, & Combs, 2006). In addition to the three elements of occupational engagement, the burnout dimension of personal accomplishment, reverse scored in the MBI-GS, was found to correlate highly with the engagement factors (Schaufeli & Bakker 2004, Schaufeli et al., 2002) and warrants inclusion as an additional factor when measuring engagement.

Figure 1-2. Occupational engagement model (Schaufeli & Bakker, 2004)

While the study of occupational engagement is important, other more long-term outcomes related to this construct have not been studied. It is posited, however, that employees who are engaged will suffer less from deleterious outcomes that includes psychological stress, illness, and absenteeism (Schaufeli et al., 2002). As depicted in Figure 2, Schaufeli and Bakker (2004) did test the outcome of turnover intention, but not a direct path from engagement to health problems. Results showed that an engaged employee was less likely to consider leaving a job than a burned out employee. Indirectly, personal resources, antecedents to engagement, were
shown to negatively correlate with the burnout dimension of exhaustion possibly leading to reductions in health problems (Xanthopoulou et al., 2007).

Both models described above predict burnout or engagement based on the presence or absence of job demands and/or resources. However, they do not depict the cognitive process that lead an individual to these experiences. An individual’s behaviors are influenced by how they interpret and appraise a stressful situation and lead to their ultimate emotional experience of that event. Lazarus’ cognitive motivational relational (C-M-R) theory of stress, emotion and coping addresses the cognitions that lead to a persons coping with a stressor and emotion experienced. Widely cited in the stress and coping literature, the C-M-R theory is appropriate to offer interpretations on the cognitive processes that result in occupational burnout and/or engagement. I will now elaborate on this theory.

**Cognitive Motivational Relational Theory of Stress, Emotion, and Coping**

Lazarus (1999) theory is a process oriented theory on how people appraise, cope with and emotionally experience situations they encounter in their life. These cognitions, based on the appraisals of any given situation, result in the emotions felt and coping behaviors of that individual. Lazarus (1999) identified two main antecedents to the appraisal process: environmental variables and person variables. Within the occupational context job demands can be included as environmental variables that include job specific expectations, hours worked, and the number of athletes an athletic trainer works with and job resources, a person’s intelligence, social skills, education, and a social support network of family and friends can be included as person variables. These resources will then impact a person’s appraisal of and coping with a stressful situation. In addition personality traits, such as the “Big-Five” or the five-factor model (Costa & McCrae, 1992) can also be considered a person variable and contribute to coping style
or effectiveness (Campbell-Sills, Cohan, & Stein, 2006; Carver, Scheier, & Weintraub, 1989; George & Brief, 2004).

The appraisal process, which occurs during a possible stressful encounter, is broken into two temporally based components, primary and secondary appraisal. These are cognitive processes that lead to coping strategies and emotions experienced. Although they work interdependently, the two types of appraisal, primary and secondary will be discussed separately. During primary appraisal, the individual determines if the situation, first and foremost, affects his/her goals, values, or overall well-being. Lazarus (1999) defined three types of primary appraisal: harm/loss, threat, and challenge. Threat and challenge are the two primary appraisals I will focus on. For instance, if the athletic training profession is highly valued and an individual appraises a particular event as threatening then he or she might experience a stress related emotion such as anger or anxiety. Challenge appraisals occur when a situation occurs that allows for achievement of a goal or movement toward achievement of a goal. An example of a challenge might be a situation in which an athlete experiences a minor injury. The ATC has prior experience and the skills to handle such a situation and therefore views it as a challenge. Based upon these conceptually distinct cognitive appraisals, it could be theorized that if an ATC perceives several situations over time as threatening, then high levels of stress emotions will be experienced. In contrast, if situations are cognitively appraised as challenges then more positively toned emotions will be experienced and occupational engagement will occur.

The secondary appraisal process is a person’s analysis of their resources and coping strategies (Lazarus, 1999). The individual determines which strategies they are capable of undertaking as well as the likelihood for success using that strategy. If a person believes that they have the resources to cope effectively with a given situation then that situation will be perceived as a challenge rather than a threat.
Once a person has gone through the appraisal process, the individual will then implement a coping strategy to alleviate a stressor. Coping mediates the appraisal process and the emotions experienced in a process oriented manner that is predicted to change and evolve over time. Two issues related to coping are its consistency and stability over time. An individual coping the same way with different stressors demonstrates coping stability. An individual coping the same way each time the same stressor is experienced demonstrates coping consistency. Lazarus posited that a person utilizes different coping strategies with the same stressor until one is discovered to be the most effective at alleviating that stressor. Clearly, Lazarus and Folkman’s (1984) process oriented views about coping responses consider coping to be variable across time and situations. However, there is evidence of temporal stability of coping with the coping process and others (Carver et al., 1989) view coping to be more consistent or stable over time. The issue of whether coping is stable over time versus variable and changing is important for theoretical and practical reasons. From a theoretical standpoint the issue of coping stability might shed light on personal resources related to adaptation and help to explain the deleterious impact of stress on health and well-being. With regard to practical implications if coping is found to be variable then stress reduction programs would need to account for many possible patterns of coping in response to stress. If however, coping is shown to be stable then it might be important for practitioners to help clients understand how and under what circumstances their preferred coping styles work or do not work.

Lazarus defined two types of coping, emotion-focused coping and problem-focused coping. Emotion-focused coping deals solely with the emotions that a situation elicits while problem-focused coping takes a more active approach by attempting to resolve a stressor with either cognitive or behavioral efforts (Folkman & Lazarus, 1980). An article by Skinner, Edge, Altman and Sherwood (2003) on coping categories proposed more than just the two coping
styles posited by Lazarus. Their argument is that both problem focused coping and emotion focused coping are not mutually exclusive. For example a person plans ahead not only solves the problem but the act of doing so alleviates the emotions that stressor elicits as well. They analyzed over 100 assessments of coping resulting in a list of 400 distinct ways of coping and recommend a hierarchical system of 13 potential core families of coping. These include problem solving, support seeking, escape, distraction, cognitive restructuring, rumination, helplessness, social withdrawal, emotional regulation, information seeking, negotiation, opposition, and delegation. According to Lazarus (1999) there are 15 discrete emotions and these emotions are elicited as a result of the appraisal process and how one copes with their threats, losses, or challenges. There are eight negative emotions, which include anxiety, fear, anger, guilt, shame, sadness, envy and jealousy. These negative emotions might possibly lead to an employee experiencing burnout (see Figure 1-3) According to Lazarus (1999) there are seven positive emotions: hope, happiness, love, pride, relief, gratitude, and compassion. These emotions I propose contribute to a person experiencing occupational engagement.

Therefore according to Lazarus C-M-R theory a person encounters a situation that they interpret as a threat or a challenge. The person then employs one or many coping strategies to effectively deal with the stressor itself or the emotions elicited. Positive or negative emotions then result and in turn influence the appraisal process with respect to the current situation and future situations. The next section attempts to explain how the C-M-R theory can be used to explain the constructs of occupational burnout and engagement within the athletic training profession.

A Theoretical and Conceptual Integration of Three Perspectives

All three perspectives discussed above have stimulated a tremendous amount of research over the past three decades. For instance, the use and application of the MBI has been
demonstrated by over 413 published studies while the C-M-R theory is both widely accepted and has also stimulated a vast amount of commentary and empirical scrutiny (Anderson, White, & McKay, 2004; Bunk, 2007; Dillard & Shen, 2007; Giacobbi, Tuccito, & Frye, 2007; Jackson, 2006; Jones, 2003; Kappas, 2006; Monat, Lazarus, & Reevy, 2007; Nicholls & Pollman, 2007; Patton, Bartrum, & Creed, 2004; Pensgaard & Duda, 2003; Uphill & Jones, 2004; Zuk, 1994). The CMR theory is process-oriented meaning that one’s emotional and coping processes evolve and change over time through a process of cognitive mediation. Similarly, Smith (1986) integrated tenets of Lazarus’ theory into a model that attempts to explain athletic burnout. In particular the cognitive processes that lead to perceived stress and result in burnout. Therefore, the cognitive-mediational approach seems appropriate to use as a theoretical model to explore the constructs of occupational engagement and occupational burnout. I will now elaborate on how the basic tenets of Lazarus’ (1999) C-M-R theory will be integrated into the present focus on occupational burnout and engagement.

In order to more clearly justify my theoretical integration of the work conducted by Maslach and colleagues, Schaufeli and Bakker (2004), and the C-M-R theory (Lazarus, 1999), an important question to ask is where does occupational burnout and engagement fit into Lazarus’ C-M-R theory. Figure 1-3 shows a possible location within the theoretical model. Columns A, D and E contain the elements of both burnout and engagement models while columns A, B and C contain the C-M-R theoretical elements. Schaufeli and Bakker’s model (2004) and Maslach et al’s model (1996) do not outright omit the cognitive processes that lead to either occupational burnout or engagement, but they are not elaborated in either model. Therefore I propose the appraisal and coping process as elaborated by Lazarus (1999) theory as a mediator between the antecedents and experience of either burnout or engagement.
Here in these antecedents to appraisal (column A in figure 1-3), parallels can be drawn to the antecedents in both burnout and engagement models. Job demands, whether they are job expectations, work overload, conflict with others, are environmental variables in Lazarus’ C-M-R theory (1999). Job resources like social support networks, education, and past experiences are person variables. The interaction of person and environmental variables influence the way people appraise, cope with and experience a situation and will lead to whether a person feels burned out or engaged. Lazarus’ environmental and person variables can be thought of as synonymous with job demands and resources. An overloading of job demands/environmental variables with low job resources would lead to a threat appraisal (figure 1-3 column B) and if that person is unable to effectively cope with that situation the resulting negative emotions of fear and anxiety could lead to burnout.

In contrast to burnout, an individual who possesses resources to match the job demands might appraise a given situation as a challenge rather than in a threatening manner. An individual with the requisite resources to meet the demands will appraise the situation as a challenge, cope effectively and perhaps experience more benign emotions. This individual may cope (figure 1-3, section C) with these appraised challenges in a variety of ways but most likely use more action-oriented coping responses. The resulting emotions of happiness and pride could lead to engagement.

Another aspect to discuss is that a person who is experiencing burnout will appraise situations differently and cope with them differently as well. For example an athletic trainer who is experiencing burnout might appraise more situations as threats (figure 1-3 path a), subsequently feel that they are ineffectual and might employ a coping strategy (figure 1-3 path b) that is maladaptive and results in more anxiety. Therefore, the experience of being burned out will affect the appraisal and coping processes.
Figure 1-3. Theoretical integration of Lazarus’ C-M-R theory (1999) and occupational burnout and engagement. Column A – antecedents, Column B – appraisal process, Column C – coping and emotional outcomes, Column D – burnout and engagement models Column E – burnout and engagement specific outcomes.
In contrast an engaged athletic trainer will appraise more and more situations as challenges well within their control and matching their abilities and cope effectively. Thus an engaged athletic trainer appraises more situations as challenges (path c) and has confidence in their coping abilities because they have been successful (path d). Therefore, the appraisal and coping processes are affected by the engagement experience.

**Measurement of Occupational Burnout and Occupational Engagement**

It is important to now elaborate on how burnout and occupational engagement have been measured. The Maslach Burnout inventory is a measure based on Maslach’s Model (1996) of burnout. Specifically it measures the three components associated with the model, emotional exhaustion, depersonalization and personal accomplishment. Personal accomplishment is reverse scored to assess inefficacy. The Maslach Burnout Inventory General survey (MBI-GS) was developed by Maslach et al. (1996) to assess burnout in individuals in occupations other than the health professions. It is a 16-item measure assessing the three components of burnout, exhaustion (EX), cynicism (CY), and low self-efficacy (EF). Exhaustion is measured by 5 items, cynicism by 5 items and efficacy by 6 items which are reverse scored. Items are scored on a 7-point likert type scale on frequency (0 being ‘never’ and 6 being ‘always’) and a 7-point likert type scale on intensity (1 being ‘very mild’ to 7 being ‘very strong’). Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002) observed Cronbach’s α levels of internal consistency of 0.85, 0.78, and 0.73 for EX, CY and EF for a sample using an unmodified version of the MBI-GS.

An occupational engagement (OES) measure developed by Schaufeli et al. (2002) was developed to determine whether individuals score high or low on occupational engagement. The measure is a 17-item survey assessing three factors of engagement (vigor, dedication, and absorption). A three factor model tested by Schaufeli et al. (2002) that consisted of vigor,
dedication, and absorption subscale yielded alpha values greater than .70 for two separate samples. The three factor model fit the data reasonably well with a \( \Delta \chi^2(6) = 284.81, p < 0.001 \) and correlations between the three latent factors were \( r(\text{VI.DE}) = 0.77/0.84, r(\text{DE.AB}) = 0.75/0.91 \) and \( r(\text{VI.AB}) = 0.98/0.93, \) (Sample 1/Sample 2). Each item is scored on a six point likert type scale and also has a seven-point intensity scale. For example the item “I can effectively solve the problems that arise in my work.” Had responses ranging from 1 “A few times a year” to 6 “Every day.” The intensity scale ranges from 1 “Very mild, barely noticeable” to 7 “very strong, major.” There is “Never” response option as well with each item.

Utilizing the MBI and OES it is important to note how one would be identified as being either burned out or engaged or both. Golembiewski et al., (1996) establishes phases based on the scoring within the burnout sub-domains. He elaborates eight different phases of burnout. Phase one being the lowest and eight being the highest level of burnout. Based on norms an individual, scores high or low in each sub-domain and then is assigned a phase. Golembiewski et al. (1996) identify scores 24 and over on the exhaustion component, 19 and over on the cynicism component and 27 and above on the personal accomplishment (reversed) component of the MBI as being high in the dimension. Table 1 below breaks down each phase based on sub-domain scoring. Based on Golembiewski et al’s (1996) model a person who scored high on all three components of Maslach et al. (1996) model would be in the most advanced phase of burnout.

Table 1-1. Progressive phases of burnout (Golembiewski et al., 1996)

<table>
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<tr>
<td>Depersonalization</td>
<td>Lo</td>
<td>Hi</td>
<td>Lo</td>
<td>Hi</td>
<td>Lo</td>
<td>Hi</td>
<td>Lo</td>
<td>Hi</td>
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<tr>
<td>Personal Accomplishment (reversed)</td>
<td>Lo</td>
<td>Lo</td>
<td>Hi</td>
<td>Hi</td>
<td>Lo</td>
<td>Lo</td>
<td>Hi</td>
<td>Hi</td>
</tr>
<tr>
<td>Emotional Exhaustion</td>
<td>Lo</td>
<td>Lo</td>
<td>Lo</td>
<td>Hi</td>
<td>Hi</td>
<td>Hi</td>
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Similarly, with occupational engagement, established norms (Schaufeli et al., 2002) are used to determine whether an individual is considered occupationally engaged. Scores greater
than 3.82 on vigor, 3.74 on dedication and 3.53 on absorption classify someone as occupationally engaged.

