EXAMINING THE EFFICACY OF POSITIVE PSYCHOLOGY
INTERVENTIONS FOR REDUCING SYMPTOMS OF BURNOUT
AMONG NCAA DIVISION-I ATHLETIC TRAINERS

A Dissertation
Presented to
The Faculty of the Graduate School
At the University of Missouri

In Partial Fulfillment
Of the Requirements for the Degree
Doctorate of Philosophy

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May 2014

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ACKNOWLEDGEMENTS

I am thankful for my committee, Dr. Alex Waigandt, Dr. Richard McGuire, Dr. Joseph Johnston, Dr. Antonio Castro, and Dr. Leigh Neier. A special thanks to Dr. McGuire and Dr. Castro for their mentorship over the past five years, and continued support.

I would like to express my sincere gratitude to Rex Sharp and the entire Sports Medicine staff at the University of Missouri. I would also like to acknowledge the insights provided by my peers, Dr. Anne Shadle, Scotta Morton, Brian Zuleger, and Bobby Low. I am truly grateful for the assistance of all those who contributed to this research endeavor.

Finally, I would like to thank my family for their continued support throughout my graduate studies, and my cousins Chris and Jessica Koenig for providing me a home in Missouri.

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ABSTRACT

This study sought to examine the efficacy of three positive psychology interventions (i.e. *Three Good Things in Life*, *Using Signature Strengths in a New Way*, and *Peer Support*) for reducing symptoms of burnout and enhancing well-being. An additional objective was to determine which intervention participants perceived as most effective. This study employed multiple case study methods, utilizing both quantitative and qualitative methods. This study consisted of five athletic trainers (2 graduate assistant athletic trainers & 3 full-time athletic trainers). The Maslach Burnout Inventory was used to assess the severity of participant's burnout symptoms. Qualitative data was collected at five intervals, before engaging in the positive psychology interventions, after each intervention, and two months after the final intervention. Three participants rated the *Using Signature Strengths in a New Way* intervention as the most effective, where the remaining two participants reported the *Three Good Things in Life* intervention as most effective. Overall, participants reported that these interventions were an effective means of increasing positive thinking and staff cohesion. Furthermore, participants reported that engaging in positive psychology interventions encouraged them to engage in more self-care activities. The findings of this study suggest that educating athletic trainers on self-care strategies such as positive psychology interventions may reduce risk of burnout and alleviate severity of burnout symptoms.

CHAPTER 1: THE CONTEXT FOR RESEARCHING BURNOUT IN CERTIFIED ATHLETIC TRAINERS

Research on the experience of burnout began with Freudenberger's (1974) article examining staff burnout among individuals working in human service professions. Smith (1986) proposed the first theoretical framework of burnout, a model that has been widely accepted and has served as the basis for much of the contemporary research on burnout. In general, burnout is a term used to describe the cognitive, emotional, and behavioral effect of experiencing chronic stress in an occupational setting. Burnout and stress have been studied in a variety of service professions, including education, coaching, and healthcare (Hendrix, Acevedo, & Hebert, 2000). Within the sports arena research on burnout has traditionally focused on athletes, coaches, and sports officials (Kelley, 1994). Although studies examining prevalence rates of burnout in athletic trainers have produced mixed results (Giacobbi, 2009), there is general consensus that the occurrence of burnout symptoms among athletic trainers working in collegiate settings merits research efforts to validate strategies for reducing burnout (Kania, Meyer, & Ebersole, 2009; Riter et al., 2008; Stilger, Etzel, & Lantz, 2001).

To address the growing concern regarding athletic trainer attrition and diminished quality of care to injured student-athletes resulting from experiences of burnout, recent studies have begun to investigate the causes, symptoms, and coping strategies for burnout among athletic trainers working in the Division I Athletic Association setting (Pitney, 2006; Reed & Giacobbi, 2004; Stilger et al., 2001).

Research on causes of burnout have identified both environmental factors and personal characteristics (Hendrix et al., 2000). Environmental factors include work related issues such as organizational structures that hinder personal autonomy, lack of appreciation for services provided, and provision of social support among colleagues (Pitney, 2006). Personal characteristics refer more to one's susceptibility to experiences of burnout, where the personality construct of hardiness is used to assess one's vulnerability to burnout. Specifically, individuals with a high degree of hardiness possess a perceived sense of autonomy, a willingness to commit to relationships, and an ability to view change as a stimulus for personal growth (Hendrix et al., 2000). In short, those who reflect these personal characteristics of hardiness are less vulnerable to burnout.

The Maslach Burnout Inventory (MBI) assess three primary symptoms of burnout: (1) emotional exhaustion, (2) depersonalization, and (3) lack of personal accomplishment (Maslach & Jackson, 1986). These symptoms refer to the experiences of an inability to meet the emotional demands of one's work, becoming callous towards clients or colleagues, and negative evaluations of one's work performance (Pitney, 2006). Research on the relationship between these symptoms and perceived stress suggests that emotional exhaustion and lack of personal accomplishment are more predictive of perceived stress than depersonalization (Hendrix et al., 2000).

Coping refers to cognitive, emotional, and behavioral responses to perceived stress (Smith, 1986). Research on athletic trainers use of coping strategies delineates between problem and emotion-focused coping strategies (Reed & Giacobbi, 2004).

Problem-focused coping strategies refer to attempts to remove the stimulus causing the stress response, where emotion-focused coping strategies refer to attempts to manage the severity of the stress response (Cox, 2007a). Research suggests that, under the problem-focused coping domain, seeking assistance from colleagues on how to perform a particular work related duty (instrumental social support) and organizing one's work related responsibilities (planning) were most effective for reducing perceived stress (Reed & Giacobbi, 2004). For emotion-focused coping, reflecting on what one does well (positive evaluations) and employing humor were most effective for reducing perceived stress (Reed & Giacobbi, 2004).

Existing research provides us a thorough understanding of the environmental factors that contribute to experiences of burnout as well as how personal characteristics and self-employed coping strategies may reduce vulnerability to burnout. As burnout is viewed as a disruption of well-being, interventions designed to bolster one's well-being or enhance personal characteristics such as hardiness could effectively alleviate or protect against experiences of burnout. Research examining the efficacy of interventions for enhancing well-being would advance this line of inquiry.

Theoretical Framework and Purpose for this Present Study

Positive Psychology is the study of personal characteristics or traits that contribute to one's well-being (Seligman & Csikszentmihalyi, 2000). Seligman (2011) describes well-being as a construct consisting of five components; 1) Positive Emotion, 2) Engagement, 3) Positive Relationships, 4) Meaning, and 5) Accomplishment (PERMA). The extent to which individuals experience positive emotions (i.e. joy, contentment, and

pleasure) is described as the central marker of subjective well-being (Seligman, 2011). Engagement is described as the extent to which individuals become absorbed in a particular activity. Positive relationships are described as interactions with others that provide a sense of both autonomy and relatedness, and are more generally viewed as supportive relationships (Seligman, 2011). Meaning is described as the perceived sense that one is contributing to something larger than themselves (Seligman, 2011). Lastly, accomplishment refers to perceptions of achievement (Seligman, 2011). To summarize well-being is comprised of the presence of positive emotions, engagement, positive relationships, meaning, and accomplishment, where well-being is enhanced when any one component is experienced by the individual.

The present study views the burnout symptom of emotional exhaustion as deterring from the positive emotion and engagement components of well-being, where depersonalization is viewed as detracting from positive relationships, and lack of personal accomplishment reduces one's ability to experience the accomplishment component of well-being. This PERMA framework for assessing well-being offers particular appeal to the present study in that research in this area has been coupled with investigations into the efficacy of interventions for enhancing these components of well-being. This view of well-being consisting of experiencing the PERMA constructs will provide the framework for this study.

The purpose of the present study is to examine the efficacy of three positive psychology interventions for both enhancing well-being and reducing symptoms of burnout. I seek to explore not only the potential of positive psychology interventions to

reduce the severity of burnout symptomology, but the relationship between each intervention and the PERMA components of well-being. Furthermore, athletic trainers perceived preferences for each intervention will be assessed.

Significance of the Present Study

As will be discussed in greater detail in the proceeding review of the literature, such studies employing quantitative and qualitative research methods have produced a holistic understanding of the causes and symptoms of burnout among NCAA Division I athletic trainers. What remains relatively unclear is the efficacy of interventions aimed at preventing and alleviating the symptoms of burnout among this population.

Although research has been conducted on the efficacy of self-employed coping mechanisms for reducing burnout symptomology, the present study marks the first attempt to investigate the efficacy of implementing positive psychology interventions for alleviating symptoms of burnout among collegiate athletic trainers through use of both quantitative and qualitative methods. In short, this study addresses the call for future research on validation of strategies for reducing burnout among collegiate athletic trainers. Furthermore, if effective, use of positive psychology interventions may enhance the occupational satisfaction of athletic trainers, which, in-turn could enhance the provision of high quality health care to the athletes they serve.

Research Questions

The primary aim of this study is to investigate the efficacy of three positive psychology interventions for reducing symptoms of burnout. More specifically, the

study will address the following five research questions: (1) What are athletic trainer's perceptions of their experiences of burnout and well-being? (2) What factors do athletic trainers perceive as contributing to experiences of burnout? (3) Will engaging in positive psychology interventions reduce MBI scores? (4) Which subscales of the MBI are most affected by the positive psychology interventions? (5) Which positive psychology intervention do athletic trainers perceive as most effective?

An initial baseline semi-structured interview will serve to collect data for research questions one and two, inquiring about athletic trainers' perceptions of both well-being and burnout, as well as which factors athletic trainers believe contribute to experiences of burnout. Examining participant's MBI subscale scores after completing each positive psychology intervention will provide a means for answering whether the positive psychology interventions effectively reduce burnout symptomology, and which subscales of the MBI each intervention has the greatest effect on. Engaging in semi-structured interviews after each intervention, qualitative data will be collected on which intervention participants perceive as most effective. Furthermore, a final follow up interview will be conducted two months after participants complete the final positive psychology intervention to examine long-term effects of the interventions.

This dissertation presents the background of the research problem, the significance of this study, the study's research questions and related definitions in this first chapter. In chapter two, I expound upon research on burnout in athletic training and research on the efficacy of positive psychology interventions. The findings of this study are presented in chapter four, and the implications of those findings are discussed

in chapter five. Finally, chapter three addresses concerns over the quantitative and qualitative methodology that I will employ and ways that I strive to achieve a sense of trustworthiness.

CHAPTER 2: REVIEW OF THE LITERATURE

Burnout is described as a chronic condition that develops when one works too hard for too long in a high pressure situation (Feigley, 1984). Smith (1986) conceptualized burnout as a complex interaction among a number of components that produce physical, behavioral, cognitive, affective, and emotional signs and symptoms. The cognitive, affective, and emotional signs and symptoms constitute what is generally referred to as the psychological response to burnout (Maslach & Jackson, 1986). This psychological response to burnout refers to three specific negative responses (i.e. depersonalization, emotional exhaustion, and lack of personal accomplishment) (Kelley & Gill, 1993). Depersonalization is described as the act of becoming callous toward or withdrawn from clients and colleagues (Evans & Fischer, 1993). Emotional exhaustion refers to the feeling of being overextended, and the perceived inability to meet the emotional demands of one's work (Demerouti, Nachreiner, Bakker, & Schaufeli, 2001). Lack of personal accomplishment results from negative self-evaluations of one's work performance. Currently, the most prominent model for understanding burnout in athletic contexts is the Cognitive-Affective Model, (Hendrix et al., 2000). Developed by Smith (1986), this model consists of three components: (1) Personal and situational

characteristics, (2) the cognitive stress appraisal, and (3) coping strategies (Smith, 1986).