It is also important to note that burnout and engagement as demonstrated by Schaufeli et al. (2004) do not lie on either ends of the same continuum but in fact are independent or orthogonal constructs. Schaufeli et al. posit that an individual can score both low on the MBI and the OES and that that person is not burned out but not engaged either. Such an individual could possibly have job demands that are so low and easily met that engagement is unlikely to occur: simply put their job is boring. Therefore, it is then theoretically possible to be burned out and engaged at the same time. Perhaps certain aspects of an ATC’s job are demanding and that person does not have the resources to meet them but does have the resources to meet other job requirements. For example an ATC may not have the experience or knowledge to plan team meals but does have the skills and knowledge to deal with severe injuries. In this case, one element of the occupational experience is difficult and may be associated with burnout while the other (injuries) is engaging.

Both the MBI (Maslach et al., 1996) and OES (Schaufeli et al., 2002) have demonstrated reliability and validity in the measurement of burnout and engagement. However, neither measure assesses the overall impact of being burned out or engaged on the individual and how experiencing either affects that person’s quality of life, job satisfaction or ability to cope with occupational demands. While both measures do an excellent job of metering the degree to which an individual is engaged or burned out neither explains how that person arrived at the point.

**Empirical Studies**

**Empirical Studies on Burnout**

Burnout has been studied with respect to various occupations, originally exploring the phenomenon in the medical community resident physicians, nurses, health care workers
(Dierendonck et al., 2001; Rowe & Sherlock, 2005; Thomas, 2004), as well as management (Schaufeli & Bakker, 2004), and air traffic controllers (Demerouti, Bakker, Nachreimer, & Schaufeli, 2001). However, research examining burnout in the athletic training profession is relatively sparse with respect to Burnout (Hendrix, Acevedo, & Hebert, 2000; Reed & Giacobbi, 2004).

Empirical Studies on Occupational Engagement

Research focusing on the study of Occupational Engagement has only existed since the turn of the century. A shift in focus toward positive psychology has proposed focusing not only on the weaknesses of human behavior but toward positive functioning and strength (Seligman & Csikszentmihalyi, 2000). I will now review some of the literature that has explored the study of occupational engagement.

Schaufeli et al. (2002) developed and tested the Utrecht work engagement scale (OES) and tested higher-order factors with the (MBI-GS: Salanova & Schaufeli, 2000) with separate samples of 314 students (M=22.3) and 619 employees (M=32.8). Participants were administered the 24-item Spanish version of the MBI-GS (Salanova & Schaufeli, 2000) to assess burnout levels. As predicted the MBI-GS dimensions were positively interrelated as were all of the engagement dimensions and the burnout and engagement dimensions were negatively correlated with one another. The authors then tested higher-order factors and suggested support for two latent factors one with cynicism and exhaustion and the other with all three engagement scales: vigor, dedication, absorption, and efficacy. This finding is questionable however because although there were significant differences between the models tested, the RMSEA of .11 which is outside of conventional cutoff standards (Byrne, 2005).

The results of this study set preliminary ground work in distinguishing occupational and burnout as separate constructs and not opposite ends on the same continuum. Viewing these
constrasts as independent of one another yet moderately negatively related allows one to conclude that engagement is indeed an antipode of burnout (Schaufeli et al., 2002).

Schaufeli and Bakker (2004) looked further at the relationship between burnout and engagement with respect to job demands and job resources in 2004, as well as the outcomes possibly resulting from the two phenomena (See Figure 1-2). Employees from various Dutch service organizations participated in the study, to include an insurance company, a pension fund company, an occupational health and safety service and a home-care institution. Sample 1 included 261 males and 120 females with a mean age of 40 years old and average of 12.5 years organizational tenure that worked at a Dutch insurance company. Sample 2 was comprised of employees at several branches of an occupational health and safety service including 76 males, 126 females with a mean age of 40 years and average time with that company or 7 years. 173 males and 334 females with a mean age of 35 years and average organizational tenure of 6.5 that worked at a pension fund company comprised Sample 3. Employees of a home-care company, 608 participants with 97 percent being female, with a mean age of 42 years old and 9 years average experience at that company, were designated as Sample 4. All participants were administered the Dutch version (Schaufeli & Dierendonck, 2000) of the MBI-GS (Schaufeli et al., 1996), the Utrecht Work Engagement Scale (UWES; Schaufeli, et al., 2002), a Dutch version (De Jonge, Dollard, Dormann, Le Blanc, & Houtman, 2000) of Karasek’s (1985) job content scale (to assess the job demand of workload and job resource of performance feedback), a five item scale to assess emotional demands in the workplace and a ten item scale to assess social support from colleagues both developed by Van Veldhoven and Meijman (1994), a Dutch version of Graen and Uhl-Bien’s (1991) 12 item Leader-Member exchange Scale (Le Blanc,
to assess supervisory coaching, a 13-item health complaint questionnaire (Dirken, 1969), and a turnover intention scale consisting of three items (Van Veldhoven & Meijman, 1994).

Similar to Schaufeli et al. (2002) the relationship between burnout and engagement were tested using SEM with three models. The third model, with the PE loading onto engagement instead of burnout fit the data best. These results reinforce those reported in Schaufeli et al. (2002). Schaufeli and Bakker (2004) then tested the goodness of fit of the four samples using the model depicted in Figure 2 in order to test the hypotheses of whether burnout mediates the relation between high job demands and experienced health problems, whether engagement mediates the relationship between job resources and low turnover intention, as well as the various cross links depicted in Figure 2. The results showed support for burnout mediating the relationship between job demands and health problems as well as engagement mediating the relationship between job resources and turnover intention. Several models were run, the first ($M_{\text{original}}$) testing the paths as shown in Figure 2 and a second ($M_{\text{re-specified}}$) allowing the error terms of DE and AB, and VI and AB to correlate. $M_{\text{re-specified}}$ improved the fit of the model significantly than $M_{\text{original}}$ ($\Delta \chi^2 (8) = 163.54, p < 0.001$) and two constrained models that were also run with the data.

The results of Schaufeli and Bakker (2004) suggest that burnout and engagement mediate the relationship between job demands/job resources and health problems/turnover intentions, however, the effects of being burned out or engaged have further implications than just these two outcomes. They did not test for any positive outcomes that engagement might lead to, among them, job satisfaction, improved quality of life, etc.
Empirical Studies with the Population of Athletic Trainers

Research focusing on occupational burnout, engagement, and coping experienced by athletic trainers is limited in comparison to other human service settings. While athletic training is similar to other human service occupations, it does possess its own specific set of stressors and challenges that warrant empirical scrutiny (Reed & Giacobbi, 2004). In this section I will provide a review of the literature focused on stress, coping, burnout, and attrition in the athletic training profession.

Campbell, Miller, & Robinson (1985) were perhaps the first to assess the prevalence of burnout in the athletic training profession. They distributed an author developed questionnaire at the 1984 National Association of Athletic Trainer’s (NATA) Clinical Symposium. Two hundred and twenty one athletic trainers, out of a total of 1500 certified athletic trainers in attendance, completed the survey packet (.15 response rate). The participants were 70.1% male and 29.9% female with an average age of 35 years old. For this sample, the length of time in their present positions were 40.8% with less than 4 years at their current job, 40.3% with 4 to 10 years, and 18.8% having more than 10 years. The questionnaire that was distributed at the convention consisted of the Athletic Trainer Burnout Scale (ATBS), developed by the authors for the purposes of this study, which focused on stress, common medical conditions, and demographic questions. The ATBS included 43 questions and had a range of scores from 58 to 168. The authors did not report any reliability or validity statistics of the measure and those who scored over 117 on the ATBS were classified as “burned out” while individuals who scored 117 or lower were classified as “not burned out.”

Campbell et al. (1985) found that 60.3% of the sample was burned out and there were significant associations between burnout and frequent headaches (.22), high blood pressure (.20), nervousness (.23), depression (.43), indigestion (.27), fatigue (.28), and sleeplessness (.24).
Fatigue was the most frequent medical condition reported in this study with 40.7%. No significant relationships were found between the susceptibility of being burned out based on background or other demographic variables.

There are some limitations to Campbell et al.’s (1985) study related to the reliability and validity of the ATBS. The authors do not provide any validity or reliability statistics with respect to this measure nor did they provide a conceptual definition or theory from which the survey was based. Another limitation concerns their sampling scheme as the participants were comprised of attendees to a national conference, which excluded those not in attendance from being participants. With this approach it would be possible that those in attendance were systematically different from those not in attendance, which limits the generalizability of Campbell et al.’s (1985) findings. However, even though there are questions about the findings reported by Campbell et al. (1985), this study was important because it indicated attention being focused on issues of stress and burnout within the athletic training profession.

Capel (1986) studied the relationship of various psychological and organizational factors linked to burnout. She specifically looked at role conflict, role ambiguity, locus of control, number of athletes the athletic trainer was responsible for, and hours of contact with those athletes each week. The participants were 332 full- and part-time athletic trainers certified by NATA and included 209 males and 123 females. The researchers obtained a list of National Athletic Trainers Association (NATA) certified athletic trainers living in the western portion of the United States and mailed a letter of consent and a questionnaire to a total of 900 ATCs. The sample was self-selected based on those who chose to return the surveys and part time athletic trainers who worked less than 20 hours per week were excluded from the data set. The mean age for the sample was 31.3 years with an average with only 4.6 years of experience. Fifty-two
percent of the sample were married and 44% of the sample were employed in either the high school or Division I collegiate setting. The questionnaires included the Maslach Burnout Inventory (MBI), Rizzo, House and Lirtzman’s (1970) role questionnaire, which assessed role ambiguity and role conflict, the Rotter Internal-External Locus of Control Scale (Rotter, 1966), and demographic questions.

Capel (1986) reported relatively low individual subscale mean scores of 2.84 for emotional exhaustion, 1.95 on the, depersonalization scale, and 5.20 for (M = 1.95), personal accomplishment. The range of scores for role ambiguity and role conflict are on a scale of 1 to 7 with a 1 representing high role ambiguity and a 7 representing high role conflict. Role ambiguity and role conflict scores were also generally low with mean scores of 5.2 and 3.0 respectively.

According to Capel (1986) 78% of the ATCs had an internal locus of control and that the number of athletes and the hours of care were highly variable. Results indicated that the higher the role conflict, number of contact hours, having an external locus of control and having a higher level of role ambiguity correlated to higher levels of burnout. A regression analysis suggested that role conflict was the strongest predictor of burnout frequency and intensity, with beta weight coefficients of .356 and .672 respectively.

Capel (1986) discussed several possible reasons that the burnout scores were low when compared to other helping professions. First, 45% of the athletic trainers in the sample reported being the sole athletic trainer in their work place and 76% reported being the head athletic trainer. Those working alone or as head ATC are highly autonomous which is reflected by lower burnout. Capel (1986) also surmised that it might be that burnout is low because trainers have an “off season” or time away from their profession. Another possibility is that ATCs receive immediate feedback of their work (e.g., an injured athlete returns to competition). Time off and
positive feedback, in the form of athlete’s progress, might buffer the athletic trainer against burnout.

While Capel’s (1986) findings were important, several limitations preclude generalizations. The mean experience level of the sample was only 4.6 years and it may be that many ATCs have left the profession altogether due to early career burnout are therefore not represented in the study. Likewise, a certain segment of the population was not represented due to the self-selective nature of study participation, and the fact that individuals in other parts of the United States were not represented. Again, these limitations increase the difficulty of generalizability to the ATC population as a whole because it is possible that individuals in the profession for longer periods of time may exhibit different responses. Finally, gender was not evaluated in either investigation as neither Campbell et al. (1985) nor Capel (1986) report any differences in burnout between males and females.

The study does offer some strong evidence on some of the possible organizational predictors of burnout. Specifically, role conflict might arise due to the additional duties that ATCs are required to do outside their expertise, such as travel and meal arrangements. Further study is needed to identify how the ATC appraises these challenges and eventually cope with them.

With a strong need previously demonstrated reason to systematically explore stress, burnout, and attrition in the athletic training profession, Capel (1990) later attempted to determine why athletic trainers were no longer employed in the profession. Eighty-two out of an initial sample of 219 former ATCs responded to a one-shot 22-question survey based study. The questionnaire included items to assess demographic information, reasons for both entering and
leaving the profession, and current employment. Open-ended questions were also included to solicit more inductively developed information regarding the participants’ experiences.

Over half of the sample (57%) reported that the costs of being an athletic trainer were too great such as having to do jobs not within their roles as athletic trainers, work overload, and multiple people to please. However, ninety-one percent reported that the job was worth the time commitment. It can be inferred that certain aspects of the job are rewarding while others are taxing and, for some, ultimately lead to leaving the profession altogether. The possibility then arises that certain aspects of the job are engaging while others contribute to burnout and possibly can occur simultaneously. Again over half (58%) reported that they would take a job as an athletic trainer again but qualified their decision by describing specific criteria that would have to be met.

Another study examined the relationships between a personality trait of hardiness, social support, and job-specific issues, and burnout with ATCs (Hendrix et al., 2000). The purpose of this study was to assess correlations between issues faced by athletic trainers, perceived stress scores, and the personality dimensions of hardiness, and social support. Another purpose of the study was to provide evidence to support Smith’s model of stress appraisal, and burnout (Smith, 1986). Smith’s model of athletic burnout states that situation and person variables influence a person’s appraisal of stress and that in turn influences burnout experienced. One-hundred and eighteen certified athletic trainers from NCAA Division I-A universities participated in the study. Of the athletic trainers in this sample, 57% listed football as their primary sport with athletic trainers of other sports totaling 43%. The average age of the participants was 38.7 (SD not reported) years for football athletic trainers and 31.0 years for non-football athletic trainers.
Forty-five percent of the sample ranged in experience from 2 to 5 years with only 23% having over 11 years experience.

The results of Pearson product-moment correlations showed associations between perceived stress and all three elements of burnout: emotional exhaustion \( r = 0.59 \), depersonalization \( r = 0.43 \) and low levels of personal accomplishment \( r = -0.27 \). These results supported the hypothesis related to Smith’s model (1986) that higher perceived stress would correlate to higher levels of burnout. Two stepwise multiple regressions were run, the first analyzed how hardiness, athletic training issues, social support, and sport (football or non-football) predicted perceived stress. The results of the first model showed that the personal variables of hardiness (.40), and social support (.05) uniquely contributed to the total variance with the situational variable of athletic training issues accounting for an additional .07.

The second stepwise multiple regression analyzed how the burnout dimensions (emotional exhaustion, depersonalization, and personal accomplishment) predicted perceived stress scores. Emotional exhaustion and personal accomplishment each contributed significantly to the variance with 35% and 5% explained respectively. The burnout dimension of depersonalization did not significantly contribute to the variance explained. These results suggest that athletic trainers who scored high on hardiness, had fewer athletic training related issues, and greater perceived social support, were less likely to experience high levels of stress. Additionally, those with higher levels of emotional exhaustion and lower levels of personal accomplishment also reported higher levels of perceived stress. These findings also demonstrate that unique combinations of psycho-social and contextual variables are linked to the stress and burnout experience.
The following two articles deal with a subset of athletic training: student athletic trainers. Stilger, Etzel, and Lantz (2001) studied the life-stress sources of collegiate athletic trainers over the course of an academic year. Eleven male and 9 female student ATs were administered the Quick Stress Questionnaire (QSQ: Otani, 1985) each month throughout an academic year. The participants were enrolled in a NCAA Division I undergraduate program accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). The mean age of the participants was 22 years (SD = 4.6 years). Out of an original 43 student athletic trainers originally enrolled, only twenty participants completed the study for various reasons discussed by Stilger et al. (2001). The study was intended to identify the sources of stress for student athletic trainers, explore gender differences, and provide input to athletic training on how to assist the students.

The QSQ (Otani, 1985) is a 25-item measure that assesses stress and stress-related symptoms in college students. Each item is measured on a 9-point likert type scale (1 = little stress, 9 = extreme stress). Items assess the severity of stress with respect to academics, social/personal stressors, family issues, financial stressors, self-image issues, health issues, sexual issues, and day-to-day hassles. Stress symptoms are classified as cognitive, somatic and behavioral. Students completed the QSQ once a month during the academic year for a total of 8 administrations. An ANOVA was performed to determine the severity of each stress source across gender and time. A separate ANOVA was performed to determine any changes over time in the expression of cognitive, somatic or behavioral stress.

Stilger et al. (2001) found that academics and financial concerns were the primary sources of stress for the student athletic trainers. The authors noted significant main effects for gender relative to cognitive ($F_{1,18} = 5.99, P = .001$) and behavioral expressions of stress ($F_{1,18} =$
with women reporting greater stress symptoms than men particularly. Women also reported greater overall stress during the academic year relative to men ($F_{1,18} = 14.38$, $P < .001$).

Reed and Giacobbi (2004) explored the sources of stress and coping methods of certified graduate athletic training students in their study. Three men and three women enrolled in a graduate athletic training program at a NCAA Division I University volunteered to participate in the study ($M = 23$ years). All participants worked in either a collegiate or high school setting and all were in a supervisory position overseeing at least two undergraduate AT students. Utilizing qualitative and grounded theory methods (Charmaz, 2000) they interviewed student ATCs three times over a nine-month period to assess the major sources of stress and coping responses. A semi structured interview guide was developed by reviewing the existing stress and coping literature and a series of probes were devised to elicit rich details pertaining to the individuals’ experiences. The first interview was designed to establish trust and rapport between the participant and researcher allowing for the participant to feel comfortable to relay personal information during interviews two and three. The interviews were transcribed verbatim and coded utilizing grounded theory analytic procedures (Charmaz, 2000).

Reed and Giacobbi (2004) found a variety of stressors and coping strategies employed by certified graduate athletic training students. Six general dimensions of stress were determined from analyzing the interviews to include: Athletic training duties, comparing job duties, responsibilities as student, time management, social evaluation and future concerns. A multitude of coping strategies fell into 11 general dimensions to include planning, instrumental social support (e.g. seeking advice), adjusting to job responsibilities, positive evaluations, emotional social support (e.g. venting), humor, wishful thinking, religion, mental and behavioral
disengagement, activities outside of profession (e.g. exercise, recreational activities), miscellaneous (e.g. try to understand other’s feelings). These coping strategies were further categorized into emotion focused coping (e.g. humor, exercise, and venting) utilized to alleviate emotional distress and problem focused coping (e.g. planning, seeking advice) used to resolve the stressful situation directly. Two out of the six participants decided not to pursue a career in athletic training and though no specific reasons were elaborated upon, Reed and Giacobbi (2004) surmised that excessive stress and burnout could have been factors.

Reed and Giacobbi (2004) identified stressors specific to graduate student ATCs, including student responsibilities, time management, future concerns, and meeting expectations of peers, coaches and instructors. The authors noted that over the course of the academic year the student ATCs appeared to gain confidence in their abilities and cited social evaluative stressors less frequently in the final interview. Student ATCs used both proactive and emotional coping strategies to alleviate stress.

There are a few limitations to this study. The sample consisted of graduate school ATCs and as a result cannot be generalized to the ATC population as a whole. Older more experienced ATCs might have learned to cope more effectively with the stressors that are AT specific. In addition the academic stressors will not be experienced by ATCs established in their current job. Methodologically, only three interviews were conducted over a nine-month period and stressors when recalled over a great period of time are not as emotionally salient and therefore rich contextual detail can be absent from the interview.

The extant literature is minimal with respect to ATCs and the study of burnout with only six studies exploring this phenomenon. Of the six studies only one (Capel, 1986) used random sampling techniques to recruit participants and then only those who chose to return the
questionnaires where included. Two of the studies explored stress and coping with respect to student ATs (Stilger et al., 2001; Reed & Giacobbi, 2004) therefore making generalization of their findings to the ATC population as a whole problematic. Only one study explored gender differences among ATCs reporting that females reported more stress than males. No studies looked at occupational engagement with respect to ATCs. Therefore, it is important to build on this literature and explore the constructs of burnout, engagement, stress and coping with full time ATCs.

Rationale

As discussed in the previous sections, researchers have only begun to study occupational burnout and engagement in the athletic training profession. Much remains to be learned particularly with regard to how and why some individuals in the profession are able to adapt to this relatively lower paying human service profession while others become burned out and leave the profession. Experiencing stressful situations with athletes, parents, coaches, physicians, as well as high athlete to trainer ratios, and dual role responsibilities are some of the stressors unique to the athletic training profession (Hendrix et al., 2000; Reed & Giacobbi, 2004). Hendrix et al. (2000) focused particularly on hardiness, social support, perceived stress and their relationship to burnout. While social support is one coping mechanism, there are almost no studies that have focused on other coping strategies utilized by ATC’s who have been in the profession for several years. Reed and Giacobbi (2004) examined the coping responses of student athletic trainers but it is possible that individuals who have more experience within the profession may exhibit more automated and perhaps adaptive coping over time. By understanding the stressors and coping strategies particular to a specific context important information can be used to develop interventions that can be designed and empirically tested. Whereas Reed and Giacobbi focused on student ATC’s, this study will replicate and expand
upon Reed and Giacobbi by interviewing ATC’s in a secondary school setting. In addition to analyzing stress and coping responses this study will explore athletic trainers’ thoughts and feelings about the concepts of occupational burnout and engagement as well as coping consistency and stability over time. There are also indications of gender differences in other human service professions with regard to the burnout syndrome (Maslach & Jackson, 1985; Maslach, Jackson & Leiter, 1996). For instance, Bekker, Croon, and Bressers (2005) found that female nurses experiencing burnout had a significantly higher absentee rate due to sickness than males. Lindblom et al. (2006) found women were more likely to be in a higher level group of individuals experiencing burnout. The issue of gender differences with regard to stress, coping, burnout, and engagement has not been addressed with ATC’s. The final shortcoming within the extant literature concerns the issue of coping stability or consistency over time. The only study to examine ATC’s coping responses over time was Reed and Giacobbi (2004) but they did not directly examine the stability or consistency of coping across the three interviews. The issue of whether ATC’s cope with occupational stress consistently over time, as would be suggested by a trait like perspective (e.g., Carver et al., 1989), or whether coping is more variable and process oriented as posited by Lazarus’ (1999) and colleagues (Lazarus & Folkman, 1984), remains unclear and will be examined here.

The purposes of this mixed-methods study were to examine the occupational constructs of stress, burnout, engagement, and coping with a select group of ATC’s previously identified to be in the most advanced stages of burnout or occupationally engaged. Efforts will be made to examine contextual elements of the participants’ occupational setting (e.g., resources and demands) along with characteristics of the individual (e.g., cognitive appraisal, coping, overall occupational experiences), as well as the individual’s coping stability and consistency over time.
A secondary purpose was to make comparisons with regard to the constructs depicted in Figure 1-3 between males and females and individuals with more (greater than 10 years) versus less (less than 5 years) years post certification.
CHAPTER 2
MATERIALS AND METHODS

Research Design

This study used a mixed-methods design based on the work of Giacobbi, Poczwardowski, and Hager (2005) who elaborated on different combinations of research methods that could involve qualitative and quantitative data sources. Step one of my design, depicted in Figure 4, involved quantitative data that was used to pre-screen individuals for recruitment into interviews. Individuals were selected as being an ATC in a secondary/high school setting and worked with the school football team. This involved identifying a sub-set ($N = 4$) of ATC’s who scored within the advanced stages of burnout (stage VI, VII or VIII) and a second sub-set identified as occupationally engaged ($N = 4$) from recently collected data from a nationwide random sample of certified ATC’s (Giacobbi, In Progress). For this portion of the study, 6 individuals from a sample of 555 were identified as being in the most advanced stages of burnout based upon accepted criteria (Golembiewski, Boudreau, Munzenrider, & Lou, 1996) and all were employed in secondary school/high school settings. Specifically, individuals were considered burned out if they were in the fifth or sixth stage of burnout according to Golembiewski et al (1996). No individuals met the criteria for being in stage seven or eight however individuals with high emotional exhaustion subscale scores were selected. Of note, two of the participants were within 2 points of the personal accomplishment cutoff. Other factors that were considered in selection were time certified (4 individuals with over 10 years experience and 4 individuals with less than five years experience), and the number of clients in their facilities (ranging from 50 to 800). Likewise, those who had a mean score greater than 3 on all three subscales of the OES (Schaufeli et al., 2002) were classified as occupationally engaged. One hundred and thirty-seven individuals
met these criteria. Four individuals were selected based on gender, time certified, and number of clients. The remaining steps in my study design are described below.

Figure 2-1. Four step design of this study.

- **Step 1:** Identify ATC’s who scored high on either the MBI and OES.
- **Step 2:** Contact a subset of these individuals for interviews.
- **Step 3:** Establish trust and rapport with participants and analyzed job context during first interview.
- **Step 4:** Conduct second interview.
  - **2A:** Verify their current occupational experiences as either being burned out or engaged.
  - **3A:** Transcribe interview one and analyze data.
  - **4A:** Transcribe interview two and analyze data.
- **Step 5:** Conduct third and final interview.
  - **5A:** Transcribe interview two and analyze data.
- **Step 6:** Analyze data using constant comparative method and sensitizing concepts.
Participants

Approval was obtained from the University of Florida Institutional Review Board (IRB) in November 2007, UFIRB# 2006-U-0693. From an original sample of 934 ATC’s sampled randomly, a sub-set of 555 individuals indicated their approval to contact them for follow-up interviews. Using the screening process described above, eight certified athletic trainers were recruited to participate in this study. Requirements for participation were: 1) Must currently hold a position as an athletic trainer, 2) must be NATA certified, and 3) must be out of school. Additional efforts were made to counterbalance participants by years of experience so that there were two individuals from each sub-set described above with greater than 10 years post certification and two individuals with less than 5 years experience. The final sample consisted of 8 individuals averaging 33.9 years old with a standard deviation of 8.69 years.

Measures

The Demographic Questionnaire. The following demographic data will be verified during the interviews: age, gender, racial/ethnic background, number of clients at their facility, and the staff/client ratio.

The Maslach Burnout Inventory (MBI). The original MBI (Maslach & Jackson, 1981) is a 22-item measure of occupational burnout that consists of three subscales: emotional exhaustion (e.g., “I feel emotionally drained from my work”), personal accomplishment (e.g., “I have accomplished many worthwhile things in this job”), and depersonalization (e.g., “I worry that this job is hardening me emotionally”). Participants answer each question based upon two dimensions: how often and how strong/intensely they experienced a given thought or feeling on a Likert type scale that ranges from 0 (never) to 7 (every day or very strongly). The MBI is the most widely used measure of occupational burnout and it has established reliability and validity (Leiter & Schaufeli, 1996). Individuals who score 19 or greater on depersonalization, 24 or
higher on emotional exhaustion and the reverse scored personal accomplishment subscale would be considered burned out.

**Occupational Engagement.** Occupational engagement was assessed with the Occupational Engagement Survey (OES) constructed and validated by Schaufeli et al. (2002). This measure consists of 3 subscales and 24 items intended to measure vigor (i.e., When I get up in the morning I feel like going to work); Dedication (i.e., I’m enthusiastic about my job); and Absorption (i.e., When I’m working I forget about everything around me). Items are scored on a 7-point frequency scale from 0 (‘never’) to 6 (‘always’). As stated above factorial validity for the OES was demonstrated in Schaufeli et al. (2002).

**Qualitative Interview**

Three interviews were conducted over the phone and efforts were made to establish rapport and trust between the interviewer and interviewee (Johnson & Weller, 2002; Shuy, 2002). These interviews were semi-structured in nature with the use of an interview guide and probing questions as discussed by Charmaz (2002). The first interview guide consisted of questions, which were used to confirm demographic data, build rapport, and to introduce the constructs of burnout, engagement, and coping. Participants were provided with the interview guide several days in advance of the actual interview. The interview guide for the first interview was as follows:

1. Please describe your typical day as an athletic trainer.
   Tell me more about the athletes you work with?
   Tell me more about your coworkers (if any)?

2. How long have you been at your current position?
   What other jobs have you held?
   How long were you there?
4. Please describe how you came to the decision to become an athletic trainer.

5. Please describe some aspects of your job that you would like to change.
   
   Tell me more about ______?
   
   What is it about _____ that makes you want to change it?

6. Please describe some aspects of your job that you enjoy.

   Tell me more about _____?

   How does that make you feel?

7. A challenge is a situation, which allows you to achieve a goal or movement toward the achievement of a goal. Please describe some of the challenges you face in your job.

   Tell me more about _____?

   How does that make you feel?

8. Stress is considered the negative emotions, feelings, and thoughts with regards to your occupation. Please describe some of your current sources of stress?

   Tell me more about _____?

   What makes this situation stressful for you?

9. A coping strategy is anything you do to reduce or lessen the negative impact of a particular source of stress. Could you please describe a particular way that you coped with the situations, experiences, and incidents you described earlier?

   How did you feel after coping with it?

   Have you ever done something different in that situation?

10. A lot of people talk about being burned out. Please describe what being burned out means to you.

    Have you ever experienced burnout? If so what was it like?
How did it affect you at work? At home?

How did you get out of it?

11. Occupational engagement is hypothesized to be the opposite of burnout. Its characteristics are vigor, determination and absorption.

Have you ever experienced this? If so what was it like?

How did it affect you at work? At home?

Interview two focused on specific experiences and the temporal stability of coping.

1. Could you please give me an update on how things are going within AT lately?

2. Since our last interview could you please describe some of the challenges you have faced?

   How did you cope with ______?

   How did you feel while it was happening?

   How did you feel after it was over?

3. Please describe some of the stressors you have experienced since the last time we talked.

   How did you deal with ______?

   How did you feel while it was happening?

   How did you feel after it was over?

Interview three explored similar issues as interview two and in addition I asked questions pertaining to some of the topics discussed previously.