Personal and Situational Characteristics

The Personal and Situational Characteristics include hardiness, social support, motivation, and work related issues (Smith, 1986). Hardiness is described as a personality construct reflecting perceptions of control, commitment, and challenge (Roth, Wiebe, Filligim, & Shay, 1989). Control reflects the tendency to believe that one has the ability to influence the course of events occurring in the face of a variety of life circumstances (Hendrix et al., 2000). This ability to influence the course of events reflects the concept of autonomy, where a lack of autonomy has been cited as a source of burnout among athletic trainers (Pitney, 2006). Commitment refers to an approach to life characterized by curiosity, a sense of purpose, and a willingness to commit to relationships (Hendrix et al., 2000). Challenge reflects the belief that change, as opposed to stability in life is normal, in which change is viewed as interesting, positive, and a stimulus for personal growth (Hendrix et al., 2000). By this definition, challenge can be used as a term for describing optimistic thinking. These components comprising the construct of hardiness will be central to the rationale for implementing positive psychology interventions among athletic trainers.

Optimism is generally referred to as positive thinking, which confers benefits on what people do and what they are able to achieve in times of adversity (Scheier & Carver, 1992). Optimism increases the probability that individuals will view their desired outcomes as attainable, and when desired outcomes are viewed as attainable the

individual experiences a range of positive affect or emotions (Carver & Scheier, 1990). Pessimism, on the other hand, is linked to the belief that one's goals are unattainable, resulting in the tendency to disengage from one's goals, and the experience of negative emotions (Scheier & Carver, 1985). Such conclusions on the effects of optimism come from studies holding the assumption that optimism is a relatively stable personality disposition (Scheier & Carver, 1992). Although it is important that certain individuals, by nature, have a greater capacity for optimism, most relevant to this study is that optimism can be enhanced in those who have a more pessimistic disposition. For example, optimism training as one component of Positive Psychotherapy involves encouraging the individual to see bad events as temporary, changeable, and local has demonstrated consistent efficacy in reducing depressive symptoms (Seligman, 2011). For the purposes of this study optimism is viewed similarly to hardiness, having a buffering effect on the occurrence of burnout. Strategies for enhancing optimism will be discussed further in relation to the proposed positive psychology interventions used in this study.

Social Support has been described as the number of individuals one can rely on to listen, offer advice, and provide emotional support as well as functional assistance (Martin, Kelley, & Eklund, 1999). Furthermore, social support also reflects the perceived quality or meaningfulness of relationships between those receiving and offering social support (Cohen & Wills, 1985). Most relevant to the aims of the present study is that social support has been empirically validated to mediate the cognitive stress appraisal process as well as reduce the deleterious effects of perceived stress (Kelley & Gill, 1993).

Thus, meriting the inclusion of an intervention specifically designed to increase the provision of social support among athletic trainers. Social support will be discussed more in-depth later in the literature review in terms of the importance of how athletic trainers both receive social support from peers and instructors, and provide support to the athletes with whom they care for.

The Cognitive Stress Appraisal

According to Lazarus (1990) stress is the result of a cognitive appraisal process. For example, when an individual perceives the demands of a particular task to be greater than their abilities, they experience stress (Lazarus, 1990). Following the Interactional Model, it is suggested that the likelihood that an individual will perceive a particular event as stressful is influenced by the presence and interaction of the personal and situational characteristics described above (Kelley, 1994). For example, if an athletic trainer was assigned to a high number of athletes or sports teams, and did not feel they had adequate social or instrumental support to meet the needs of those athletes or teams, a stress response would be evoked. Thus, positive psychology interventions aimed to increase the elements of hardiness (i.e. control, commitment, and challenge) and social support, if effective, could reduce perceived stress and burnout among collegiate athletic trainers.

Coping Strategies

Coping is a cognitive, emotional, and behavioral response to perceived stressful situations (Smith, 1986). Coping is highly influenced by one's psychological resilience,

“the ability to bounce back from negative emotional experiences, and adapt to the changing demands of stressful situations” (Tugade & Fredrickson, 2004). Research identifies two primary coping strategies; solution-focused coping and emotion-focused coping (Cox, 2007a). In addition, each coping strategy is associated with both an avoidance and approach style (Cox, 2007a). Solution-focused coping involves attempts to reduce the environmental stimulus causing the stress response, where an approach style would entail identifying strategies to remove the stimulus stressor, and an avoidance style would involve applying a mental distraction (Cox, 2007a). Emotion-focused coping reflects attempts to manage the severity of the stress response, rather than attempts to remove the stressor altogether (Cox, 2007a). An emotion-focused approach style of coping involves use of relaxation strategies or humor, where an avoidance style is characterized by the venting or expression of unpleasant emotions (Cox, 2007a). Research suggests certain coping strategies are more effective than others, and that some coping strategies may actually perpetuate symptoms of burnout.

For example, looking at burnout from a behavioral perspective Tyrell (2010) proposes a model in which behaviors that are adopted as a means for coping with stressors are initially adaptive, but may actually maintain the experience of burnout over time. This model is based on the premise that the factors that are most significant in the development of burnout may not be the same factors that perpetuate burnout (Tyrell, 2010). In this model perceptions of burnout are generated from past personal experiences of burnout, and by views held by society about burnout (Tyrell, 2010). This examination of how the individual interprets the subjective meaning of burnout in

relation to socially constructed meanings of burnout in the larger societal context is congruent with the constructivist epistemology used in the current study. Commonly burnout is perceived as having a deleterious effect on one's occupational functioning, physical and psychological well-being (Evans & Fischer, 1993). In short, burnout is perceived as something to be avoided, and thus, symptoms of burnout must be carefully monitored. This hypervigilance for sensations of emotional fatigue is one component of this model, in which attention is directed towards detection or monitoring of symptoms of burnout as opposed to signs or feelings of coping (Tyrrell, 2010). A third component of this model posits that once identified, these symptoms of burnout trigger automatic negative thoughts such as the belief that one can no longer work under current conditions, which, in turn lead to increased attempts to avoid perceived stressors (Tyrrell, 2010). Furthermore, attempts to avoid perceived stressors is often coupled with a reduction in one's occupational duties (i.e. depersonalization), which can negatively influence perceptions of one's work performance (i.e. personal accomplishment) (Tyrrell, 2010). This reduced self-efficacy and the failure to disconfirm fears act to strengthen or perpetuate the negative thought process, maintaining the experience of burnout (Tyrrell, 2010). This monitoring of signs and symptoms of burnouts, which then directs individual's behavioral responses serves as an example of the cognitive stress appraisal process.

Burnout in Athletic Occupations

Burnout and stress have been studied in a variety of service professions, including education, coaching, and healthcare (Hendrix et al., 2000). Research on non-

service professions (i.e. industry and transport) report similarities in symptoms of burnout among human service and non-service professions (Demerouti et al., 2001). In either field burnout occurs when there is a consistent imbalance between the ratio of job demands to job resources (Feigley, 1984). The effects of this disproportionate ratio between job demands and job resources on burnout is compounded in high pressure work environments such as athletics and health care (Hendrix et al., 2000). Within the collegiate setting athletic trainers vary in terms of their professional development from undergraduate student trainers, graduate student trainers, and certified athletic trainers. This distinction is of paramount importance when discussing the prevalence, symptoms, and causes of burnout. It is also important to note that at many collegiate institutions graduate students may have their athletic training certification, and thus only differ from full-time certified athletic in that they are pursuing a graduate degree. One study examining prevalence rates of burnout among 206 certified athletic trainers recruited from various NCAA institutions reported that 32% (n=66) of trainers in their study were experiencing burnout (Kania et al., 2009). Past research reports burnout rates of 60.3% (Campbell, Miller, & Robinson, 1985) and 40% (Capel, 1990) for all levels of athletic trainers. Another study consisting of 934 athletic trainers working in collegiate, secondary school, and clinical settings reported burnout rates of only 17.2% (n=161) (Giacobbi, 2009). Although exact prevalence rates for undergraduate, graduate, and certified athletic trainers remains unclear, greater consistency can be found in the causes, symptoms, and coping strategies for burnout among athletic trainers working in

the Division I Athletic Association setting (Pitney, 2006; Reed & Giacobbi, 2004; Stilger et al., 2001).

In a study of 118 certified athletic trainers working in an NCAA Division I-A setting Hendrix et al., (2000) set out to examine the relationship of hardiness, social support, and work related issues to stress, and the relationship of perceived stress to burnout. More specifically, the impact of perceived stress was assessed on three symptoms of burnout (i.e. emotional exhaustion, depersonalization, and personal accomplishment). Using the Cognitive-Affective Model of Burnout as a framework, personal and situational variables were measured using the Hardiness Test, Social Support Questionnaire (SSQ), and the Athletic Training Issues Survey (ATIS). The Perceived Stress Scale was used to measure participant's stress appraisal, and burnout was assessed using the Maslach Burnout Inventory. In the statistical analyses Pearson product-moment correlations were conducted to determine which personal or situational variables would predict stress appraisal, and the relationship between perceived stress and the three burnout symptoms. Two stepwise multiple regressions were conducted to determine the relative contribution of the personal and situational variables to stress, and the relative contribution of the three burnout factors to stress. The results of the correlational analyses showed significant relationships among the variables measured, where negative relationships were found between hardiness and perceived stress ($r = -0.63$), social support and perceived stress ($r = -0.41$), and personal accomplishment and perceived stress ($r = -0.27$). Positive relationships were observed between ATIS scores and perceived stress ($r = 0.45$), emotional exhaustion and perceived

stress ($r = 0.59$), and depersonalization and perceived stress ($r = 0.43$). For the stepwise multiple regression analyses “sport” was added as a nominal variable (i.e. Football or Nonfootball) where the dependent variable was perceived stress and the predictor variables included hardiness, athletic training issues, social support, and sport. A significant multivariate effect was obtained ($r = 0.638$), where the personal and situational factors, taken together accounted for 52% of the variance in perceived stress. Hardiness being the first variable entered accounted for 40% of the variance, followed by athletic training issues accounting for 7% of the variance, and social support accounting for 5% of the variance in perceived stress. No support was found for the prediction of sport and perceived stress. The findings of this study highlight the significant influence of hardiness on burnout.

In the second stepwise multiple regression analysis a significant multivariate effect was obtained ($r = 0.59$), where emotional exhaustion, entered first, accounted for 35% of the variance, followed by personal accomplishment accounting for 5% of the variance in perceived stress. No support was found for depersonalization as a significant predictor of perceived stress (Hendrix et al., 2000). The work environment of collegiate athletic trainers, situated within a sport culture that emphasizes winning and competing at a high level, demands the provision of high quality health care to injured athletes, and thus, can certainly be characterized as a high pressure situation (Pitney, 2006). As the nature of the rehabilitation environment along with perceived social support from athletic trainers has consistently shown to exert a strong influence on the psychological response and coping behaviors of injured athletes (Robbins & Rosenfeld,

2001; Walker, Thatcher, & Lavalley, 2007; Wiese & Weiss, 1987) the extent to which athletic trainers experience burnout becomes of paramount importance in their ability to effectively serve both the physical and psychological needs of injured athletes.