1. Could you please give me an update on how things are going within AT lately?

2. Since our last interview, could you please describe some of the challenges you have faced?
How did you cope with ______?
How did you feel while it was happening?
How did you feel after it was over?

3. Please describe some of the stressors you have experienced since the last time we talked.
How did you deal with ______?
How did you feel while it was happening?
How did you feel after it was over?

4. Last time we talked about ______. How do you feel about that now?
Tell me more about ______.
How will you deal with that in the future?

5. We also talked about ______. How do you feel about that now?
Tell me more about ______.
How will you deal with that in the future?

Throughout all three interviews elaborative probes were used in accord with suggestions by Charmaz (2000, 2002). For instance, the participants were asked to be a specific as possible in their descriptions of actual events, experiences, and incidents that they have encountered between each interview. All interviews were digitally recorded and transcribed verbatim. Consistent with Reed and Giacobbi (2004), member check procedures were conducted where I gave the participants summaries of all three interviews in the form of one to two pages of text. The participants were asked to review the summaries and provide additional information, clarification where necessary, and provide input about the accuracy of my observations.
Data Analysis

The first step after acquiring the transcribed data was to conduct line-by-line or open coding (Strauss & Corbin, 1990). This consisted of a thorough review of all interview data until intimate familiarity was achieved with each participants’ occupational experiences. Raw data themes that pertained to the participants’ specific sources of stress and subsequent coping responses to those stressors were identified by specific quotes found within the interview transcriptions. The raw data themes were then compared and contrasted based on theoretically similar and dissimilar constructs (Charmaz, 2000). This analysis consists of comparing and contrasting a person’s experiences with other participants’ experiences as well as across similar situations within participants from one interview to the next. Similar raw data themes were grouped together to produce general abstract themes and were named based upon the content of the information provided by the participants. A second coder analyzed the raw data themes and placed them into the broad categories provided by the primary coder independently from the primary investigator. Both coders then met to establish reliability with respect to the themes. Agreement was reached with respect to the appropriateness of each theme and categories.

A separate independent auditor was given the interview transcriptions and analyzed the data similar to the procedures outlined above. The purpose of this independent audit was to determine the validity of the raw data themes and broad categories. The raw data themes generated by this audit were compared to the initial analysis and inter-rater reliability was established through a series of meeting in which all themes were discussed, agreed upon or reanalyzed.

The final step in the analysis was the axial coding or dimensionalizing of the data. This consisted of making connections and distinctions between themes and sub-themes observed within and between the interviews (Charmaz, 2000; Strauss & Corbin, 1990). Each individual’s
stress and coping as well as burnout and engagement data themes were examined within the participants’ occupational context and the specific sources of stress relayed during the interview process (Charmaz, 2000). Emerging themes from the interview text were integrated into theoretical framework outlined in Figure 1-3.

Sensitizing concepts were used to interpret the data. Sensitizing concepts include background information, either a theory or empirical studies used as a starting point to analyze and interpret the data. A combination of Lazarus (1999) and Reed and Giacobbi (2004) were used to evaluate and label the coping general dimensions and the goodness of fit hypothesis was used to evaluate consistency and stability of the participants’ coping responses over time.

Lazarus and Folkman (1984) stated that the effectiveness of the coping strategy is dependant on the context that the individual experiences it in. Coping efforts should therefore match the controllability of the situation. Problem focused coping strategies, ones that directly address alleviation of the stressor, should be used when the individual can control the situation. Stressors outside of the controllability of the individual should be coped with using emotion focused strategies, ones that directly address the emotions elicited by the stressor.

Issues of Reliability and Validity

According to Lincoln and Guba (1985) trustworthiness of qualitative data needs to meet the specific criteria of credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity). This was achieved in my study by conducting multiple interviews that were analyzed by independent auditors. Trust and rapport and the longitudinal nature of the present study allowed for familiarity between researcher and participant. This trust is essential to ensure that the participants feel comfortable talking with the researcher on a variety of topics sometimes of a personal nature with respect to stress and coping in their occupation as an ATC. Trained qualitative researchers provided support to the analysis as
their input helped alleviate researcher biases or prior beliefs about the interview text. All of these strategies contributed towards achieving credibility, dependability, transferability, and confirmability.

As cited by Sparkes (1998), techniques to achieve external validity include “thick description” and a “database for reader judgment of potential transferability” (p. 367). These techniques were utilized in the results section as each general dimension and higher order theme was explained in detail. In addition, specific quotes representing each general dimension were provided allowing readers to determine transferability. Steps to ensure reliability included verification of interviews by participants (member checks), and the use of an independent audit by an unbiased researcher. These results were 93% agreement on stressor general dimensions, 80% agreement on challenge general dimension and 91.3% agreement on coping strategy higher order themes (problem focused or emotion focused). These steps ensured the accuracy of transcribed interviews as well as agreement on the raw data themes observed.
CHAPTER 3
RESULTS

Descriptive and Comparative Findings

The purposes of this study were to assess the sources of stress, challenges and coping strategies used over time by certified athletic trainers. An additional purpose was to explore issues of coping stability and consistency over time as well as make comparisons between males and females and year experience. Three semi-structured interviews were conducted with eight certified athletic trainers employed in high school settings. The participants were asked about specific stressors, challenges and coping strategies over the course of the three interviews.

Prior to the interviews, the participants completed the MBI and OES at two specific times. The first assessment occurred during the fall/winter of 2006/2007 as part of a larger study and the second occurred in November 2007 prior to the interviews. Initial scoring on these measures determined whether the participant was either burned out or occupationally engaged. Individuals who score above a 19 on depersonalization, 24 on emotional exhaustion, and less than a 21 on personal accomplishment are considered High in each factor respectively according to Golembiewski et al. (1996). An individual who is scores high in all three factors is considered in phase VIII according to Golembiewski. An individual who scores high in emotional exhaustion is considered stage V and one who scores high in emotional exhaustion and depersonalization is considered stage VI. Out of the four participants selected for the burnout category, one was in stage VI and the other three were in stage V. All participants scored well above published norms for emotional exhaustion. An individual who scored above a 3.82 in vigor, 3.74 in dedication and 3.53 in absorption is considered high in occupational engagement according to the normative data (Schaufeli et al., 2002).
Figures 3-1 and 3-2 depict the average scores on each factor of the MBI and OES respectively. Scores on each factor of the MBI for the burned out ATCs showed a decreasing trend with average scores for emotional exhaustion dropping around 6 points. Those ATCs identified as occupationally engaged showed relatively stable scores on the MBI over time. On average, those individuals previously identified as being burned out remained in phase V across time. Also of note is that personal accomplishment scores (not reversed scored) were high regardless of whether participants were classified as either burned out or occupationally engaged.

![Figure 3-1 Burned out versus Occupationally engaged ATC MBI average scores.](image)

Figure 3-1 Burned out versus Occupationally engaged ATC MBI average scores.

Figure 3-2 depicts the average scores on the OES. Interestingly, to note that those individuals identified as burned out also scored above normative data on all three factors of the OES. This in part could be due to the fact that certain aspects of their job are engaging while other aspects are not. Their scores remained the same over time for both those burned out and occupationally engaged.
Figure 3-2. Burned out versus Occupationally engaged ATC OES average scores.

Figure 3-3 depicts the average MBI scores based on gender. Scores on each factor were similar for both the men and women ATCs. Across time, the only notable decrease found at time two was from 9.5 to 5 on the depersonalization factor for men only. Women remained consistent on depersonalization. Personal accomplishment scores decreased for men across time and increased for women. Emotional Exhaustion scores decreased similarly for both genders.

Table 3-4 depicts the average scores on the three factors of the OES with respect to the men and women participants. There are no notable differences in OES scores based on gender. There were also no notable changes in factor scores from time 1 to time 2 suggesting that occupational engagement is stable over time.
Figure 3-3. MBI average scores for men and women ATCs.

Figure 3-5 depicts the average MBI scores based upon years post-certification. There are no noticeable differences between those with less that five years experience and those with over ten years experience. All factors decreased from time one to time 2 except personal accomplishment in those with less than 5 years experience, which stayed relatively the same.

Table 3-6 depicts average OES scores based on years experience. There are no noticeable differences with the exception of the factor absorption with respect to those participants with less than five years experience. Absorption scores at both time frames were less for those with less that 5 years experience than those with greater than 10 years experience.
Figure 3-4. OES average scores based on gender.

Figure 3-5. Average MBI scores based on year’s experience.
Case Summaries

The following are brief case histories of the participants to familiarize the reader with the participants’ experiences and unique work contexts. In all cases pseudonyms were used to maintain participant confidentiality.

At the time of the study “Dale” was 39 years old with 17 years as an ATC. He was married and had two children. Dale worked in a high school as both a teacher and an athletic trainer seeing approximately 150 to 200 athletes in a season with about 800 student athletes at the school in total. An assistant ATC also worked at the school for the fall and winter sport seasons. Dale taught health services and anatomy and physiology and made approximately $65,000 a year. At time one, he scored a 19 on depersonalization (CY), 43 on emotional exhaustion (EE), and a 40 on personal accomplishment (PA) on the MBI. This placed him in phase VI of burnout.
At time two he scored a 12 on CY, 31 on EE, and 31 on PA. This placed him in phase V level of burnout. At time one he scored a 4 on vigor (VI), 3.3 on absorption (AB) and a 4 on dedication (DE) on the OES. At time two he scored 4.8 (VI), 4.2 (AB), and 4.2 (DE).

“Brian” was a 28-year-old ATC with 8 years experience. He was married and had one child at the time of the study. Initially he was selected based on the belief he had less than five years experience but during the interviews it was revealed that he actually had eight years. He worked in the high school setting but also does work in a sports medicine clinic. He was a teaching assistant at a local college and supervised one student AT each fall and spring semester. Brian had changed jobs between time 1 and time 2. At time 1 he worked at a school with over 1000 athletes and two ATCs. He also worked at a sports medicine clinic. At time 2 Brian was employed at a different school with only 400 athletes. Brian’s MBI scores at time 1 were 12 (CY), 34 (EE), and 42 (PA). At time 2 his scores were 4 (CY), 30 (EE) and 37 (PA). Brian stayed at phase V on the Golembiewski et al. (1996) scale. At time one his scores on the OES were 4 (VI), 3.3 (AB) and 4 (DE). At time two they were 4.8 (VI), 3.8 (AB) and 4.6 (DE). Brian made approximately 50,000 dollars a year.

“Ann” was a 28-year-old female ATC in her fifth year of certification and at her current position. She worked as both a high school science teacher and athletic trainer. She and another AT, who is licensed but not certified, are responsible for 650 athletes. The school schedule consisted of split days. One day she would teach and work as an ATC and the other day she would only work as an ATC. Her associate ATC had been at the school for 18 years. Their high school has split athletic facilities with the gym located on school grounds and athletic fields at a separate location. She made 46,000 dollars a year and was married at the time of the study. Her scores on the MBI at time 1 were 6 (CY), 35 (EE), and 33 (PA). At time 2 they were 10 (CY), 30
(EE) and 43 (PA). She remained stable at phase V in her level of burnout. Her scores on the OES at time 1 were 4 (VI), 3.3 (AB), and 4.4 (DE). At time 2 they were 5 (VI), 4.33 (AB), and 5.4 (DE).

“Rachel” was a 37-year-old female with 15 years experience as a certified athletic trainer. She was employed by a local hospital and, in addition to her responsibilities as an ATC to a local high school; she was the ATC coordinator for that hospital. She made $39,000 a year at the time of the study and was responsible for 650 athletes at her high school. She was single but in a relationship with a fellow ATC. Her MBI scores at time 1 were 15 (CY), 31 (EE), and 39 (PA). At time 2 they were 11 (CY), 25 (EE), and 37 (PA). She remained in phase V across time periods. Her scores on the OES were as follows, at time 1, 5.2 (VI), 3.8 (AB), and 4.4 (DE), at time 2, 5.2 (VI), 3.2 (AB) and 4.8 (DE).

“Tom” was a 36-year-old ATC with 11 years experience at his current high school. Tom was married and had 2 children. He was on staff at the high school but not required to teach. He taught some classes at a local college and has interns that he supervised from there as well. He made roughly $30,000 a year and worked part time as an ATC for local sporting events. Tom was responsible for 800 athletes at the high school where he worked. His scores on the MBI at time 1 were 1 (CY), 1 (EE) and 45 (PA) and at time 2 were, 5 (CY), 4 (EE), and 43 (PA). His scores on the OES at times 1 were, 6 (VI), 6 (AB), and 5.2 (DE), and at time 2 were 5.2 (VI), 5.5 (AB), and 5.4 (DE).

“Chuck” was a 25-year-old ATC with less than five years experience and was in his current position for two and a half years at the time of the study. He had a fiancée and was responsible for the care of 250 to 300 athletes. He was contracted to the high school from a hospital and not required to do any clinical work. There was no other ATC located at his school,
however two other ATCs at the hospital are contracted similarly to area high schools. Chuck’s
scores on the MBI at time 1 were 6 (CY), 2 (EE), and 48 (PA). His scores at time 2 were 0 (CY),
4 (EE) and 47 (PA). His scores on the OES at time 1 were, 6 (VI), 3.2 (AB), and 6 (DE). His
scores at time 2 were, 6 (VI), 5.5 (AB) and 6 (DE). Chuck did not specify his salary at the time.

“Crystal” was a 27-year-old ATC with two and half years experience at her current
position. She worked at a hospital and was contracted out to three area high schools, which
included 48 teams. There were three full time ATCs and one part time ATC that work out of the
hospital. She was married to another ATC and made $31,000 at the time of the study. Crystal’s
scores on the MBI at time 1 were, 0 (CY), 7 (EE), and 38 (PA). Her scores at time 2 were, 0
(CY), 5 (EE), and 37 (PA). Her scores on the OES at time 1 were, 5.8 (VI), 5.3 (AB), and 5.8
(DE). Her scores at time 2 were 5.3 (VI), 4.12 (AB), and 5.2 (DE).

“Barbara” was a 51-year-old ATC with 17 years experience at her current position. She
taught math in addition to her duties as an athletic trainer. She was responsible for approximately
500 athletes at her high school. A contracted ATC worked evenings for game coverage. Due to a
past agreement with the school board and union, Barbara was restricted to a certain amount of
hours a week both teaching and working as an ATC. Earlier in her career she was working
excessively that resulted in her becoming exhausted and unaware of her condition. She has no
spouse and lives alone. Her scores on the MBI at time 1 were, 1 (CY), 10 (EE), and 48 (PA). Her
scores at time 2 were 2 (CY), 11 (EE), and 46 (PA). Her scores on the OES were 5.7 (VI), 4.7
(AB), and 6 (DE) at time 1. Her scores at time 2 were 5.3 (VI), 5 (AB), and 4.8 (DE). She was at
the top of the pay scale but did not mention an exact number.

**Purpose One: Sources of Stress**

Figure 3-7 depicts the 29 stressor raw data themes representing 13 first-order, 5 second-
order, and 2 general dimensions that consisted of athletic training/job duties and family and
personal life. Athletic training/job duties encompassed all the facets of the job that the ATCs experienced. These included both athletic training responsibilities as well as teaching duties where applicable. Three second-order themes comprised this dimension: ATC and job duties, Administrative, and Communication with others. ATC and job duties consisted of the first-order themes of hours worked, job demands, athletes, and documentation. Five participants listed game and practice coverage of multiple sports as a stressor. These were particularly stressful for Ann and Tom, two athletic trainers that had split athletic facilities at their schools. Ann, who was in phase V level of burnout, found it especially stressful when her associate ATC was absent. Ann and Barbara found the requirement of teaching in addition to performing their athletic training duties as stressful. Ann stated, “I don’t hate teaching but if I had to teach every day and I didn’t have athletics I would find another profession a long time ago.” Barbara, an occupationally engaged ATC who was limited to the hours she worked as a whole, wished she could work full time as a “trainer” and not have to teach so she could dedicate more of her time to the athletes. Crystal, an occupationally engaged ATC who was responsible for three separate schools, spent a lot of her time driving between the different campuses to cover events. Job demands of being accessible to the athletes all day, covering multiple sports and events, and having to be in two places at once were listed by five ATC’s as stressful. Brian, a burnout phase V ATC with 8 years certified, described the pressure of having to be in two places at once:

They want me to be in at like a junior varsity game but at the same time I’m treating the varsity players in the training room. So it’s like they want you to be at two places at once and…

The following quotation from Rachel, a phase V burnout level ATC with over 10 years experience, illustrates this point as well:

Probably the other thing is with such a large school everybody thinks I work for just them. The cross-country team thinks I’m their athletic trainer. Football thinks I’m their athletic trainer. And I can’t be everywhere at once. And once in awhile that gets pretty stressful.
Another first-order theme focused on working with the student athletes. In particular, ATCs mentioned malingering athletes, athletes with different pain thresholds, overly dramatic athletes, athletes not following orders, getting a large group of athletes ready for practice in a short amount of time, and injuries beyond their capabilities as stressful. An example of this stressor is in the following quotation from Tom, an occupationally engaged ATC with over 10 years experience:

I mean this year our coach’s kid, senior, line backer, quarterback of the defense, by far the most football knowledgeable kid in the whole program goes down on the third game of the year with an ACL. There is not a darn thing I can do about it so we are losing one of the best players of the team; he is the coach’s son, senior captain. That is very stressful because there is nothing I can do about it.

The final first-order theme under the second-order theme of ATC/Job duties is documentation. Dale, a phase V level of burnout ATC with over 10 years experience, listed paperwork as stressful and Barbara, also with over 10 years certified, mentioned state licensure inspections as stressful. Barbara’s proximity to the state capital increased the frequency of inspections at her school.

Another second-order theme under the general dimension of ATC/job duties was administrative. The first-order themes of maintaining certification and administrative duties emerged from the data. In order to recertify an ATC must take a required amount of continuing education units (CEUs) by a specified date. Dale and Rachel both listed getting their CEUs done in time as stressful. CEUs can be achieved by attending conferences, attending workshops and online. Due to the hectic work schedule Rachel noted that she can’t always attend conferences and it becomes stressful to find enough credits. A second first-order theme of administrative also emerged. Tom and Ann cited low pay as stressful, particularly as Tom noted that he had to pick up other jobs to compensate and provide for his family. Rachel listed her duties as the sports medicine coordinator as stressful. The hospital had told her she had to lay off a certain number of
people, which she found extremely stressful. Chuck, an occupationally engaged ATC with less than five years experience, found the demands for sport related referrals from him as stressful. Crystal, an occupationally engaged ATC with less than five years experience, experienced stress resulting from a difference of opinion with her boss. She believed he was not as focused on quality customer service to the schools the program provides for.

The final second-order theme that emerged from the data under the general dimension of ATC/Job duties was Communication with others. First-order themes of counterpart, parents, coaches and outside ATC comprised the elements of this second-order theme. Three participants listed their counterpart ATC being absent as a stressor. Barbara elaborates on when the contracted ATC is not on time with the following quote, “But…you know I don’t like my kids to be uncovered and it bugs the crap out of me.” Another stress experienced by the participants was dealing with parents. Brian and Ann listed parents not taking their advice as stressful. Brian described this stressor:

I know what I am doing and umm it’s a little frustrating that if I tell ‘em one thing and I talk to the parents and say their child, this going on and then they still go to the doctor and they get disqualified for three weeks and the doctor said the same exact thing as me. And we both know I could have gotten the kid out in about a week. And so it’s a little stressful.

In addition, parents who think their child is indestructible and don’t need to sit out from games and parents who have high expectations of their children were also listed as stressors.

Another source of stress under the general dimension of communication with others concerned coaches. New coaches who were not aware of paperwork requirements were a source of stress for Ann. She elaborated on this point: “Example would be a student who has not turned in physical packet information is not cleared to participate and I see him running out there on the field doing such and such. You know that’s not ok with me.” The first-order theme of outside ATC, particularly how they are viewed by others in the medical community, was listed as
stressful by two ATCs. Tom stated, “But some of the physical therapist that my athletes see are very anti athletic trainer, so the respect factor in the community is something I would love to change.” Similarly, there was a perceived lack of respect in their capabilities from some doctors, usually those who do not work with ATCs on a regular basis. Rachel experienced an example of this at a wrestling meet where a physician in the stands took over when an athlete was injured. “Dealing with that was kind of frustrating, having this doctor who has no clue about the athlete and his history come in and try to take over the situation.” The athlete in question had a low tolerance for pain and Rachel had made the correct diagnosis, a pulled hip flexor, however the doctor sent the child to the ER.

The second general dimension shown in Figure 3-7 was Family and personal life. This dimension was comprised of the second-order themes of personal space and family and personal life. Ann explained a particularly stressful situation that was ongoing involving the privacy of the training room office. While the door can be locked to her room, all of the athletic staff have a key to the room and someone lets athletes into the room and leaves them unsupervised. Ann elaborated:

For example my athletic training room is apparently a public stomping ground and I can only lock up so many things but so many people have keys to so many things. So umm…people borrowing things without asking and forgetting to return them. You know you’re running around to set up for a basketball game and you only have one cooler. That is definitely a very negative stress.

The second-order theme of family and personal life contained the first-order themes of social life and personal life. Four participants labeled time away from either their spouse or family as stressful. Tom elaborates:

Feeling the need to provide for your family, so I pick up a couple extra games, so I am making more for my family but yet I am spending another night away too. That stresses me out a little bit, because how do you balance that out? How do you keep providing for your family but spend time with your family at the same time?
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<thead>
<tr>
<th>Raw Data Themes</th>
<th>1st Order</th>
<th>2nd Order</th>
<th>General Dimension</th>
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<tbody>
<tr>
<td>Game coverage (5)</td>
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<td>Hours worked</td>
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<td>Teaching duties (2)</td>
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<td>Amount of driving</td>
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<td>Season length and intensity</td>
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<td>Game scheduling</td>
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<td>Unexpected scheduling of games</td>
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<td>Accessibility all the time</td>
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<td>Being in two places at once</td>
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<td>Multiple sports demanding time</td>
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<td>Split facilities/multiple event coverage (2)</td>
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<td>Student drug overdose</td>
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<td>Athletes with different pain thresholds</td>
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<td>Malingering athletes</td>
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<td>Overly dramatic athlete is injured</td>
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<td>Athlete not following orders</td>
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<td>Injuries beyond capabilities</td>
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<td>Getting athletes ready for practice in short time</td>
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<td>Continuing education credits (2)</td>
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<td>Coordinator duties/having to fire people</td>
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<td>Demands of hospital</td>
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<td>Hospital boss not focused on customer service</td>
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<td>Student ATC absent</td>
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<td>Other ATC/boss going on vacation</td>
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<td>Contracted assistant late</td>
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<td>Parents not listening to ATC (2)</td>
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<td>Parents think child is indestructible</td>
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<td>Parent high expectations of athlete</td>
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Figure 3-7. Stressors Experienced by High School Athletic Trainers.
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<tr>
<th>Certain coaches (2)</th>
<th>New coaches</th>
<th>Coach with no trust</th>
<th>How ATC are perceived by medical community</th>
<th>Physician taking over at sporting event</th>
<th>Training room office easily unlocked (no privacy)</th>
<th>Time away from family(2)</th>
<th>Time away from husband (2)</th>
<th>Not getting to gym</th>
<th>Coaches</th>
<th>Communication with others</th>
<th>ATC/Job Duties</th>
<th>Personal space</th>
<th>Social life</th>
<th>Family and personal life</th>
<th>Family and personal life</th>
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Figure 3-7. Continued.
Rachel listed not being able to get to the gym as stressful. “That’s usually stressful for me if I can’t get there. If I can’t get there 4 out of 7 days then I am stressed because I’m thinking, I need to get to gym…when am I gonna fit it in?”

**Challenges**

In addition to the stressors experienced, participants were asked what aspects of their job they felt were challenging. A challenge is a situation, which allows you to achieve a goal or movement toward the achievement of a goal. Challenges are distinct from stressors because goals are not appraised as being threatened in these situations. As can be seen in Figure 3-8 four general dimensions, with five second-order and 10 first-order themes emerged from the data. The four general dimensions were ATC duties, other than ATC duties, self-presentation and growth, and family and personal life.

Three, second-order themes emerged from the general dimension of ATC duties. They were ATC duties, communication with others, and job resources. ATC duties were comprised of two 1st order themes of athlete care and scheduling and event coverage. Clearly the biggest challenges faced by ATCs are working with injured athletes. Raw data themes included every facet of the process, initial assessments, rehabbing, and counseling on return to play. Five participants listed getting athletes back on to the field as a challenge and is best illustrated by a quote from Tom, who was occupationally engaged:

> Its funny because to me this is not that stressful of a job compared to a lot of people. Now some take it as a stressful job but I kind of thrive on stress (chuckle) If I have to have that star athlete back on the field on the next play I get all excited about that… It is a challenge man! Its like all right lets go!

Four ATCs said getting a star athlete on the field was a challenge and three listed dealing with malingering athletes as a challenge. Other challenges faced by ATCs with respect to athletes were getting athletes with eating disorders help, athletes with fungus infections, and weaning.
athletes off of psychological crutches. For example an athlete who feels they need their ankle taped all the time. Another challenge elaborated on by Dale was the following:

I would say that the challenge that I have is that people are so different, that everybody responds differently to a variety of different things. So one of my challenges to achieving the goal of getting kids back in activity is reading people, reading how things are going with their body, their rehab, their treatment, and everything. And trying to customize things to allow them to return to play or activity or whatever it is.

Two other raw data themes mentioned by one participant each were Dale’s challenge of evaluating the entire county’s wrestlers body fat and weight index and Chuck challenge of getting multiple sports athletes ready for practice in a short amount of time.

The second 1st order theme falling under ATC duties was scheduling and event coverage. Multiple sport events and schedules and determining where the ATC needs to be was listed as a challenge. Ann states:

Other challenges are just you know looking at the schedule and figuring out what’s going on and being able to manage your time wisely. So that you are present when you need to be and you’re doing your job effectively.

Crystal, who worked at a contracted sports medicine program, described figuring out her schedule, with not only multiple sports but also multiple schools, as a challenge. Ann and Tom listed covering multiple events at split facilities as a challenge. Even more so when her assistant is absent Ann states, “Yesterday my associate was out and with the split the training room, I was back and forth like a chicken but…” Chuck listed working an 8 team wrestling tournament and being able to provide quality coverage to all teams as a challenge. Crystal listed scheduling coverage of another ATCs schools when that ATC leaves for a pregnancy as a challenge.

The second-order theme of communication was comprised of the first-order themes of coaches and parents. One participant listed getting the paperwork required from all the coaches as a challenge. Another challenge expressed by three ATCs was explaining to a coach why an athlete cannot return to play. Rachel states, “Yah know, especially the coach, ‘Do you think he’s
going to be back by this time? Do you think he’s going to be back by that time?” Tom listed talking with a coach who also happens to be the injured athlete’s father as a challenge, “That is kind of a challenge too, telling dad that his son is not faking it, and it is real.” Two participants listed educating parents on what services an athletic trainer provides as a challenge. Brian talked about a situation where he explained to the parents that their student athlete had injured his head and should be taken to the hospital. The ATC found it challenging trying to find out if the parents had heeded his advice and finding out that they had not, working with the Athletic Director to resolve the situation. On the other extreme Ann listed dealing with an overprotective parent who wanted to take her child to the ER for a minor injury as a challenge. Ann explains further:

I said you know, they’re going to take an x-ray and then they’re going to refer him to a doctor and I’m already pretty sure he doesn’t need an x ray, so, you know, it’s the kind of thing, where, where parents who don’t know us, or, or the public who don’t know who we are and what we do don’t understand the value of the specialized education that we have. So that’s our opportunity to educate them.

A final second-order theme of job resources fell under the general dimension of ATC duties. One first-order theme of equipment needs emerged from the data. Chuck listed getting the right equipment he needed to do rehab as a challenge. Chuck also listed getting a new training room built as a challenge. The following quotation illustrates this:

You know one other goal that we...that I was kind of thrown into was getting and promoting and getting a new training room for our outdoor sports and having to convince administration that I need to have the say in it and the architect who’s never seen an athletic training room and what goes in there and how it’s designed.

Barbara listed the challenge of coordinating with other ATCs to provide the supplies needed for their athletes when they visit her school for events. In the past Barbara would run out of basic supplies because she was using them up on other athletes who would visit for tournaments and away games.
The second general dimension depicted in Figure 3-8 was other than ATC duties and was comprised of only the two first-order themes of teaching and hospital. Three challenges with respect to teaching were listed as raw data themes. Dale listed teaching all the required material before winter break and taking students on a field trip as challenging. Ann felt teaching required core curriculum material and getting the parents to care about their child’s education as challenging. Ann states, “and of course the parents only care when…you’re locking down the grades for a report card. And they’re going, ‘Why’s he failing? What can he do? Why couldn’t he do extra credit?’ you know that kind of thing.” Chuck listed dealing with his supervisor at the hospital, who is not an AT, which contracts him to the school as a challenge. Admittedly the supervisor is not sure what an ATC does and it is a challenge educating his supervisor to understand certain aspects of his job.

A third general dimension that emerged from the challenges experienced by athletic trainers in a high school setting was self-presentation and growth. The dimension was comprised of two 1st order themes of self-presentation and focus. Ann and Chuck listed being a good role model for the students and athletes as a challenge. An example of this is the following quotation from Chuck:

You know through the way that I present myself my demeanor the way that I represent my profession…you know that they can see that. Everybody sees that I have fun and love my job and that you don’t have to be a slave to the system all the time.