Quality-of-Life was investigated qualitatively among 12 athletic trainers (11 certified athletic trainers, and 1 graduate student trainer) and two athletic directors working in a NCAA Division I setting in a study conducted by Pitney (2006). One semi-structured interview and one follow-up electronic (via email) interview were conducted with all participants. Two major themes emerged from the participant data; Organizational influences and Quality-of-life issues. When reflecting on organizational influences, the athletic trainers consistently reported that bureaucratic tendencies of their respective organizations challenged their ability to provide quality care to their athletes, and hindered their autonomy. Again, this lack of autonomy relates to a diminished sense of control, on of the components of hardiness. Participants also reported that the pressures to win inherent in the collegiate sport culture created an unsettling environment that appeared to devalue their role as athletic trainers (Pitney, 2006). Enhancing the provision of social support among athletic trainers may counteract this perceived lack of appreciation. As for Quality-of-life issues, participants emphasized their fear of burnout as a result of role overload (Pitney, 2006). In particular, participants reported struggling with maintaining a work-life balance, expressed concern for how strongly the successes or failures of the athlete or teams they worked with influenced their own emotions, and feeling unappreciated by the athletic administration (Pitney, 2006). In reflecting on the challenges posed by

organizational influences and quality-of-life issues, the majority of trainers stated they were able to maintain their commitment to delivering quality care to student-athletes, which could be taken to suggest that the athletic training profession is most attractive to highly resilient or optimistic individuals.

Reed & Giacobbi (2004), interviewed six certified graduate athletic trainers at three intervals over a 9-month period to assess coping strategies commonly employed by athletic trainers. Following the tenants of grounded theory research, six general sources of stress and eleven coping dimensions were revealed. The general sources of stress included; athletic training duties, comparing job duties, responsibilities as a student, time management, social evaluation, and future concerns (Reed & Giacobbi, 2004). The eleven coping dimensions identified were labeled; planning, instrumental social support, adjusting to job responsibilities, positive evaluations, emotional social support, humor, wishful thinking, religion, mental or behavioral disengagement (i.e. depersonalization), activities outside of profession, and miscellaneous (Reed & Giacobbi, 2004). Planning was viewed as a coping mechanism for managing multiple job demands and responsibilities. Instrumental social support was described as seeking advice from others in regards to performing occupational duties. Adjusting to job responsibilities referred to behavioral changes trainers made to fulfill to their professional obligations. Positive evaluations related to trainers choosing to view challenges as learning opportunities, reflecting a presence of the challenge component of hardiness, and thus can be viewed as examples of optimistic thinking. Emotional social support was described as expressing one's feelings. Humor was described as intentionally joking

around or teasing one another to reduce stress. Wishful thinking involved hoping for the best in times of adversity. For religion, two participants reported going to church or praying as a means to reduce stress. Mental or behavioral disengagement (i.e. depersonalization) was described as either ignoring a problem or physically avoiding stressful situations. Under the miscellaneous coping dimension, two participants reported leaving the athletic training profession as a result of experiencing burnout. In their analysis of the data the authors suggested that problem-focused (eg, seeking instrumental social support, and planning) and emotion-focused (eg, positive evaluations, and humor) coping strategies were most efficacious for reducing perceived stress (Reed & Giacobbi, 2004).

Studies using the Maslach Burnout Inventory have yielded several notable findings with regard to factors predicting scores for the three subscales of the MBI. Burnout scores of 24 or greater for emotional exhaustion, 19 and higher for depersonalization, and 27 or more for personal accomplishment (reverse scored) are considered high (Golembiewski, Boudreau, Munzendrider, & Luo, 1996). These factors are generally distinguished as personal or environmental characteristics. For personal characteristics, perceived stress is predictive of all three subscales, type of athletic training program and graduating from a master's degree athletic training program have both shown to be predictive of emotional exhaustion, and leisure time, predictive of personal accomplishment (Kania et al., 2009). Additionally, gender has shown to be a significant predictor of emotional exhaustion, where women have significantly higher scores than men (Giacobbi, 2009; Maslach & Jackson, 1986; Riter et al., 2008; Stilger et

al., 2001). As for environmental factors, academic responsibilities and financial concerns were prominent predictors of perceived stress for undergraduate student trainers (Stilger et al., 2001). For graduate and certified athletic trainers pressure from coaches to medically clear athletes was predictive of all three subscales, working with athletes who experienced chronic injuries increased the likelihood of emotional exhaustion, being held responsible for a greater number of sports teams correlated with increased depersonalization, and the number of athletes trainers were responsible for was also positively correlated with personal accomplishment (Kania et al., 2009). Most interesting, although working with a greater number of sports teams increased depersonalization scores, indicating higher risk for burnout, working with a greater number of athletes increased personal accomplishment, reducing risk of burnout (Kania et al., 2009). Lastly, it was found that athletic trainers working in a collegiate setting scored significantly higher on the emotional exhaustion and depersonalization subscales than did athletic trainers working in a clinical setting, suggesting the collegiate context may include different demands or fewer support systems than private or clinical settings (Giacobbi, 2009).

The relationship between athletic trainers and injured athletes

As the primary responsibility of athletic trainers is to deliver quality health care to injured athletes, a discussion of the psychological response of athletic trainers to their professional demands warrants a discussion of the psychological response of the injured athletes with whom they work. Research on injured athletes has established that the occurrence of a physical injury is often accompanied by a psycho-emotional

experience or response to the injury (Brewer, 1994). The psychological response to injury and the experience of burnout share several key characteristics including the role of cognitive appraisals, personal and situational factors, and the significance of perceived social support.

A widely accepted model for understanding the emotional response to injury in sport is the Integrated Model of Response to Sport Injury (IRM), developed by Wiese-Bjornstal (1998). Opposed to stage like models, positing that individuals progress through a series of five distinct stages, the IRM suggests that following the onset of injury, athletes engage in a cognitive appraisal of their injury (Tracey, 2003). The appraisal reflects what the athlete believes his or her injury means to them. This belief, in-turn, influences the emotional response of the athlete, which then directs behaviors, which eventually lead to injury rehabilitation outcomes (Tracey, 2003). Most important, this process is more cyclical than stage like: the athlete appraises the injury, develops an emotional response, engages in behaviors, and then appraises behaviors, from which they develop an emotional response. The cycle continues until rehabilitation is complete.

Contributing to the appeal of this model is the inclusion of various factors that influence the nature of the cognitive appraisal. That is, whether the athlete makes a positive or negative appraisal of her or his injury depends on both Personal factors (i.e. injury history, personality, self-esteem, Social Economic Status, and physical health) and Situational factors (i.e. sport type, level of participation, time of injury onset, social support, and nature of rehabilitation environment).

As the nature of the rehabilitation environment along with perceived social support from athletic trainers has consistently shown to exert a strong influence on the psychological response and coping behaviors of injured athletes (Robbins & Rosenfeld, 2001; Walker et al., 2007; Wiese & Weiss, 1987) the extent to which athletic trainers experience burnout becomes of paramount importance in their ability to effectively serve both the physical and psychological needs of injured athletes.

A review of studies examining the influence of social support on individuals suffering from health problems has produced three primary conclusions: (1) There is a need for social support among individuals recovering from health issues. (2) Sufficient social support is positively correlated with improved recovery and decreased stress. (3) A lack of social support is associated with hindered recovery and poor stress management (Barefield & McCallister, 1997). Richman, Rosenfeld, and Hardy (1993) identified and defined the following eight categories of social support:

1. Listening Support: the perception that an other is listening without giving advice or being judgmental.
2. Emotional Support: the perception that an other is providing comfort and caring and indicating that they are on the support recipient's side.
3. Emotional Challenge: the perception that an other is challenging the support recipient to evaluate his or her attitudes, values, and feelings.
4. Reality Confirmation: the perception that an other, who is similar to the support recipient and who sees things the same way the support recipient does, is helping to confirm the support recipient's perspective of the world.
5. Task Appreciation: the perception that an other is acknowledging the support recipient's efforts and is expressing appreciation for the work he or she does.
6. Task Challenge: the perception that an other is challenging the support recipient's way of thinking about a task or an activity in order to stretch, motivate, and lead the support recipient to greater creativity, excitement, and involvement.

7. Tangible Assistance: the perception that an other is providing the support recipient with financial assistance, products, and/or gifts.
8. Personal Assistance: the perception that an other is providing services or help, such as running an errand or driving the support recipient somewhere.

In a study of 85 athletes from the same Division I institution, representing a variety of sports, athletes reported most commonly receiving listening support and task appreciation, while tangible and personal assistance were least commonly received (Barefield & McCallister, 1997). Important to note is that the athletes in this study did not perceive any differences in provision of social support between certified athletic trainers and student athletic trainers, suggesting that the presence rather than source of social support is most important (Barefield & McCallister, 1997).

Athletic Trainer's Use of Sport Psychology Techniques

As injured athletes spend the majority of their time interacting with physical therapists and athletic trainers during their rehabilitation, a study of physical therapist's and athletic trainer's attitudes towards psychological interventions is well warranted. Using a series of electronic surveys Hamson-Utley, Martin, and Walters (2008) conducted such a study, examining attitudes towards imagery, goal setting, and positive self-talk. In general, athletic trainers held more positive attitudes about all three psychological interventions in terms of their ability to enhance the personal well-being of the athlete, where physical therapists were relatively neutral in their attitudes about imagery and positive self-talk, but held positive attitudes about goal setting which they perceived to be an effective means of increasing rehabilitation program adherence.

What was unaddressed in this study was whether participants had received any formal training with these psychological interventions.

Clement and Shannon (2009) held a workshop to determine the extent that sport psychology skills training presented to athletic training students would translate into the actual use of Sport Psychology behaviors. In their study it was reported that 84% of athletic trainers do not see themselves as competent in the use of Sport Psychology techniques, and 87% expressed a desire to receive more training in this area. The Sport Psychology behaviors recorded in the study included: (a) speaking to an athlete about Sport Psychology, (b) seeking out additional information about Sport Psychology, (c) talking to a Sport Psychologist about an athlete, (d) referring an injured athlete to a Sport Psychologist, and (e) using applied Sport Psychology techniques in rehabilitation programs with injured athletes. A two-week follow up after the workshop showed that the participating athletic trainers increased in all of the above Sport Psychology behaviors, with the exception of referring an athlete to a Sport Psychologist. With more advanced training in Sport Psychology skills (including applications of Positive Psychology) athletic trainers could become a major asset in providing emotional support to injured athletes. Furthermore, the findings of this study suggest that although formal education for applying sport psychology techniques is lacking, on the whole, athletic trainers are receptive to and willing to apply sport psychology techniques. Thus, providing athletic trainers with first hand experience with using positive psychology interventions as strategies for coping with stressful situations may enhance athletic

trainer's ability to identify appropriate positive psychology interventions for use with their athletes.

Gaps in Athletic Trainer Burnout Literature

As shown in the literature review, with few exceptions, research examining burnout among athletic trainers has most prominently been pursued through use of quantitative methods. In response to this trend has been a call for employing qualitative methods to understanding the phenomena of burnout (Pitney & Parker, 2001). Although these quantitative studies have provided a dearth of knowledge regarding factors contributing to burnout among athletic trainers, descriptions of how athletic trainers perceive and experience burnout have yet to be fully addressed. Qualitative research not only differs from quantitative approaches in the methodology used, but also in the type of questions being investigated. Qualitative research is most apt for attaining rich descriptions of particular phenomena such as burnout, and how one's understanding of these phenomena is influenced through social interactions (Pitney & Parker, 2001). As one aim of this study is to assess athletic trainers perceptions of burnout and well-being in the athletic training context, a qualitative approach following a symbolic interactionist theoretical perspective will be employed in conjunction with quantitative methods for assessing burnout.

Research in the field of burnout includes a variety of proposals for coping strategies (Reed & Giacobbi, 2004) as well as practices for improved self-care, such as balancing work and leisure activities, increasing access to positive social support, and finding ways to reduce work load (Norcross & Guy, 2007; Wicks, 2008). However,

limited published research exists examining the efficacy of coping strategies for reducing perceived stress (Maslach, 2003). Thus, the primary goal of this study is to address this lack of empirically validated research on interventions to reduce symptoms of burnout, and generally enhance well-being among collegiate athletic trainers through use of a Positive Psychology approach.