Dale talked about the challenge of having to teach all day and then trying to stay focused on his athletic training duties. Dale stated:

But you know teaching for 7 to 7½ hours and then going directly to athletic training for another 3 to who knows however many hours, the day tends to just get eaten up all the time so the ability to kind of you know really do a good job on one thing or to really focus on something and improve in this certain area tends to just kind of go by the wayside and you do the best with what you can.
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<tr>
<th>Raw Data Themes</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; Order</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; Order</th>
<th>General Dimension</th>
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<tbody>
<tr>
<td>Returning and injured athlete to play (5)</td>
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<td>Reading people (athletes)</td>
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<td>Malingering athletes (3)</td>
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<td>Injuries</td>
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<td>Star athlete injury (4)</td>
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<td>Evaluating a lot of athletes in a short time</td>
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<td>Getting athletes ready for practice</td>
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<td>Athletes with eating disorders</td>
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<td>Weaning an athlete off of taping dependency</td>
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<td>Wrestler with fungus (MRSA) (2)</td>
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<td>Managing time with sports schedule</td>
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<td>Managing time with multiple schools sport schedules</td>
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<td>Event coverage with assistant absent</td>
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<td>Event coverage with split facility (2)</td>
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<td>Multiple team tournament (8 teams)</td>
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<td>Losing ATC to pregnancy and school coverage</td>
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<td>Dealing with coaches (paperwork)</td>
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<td>Dealing with coaches about injured athlete</td>
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<td>Dealing with coach about star athlete (2)</td>
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<td>Dealing with coach who is also father of injured son</td>
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<td>Educating parents on what an AT does (2)</td>
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<td>Parents not taking athlete with head injury to hospital</td>
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<td>Overprotective parent</td>
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<td>Getting the right equipment to do job</td>
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<td>Getting a training room built</td>
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<td>Having supplies to match needs</td>
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<td>Teaching required material before winter break</td>
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<td>Teaching core curriculum material</td>
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<td>Taking students on a field trip</td>
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<td>Dealing with hospital supervisor who is not an ATC</td>
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<td>Figure 3-8. Challenges experience by high school athletic trainers.</td>
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<tr>
<td>Being a good role model for kids (2)</td>
<td>Self presentation</td>
<td>Self presentation and growth</td>
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<tr>
<td>Staying focused after teaching all day</td>
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<td>Spending time with children (2)</td>
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<td>Balancing home and work</td>
<td>Family time</td>
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<td>Spending time with husband</td>
<td>Family time</td>
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<td>Spending time with fiancée</td>
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<td>Family and personal life</td>
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Figure 3-8. Continued.
So it is a challenge to be able to do a good job and focus when he is tired and has been teaching all day.

The final general dimension that emerged from the data depicted in Figure 3-8 was Family and personal life that consisted of one 1st order theme of family time. Dale and Tom mentioned that it was a challenge to spend time with their children. Dale talks about this challenge, “I’ve kind of realistically evaluate the amount of time that I spend away from my family and try to optimize the times when I can be with them.” Crystal and Chuck said that it was a challenge to spend time with their husband or fiancée, respectively. Rachel listed balancing home and work as a challenge. Specifically trying to get a new home built while spending the amount of time that she does at work.

**Coping Strategies**

Coping behaviors were assessed across all three interviews and produced 45 raw data themes. Each raw data theme was coded and compared to produce 24 1st order themes and 13 general dimensions and are depicted in Figure 3-9. The general dimensions included positive evaluations, emotional social support, activities outside of profession, social activity within profession, active problem-solving, instrumental social support, prevent future stressors, humor, mental disengagement, wishful thinking, behavioral disengagement, time management, and miscellaneous.

Positive evaluations. Two first-order themes emerged that represented the general dimension of positive evaluations. Figure 3-9 depicts these first-order themes of acceptance and justify decisions. Coping raw data themes that emerged under the first-order theme of acceptance included, taking a deep breath when confronted with a particular injury, telling oneself that they did the best they could today, and learning to just let a particular stressor go and move on. Barbara stated that when dealing with frustrating parents “You just have to learn to let it go and
say you did the best you could.” Ann stated that with respect to the sport schedule that she just realized that some things she couldn’t control and accept it. Other raw themes were to try not to worry and try to relax. The other first-order theme of justifying decisions contained one raw data theme from Chuck. He stated that he put an athlete in a walking boot for what he believed was just a sprained ankle and scheduled an appointment at a later date after a follow up assessment.

Chuck stated:

Yeah you probably could say the girl that sprained her ankle on Friday should have gone to the ER and got an x-ray but you can also say well you’re in a walking boot they’re not going to do anything different so why don’t we wait and see how you’re doing on Monday.

Chuck further justified his decision that it would be much cheaper for the family to visit the family doctor than the emergency room. Chuck further states:

And if you’re still feeling bad on Monday then we can send you to your primary care, which is obviously, is a lot less cost to the patient and her family but just leaving on…just on the co pays alone.

Emotional social support. The second general dimension depicted in figure 3-9 is emotional social support and was comprised of the single first-order theme of venting. Dale and Crystal listed venting to other ATCs as a coping mechanism. Rachel listed venting to the coaches that the ATC was comfortable with and venting to the athletic director as coping mechanisms. Crystal and Rachel were in a relationship with another ATC and remarked about venting to them because they were able to relate to the similar job stressors. Crystal stated that she vented to her husband about dealing with her boss at the hospital when he restricted the number of miles they could drive. Two participants listed venting to family members such as parents and siblings as a coping mechanism. Barbara listed crying as a coping mechanism. She stated, “And I’m a typical girl I tend to cry and let it out,” when dealing with a particular catastrophic injury to an athlete that had occurred in the past.
Activities outside the profession. The general dimension of activities outside of the professions yielded two first-order themes. Ann, Dale, and Rachel mentioned they used exercise as a stress reducer. The following quotation illustrates the importance of exercise for Ann, “My late day I can recover a little bit and get my workout in before I go to work so I have a much better outlook. I have a much better attitude.” Barbara also stated that before she had her farm she too exercised as a stress reducer. The second first-order theme was recreation and Barbara cited taking care of her farm and riding her horses as coping mechanisms. Barbara elaborates:

I have a farm and I built that farm to be my serenity spot. So I go home and I go out in the barn and I pick up the poo and I say, ‘You know there is a lot to shoveling the real stuff that relieves the other stuff.’

Social activities within the profession. Chuck listed socializing with the coaches and faculty as a coping strategy. It allowed him to develop a better working relationship with his peers and allowed for his fiancée to be accepted into the coaches’ wives social circle. This also allowed him to spend time with his fiancée.

Active problem solving. The general dimension of active problem solving yielded the most first-order themes that included event coverage, planning ahead, injury problem solving, career requirement planning ahead, time management and administrative problem solving all emerged as first-order themes. Seven out of 8 participants listed getting another ATC to help cover events as a coping mechanism. Tom utilized both the student ATCs on an internship at his school and a friend who was also an ATC to help cover multiple events at the same time. Dale and Ann who have counterparts at their school split duties for game and practice coverage. They also covered for each other when they needed a break. Dale stated:

Having an assistant to be able to say ‘I need to take this day off, I’m just going to get out and not have to worry about this thing for a day’ gives you a huge relief from the stress and be able to recuperate from things.
Similarly, three ATCs had either a contract assistant or utilized another ATC that worked at their sports medicine clinic to cover events. Barbara had a contract assistant that would show up to cover events that she could not due to her hour restriction. Rachel and Crystal both utilized another ATC that was employed at their hospital program to cover events when they needed. Crystal talks about splitting up duties with another ATC she works with, in order to spend time with her husband:

So he’s pretty good about taking on a little bit more so, you know, we can go out of town, or, um, whatever, but then, in return, I like to cover a little bit more, because, you know, his children are off from school, and he doesn’t see them that much.

The second first-order theme in the active problem solving general dimension was injury problem solving. This theme emerged with respect to the challenges and stressors experienced when dealing with injured athletes. Dale stated that that he tried to focus solely on the athlete and the injury regardless of the severity:

I’m just kind of focused on them, on what’s going on, I run through my sequences of you know questions I want to ask and figure things out and then from there I just start problem solving how I want to achieve my goal of successfully getting her back out there and the best way possible.

When dealing with a large group of athletes that need to be assessed and treated Brian elaborated how he systematically triaged those athletes. Brian stated, “I try to triage. I try to get the varsity kids out first and the JV kids out next. I do anybody who gets taped and who I’ve taped before.” Other raw data themes that emerged were treating every athlete the same and both Brian and Ann mentioned sitting down and counseling the athlete on the injury. Brian explains a situation:

Ah I sit down with them and we have little discussion and I explain to them, “You know its great that you got cleared and its great that you are doing so well and you are getting stronger but in the same respect you have to still take it a little easy because if you get out there today and try to go crazy like you did before you got hurt. You’re gonna re-injure yourself and we might have to talk about more surgery again.”
Another first-order theme was career requirement planning ahead. The subject of obtaining continuing education units was a source of stress and Dale and Rachel listed coping strategies of getting online credits, trying to get credits well in advance of recertification and using down time to work on them as raw data themes. Rachel stated that she watched an online session during a team’s practice, “yeah I actually watched yesterday during practice.”

Time management was another first-order theme that emerged from the general dimension of active problem solving. Dale scheduled large groups whenever he could in order to finish body composition assessments for the entire counties wrestling teams by the deadline. Ann listed planning ahead as best she could for covering multiple events in order to know exactly where she had to be. Crystal planned the night before to meet her requirements of being at multiple schools for different events.

The first-order theme of administrative problem solving had one raw data theme. Chuck coped with the stressor generated in working for the hospital’s medical program he worked for by actively developing a survey to help justify the amount of referrals based on the athletes’ primary care physicians.

Instrumental social support. The general dimension of instrumental social support had two first-order themes that were communication and conversation. The theme communication dealt more with keeping coaches and physicians informed on athletes’ progress while the theme conversation entailed seeking out advice from the people the ATCs worked with. Open communication with the coaches was listed as a coping strategy by 7 out of 8 participants. Both Tom and Rachel mentioned a coping strategy of talking to all of the coaches at the beginning of the school year and educating them on their capabilities and limitations to help prevent future stressors. Dale who was dealing with a malingering athlete stated, “Yea, defiantly I don’t have
any problems going to the coach and letting them know that I’m having, you know, issues with a kid you know.” Another raw data theme was to keep coaches informed of the injured athletes’ progress toward getting back to playing. Tom and Barbara communicated with coaches and reached an agreement to leave practice early by providing their cell phone numbers with instructions for the coaches to call should they need anything. This communication allowed Tom to spend more time with his family, which was especially important during the holidays. Ann kept the coaches informed via email of event coverage limitations when the other on site ATC was absent. ATCs also communicated with the team physician and local area doctors. Brian mentioned talking directly to a doctor about an athlete with an eating disorder. Barbara developed a good working relationship with the team physician in order to provide the best care to the athletes.

The other first-order theme under the general dimension of instrumental social support was conversation. As stated earlier this theme reflected the participants actively seeking advice from colleagues. Ann stated that went to the principal in charge of facilities to find out who had opened the training room without authorization leaving several athletes and student unsupervised. Five participants listed as going to the athletic director at the school for advice or help with a particular situation. The following quotation from Crystal illustrates this:

I don’t confront anybody and she’s a young coach…but you know that that kind of worked it self out through the athletic director, you know him sending out an email to everybody telling to you know respect the stuff that we do.

Three participants listed seeking out advice from other ATCs as a coping strategy they employ. Crystal talks with her program coordinator and another has asked a coach to back her up on dealing with an athlete’s parents. Chuck went to the administration at the school in order to get the training room he required built. Barbara in the past had the union file a grievance on her behalf due to the excessive hours she was working that had resulted in serious health issues.
related to her exhaustion. This resulted in an agreement that limited the amount of hours she could work.

Prevent future stressors. A general dimension of preventing future stressors also emerged from the interviews. These were coping strategies employed prior to experiencing any particular stressor. Two first-order themes comprised this general dimension: Education and future planning. Tom made a point to go to parent night at the beginning of the year in order to elaborate on his duties as an athletic trainer and the services he provided for the athletes. Tom stated that, “if I know that parents are going to cause me stress I go to the parent meeting in the beginning of the season and try to explain who I am and what I do.” Similarly Ann took as many opportunities to educate the parents on what an ATC does as possible in the hopes that that parent will listen to them on the care of their child. Two participants listed future planning with respect to their careers. Crystal was dealing with stress associated with the hospital that she worked with and mentioned getting a teaching degree in order to be more marketable and possibly get a job directly at a school in the future. Ann was working toward a graduate degree in administration.

If I have a, another plan to go to. If I have a plan B then as long as I don’t feel backed into a corner I’m pretty much ok as long as I have an option and uh I guess last fall I went back to school to get an administration certificate so that I could potentially one day move forward toward athletic administration or principal administration and that helped me changed my attitude greatly because now I have another plan if I need it.

Humor. Brian listed using humor as a coping mechanism. He would tell jokes with his student trainer and laughed a lot to deal with stress. He stated, “You got me thinking about that because I feel I handle stress very well and I don’t know what I do. (participant laughs) I think I laugh a lot that’s probably about it.”