Positive Psychology & Well-Being: A framework for investigating burnout

Positive Psychology is described as the study of the presence of individual traits, strengths, or virtues that contribute to subjective well-being (Seligman & Csikszentmihalyi, 2000). Proponents of Positive Psychology operate under the assumption that it makes sense to study what is right in people in addition to what is wrong (Seligman & Csikszentmihalyi, 2000). As burnout can most simply be described as a disruption in well-being, a Positive Psychology approach offers particular appeal for addressing burnout in that research aimed at identifying the specific components of well-being has been simultaneously pursued with research designed to empirically validate interventions for enhancing well-being (Seligman, Park, & Peterson, 2005).

Seligman (2011) describes well-being as a construct consisting of five components; 1) Positive Emotion, 2) Engagement, 3) Positive Relationships, 4) Meaning, and 5) Accomplishment (PERMA). Seligman (2011) suggests that each of these five components meet three critical properties in order to be included in the construct of well-being. These properties include: (1) it must contribute to well-being, (2) many people pursue it for it's own sake, not merely to experience any of the other elements,

and (3) it is defined and measured independently of the other elements (Seligman, 2011).

The first component of well-being, positive emotion, is the central marker for assessing well-being (Fredrickson, 2000). Of the five components of well-being positive emotion is the most critical to the rationale for implementing Positive Psychology Interventions (PPI's) among athletic trainers, and thus will be more thoroughly discussed in later sections of the literature review. For a brief introduction, positive emotions include joy, contentment, pleasure, and interest (Seligman, 2011). Although working definitions of emotion vary within the positive psychology literature (Diener, Eunkook, Lucas, & Smith, 1999), most commonly emotions are "conceptualized as multicomponent response tendencies that unfold over relatively short time spans" (Fredrickson, 2001). Emotions emerge as a result of one's appraisal of the personal meaning of an antecedent event, in which the appraisal can be either conscious or unconscious (Fredrickson, 2001). It is an uncontended notion that the experience of positive emotions enhances well-being (Cohn & Fredrickson, 2010; Diener, 2000; Fredrickson & Joiner, 2002; Lyubomirsky & Layous, 2013; Seligman et al., 2005).

Second, Seligman (2011, p.11) describes engagement as "flow; being one with the music, time stopping, and the loss of self-consciousness during an absorbing activity." In this sense engagement is distinct from positive emotion in that the individual does not appraise an event, but merely experiences the event (Seligman, 2011). As thinking or cognitive appraisals are absent in the experience of engagement, engagement can only be assessed retrospectively (Seligman, 2011). Further, although

the retrospective appraisal of engagement may produce the subjective experience of positive emotions, engagement is pursued for its own sake rather than for the anticipated experience of positive emotions (Seligman, 2011).

The third component, positive relationships, serve as the foundation for well-being. In their development of Self-Determination Theory (SDT), Deci and Ryan (2000) list relatedness in addition to autonomy and competency as essential human needs for well-being. Further research on (SDT) revealed that autonomy and relatedness were not entirely distinct entities, rather within relationships in which individual autonomy was supported well-being was enhanced (Ryan & Deci, 2006). This is of particular relevance to the current study in that research shows relationships with superiors are often seen as hindering the autonomy of athletic trainers (Pitney, 2006). Of the various positive psychology interventions that have been tested practicing acts of kindness produced the single most reliable momentary increase in well-being (Seligman et al., 2005).

According to Seligman (2011) the fourth component of well-being, meaning, refers to a sense of “belonging to and serving something perceived to be bigger than the self.” Meaning has a subjective component in that only the individual themselves can derive what life events or activities serve a higher purpose. In short, meaning has more to do with altruism than the individual pursuit of well-being.

Lastly, accomplishment, especially in sport, is closely linked to the concept of intrinsic motivation. Intrinsically motivated people freely engage in activities of personal interest on their own volition (Cox, 2007b). Deci & Ryan (2000) discuss

competency as an intrinsically motivated desire to achieve mastery over a particular life domain, in which satisfying the need for competency bolsters well-being.

To summarize, well-being is comprised of an individual's subjective experience of positive emotions, engagement, positive relationships, meaning, and accomplishment. Important to note is that these components are merely indicators of one's well-being; one must not experience all five components to be considered to have high well-being. Furthermore, the components of well-being do not apply exclusively to one particular life domain such as one's occupation. Rather, individuals, can experience positive relationships at home but not in the work place, or one could be engaged in a particular hobby, but not with their job related tasks. In short, well-being is enhanced when any one component is experienced by the individual regardless of the context in which that component is experienced.

The Role of Positive Emotions in Well-Being

As positive emotions are described as the central marker of well-being, a review of evidence for how positive emotions contribute to well being is provided. Specifically, The Broaden-and-Build theory of positive emotions describes how positive emotions influence our behaviors, undo the physiological effects of negative emotions, and create an upward spiral toward well-being.

Intuitively, and empirically validated, the ratio of individual's positive to negative emotions contribute to subjective well-being (Diener, Sandvik, & Pavot, 1991). Another common assumption is that increases in positive emotions momentarily enhances one's perception of well-being (Seligman & Csikszentmihalyi, 2000). The Broaden-and-Build

Theory of Positive Emotions expands upon this notion asserting that positive emotions produce optimal functioning, providing a means for achieving personal growth and psychological well-being over the course of one's lifespan (Fredrickson, 2004). The mechanism through which this long-term personal growth occurs is the *specific action tendencies* elicited by emotions (Levenson, 1994). Specific Action tendencies refers to the concept that in response to their emotions, people's ideas about possible courses of action narrow in on a specific set of behavioral options (Fredrickson, 2004). This association is believed to be evolutionarily adaptive, where an emotion such as fear creates the action tendency to escape, coupled with the autonomic response of redirecting blood flow to large muscle groups. As opposed to negative emotions, which narrow specific action tendencies, positive emotions have shown to broaden specific action tendencies (Fredrickson & Levenson, 1998). Furthermore, positive emotions have been identified to facilitate approach behavior, prompting the individual to engage with their environments, and build upon their personal, psychological, and social resources (Davidson, 1993). This particular approach behavior can be highly adaptive for the athletic trainer experiencing burnout by counteracting the tendency to withdraw from others, referred to as depersonalization. Fredrickson (2001), states that positive emotions can occur under adverse circumstances, although the likelihood of such a response may be dependent upon the personality disposition of the individual. Fortunately, positive emotions can be cultivated through use of various intentional exercises such as PPI's (Cohn & Fredrickson, 2010).

With the observed increase in cardiovascular activity in response to negative emotions researchers proposed that positive emotions would reduce cardiovascular activity, known as The Undoing Hypothesis. To test this theory researchers first showed participants a video aimed to elicit fear, which effectively increased cardiovascular activity (Fredrickson & Levenson, 1998). Next, participants were shown a video clip to elicit one of four emotions according to their particular experimental condition (i.e. contentment, amusement, neutrality, and sadness) (Fredrickson & Levenson, 1998). The results of the study supported the Undoing Hypothesis, where participants in the two positive emotion experimental conditions (i.e. contentment and amusement) showed the fastest cardiovascular recovery (Fredrickson & Levenson, 1998). This study shows that positive emotions can reverse the physiological consequences of negative emotions. This undoing effect is particularly relevant in the context of athletic injury rehabilitation where negative emotional responses are normative, suggesting that PPI's designed to enhance positive emotions could effectively alleviate the physiological consequences of negative emotions.

The Broaden-and-Build Theory of Positive Emotion posits that positive emotions broaden the scope of individual's thought repertoires, ultimately leading to enhanced well-being (Fredrickson & Branigan, 2005). Fredrickson and Joiner (2002) investigated this proposed relationship hypothesizing that positive emotions and broad-minded coping hold a reciprocal relationship. Administering the Coping Response Inventory at two five week intervals on a sample of 138 college students, the results of regression analyses showed: (a) initial positive emotion predicted improved broad-minded coping,

(b) initial broad-minded coping predicted increased positive emotion, (c) initial negative emotion did not predict improved broad-minded coping, and (d) initial broad-minded coping did not predict reductions in negative emotion (Fredrickson & Joiner, 2002). In summary, positive emotion improves broad-minded coping, which further increases the experience of positive emotions, ultimately enhancing well-being.

Efficacy of Positive Psychology Interventions

Efficacious interventions for increasing subjective well-being have been described as “the bottom line of work in Positive Psychology” (Seligman et al., 2005). To test the efficacy of a variety of interventions aimed to increase happiness, researchers recruited 411 participants via the internet, and assessed them at five intervals over a six month period (Seligman et al., 2005). To assess depression the Center for Epidemiological Studies-Depression scale (CES-D) was used, where happiness was measured using the Steen Happiness Index (SHI). Following a randomized control trial format participants were assigned to one of five happiness exercises or a placebo control exercise (Seligman et al., 2005). Each of the six exercises are listed below as they were described in the study:

Placebo Control Exercise: Early Memories

Participants were asked to write about their early memories every night for one week.

Gratitude Visit

Participants were given one week to write and then deliver a letter of gratitude in person to someone who had been especially kind to them, but had never been properly thanked.

Three Good Things in Life

Participants were asked to write down three things that went well each day and their causes every night for one week. In addition, they were asked to provide a causal explanation for each good thing.

You at Your Best

Participants were asked to write about a time when they were at their best and then to reflect on the personal strengths displayed in the story. They were told to review their story once every day for a week and to reflect on the strengths they had identified.

Using Signature Strengths in a New Way

Participants were asked to take an inventory of character strengths online and to receive individualized feedback about their top five “signature strengths.” They were then asked to use one of these top strengths in a new and different way every day for one week.

Identifying Signature Strengths

This exercise was a truncated version of the exercise described above, without the instruction to use signature strengths in new ways. Participants were asked to take the character inventory, to note their five highest strengths, and to use them more often during the next week.

Using Analysis of Variance tests, researchers reported that the *using signature strengths in a new way* and the *three good things* exercises significantly increased happiness and decreased depressive symptoms for six months (Seligman et al., 2005). The *gratitude visit* produced large significant increases in happiness for a period of only one month (Seligman et al., 2005). The *identifying signature strengths, you at your best*, and the *placebo control* exercises showed positive but not significant increases in happiness and decreases in depressive symptoms (Seligman et al., 2005).

Given the findings from the study above, the *using signature strengths in a new way*, and the *three good things* interventions have been selected for use in this study as they produced the longest lasting significant increase in happiness and decrease in depressive symptoms. The *three good things* exercise is viewed as a means of promoting positive evaluations, identified as one of the more efficacious emotion-focused coping strategies for reducing perceived stress (Reed & Giacobbi, 2004). In addition this intervention may promote internalization of the challenge component of hardiness, identifying the positives in challenging situations, where increased hardiness is linked to decreased burnout symptomology (Hendrix et al., 2000). Lastly, to address athletic trainer's perceived lack of social support (Giacobbi, 2009) or appreciation for their work (Pitney, 2006), a *peer support* intervention was specifically designed for this study. The *peer support* exercise requires that participants deliver a letter to an athletic trainer they work with describing one or more strengths that trainer displayed over the course of one week. In addition, participants will describe in their letter how the

strength(s) displayed by the other athletic trainer influenced how they themselves approach their occupational duties.

With the knowledge that positive emotions enhance well-being, and that positive emotions can be enhanced through the use of positive psychology interventions the purpose of this study is to determine if the positive emotions elicited through use of the proposed interventions will both reduce symptoms of burnout and enhance subjective well-being among athletic trainers. Most apparent in a review of the literature on burnout in athletic trainers as well as other professionals is a lack of empirically validated strategies for reducing symptoms of burnout. Thus, this investigation into the efficacy of positive psychology interventions for reducing burnout is based upon the future research recommendations made in the existent literature, reflecting a shift of attention away from causes and symptoms of burnout toward strategies for alleviating burnout.