Mental disengagement. The ninth general dimension depicted in Figure 3.3 was mental disengagement and contained the first-order theme of looking ahead. Three participants listed
<table>
<thead>
<tr>
<th>Raw Data Themes</th>
<th>1st Order</th>
<th>General Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take a deep breath</td>
<td></td>
<td></td>
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<tr>
<td>Try not to worry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I did the best I could today</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learn to let it go</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some things you can’t control</td>
<td></td>
<td>Acceptance</td>
</tr>
<tr>
<td>Try to relax</td>
<td></td>
<td>Positive evaluations</td>
</tr>
<tr>
<td>They wouldn’t have done any different at ER</td>
<td></td>
<td>Justify decisions</td>
</tr>
<tr>
<td>Venting to other ATC (2)</td>
<td></td>
<td>Venting</td>
</tr>
<tr>
<td>Venting to coaches</td>
<td></td>
<td>Emotional social support</td>
</tr>
<tr>
<td>Venting to AD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venting to wife</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venting to significant other (also ATC) (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venting to family (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cries</td>
<td></td>
<td></td>
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<tr>
<td>Exercise</td>
<td></td>
<td>Exercise</td>
</tr>
<tr>
<td>Gym</td>
<td></td>
<td>Activities outside of</td>
</tr>
<tr>
<td>Pilates</td>
<td></td>
<td>profession</td>
</tr>
<tr>
<td>Goes home to farm and takes care of horses</td>
<td></td>
<td>Recreation</td>
</tr>
<tr>
<td>Rides horses</td>
<td></td>
<td>Social activity within</td>
</tr>
<tr>
<td>Socialize with faculty</td>
<td></td>
<td>profession</td>
</tr>
<tr>
<td>Split duties with assistant trainer on site (2)</td>
<td></td>
<td>Planning ahead</td>
</tr>
<tr>
<td>Get another ATC to cover duties (friend)</td>
<td></td>
<td>Active problem solving</td>
</tr>
<tr>
<td>Get another ATC from hospital to cover (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Split duties with contract ATC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilize Student ATC (2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 3-9. Coping strategies experienced by high school athletic trainers.
<table>
<thead>
<tr>
<th>Focus on injury and problem</th>
<th>Problem solving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systematically triaging large groups</td>
<td></td>
</tr>
<tr>
<td>Counsel athlete on injury (2)</td>
<td></td>
</tr>
<tr>
<td>Treat every athlete the same</td>
<td></td>
</tr>
<tr>
<td>Get online continuing education credits</td>
<td>Planning ahead</td>
</tr>
<tr>
<td>Take CEUs well in advance of deadline</td>
<td></td>
</tr>
<tr>
<td>Use down time to work on credits</td>
<td></td>
</tr>
<tr>
<td>Schedule large groups of Body Fat assessments for wrestling</td>
<td></td>
</tr>
<tr>
<td>Plan next days schedule the night before</td>
<td></td>
</tr>
<tr>
<td>Plan ahead for multiple event coverage</td>
<td>Time management</td>
</tr>
<tr>
<td>Develop survey to learn of Primary Care physicians</td>
<td></td>
</tr>
<tr>
<td>Talk to coach about malingering athlete</td>
<td>Problem solving</td>
</tr>
<tr>
<td>Talk to coaches at beginning of school year (2)</td>
<td></td>
</tr>
<tr>
<td>Keep coaches informed on athletes progress</td>
<td></td>
</tr>
<tr>
<td>Inform coach of limitations with event coverage</td>
<td></td>
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<tr>
<td>Leave phone number with coach when off site (2)</td>
<td></td>
</tr>
<tr>
<td>Communicate with doctors on athlete (eating disorder)</td>
<td></td>
</tr>
<tr>
<td>Develop good relationship with team physician</td>
<td></td>
</tr>
<tr>
<td>Seek advice/help from principal</td>
<td>Active Problem solving</td>
</tr>
<tr>
<td>Discuss problems with program coordinator</td>
<td></td>
</tr>
<tr>
<td>Go to the Athletic director (5)</td>
<td></td>
</tr>
<tr>
<td>Get coach to back you up</td>
<td></td>
</tr>
<tr>
<td>Talk to other ATCs (3)</td>
<td></td>
</tr>
<tr>
<td>Persistence with administration to get supplies</td>
<td></td>
</tr>
<tr>
<td>Go to Union and have them file grievance</td>
<td></td>
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<tr>
<td>Talk to parents at parent night</td>
<td></td>
</tr>
<tr>
<td>Educate parents on what ATC does</td>
<td></td>
</tr>
<tr>
<td>Get a teaching degree</td>
<td></td>
</tr>
<tr>
<td>Get an administrative degree</td>
<td></td>
</tr>
<tr>
<td>Tell jokes with other trainer</td>
<td></td>
</tr>
<tr>
<td>Laugh at certain situations</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3-9. Continued.
<table>
<thead>
<tr>
<th>Looking ahead to end of sport season (fall, winter, spring)</th>
<th>Looking ahead</th>
<th>Mental disengagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looking ahead to summer vacation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Looking forward to family and friend activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play hard on vacation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross my fingers</td>
<td>Wishful thinking</td>
<td></td>
</tr>
<tr>
<td>Put off paperwork</td>
<td>Wishful thinking</td>
<td></td>
</tr>
<tr>
<td>Avoid coach (2)</td>
<td>Put off paperwork</td>
<td>Procrastinate</td>
</tr>
<tr>
<td>Kids come to games</td>
<td>Avoidance</td>
<td>Behavioral disengagement</td>
</tr>
<tr>
<td>Fiancée comes to games</td>
<td>Schedule family time</td>
<td></td>
</tr>
<tr>
<td>Take a day off</td>
<td>Schedule personal time</td>
<td>Time management</td>
</tr>
<tr>
<td>Make down time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doing my athletic training duties</td>
<td>Helping athletes</td>
<td>Miscellaneous</td>
</tr>
<tr>
<td>Have snacks in training room</td>
<td>Miscellaneous</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3-9. Continued.
this as a coping strategy when asked how they deal with some of the stressors of their work. Brian said that he looks forward to the next sport season (winter, or spring sports) when he begins to get burned out on the current season. Brian states that, “I think the change of the sports helps ya. I think you get excited to watch and…a different form of sports.” Chuck said when the hours get long he looks forward to the end of the school year and summer break. Rachel listed planning and looking forward to activities with family and friends as a coping strategy to deal with the stress of working long hours.

Behavioral disengagement. The two 1st order themes of procrastinate and avoidance comprised the general dimension of behavioral disengagement. Dale listed procrastination as a coping strategy to the stress of having to do paperwork. He allowed paperwork to pile up until he had a large stack and then would complete it. Rachel and Crystal listed avoidance as a coping strategy. Rachel stated that she was avoiding a coach who was upset about a district policy and she states, “I’m actually in my office with my door closed because my office is in the same hall where the (sport) office is. So, I’m actually hiding because I don’t want to hear it.”

Time management. The general dimension of time management contained two 1st order themes: schedule family time and schedule personal time. In order to spend time with their kids, Dale and Tom would bring them to the sporting events they were working. Dale stated “It’s getting to the point now where my kids are the age where they come by, spend a little time with me, they can get dropped off, we can watch games together.” Chuck’s fiancée does the same thing, attending games while he was working. Dale would take a day off when things were particularly stressful and have the other ATC cover for him. The following quote by Dale:

I was too burnt out so having an assistant to be able to say, “I need to take this day off, I’m just going to get out and not have to worry about this thing for a day” gives you a huge relief from the stress and be able to recuperate from things.
Miscellaneous. Two first-order themes comprised the miscellaneous general dimension.

Chuck keeps snacks in the training room for the athletes and this allows him to build rapport with the athletes. Chuck states, “Food is the way to get them to open up to me then I buy a bag of pretzels every week.” Ann had a unique mechanism for coping with the stress associated with being in the classroom all day: doing her job as an ATC. Ann elaborates on this:

Which goes back to the whole thing that I have athletics in the afternoon when I teach because if I went home feeling like that way everyday, I might not go back to work the next day. Umm so on the bright side the athletic part of my job kind of lifts me back up. And you know I did something good for this child today. I put him on a plan of action to get better and so I mean I guess its my way of balancing…

While all of the ATCs enjoy the athletic training aspect of their job she was the only one that saw it as a coping mechanism.

Additional Analyses

Each raw data theme from coding of the interviews was counted and yielded the results as depicted in Table 3-7. The participants who were previously classified as being burned out listed 33 stressors while those occupationally engaged listed 19 distinct stressors. Similarly, burned out participants’ named 29 challenges and while those who were occupationally engaged listed 21. Burned out ATCs listed 46 coping strategies and those occupationally engaged listed 40. Those individuals with less than 5 years experience shared 23 sources of stress, 25 challenges, and 46 coping strategies. ATCs with over ten years experience discussed 29 stressors, 25 challenges and 40 coping strategies.

<table>
<thead>
<tr>
<th>Table 3-7. Stressors, challenges and coping strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stressors</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>33</td>
</tr>
<tr>
<td>Challenges</td>
</tr>
<tr>
<td>Coping</td>
</tr>
</tbody>
</table>

Note. <sup>a</sup>Occ Eng = Occupationally Engaged.
Coping stability and consistency

The following section will address the secondary purpose of this study, which focused on assessing coping stability and consistency over time both respect to the same stressors/challenges or different stressors. ATCs were interviewed over the course of approximately three weeks and asked to discuss their current as well as past sources of stress, challenges, and coping strategies. ATCs overall talked about the day-to-day stressors that they encountered and many of the stressors discussed were resolved between interviews which made the opportunity to assess consistency with the same stressor difficult. The following are between interview results for each individual participant who experienced the same stressor across interviews.

Dale, a burned out ATC with over ten years experience, used multiple coping strategies across stressors under the general dimensions of active problem solving, time management instrumental social support, emotional social support and behavioral disengagement. He consistently used active problem solving to cope with the chronic stressor of acquiring CEUs for his recertification. Dale stated:

Getting all my CEUs done, that’s a source of stress. I don’t necessarily have a lot of free time, and what free time I do have, I like to spend with my family, so trying to go to conferences, take courses, etc. is a hassle.

Dale used active problem solving to find sources for credits that would count toward his CEUs. He stated, “I’ve had to call in to the board of certification about a specific class, a review class, about whether or not it meets the requirements for CEUs.” Dale also said with respect to acquiring credits that he was “trying to get a jump on that, because I tend to put that off. It’s pretty low on my priority scale so I don’t want to get caught, like I have in the past.” Dale’s resulting emotions are demonstrated by the following quote, “in the past I haven’t done very good with that (laughs) but this year I think I’m doing a little bit better job, so I’m feeling better.”
Brian was an ATC in phase V of burnout with 8 years experience. Brian utilized positive evaluation, mental disengagement, active problem solving, prevent future stressors, humor, and instrumental social support. Brian was consistent in using active problem solving and instrumental social support for the situations he labeled as challenges, which predominantly were focused on athlete injuries. Brian stated that he used humor to deal with stress in general but did not list any specific instances.

Ann was an ATC with 5 years experience and was in phase V level of burnout. Ann used coping strategies that fell under the general dimensions of activities outside the profession, positive evaluations, active problem solving, instrumental social support and miscellaneous. She used instrumental social support to cope with the recurring stressor of her training room being opened without her knowledge. Ann described how she coped:

So umm and we went and tried to look at, we tried to figure out who left the door open. Uh, on the video system but the principal that was working is not the normal video principal so I have to go back later today and see if we can find out who it is. So we had one person get reprimanded last year.

Ann showed consistency in that she used instrumental social support across several situations. She utilized her associate ATC to help cover events and went to her athletic director, and assistant principal, as mentioned above, for help. This was something she learned from the past year, where she would not follow up with her associate in helping with athletic responsibilities and as a result had a stressful year.

Rachel was a burned out ATC in phase V and has over 10 years experience. Her coping strategies included activities outside of profession, instrumental social support, active problem solving, behavioral disengagement, positive evaluation, and time management. In response to a coach she initially used instrumental social support and then behavioral disengagement when that
proved ineffective. After she and the AD addressed the situation, she then avoided the coach. Rachel explained, “I’m actually in my office with my door closed because my office is in the same hall where the wrestling office is. So, I’m actually hiding because I don’t want to hear it.”

Tom, an occupationally engaged ATC with over ten years experience, utilized the general dimension coping strategies of active problem solving, time management, instrumental social support, and prevent future stressors. Tom used time management and instrumental social support to deal with his biggest stressor. He said, “That is my biggest stressor here. Is that family time right now.” His coping responses were demonstrated by this quotation:

They (his children) came to the basketball games Friday night for a while, but its not high quality time, but it is nice that they can come hang out with you while you are at work. That is one thing nice about this job is that your kids can come to work.

Tom consistently used active problem solving across several stressors and challenges. Tom recognized the need to meet with the parents at the beginning of the year to prevent future stressors and did so by attending parent night in the hopes of eliminating the stressor of dealing with parents.

Chuck, an occupationally engaged ATC with less than five years experience, utilized active problem solving, instrumental social support, positive evaluation, time management, and miscellaneous. Chuck mentioned few stressors overall with one that reoccurred. Chuck described the strategy to deal with the stress imposed by the hospital he worked for:

So anyway that’s what we’re trying to come up with some discussions and questions and ways to set up an informal survey to look at the perceived quality of care they receive here in (local) county and also look at the referral issue and primary care providers. Where they’re located at.

Chuck mentioned only one emotion focused coping strategy. This coping strategy fell under the general dimension of positive evaluations and is demonstrated by the following quotation:

You know I try not to worry about it. I think that if push comes to shove that I’ve done enough…a good enough job and impressed enough people at here at the school that the
school or the school district would find money and be able to hire me directly if the hospital dropped the program.

Chuck used multiple strategies to address different aspects of the same stressor. Chuck consistently used problem focused coping strategies, specifically active problem solving and instrumental social support.

Crystal, an occupationally engaged ATC with less than five years of experience, utilized the coping general dimensions of time management, emotional social support, prevent future stressors, positive evaluation, instrumental social support, active problem solving, and wishful thinking. Crystal used multiple strategies to deal with a stressor imposed on her from her boss. Crystal used instrumental as well as emotional social support, demonstrated by the quotation:

But, you know, I talk to everybody, and, you know, they’ll sit there and let me vent, and we’ll go from there. I’ve kind of thought about it over the weekend, you know, thinking about our meeting, and, you know, I’m going to make it clear, which, you know, my boss knows where I stand, but, you know, I’ve told him before…

Crystal consistently used emotional and instrumental social support in coping with her stressors.

Barbara, an occupationally engaged ATC with over ten years experience, utilized activities outside of profession, positive evaluation, instrumental social support and active problem solving as her coping strategies. Barbara used activities outside the profession and positive evaluation to cope with a chronic staffing stressor. The following quote from Barbara states how she coped with this stressor:

I just have to make sure to cover my bases and I have to make sure that the parents understand you know that it’s not my decision. So umm…its like I said before my farm is my serenity spot and I just have to learn that once I turn in that driveway I just have to not worry about it and it you know that didn’t come in the first year I was a trainer.

Barbara talked a lot about her farm and taking care of her horses. She relieved a lot of stress when she was in the barn taking care of the animals. This coping strategy fell under the general dimension of activities outside of the profession and was coupled with a coping strategy of
acceptance (I did the best I could), which fell under the dimension of positive evaluation. Both of these general dimensions are emotion focused coping strategies.

**The Goodness of Fit Hypothesis**

Another way to examine coping stability and consistency is to look at the fit between the nature of the stressors (e.g. controllable versus uncontrollable) and the participants’ coping responses. For this portion of the analysis, the goodness-of-fit hypothesis was used as a sensitizing concept to look at the participants’ stressors and how they coped over time. Lazarus and Folkman (1984) emphasized that one way to evaluate coping effectiveness is by the match, or mismatch, of one’s coping strategies and the appraised controllability of the stressor. Basically, an emotion focused coping strategy for situations beyond the control of the individual would be deemed adaptive: problem focused coping in situations within the control of the individual would be considered adaptive. Only stressors paired with a specific coping strategy for this level of analysis were utilized. Coping mechanisms that fell under the general dimensions of active problem solving, instrumental social support, prevent future stressors, and time management were considered problem focused coping strategies. Coping mechanisms that fell under the general dimensions of positive evaluations, emotional social support, activities outside of profession, social activity within profession, humor, mental disengagement, wishful thinking, and behavioral disengagement were classified as emotion focused coping strategies.

As shown in Table 3-8, columns 1 (match - controllable stressor paired with problem solving coping) and 4 (match - uncontrollable stressor paired with emotion focused coping) were considered adaptive while columns 2 (mismatch - controllable stressor paired with emotion focused coping) and 3 (mismatch - uncontrollable stressor paired with problem focused coping) were labeled maladaptive. According to Lazarus when a mismatch occurs the stressor is not effectively dealt with and leaves the individual susceptible to further psychological distress.
Participants matched problem focused coping strategies with controllable stressors on 15 occasions while emotion focused coping strategies were used in response to uncontrollable stressors in response to 20 stressful situations. Overall 6 mismatches occurred when participants used a problem focused coping strategy and an uncontrollable stressor or an emotion focused coping with a controllable stressor.