CHAPTER 3: METHODOLOGY

The present study includes quantitative and qualitative methods. The Maslach Burnout Inventory (MBI) will be used to quantitatively assess burnout symptomology. As mentioned in the literature review the MBI has been a widely used instrument for assessing burnout among athletic trainers, and recently, a call has been made for qualitative approaches for assessing burnout. Thus, the current study allows for both drawing comparisons of data attained from participant MBI scores with past research, and building upon the limited qualitative research in this field. The proceeding sections describe the research questions being investigated, the rationale for employing the particular research methods, an overview of participants, researcher positionality, and data collection and analysis.

This study will attempt to answer the following research questions: (1) What are athletic trainer's perceptions of their experiences of burnout and well-being? (2) What factors do athletic trainers perceive as contributing to experiences of burnout? (3) Will engaging in positive psychology interventions reduce MBI scores? (4) Which subscales of the MBI are most affected by the positive psychology interventions? (5) Which positive psychology intervention do athletic trainers perceive as most effective? Use of the MBI provides a well-validated measure for assessing the experience of burnout symptoms. The qualitative methods employed will provide for a richer description of how trainers experience symptoms of burnout and describe their overall subjective

well-being. Interviews with participants will be particularly useful in addressing research questions 1, 2, and 5.

As for the qualitative methods, the researcher must identify their epistemology, theoretical perspective, methodology, and methods (Crotty, 2003). The present study operates from a constructivist epistemology, focusing on the meaning-making activity of the individual mind in a societal context (Crotty, 2003). That is, how the individual athletic trainer interprets the socially constructed meanings of burnout and well-being. The study will follow a symbolic interactionist theoretical perspective, to be described in the data analysis. The methodology of the study is primarily experimental in nature, attempting to determine the efficacy of positive psychology interventions for reducing burnout and enhancing well-being, and will involve case study methods, utilizing semi-structured interviews, observation notes, and comparative analysis. This study also has an explanatory component, with regard to the research questions posed for understanding participant's experiences or perceptions of burnout and the positive psychology interventions.

A case study approach is recommended when the researcher has a clearly identifiable issue or concern and a bounded case to investigate this issue or concern (Creswell, 2007). As with the current study a multiple case study, as opposed to a single case study is employed in effort to attain multiple perspectives of a single issue (Creswell, 2007). For the current study the issue under inquiry is burnout, where the multiple cases (i.e. graduate student trainers, and full-time athletic trainers) are bounded by the occupational context of athletic training, allowing for comparisons

among groups of trainers. Typically, data analysis for a multiple case study begins with a rich description of each case and an identification of themes for each particular case, called a within-case analysis (Creswell, 2007). Next, researchers compare themes identified within each case across all cases, engaging in cross-case analysis (Creswell, 2007). Finally, the researcher reports on the meaning of each case in what is called the interpretive phase (Lincoln & Guba, 1985). Furthermore, as the study attempts to investigate the affects of a series of interventions, data will be analyzed chronologically across interventions as recommended by Yin (2003).

Subjects

An announcement of the purpose, procedures, and requirements of the study was made at the Sports Medicine monthly staff meeting to recruit participants for this study. The study utilized purposeful maximal sampling selecting participants that represent both groups of athletic trainers (i.e full-time and graduate assistant athletic trainers) to ensure a variety of perspectives on the issue of burnout were available for analysis. A total of 5 athletic trainers were selected for the study. Specifically, 3 female full-time athletic trainers, and 2 male graduate assistant trainers participated in this study. Demographic data for each of the participants, including their professional level, years of experience, sport teams they work with, and estimated hours worked per week is presented in Table 1. Interviews with participants were held in a private office located in the same building as the athletic training room. The primary investigator of the study will conduct interviews with participants, as well as engage in observations of participants working in the athletic training room. As the primary investigator has

served as an injury rehabilitation consultant for injured athletes at the university for period of two years it is expected that the researcher will have already established rapport with the full-time athletic trainers participating in the study.

Name	Age	Gender	Status	Experience	Sport(s)	Hours/wk
Sue	28	Female	Full-time	2 years	Women's Tennis, Women's Golf, Football	72
Molly	35	Female	Full-time	13 years	Women's Basketball	82
Becca	32	Female	Full-time	11 years	Track, Cross-Country, & Dance	85
Maxx	23	Male	Graduate Assistant	4 months	Track, Cross-country, & Cheerleading	67
Grant	23	Male	Graduate Assistant	4 months	Baseball, Football, & Cheerleading	80

Table 1- Demographic data

Instrumentation

To attain quantitative measures of athletic trainer burnout the Maslach Burnout Inventory (MBI) was used. The MBI is a well-validated and widely used method for quantifying burnout in the helping professions (Maslach & Jackson, 1986). The MBI is a 22-item questionnaire, scored using a 7-point Likert scale (0=never, 3=a few times a month, 6=everyday), and includes three subscales: emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA) (Maslach & Jackson, 1986). Emotional exhaustion is used to describe feelings of being emotionally overextended and exhausted by work, where depersonalization describes the act of becoming callous

toward or withdrawn from clients and colleagues. Lastly, personal accomplishment refers to feelings of accomplishment and a sense of competence about one's professional role as well as a sense of self-appreciation for the success achieved. Example items from the MBI include "I feel used up at the end of the workday (EE)," "I've become more callous towards people since I took this job (DP)," and "I deal very effectively with the problems of my recipients (PA)." This inventory is scored by summing the items in each of the subscales. No overall burnout score is calculated.

Data Collection

After completing the baseline MBI participants engaged in 30-60 minute semi-structured interviews to assess their perceptions of burnout, subjective well-being, occupational stressors, and use of coping strategies. All participants were asked to engage in the following positive psychology interventions in the order they are presented: Three Good Things in Life, Using Signature Strengths in a New Way, and Peer Support. Participants completed each positive psychology intervention over the course of a 7-day week. After completing each positive psychology intervention participants completed the MBI, engaged in another 30-60 minute semi-structured interview, and turned in their activity log for each intervention. At the end of each interview participants were given detailed instructions on how to complete the next intervention. Lastly, during the course of each week the researcher observed the athletic trainers in their work setting for a period of one hour, and composed observational notes.

Data Analysis

As noted earlier this study employed a symbolic interactionist qualitative perspective. The symbolic interactionism framework includes three major assumptions: (1) human beings act toward objects based on the meaning that the items have for them, (2) meaning is a product of social interaction in our society, and (3) the attribution of meaning to objects through symbols is a continuous interpretive process (Blumer, 1969). This particular framework is well suited for studying burnout among athletic trainers in that interactions between trainers at different levels of professional development (Henning & Weidner, 2008), between trainers and coaches (Kania et al., 2009), between trainers and athletes, and athletes parents (Reed & Giacobbi, 2004) and between trainers and university administrators (Pitney, Ilsley, & Rintala, 2002) have been cited as factors contributing to burnout. The actual qualitative data analysis began with a verbatim transcription of participant interviews, followed by identification of meaningful concepts, categorization of meaning units, accompanied by a continual within-case and cross-case comparison of themes identified as recommended by Creswell (2007).

Statistical Analysis

Having a relatively small sample size ($N=5$) significant differences between subscale scores of the MBI at the five intervals they are administered cannot be attained. For this reason statistical analyses were limited to an examination of changes in individual's subscale scores across MBI administration intervals. Although a significant effect of the positive psychology interventions on the three MBI subscales

cannot be attained in this multiple case study, examining the direction of change in subscale scores can provide some insight into the efficacy of the positive psychology interventions for reducing symptoms of burnout.

Validity and Trustworthiness

To ensure validity or trustworthiness of the qualitative data obtained three strategies will be employed: member checking, triangulation, and independent data analyses consultation. First, participants were provided a summary of the transcribed interview, as well as a description of themes identified in the data. Participants were asked to reflect on the accuracy of the findings and to clarify any discrepancies. Second, an interview was conducted with the athletic trainer's supervisor to assess the accuracy of the researcher's observations. Lastly, trained qualitative researchers, unaffiliated with the present study, were provided copies of the transcribed data and themes identified to provide reliability checks and assess for potential researcher biases.

Member checking with participants allowed for clarification on reported hours worked per week, and motivations for entering the athletic training profession. Participants did not find any inaccuracies with regard to reported sources of burnout or perceptions of each positive psychology intervention. Two interviews were conducted with the Director of Sports Medicine, one after participants had completed the third and final intervention, and the second after participants had completed the final two-month follow up interview. In these interviews the Director of Sports Medicine confirmed both the accuracy of events occurring during team staff meetings depicted in the findings chapter of this study, as well as participant's reported sources of burnout. As for the

coding of participant interviews provided by two graduate Sport Psychology students, a high degree of reliability was obtained when compared to the coding produced by the primary researcher. Discrepancies between coded data sets were identified only for the themes *Demanding Work Hours* and *Poor Work-Life Balance*, where *Poor Work-Life Balance* was more often coded as *Demanding Work Hours* by the graduate students. After deliberation, consensus was reached on the distinction between these two themes.

CHAPTER 4: FINDINGS

Before introducing the findings from the interviews with the participants of this study, the research questions addressed are presented for review: (1) What are athletic trainer's perceptions of their experiences of burnout and well-being? (2) What factors do athletic trainers perceive as contributing to experiences of burnout? (3) Will engaging in positive psychology interventions reduce MBI scores? (4) Which subscales of the MBI are most affected by the positive psychology interventions? (5) Which positive psychology intervention do athletic trainers perceive as most effective?

The study includes both explanatory and experimental research questions, consisted of a series of experimental interventions, and compared findings between full-time athletic trainers and graduate assistant athletic trainers. For this reason, data will be presented chronologically, beginning with baseline interviews and ending with the final two-month follow up interview. Within this chronological framework data will be presented following a Question-and-Answer Format, outlined by Yin (2003). This approach entails presenting the research question, and detailing each individual's or "case's" response, followed by a summary of themes for each case. Yin, 2003 outlines the strengths of this Question-and-Answer Format as most useful for readers to identify and attend to research questions of personal relevance, providing for an inherent cross-case analysis, and providing an organizational structure where findings are presented in a more concise manner than a traditional case study Narrative approach. This approach was deemed most suitable for this study as the cross-case analysis inherent in this

compositional style will allow readers to identify differences between “case’s” experiences of the positive psychology interventions. However, a formal cross-case analysis will be presented following each research question.

Lastly, as participant’s MBI scores will be presented throughout the chapter the scoring key used to determine the degree of risk of burnout for each symptom is presented in Table 2. Note that the personal accomplishment subscale is scored in reverse direction where higher scores indicate a greater sense of personal accomplishment, and thus a lower risk of reaching burnout.

Symptoms	High	Moderate	Low
Emotional Exhaustion	27 or over	17-26	0-16
Depersonalization	13 or over	7-12	0-6
Personal Accomplishment	0-31	32-38	39 or over

Table 2- MBI scoring key

Research Question 1: What are athletic trainer’s perceptions of their experiences of burnout and well-being?

During the initial baseline interviews participants were asked to provide, in their own words, a definition of both burnout and well-being. Follow up questions were asked about participant’s current and past experiences of burnout and well-being in this semi-structured interview. These questions were used to address research question (1)

What are athletic trainer's perceptions of their experiences of burnout and well-being?

Participant's responses are provided below.

Molly

Perceptions of Burnout

In describing burnout Molly recalled experiencing warning signs of burnout in past years, emphasizing the importance of having a commitment to the quality of care given to athletes, "When you start putting yourself in front of your athletes that's when you're near burnout because we don't do this for ourselves, we do it for the athletes."

Molly goes on, elaborating on the relationship between commitment to her athletes and burnout, "I think when you can no longer think and say you're doing a good job, you're on your way." Here, Molly expresses her belief that having a high sense of personal accomplishment is essential for preventing burnout. Molly continues to describe the phases leading up to burnout, where burnout is seen as a final end point where one should withdraw from the profession,

I think there's different phases of burnout, and I think you get the tired, I think you get the restlessness, the constant worry, the constant thoughts of work, but I think burnout is when either you're absolutely sick of it and you just walk away or it hits a point where you just physically and mentally can't focus on what you're doing anymore. You're just past that coasting period. There's no coasting. You're done.

For Molly, the primary symptom of burnout was emotional exhaustion, specifically, experiencing a perceived inability to meet the emotional demands of one's work (Demerouti et al., 2001). Furthermore, Molly proposes emotional exhaustion arises as one's level of commitment or hardiness diminishes. Although Molly stated she was currently experiencing symptoms of burnout only "from time-to-time," her MBI

scores during this baseline interview were considered high for both emotional exhaustion and depersonalization. However, consistent with her expressed need to be able to think and say she is doing a good job, Molly's score for the personal accomplishment subscale of the MBI was the second highest among this group of trainers at this baseline interval (shown in Table 3).

Molly	Emotional Exhaustion	Depersonalization	Personal accomplishment
Baseline Interview	36 (High)	13 (High)	39 (Low)

Table 3- Molly's MBI subscale scores at baseline interval

Perceptions of Well-being

When asked what she enjoys most about her work Molly began her response saying, "I always say that what I do for a living is what other people do for fun."

Elaborating on what makes the job fun Molly described the importance of relationships,

I like the relationships you build with everything from your student-athletes, to your coaches...I just think that the relationships are probably the number one thing.

Following Seligman's (2011) construct of well-being, Molly's response indicates the presence of both the positive emotion and positive relationships components of well-being. With regard to the construct of hardiness, the components of commitment and challenge emerged in Molly's response to the question of how she viewed the role of constant change in the profession,

I think that's what keeps it exiting. I've got an athlete right now that we're just trying to keep on the court, and I had our bracing representatives create a brace that's never been created before to try to fix that. So when you start thinking of those things it's like thinking outside the box, and that's more fun than going and watching a surgery.

Molly's description of change as "exciting" is consistent with the definition of the challenge component of hardiness; reflecting the belief that change, as opposed to stability in life is normal, in which change is viewed as interesting, positive, and a stimulus for growth (Hendrix et al., 2000). Describing activities that require thinking outside the box is reflective of the commitment component of hardiness; an approach to life characterized by curiosity, a sense of purpose, and a willingness to commit to relationships (Hendrix et al., 2000). Molly's preference to think outside the box could be well described as an approach to life characterized by curiosity. Molly also provides sufficient evidence of having a sense of purpose and willingness to commit to relationships as she continued to discuss what she enjoys most about her work,

My athletes asked me once what the best thing was (about my job), and I said seeing them graduate. You can see them shoot a three-pointer, but to watch them graduate and see what they are doing now...Just seeing them and their families, and where they go is probably even neater to be involved in or entwined in their lives. I think that's probably the coolest.

These comments also reflect the meaning component of well-being, which can be described as having a sense that you are part of something bigger than yourself. In Molly's case, she sees herself as being part of the personal development of her student-athletes.

Although several components of both hardiness and well-being emerged as Molly described what she enjoys about her work, Molly also described the negative impact this profession can have on her well-being when asked what she believed to be her primary source of well-being,

Work. It's always been work. I mean if there's anything I do, it's work...So, you know, your personal time suffers because of that, your out time suffers, your mind suffers,

your well-being suffers because of this. It's probably shaving years off of our lives and we don't even realize it.

Here, Molly describes how her commitment to the profession has reduced her ability to engage in activities to promote personal well-being outside of work. Molly further illustrates how closely her well-being is tied to her work when asked about the importance of receiving appreciation from the coaches and athletes she works with, "I think it's very important because it, to you, it shows you your worth." Molly's case shows how absorbing one's self in the profession of athletic training can lead to the exclusion of unrelated work activities, while committing to the profession to this degree can also provide for fulfilling experiences and overall positive perceptions of one's well-being.

Sue

Perceptions of Burnout

Sue described experiencing burnout in her previous year at her current institution. Although she reported not currently experiencing symptoms of burnout, she responded with a sense of certainty, recalling her previous experiences with burnout, and describing burnout as "When you don't want to come to work anymore. When you just look at it and you're like I don't want to come to work, that's burnout to me." This statement reflects a lack of commitment, one component of the personality construct of hardiness, which has shown to have a buffering affect against burnout when one or more of the components of hardiness is present (Hendrix et al., 2000). With regard to the three primary symptoms of burnout, Sue's response is descriptive of

depersonalization, which involves a tendency to withdraw from one's clients and colleagues (Evans & Fischer, 1993). Sue's MBI score for depersonalization at this baseline interval was a 7, meeting the minimum criterion for what is described as a moderate experience of this symptom. Thus, despite describing herself as not currently experiencing any symptoms of burnout, her MBI scores (shown below) indicate the lingering of both depersonalization and emotional exhaustion, while her perceived sense of personal accomplishment remained rather high, which may have masked her moderate experiences of the other two symptoms of burnout (shown in Table 4).

Sue	Emotional Exhaustion	Depersonalization	Personal accomplishment
Baseline Interview	22 (Moderate)	7 (Moderate)	31 High

Table 4- Sue's MBI subscale scores at baseline interval

Perceptions of Well-being

When asked how she would describe well-being Sue responded, "Healthy, happy with where I am, and my family." For Sue, well-being included the physical component of being healthy, as well as the emotions of being happy, and maintaining positive relationships with her family. Sue was asked to expound upon her statement of "happy with where I am," which she describes as,

Being excited about my job coming to work everyday. I think that is happy where I'm being because I know certain people that hate their job, but they want to do it because of the pay. I don't think the pay matters to me, it's more of if the people I work with are family, I can see myself there in a couple years with the same people, and that's what I consider happy with where I am.

Sue also expressed that she was experiencing this sense of being happy in her current position. Along with the experience of positive emotions, positive relationships with co-workers, was also viewed as an essential component of well-being. Sue continued to discuss the topic of positive relationships in regard to the student-athletes she works with,

I've had athletes say they can't do something, and then you give me a month, you give me a couple days, weeks, and they can do that again, and then they're just like oh my gosh, like you can't say never in the athletic training room, and that's something I've kind of preached around my kids is don't ever tell me never because you can always do something, that's just in your mind. So I love coming to work just because I can see that in the kids. I think I've had a positive influence on them if I keep the positive attitude, and so as long as I can do that each day I love coming to work.

For Sue, these relationships were characterized by facilitating student-athlete achievement. Sue recalled an experience early in her career that she felt marked the point she knew she had found the right profession. This experience occurred when Sue was working with a basketball player, who, for 4 years could not dunk due to pain in his knees. They committed to a rehabilitation program, working every day together for several months. After having made significant progress, the moment came when the athlete dunked the ball for the first time in his college career in a game-time situation. Below, Sue provides her recollection of that moment,

It was one of those moments where everybody knew what that meant, the team and the coaches, and it was one of those moments of I've changed a kid's mind from I can never do something to I just did it in a game. It was something we had to call a timeout for because everybody was so emotional. That was kind of my moment of like okay I can do this.

In her story Sue demonstrates the commitment component of hardiness, as well as the meaning component of well-being, appreciating her role in facilitating this

developmental milestone for the athlete, from which she also derived a sense of accomplishment.

Despite experiencing moderate symptoms of burnout, Sue describes herself as having a high sense of well-being. Sue's level of hardiness, particularly with regard to commitment, the value of her relationships with colleagues and student-athletes, and the sense of accomplishment she gains from her work, together, appear to provide her an effective buffer from experiencing more severe symptoms of burnout.

Becca

Perceptions of Burnout

Leading off the baseline interview Becca reported experiencing several symptoms of burnout in the past, and expressed that she was currently experiencing symptoms of burnout to some degree. When asked to describe burnout in her own words, Becca offered a single word "exhaustion," followed by a brief laugh, like those you hear when an individual makes an attempt to find the humor in a less than humorous situation. When asked if she was referring exclusively to mental exhaustion, Becca responded, "Physical exhaustion, like frustration, I would say." Becca continued unprompted, "Frustration with not having control of what you want to do. You're just at the disposal of what other people need you for." Although Becca described her exhaustion as physical, her added statement of experiencing chronic frustration suggests she is currently experiencing some level of emotional exhaustion, described in the literature as feeling overextended at times (Demerouti et al., 2001). Becca's attributing her frustration to constantly being at the disposal of others, and not being

able to do her job the way she would like to do it reflects a lack of control, one of the three components of hardiness, described as a lack of autonomy or perceived inability to influence the course of events in a given situation (Pitney, 2006). With this sense of lacking autonomy coupled with her current experiences of physical exhaustion and frustration, Becca appeared to be experiencing a higher degree of burnout than most other participants in the study. Becca's MBI scores at this baseline interval (shown in Table 5) supported this notion, scoring highest on the emotional exhaustion subscale.

Becca	Emotional Exhaustion	Depersonalization	Personal accomplishment
Baseline Interview	35 (High)	23 (High)	32 (Moderate)

Table 5- Becca's MBI subscale scores at baseline interval

Perceptions of Well-being

When asked how she would describe well-being, Becca offered the following,

I think in well-being you're looking at the whole person. So you want them, or yourselves, to be as balanced as possible where you can keep work related things at work and home related things at home, you know, personal things one place and professional things one place, and kind of compartmentalize so that your overall feelings are happy and content.

Although Becca's description of well-being includes positive emotions such as feeling happy or content, these emotions are end results of the practice of compartmentalizing one's professional and personal life. For Becca, balance between the professional and personal life domains is essential for well-being. Becca makes a distinction between well-being at work and well-being in her personal life, and added that her sense of well-being at work was less important to her than her sense of well-being in her personal life.

Becca also expressed how the demands of the job, at times, interfere with her personal life, “It’s harder to shift my attention from work to my personal life because you feel like you’re on call at all hours.”

When asked to describe what elements need to be in place for her to experience well-being at work, Becca emphasized the importance of organization, preparation, and communication. Specifically, the importance of organization was to ensure she had a plan in place for the student-athletes she knew she would treat that day. With a plan in place, these organizational efforts enabled her to feel prepared to address any unforeseen events such as the occurrence of a new injury or change in student-athlete’s schedules, which she described as the feeling of “always working in a controlled chaos.” Communication was deemed equally important, emphasizing the need to keep the coaches, student-athletes, and trainers all “on the same page.” In terms of hardiness, Becca’s approach reflects the component of challenge, in which change is viewed as normal. She also demonstrates viewing change as positive in the following comments, “I think the challenge is what’s really enjoyable, like the process rather than the end result.” As for the components of well-being, most salient is the presence of engagement, where communication with others had more to do with improving work efficiency than developing positive relationships with others. Becca goes on to describe her perceived role as an athletic trainer,

I don’t really care about winning championships. I just care about them being able to do the best they can, and like be happy, be fulfilled with what they were able to do, like the student-athlete or even the coach because honestly when it comes down to it I’m just a facilitator to help them achieve their goals. Like winning a team national title would be nice, but I would be more enjoying the process of being part of that

program to get to that title and see what the individuals did to get there rather than just getting there.

This role as a facilitator of student-athlete's goals reflects the hardiness component of challenge, providing her a sense of purpose. Her expressed enjoyment in contributing to the success of a program illustrates how she is able to derive the positive emotions, meaning, and accomplishment components of well-being.