Table 3-8. Analysis of the goodness of fit hypothesis.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Controllable stressor</td>
<td>Controllable stressor</td>
<td>Uncontrollable stressor</td>
<td>Uncontrollable stressor</td>
</tr>
<tr>
<td></td>
<td>Problem focused strategy match</td>
<td>Emotion focused strategy mismatch</td>
<td>Problem focused strategy mismatch</td>
<td>Emotion focused strategy mismatch</td>
</tr>
<tr>
<td>Burned out</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>14</td>
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<td>6</td>
<td>0</td>
<td>2</td>
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<td>11</td>
<td>1</td>
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<td>11</td>
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<tr>
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<td>4</td>
<td>16</td>
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<tr>
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**Burnout levels.** Participants classified as burned out matched 9 controllable stressors with problem focused coping strategies and mismatched one controllable stressor with an emotion-focused strategy. Burned out ATCs matched 14 uncontrollable stressors with an emotion focused coping strategy and mismatched 4 uncontrollable stressors with a problem focused coping strategy. Occupationally engaged individuals matched on the goodness of fit for 6 controllable stressors and 6 uncontrollable stressors. There was a mismatch only with 2 uncontrollable stressors.

One of the mismatches that illustrated the goodness of fit hypothesis pertained to the stressor experienced by Ann, a burned out ATC. Ann had no control over the individual(s) who
repeatedly opened her training room without her knowledge and repeatedly tried to cope by
going to the administration for help. Over time Ann perhaps had become quite frustrated and
angry at the situation, as nothing she did resolved the issue. While her emotional exhaustion
score decreased her depersonalization score increased from time one to time two. It might be
inferred that Ann had a growing disdain for her coworker(s) reflected in this cynicism. As
frustrating and unfair the situation is, a better coping strategy, one that focuses on her emotions,
in addition to the problem would be considered more adaptive.

 **Years experience.** ATCs with over 10 years experience listed 12 controllable stressors and
12 uncontrollable stressors matching on 11 controllable stressors and 11 uncontrollable stressors,
as can be seen in table 3-8. ATCs with less than 5 years experience matched 4 controllable
stressors and 14 uncontrollable stressors and mismatched on 5 uncontrollable stressors. It might
be inferred that with regard to years experience the 5 mismatches with uncontrollable stressors
can be attributed to youth and that better learned coping strategies might develop over time as
Barbara with over 15 years experience stated:

I mean I don’t how to tell you how I cope with it. Because the first couple years I was a
trainer I’d have been stressed. I’d have gone home. I’d have worried, been worried. I’d
have been trying to go about do what I needed to do but I’d be worried and constantly
wanting them to call me and check on things and blah, blah, blah, blah, blah,

This was in response to the stressor discussed earlier about having a new assistant every
day that was late. ATCs with over ten years experience might have learned to recognize
situations they can and can’t control and have developed appropriate coping strategies. This
would imply that coping stability over many years could be changed to more appropriate
responses.

 **Gender differences.** Male ATCs talked about coping with 11 controllable stressors that
matched on 10 of them. They also matched 4 uncontrollable stressors and mismatched on 2.
Female ATCs talked about coping with 5 controllable stressors and matched coping style on all 5. Females talked about 20 uncontrollable stressors and matched on 16. While men used both emotion focused and problem solving strategies they predominantly mentioned the stressors in which they used problem solving coping strategies. Women also utilized both coping strategies but predominantly talked about those stressors in which they used emotion focused coping strategies.

Over the short term (approximately three weeks) ATC remained consistent with their coping strategies on the same stressor over time in the instances where the occurred repeatedly. Controllable stressors and challenges were coped with utilizing problem solving strategies and uncontrollable stressors and challenges were coped with using emotion-focused strategies.
CHAPTER 4
DISCUSSION

The participants in the study were a diverse group that shared the context of being in the high school setting. They were from different regions in the country and employed by either a hospital based sports medicine program or by the school district itself. Both men and women were selected based on years experience and scores on the MBI and OES to obtain a sample that was either burned out or occupationally engaged. Four of the participants were required to teach as well as perform their duties as an ATC and four were not required to teach at all. Some participants were the sole athletic trainer at their high school while others had an associate or student interns. This study attempted to find the differences if any in the stressors, challenges, and coping strategies that these individuals experienced.

Overall there were no differences in the types of stressors experienced based on burnout level, years experience, or gender. In general stressors fell into two main dimensions, either they pertained to aspects of the ATC’s job or stress experienced in their family or personal life. All of the participants listed similar job stressors, for example ones pertaining to sporting event coverage, coaches, parents, athletes and paperwork. Both burned out and occupationallly engaged participants listed not being able to spend time with their family as a stressor. So it can be inferred that ATCs in the high school setting overall experience the same stressors.

There was a difference in the amount of stressors reported. The burned out ATCs listed 33 distinct stressors while the occupationally engaged ATCs listed 19. It would be unrealistic to say that the burned out ATCs experienced more stressors than the occupationallly engaged ATCs, but it is very possible that individuals who are burned out have an easier time recalling stressors. In addition the burned out ATCs also recalled more challenges (29) than the occupationally engaged ATCs (21). This would leave one to believe that burned out individuals perhaps spend
more time thinking about their work than occupationally engaged ATCs and ruminate on both the good and bad aspects of their job. Conversely when things are going well the occupationally engaged person has an easier time detaching themselves from both stressors and challenges associated with their work.

Generally there were no differences in the type of coping strategies employed by the participants based on burnout level. For the most part all participants used forms of both emotion-focused and problem-focused coping. Emotion focused general dimensions included positive evaluations, emotional social support, activities outside the profession, humor, mental disengagement, wishful thinking and behavioral disengagement. Problem focused coping general dimensions included time management, instrumental social support, active problem solving, and prevent future stressors.

Again there was a difference in the amount of coping strategies reported. Burned out ATCs employed more coping strategies (46) than occupationally engaged ATCs (40). The reason for this could be simply that if stressors are easily recalled then coping strategies would be as well. There was also a difference in the amount of coping strategies based on year’s experience. ATCs with less than five years experience reported more coping strategies (46) and fewer stressors (23) than did ATCs with greater than ten years, who listed 40 coping strategies to 29 stressors.

The secondary purpose of this study was to assess coping stability and consistency and note any differences based on burnout level, years experience, and gender. Participants used problem focused and emotion focused coping strategies consistently across day to day stressors and challenges and with respect to the goodness of fit hypothesis matched on the majority of situations. Participants matched on 15 controllable stressors and 20 uncontrollable stressors. Seven mismatches occurred, where the participant applied either an emotion focused coping
strategy with a controllable stressor or a problem focused coping strategy with an uncontrollable stressor.

Out of the 7 mismatches within the goodness of fit test 5 were participants who were burned out and 5 were by participants with less than 5 years experience. As stated earlier less experienced ATCs employ more coping strategies and it appears they might do so inappropriately by attempting to apply a problem solving strategy to an uncontrollable stressor. These mismatches might not lead directly burnout but if experienced repeatedly over time might contribute to it. However, in four of the mismatches, secondary coping strategies were utilized as well. For example, Chuck used both a problem focused coping strategy and an emotion focused strategy to deal with the demands on him from the hospital. This highlights the complexity of some stressors and possible requirement of applying multiple strategies to address different aspects of the situation.

There was no way to truly assess stability or consistency with respect to chronic stressors experienced, as there were very few mentioned by the participants. Dale and Rachel mentioned obtaining CEUs as a chronic stressor and both used active problem solving to address the stressor. Barbara talked about the chronic stressor of having a different contract assistant who was late every day. She coped with the uncontrollable stressor with an emotion-focused strategy. All three of these individuals had over ten years experience and in these three instances the ATCs showed stability in coping style and appropriateness. No chronic stressors were mentioned by participants with less than 5 years experience.

When asked if they had ever experienced burnout, three of the individuals classified as being burned out said that they had experienced it. Dale, Brian and Ann each mentioned that they felt symptoms similar to burnout. Dale said he had been burned out in the past but now that he
had an assistant he dealt with the stress a lot better. This is possibly reflected in his MBI scores and the fact that at time one he was in phase VI and at the time of this study was in phase V. Brian mentioned he was burned out at his prior job the year before. Factors that possibly contributed to this were long hours split between the clinic and the high school and the number of athletes he was responsible for. After changing jobs Brian’s scores on the MBI with respect to exhaustion and cynicism decreased. Ann, also in phase V, mentioned that the year before she had felt a little burned out but made an attitude adjustment over the summer. Part of her attitude adjustment included the following, “So part of its realizing what you can or can’t change and part of it’s trying to work within the system to make those positive changes.” Another part included her going to her associate for help more in event coverage. A result of this can be seen in the decrease in her emotional exhaustion scores. Her cynicism score did increase and, as discussed earlier, could be due to the uncontrollable stressor she was experiencing.

All of the participants mentioned that they had experienced occupational engagement and this was especially with respect to working with the student athletes. The nature of athletic training allows them to see the rewards of their efforts. Tom stated, “That is my goal, that’s my job, and I absolutely love to be a part of these kids athletic career and help them enjoy it to the fullest.” The following quote from Dale elaborates:

So when you see an athlete that has been you know out for 2 weeks with a sprained ankle, you’re getting them back in a playing activity and they’re successful and they do great, hey contribute to the team. Then you feel like you have done something to contribute something to that team and to that kid and what’s been going on in their life. You get great feeling of accomplishment that you played a role in whatever’s been going on in that situation.

As a reflection of this all the participants had above published norms on the OES. So one aspect of their job allows them to be engaged even when they might be experiencing burnout.
Theoretical Integration with Lazarus

Another secondary purpose of the study was to interpret burnout and engagement using Lazarus C-M-R theory (1999). There is mild support for paths a and c in figure 1-3. Burned out individuals did talk about more stressors overall than those individuals who were classified as occupationally engaged. Therefore it might be inferred that those who were burned out are more likely to label situations as threats (path a) and experience them as stressors. However, the data does not suggest that these individuals coped any differently than those who were occupationally engaged as burned out individuals overall coped with controllable and uncontrollable stressors appropriately.

The bulk of education Athletic trainers undergo specializes in athlete injuries and treatment so ATCs are well suited to deal with any situations that arise within this context. According to Lazarus (1999) ATCs will appraise the situation as a challenge because they have the requisite skill set to cope with the situation effectively and are relatively sure about a positive outcome. This was the case in this study as the bulk of challenges mentioned by the participants dealt with injury treatment.

Occupationally burned out individuals did not list fewer challenges than occupationally engaged ATCs as hypothesized. The data revealed that both occupationally engaged as well as burned out participants talked about an equal amount of challenges during the interviews. This is not surprising when looking at the OES scores for both groups. While the burned out participants’ scores were lower than the occupationally engaged participants’ scores, they were still above published norms. When asked about what are the aspects of the job that you enjoy, every single participant listed working with the athletes as one of them. This is also reflected in the number of job challenges reported. Out of 50 separate challenges 24 were related directly to the care of athletes and an additional 19 were considered ATC duties (managing sport schedules,
dealing with coaches about injured athletes, getting the right rehab equipment, etc.). So it is possible to say that the duties of an ATC directly related to athletics is occupationally engaging. Other extraneous situations, for example having to teach, or deal with hospital bureaucracy that are viewed predominantly as stressors could be the factors that lead to burnout. Out of 52 stressors reported only 6 had to deal directly with athletes.

**Limitations**

The generalizability to the entire ATC population is obviously not appropriate as only high school athletic trainers were interviewed. Additionally, out of the participants that were burned out only one was classified as being in the VI stage of burnout with the remaining three in stage V. Initial participant recruiting targeted four ATCs whose resultant scores on MBI classified them as stage VI on Golembiewski et al. (1996) scale. However, only one individual replied from round one and one individual replied from round two. In fact two of the individuals’ email addresses were no longer active. This could be due to the individuals no longer being at that current job. Perhaps because they had reached a level of burnout where they felt they need to leave that current position or the occupation altogether.

Another limitation was the use of telephone interviews. While rapport was established with most of the participants, there were a few where full trust was not established until the final interview. Therefore, the ATC might have been more apt to discuss more stressors with the interviewer during the final interview and stressors experienced earlier might have been lost or at the very least not fresh in the mind. The feasibility to conduct actual physical face-to-face interviews was not financially possible. In the future online video chat interviews might prove to be more beneficial to establishing rapport much like face-to-face interviews.

Ideally more than three interviews are necessary to truly evaluate the participants coping stability and consistency. One way to facilitate this is by conducting multiple interviews over an
entire sport season. The fall high school season being the most stressful would be appropriate as many high contact sports are ongoing. In addition the measures could be administered at the beginning and at the end of the season.

**Applied Implications**

Athletic trainers with over ten years experience were less likely to mismatch coping strategy with controllability and those mismatches were experienced by burned out individuals with less than five years experience. ATCs with greater experience seem to be better at recognizing the stressors that they can control and those they cannot control and cope with them appropriately. Instructing younger ATCs on these situations would seem to be an appropriate target for intervention. Future research should be conducted to determine what stressors are misinterpreted by younger ATCs and what coping strategies they use. Younger trainers then might be instructed how to recognize stressors as uncontrollable and which strategies are best used to alleviate those stressors. These would be emotion focused coping strategies. Barbara talked about having other interests outside of the profession:

> But you have to have other interests. Every single one of us that I can think of has other interests or other activities that we do away from athletic training. There’s one of us that’s a mountain biker. I have my horses. Uh one of the other guys does a lot of volunteer work for…I forget who he like…for dog rescue or something. You know we all have to have something else that we do. And um and that’s how you get away from it.

From this research interventions can then be developed and tested.

**Future Directions**

As supported by the results athletic trainers view their job demands pertaining to the care of athletes as a challenge and therefore the training and education that ATCs receive in this context prepares them to cope appropriately. The job demands they view as threats or stressors are predominantly those outside what they were educated on. Possible future applied implications might focus on education pertaining to specific job contexts, in this case the high
school setting, and include topics on time management, for when an ATC is required to teach as well as practice sport medicine, and appropriate coping methods for dealing with stressors outside their control. Future studies should focus on ATCs beyond the high school setting, for example collegiate, professional sports and clinical work. Stressors and challenges are possibly different as well as coping strategies employed by individuals in other job settings.
LIST OF REFERENCES


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BIOGRAPHICAL SKETCH

Frederick Dietrich was born in Ft Lauderdale, FL. in 1973. He grew up in Coral Springs and graduated from Coral Springs High School in 1991. He then attended the University of Florida in Gainesville, FL. on an NROTC scholarship. He graduated with a bachelor’s degree in psychology and was then commissioned as an ensign in the United States Navy. Frederick spent ten years in the Navy as a helicopter pilot and separated at the rank of lieutenant. He applied to and was accepted to the college of Health and Human Performance for the express purpose of achieving a master’s degree in sport and exercise psychology.