When asked what elements need to be in place to experience well-being in her personal life, Becca began by describing the importance of both being physically healthy and fiscally responsible, as well as finding time just for herself. Becca also discussed the role of relationships with others outside of work,

Knowing I have people in my life that care about me, and that, like love me, basically...So keeping good relationships outside of work, being able to have friendships outside of work with people that aren't from work.

As illustrated above, Becca's primary source of positive relationships are attained outside of work. Although Becca scores in the high risk range for burnout on the symptoms of emotional exhaustion and depersonalization, her degree of hardiness, characterized most by the components of commitment and challenge enable her to continue to function at a high level at work, while also placing greater significance on her personal well-being than occupational well-being.

Maxx

Perceptions of Burnout

Maxx had been working for 4 months as a graduate assistant athletic trainer at the time this baseline interview was conducted. When asked for his definition of

burnout Maxx responded, “I would define burnout as having a decreased desire in doing something, and along with that, just kind of regretting your career path.” Being relatively new to the profession Maxx’s response was more reflective of his familiarity of the concept of burnout, learned through social interactions. For instance, Maxx elaborated on his definition of burnout offering the following,

My parents always told me to do something you are going to enjoy, and that’s what I do, so I don’t necessarily feel like that aspect of burnout. Other than just the feeling of not wanting to do what you pretty much signed up for is part of burnout. I don’t really know much more of burnout than that.

Although initially providing a vague definition of burnout, when probed about any possible symptoms of burnout he might be experiencing Maxx provided a more personal account of what he thought may be a burnout related experience,

I don’t necessarily feel like I’m feeling any burnout symptoms yet. I am noticing that I’ve kind of become, sometimes, more abrasive with some of the athletes, wondering why they are asking the questions they are...So I guess I could be getting part of it with that.

Maxx’s first sentence in the above quote reflects the notion that burnout is an inevitable consequence of working in the athletic training profession. Maxx’s description of becoming more abrasive with athletes can be interpreted as experiencing depersonalization, which includes becoming callous towards clients and colleagues. Maxx’s awareness of his change in demeanor may explain why he scored in the moderate levels on the emotional exhaustion and depersonalization subscales of the MBI at this interval, as shown in Table 6.

Maxx	Emotional Exhaustion	Depersonalization	Personal accomplishment
Baseline Interview	26 (Moderate)	12 (Moderate)	32 (Moderate)

Table 6- Maxx's MBI subscale scores at baseline interval

Perceptions of Well-being

Maxx described well-being as, "feeling healthy, having a good place to live, having enough food, and keeping an active social life." For Maxx, it appeared important that his basic sustenance needs are met to experience well-being. When asked about his current state of well-being, Maxx responded, "I think I'm in pretty good well-being right now. I'm healthy and everything like that, so I feel well." When asked to elaborate on his social activities, Maxx provided the following,

I feel social life is pretty important. I go over to the other graduate assistant's house pretty much everyday and hangout with them for a little while, and watch TV, and just shoot the crap and everything like that, and just kind of wind down a little bit before going to bed, constantly thinking about different stuff that's going on in the athletic training room.

The comments above reflect the notion that maintaining positive relationships with co-workers can serve as an effective means of decompressing after each day's work. While in the workplace Maxx emphasized the importance of having relationships with colleagues, in which they are able to joke around and tease one another was important in keeping things fun. Maxx also mentioned being in a long-term relationship, and although his girlfriend lives a few hours away, speaking with her was also effective in keeping his mind off of work.

When asked what the most enjoyable aspect of his work was, Maxx replied,

Favorite aspect of athletic training is being around sports at all times. You see so many different injuries that come through everyday, each day is different. You don't have two days that are the same. So it's, although there are long days it's well worth it in my eyes. I know I want to do something medically related, so it's just being able to help people and know that each day is going to be different, and kind of take and roll with the punches as they come.

Maxx experiences the positive emotion component of well-being by remaining close to athletics at all times, while he also finds meaning in being in a position to help people.

Describing each day as different, Maxx was asked to elaborate on how he viewed the dynamic nature of the profession,

I like that, yeah, because I mean it's kind of once you get into the same routine you kind of get burned out more easily, I feel like, to where you can, like you don't have anything to look forward to because it's just the same repetitive thing over and over and over. And I feel like with this job you don't know if you have somebody coming in that could end up having a serious injury like a torn ACL or something like that. You could have something that could change somebody's life and yours within a matter of seconds sometimes. So it kind of, it keeps you on your toes and everything like that.

Maxx's appreciation for the dynamic nature of the profession reflects the challenge component of hardiness, while also providing him a sense of engagement in his work.

Maxx's efforts to foster positive relationships with his colleagues demonstrate the presence of the commitment component of hardiness. For Maxx, his professional life and social life are one in the same, where his degree of hardiness, and ability to experience many elements of well-being through his work, in his opinion, help to prevent experiencing burnout.

Grant

Perceptions of Burnout

As with Maxx, Grant had been working as a graduate assistant athletic trainer for a period of four months at the time this interview was conducted. When asked to define burnout in his own terms Grant provided a brief response, “Just getting tired of doing what you’re doing, I guess.” Although appearing not to have given much thought to the concept of burnout, when asked if he had ever experienced any symptoms of burnout Grant responded with a tone of certainty,

Yeah, it’s an athletic trainer thing, but a lot of it was from my undergrad. At first you are super excited to go out there, put in hours or whatever, but then by the end when you’re putting in a ton of hours, like on top of being a full-time student, it just starts to pile on.

From the statement above, whether through personal experiences or through socialization, burnout is viewed as something inherent to the profession of athletic training. When asked to elaborate on his experiences when “things start to pile on,” Grant used a metaphor comparing his experience of working while feeling burned out to having a part-time summer job, “You show up to get paid, but other than that you don’t want to be there.” This lack of engagement or desire to withdraw from work-related responsibilities is likely the result of experiencing emotional exhaustion. However, Grant reported that he “loved” his current job, and was not currently experiencing any symptoms of burnout. On this topic, Grant added,

The reason it’s easier for me to avoid the whole burnout thing, or has been, is just because I have just like a generally positive demeanor. It’s easier for me to be happy. I guess I learned when I was younger that there are times when things just don’t go right for you, and you can either sit around and let it bother you or you can find something, find a positive in it, I guess.

Grant's MBI scores (shown in Table 7) for the emotional exhaustion and depersonalization subscales support his claim, where he had the lowest scores for these subscales among the trainers participating in this study.

Grant	Emotional Exhaustion	Depersonalization	Personal accomplishment
Baseline Interview	12 (Low)	3 (Low)	41 (Low)

Table 7- Grant's MBI subscale scores at baseline interval

Perceptions of Well-being

Grant provided the following definition of well-being, "I think being in good health both mentally and physically." As he concisely stated, Grant held a holistic view of well-being, considering both physical and mental health. Grant provided a more personal view of well-being when asked what elements would be in place for him to say he is experiencing a high level of well-being,

I guess for me it would just be like getting enough sleep at night, working out 3 times a week, like, just kind of living healthy, eating healthy, that sort of thing. On top of that, I feel like there is mental well-being as well, so like if you came to work hating your life everyday then that wouldn't be well-being. So just being at peace with yourself, or being happy about the things that you do.

Again, Grant incorporates both physical and mental aspects in his personal description of well-being, mentioning exercising, getting sufficient rest, and eating healthy as means for achieving physical well-being.

When asked what activities he engages in to boost his mental well-being, Grant talked about taking time to relax and talk to his family, as well as making deliberate

attempts to find the positives in various situations. In response to being asked what he enjoyed most about his work Grant responded,

I would say relationships, like that's something that's always been big for me. Like, meeting new people, and I don't know, you just get to meet a lot of people everyday, and it's just kind of cool, like this is the first time people are dependent on my decision making versus like this is what I think, now I'll report to someone above me, that sort of thing. It's nice being depended on, but I really like the meeting new people aspect of it too.

Developing relationships with new people at work is perceived as a significant contributor to Grant's well-being. Grant also describes enjoying the autonomy this new position allows him, which reflects the control component of hardiness, characterized by having a sense of autonomy and the ability to influence the course of events under various circumstances. Being relatively new to this profession Grant was asked if he had ever experienced a moment when he knew he had picked the right profession, in which he offered,

I think I get them pretty frequently. I guess for me it's like when I know exactly what to do with this person, like those times you know exactly what to do to make them better, or like the day they go from being injured to getting back on the field participating full go, like that's the thing that makes me remember why I wanted to be an athletic trainer.

Along with Grant's previously stated value in developing relationships, and his passion for being involved with athletics Grant shows a strong degree of the commitment component of hardiness. Furthermore his description of knowing exactly what to do in certain situations suggests he is able to derive a sense of accomplishment from his work, while being part of the process of returning a student-athlete to competition reflects having a sense of meaning.

Cross-Case Analysis:

All three full-time athletic trainers reported having experienced burnout in the past, where Becca indicated that she was also currently experiencing symptoms of emotional exhaustion. Unlike Molly and Sue who described burnout as an end point where you either must leave the profession or you just don't want to go to work anymore, Becca described burnout as continuing to perform work related responsibilities in a state of mental and physical exhaustion. As for the graduate student athletic trainers, both Grant and Maxx described the experience of burnout as an inevitable part of the athletic training profession, where Grant described burnout as "an athletic trainer thing," and Maxx described himself as not "yet" experiencing symptoms of burnout. Grant did, however, express that he experienced symptoms of burnout to some degree while working as an undergraduate assistant athletic trainer. Intuitively, having accumulated more years working in the profession, the full-time athletic trainers had a greater degree of personal experiences with burnout than did the graduate student athletic trainers.

Greater consistency was seen across participants in their descriptions of well-being, with all citing that they were able to experience positive emotions, positive relationships, and a sense of meaning through their work. One significant distinction was that compared to all other participants who expressed a need to have positive relationships with both colleagues and student-athletes to experience well-being, Becca viewed positive relationships with individuals outside of work as more essential for her personal well-being. With the exception of Sue, all participants provided evidence of

the presence of the commitment and challenge components of hardiness. Grant was the sole participant to provide evidence of all three components of hardiness. The emerging themes for each participant for the constructs of well-being and hardiness are shown below in the table 8.

Participant	Components of Well-being	Components of Hardiness
Molly	Positive Emotion Engagement Positive Relationships Meaning	Commitment Challenge
Sue	Positive Emotion Positive Relationships Meaning Accomplishment	Commitment
Becca	Positive Emotion Engagement Positive Relationships (outside of work) Accomplishment Meaning	Commitment Challenge
Maxx	Positive Emotion Engagement Positive Relationships Meaning	Commitment Challenge
Grant	Positive Emotion Positive Relationships Meaning Accomplishment	Control Commitment Challenge

Table 8- Emerging components of well-being and hardiness by participant

Research Question 2: What factors do athletic trainers perceive as contributing to experiences of burnout?

Molly

Molly attributed her past experiences of burnout to “a hostile work environment.” She clarified that this experience occurred at an institution she worked at earlier in her career, and that she did not consider the environment at her current institution to be hostile. When asked what the most challenging aspect of her job was Molly provided the following,

The hours, and there’s no downtime. Quite honestly, probably the hardest part that most people don’t realize is that we don’t schedule our hours. Our hours are scheduled around team workouts, you know, we’re gonna have a 6:30 am workout, but we don’t think that the athletic trainer is going to be there at 5:30am.

Molly perceives the demanding work hours as the primary source of burnout, describing herself as “working in fatigue mode all the time” at a later point in the interview.

Furthermore, she discusses not having control over her work schedule, which represents a perceived lack of autonomy, or the control component of hardiness. Molly discussed the importance of setting aside time for herself as a healthy coping behavior, but also described how this is not always possible, providing an example of a time when she had to spend the night in the emergency room with an athlete who was displaying concussion symptoms. As noted earlier, Molly puts the care of her student-athletes above her own, and although committing to the care of her athletes to this degree provides her with a sense of purpose or meaning, it can also take a toll on her physical and mental well-being.

With such a high degree of commitment to her athletes Molly also views student-athletes who skip appointments with her or are unappreciative of her efforts as another contributing factor to burnout. Below she describes an athlete who had a tendency to skip scheduled treatments, and would come into the training room at a moment's notice expecting Molly's full attention,

It's just this, I absolutely cannot stand people that are entitled and think that they, you know, that you work for them. The minute you start treating me like I work for you, I'm done with you because I put you first, but I do not work for you.

Although seemingly justifiable in her reaction to these types of situations, this becoming callous towards or withdrawn from clients reflects the burnout symptom of depersonalization. However, when asked if her objectives changed at all with regard to treating this athlete Molly demonstrated her professionalism,

There's a couple of objectives just because this one is so tricky. One, it's to further the rehab to make sure that we're doing things right to get her stronger to get her back on the court. Two, is to provide accountability because she likes to get out of things, and it's not just athletic training, it's in the classroom, it's across the board... So I guess I, anytime I have a session or treatment with anybody I try to make them feel better walking out than when they walked in. Sometimes you can't always do that, but a lot of times you can.

Overall, Molly cites the demanding work hours and lack of control over her work schedule as contributing to experiences of emotional exhaustion, while working with noncompliant or unappreciative athletes was viewed as contributing to experiences of depersonalization.

Sue

When asked what she perceived to be a major stressor in regard to her work Sue also mentioned issues with her work schedule,

I guess the different schedules because most people only have one team, and because I have three teams and Recreation Sports, who are all on different schedules. If one schedule changes I have to adapt three other schedules, and then even if I have a personal schedule going I would have to adapt that schedule. I don't think people realize how hard it is to schedule, like with that much going, and then still finding time for yourself, if there is any time.

It should be noted that Sue was able to find the humor in how hectic her work schedule was, laughing at the very idea of finding time for herself outside of work. That is, although stressful, Sue wasn't complaining about her schedule. Still, her response reflects a perceived lack of autonomy or control. As noted in the findings for research question (1) Sue mentioned experiencing a high degree of burnout in her previous year, while making a complete turn around this year, stating "I can truly say I love coming to work everyday now." When asked what had changed, Sue put it simply "sport and coach." When asked to describe what the work environment was like that year in more detail, Sue described having a relationship with the team's coach that lacked trust, respect, communication, and appreciation, adding that all those elements were now present with the coaches she currently works with.

Returning back to her current perceived sources of burnout, Sue mentioned interactions with athlete's parents,

Dealing with parents that, they're not necessarily involved in their kid's life, the kid has one hundred percent say in what treatment they get, what they want, if they want it or not, and then you have to deal with the parent who doesn't get all the sides of the stories, and they come up to you wanting certain things when that's not been what's asked by the athlete or that's not what the athlete wants.

Here, Sue describes the difficulty of serving as a mediator between student-athletes and their parents, where she often finds herself in a situation where it is not possible to please all parties involved. Sue went on to describe other difficult interactions,

Just the political aspect of it, of like colleagues and just different people, having different coaches and how they perceive you, because I ran into it where certain coaches may think one thing of you compared to another set of coaches, or one colleague doesn't see you the way another colleague does, or they think you're lazy, they think you work too much. So just dealing with everybody's perception is kind of difficult.

As for perceived stressors, Sue's hectic work schedule can be viewed as contributing to emotional exhaustion, despite her seeming able to cope with her workload. Sue described the difficult interactions with parents, coaches, and colleagues more as distractions to her primary goal of providing the best care for her student-athletes than as sources of burnout. In dealing with these stressors Sue emphasizes the need to just focus only on the things that are under her control.

Becca

When asked to describe what she perceived to be the more challenging aspects of her job, Becca began with the topic of communication,

I think constant and consistent communication among everybody that you're working with, like if I'm discussing with a strength coach, a situation and having that same consistent message with my regular coach, and having that same message with my student-athlete, and that same consistent message with whomever else is involved, but delivering it differently because that person is in a different role. That's difficult because when you're managing so many people sometimes you get lost, not really lost, but you just forget, oh wait a second I need to tell you this and half the day has already gone by, and you needed to know four hours ago, and I missed it. Those are like really really challenging parts of keeping that consistent communication.

Becca touches on the topic of the various individuals, all with different roles that need to be kept in the communication loop when treating an injured athlete. Becca appeared to hold the view that maintaining consistent communication with all individuals surrounding the injured athlete was essential to providing the best care for the athlete.

However, as she describes “Sometimes because I interact with so many different people during the day it’s like an emotional toll to actually formulate relationships with them,” efforts to maintain communication with so many people can create a sense of emotional exhaustion.

Becca discussed having a perceived lack of control or autonomy, which she describes below,

I would say things that you don’t have control over so you get really frustrated or annoyed and you know that there’s, like in your mind you see it as a better way to do something or a better way to execute or a better way to be more efficient, but because you don’t know all the pieces of why that decision was made, you can’t really have an opinion of it so openly, so it’s easier to be like I’m really frustrated about this situation, I think it should have been handled this way, but you have to hold all of that in because your still at the liberty of somebody who is more in charge of things.

Perceiving herself as having a better or more efficient solution to a particular situation, but not having the authority to implement such a solution could potentially contribute to a lack of personal accomplishment. This lack of autonomy is also a contributing factor to burnout itself. Becca further discusses how attempts to express her frustration with colleagues only exacerbates the situation,

I don’t think it helps because we’re coming from the same mindset, and it doesn’t mean that two wrongs make a right. So sometimes it just piles on more and more and then you just don’t even want to talk to those people because you know that if you’re around them you’re gonna be more susceptible to talk about negative situations, and so like I think you get to the point where you’re like who can I talk to just to have a normal conversation. You lose what a normal conversation is.

This awareness of how venting one’s feelings to colleagues can lead to a downward spiral of negative thinking results in attempts to avoid those colleagues is consistent with the experience of depersonalization.

When asked what she believed to be the greatest source of stress in her work, Becca offered,

I would say it's just having the volume all the time, and then having coworkers who don't. So I have a lot of responsibilities outside of just my sports team, and I like them, I don't want to give them up, but then I start to get aggravated if I'm still working on things and people are interrupting me because they literally don't have anything to do right now. And I don't understand that because I always have something to do, and even if I didn't have things that were pressing I would find something to do. So that's kind of my biggest stressor.

Being responsible for the largest number of athletes among the group of trainers participating in this study, in addition to supervising two graduate assistants and nine undergraduate assistants, it came as no surprise that Becca found the "volume" of her responsibilities to be a stressor. Her description of becoming aggravated by colleagues with fewer responsibilities, and, in her opinion, do not make good use of their downtime provides more evidence of depersonalization. With so many responsibilities, Becca was asked if she ever felt that the demands of her job outweighed her resources, to which she replied, "Yeah. I don't think I can give my best because of the volume, I know that." This comment suggests that the volume of athletes and assistant trainers she is responsible for prevents her from experiencing higher levels of personal accomplishment.

Maxx

Maxx first cited the demanding work hours as a potential contributor to burnout, "The morning stuff is brutal because you're waking up at 4am or 5am." Maxx described the hours as tiring, but not detracting from the fulfillment he gets from his work. Maxx

also mentioned learning how to deal with athletes who would spend time in the training room, but did not need treatment,

I think if you are too nice to the athletes they kind of see the athletic training room as a place to hang out, so you have to kind of be somewhat abrasive to them because otherwise they think it's just a hangout place, and it's just kind of deciphering through that and deciding when to become abrasive towards them, or if there's another way to let them know that it's not a hangout place without being abrasive.

For Maxx, having athletes just hanging around in the training room was viewed as a distraction, in which he would prefer to direct his efforts towards treating his injured athletes rather than policing the training room. When asked what he currently found to be the most challenging aspect of his work, Maxx replied,

So far the most challenging aspect is like since I just came out of undergrad last year, like actually remembering the different rehabilitation techniques and different exercises and stuff like that, that you go through writing different rehabs everyday. And thinking just like with evaluation of stuff, trying to remember where each different aspect of the injury, and along with that remembering all the special tests that you have to go through to rule out other injuries and see if this the actual injury you're thinking it is.

Described above, recently entering the profession, Maxx found applying what he had learned in school to be a presenting challenge. Also as a result of transitioning from his role as a part-time undergraduate assistant to a graduate assistant, Maxx discusses balancing his work and personal life,

Keeping your work life and your personal life separate can be tough sometimes because you are, as an undergrad student you're only there for certain hours, and then once you become a graduate assistant you're there the whole time, and you're worried about these athletes so much because you spend so much time with them. So your trying to wonder when a good time is to pretty much turn off the phone and the brain because with cellphones and anything like that it's so easy to get a hold of anybody.

Although Maxx enjoys spending time with his coworkers outside of work, above he discusses having difficulty determining to what extent he should remain available to his student-athletes after work hours. Lastly, still pursuing his graduate degree Maxx briefly discussed his academic work as just another thing he had to keep on top of.

Grant

Grant made it clear that he was not currently experiencing symptoms of burnout. For this reason, Grant was asked about which elements of his work he found stressful, rather than those he perceived to be contributing to experiences of burnout. For Grant, the greatest perceived stressor was the time commitment required of his position, where committing wholeheartedly to his work responsibilities, at times, left him falling behind on his academic work. Grant also went on to describe the difference in transitioning from an undergraduate assistant athletic trainer at a Division-III university to his current role as a graduate assistant athletic trainer at a Division-I institution,

Just like the whole Division-I thing. When you're Division-III and stuff like that if someone can't come back and play right away it's not really that big a deal, but here there's a greater sense of pressure from media and coaches to get these athletes back quickly.

Grant described this sense of added pressure from working at Division-I athletic program as a stressor, but also described himself as lucky to have the opportunity to work in a Division-I setting.

When asked which of the three symptoms of burnout he believed would most likely cause him to experience burnout or consider leaving the profession all together,

Grant quickly responded, "Having a lack of personal accomplishment." As Grant previously stated "I love what I do," believing that having a perceived lack of personal accomplishment would have the greatest impact on his desire to remain in the profession suggests that the sense of fulfillment he is able to derive from his work serves as the most significant buffer in preventing his experiences of burnout. Grant added that if he were solely experiencing the depersonalization symptom of burnout he would simply look for another athletic training position at a different institution. As for the emotional exhaustion symptom of burnout, focusing on the perceived inability to meet the emotional demands of one's work, Grant reported this might also cause him to reconsider a career in athletic training. Again, this comment reflects the perceived need of having a high level of competency in his work to effectively combat experiences of burnout.

Cross-Case Analysis:

Among the full-time athletic trainers a lack of autonomy was reported as a perceived factor contributing to burnout. Specifically, both Molly and Sue reported having a lack of autonomy with creating their work schedules, which was associated with the emotional exhaustion symptom of burnout. For Becca, there was a perceived lack of autonomy in how she is able to both assess and treat student-athlete's injuries. Not having the final say in how she developed her injury rehabilitation program for athletes was seen as hindering Becca's sense of personal accomplishment. Furthermore, Becca cited having a high volume of athletes for whom she is responsible for as her primary stressor. Having to manage the care for so many athletes, Becca

reported feeling over extended and unable to invest in building relationships with each athlete, as well as not being able to provide the best care for each athlete, and becoming aggravated with colleagues whom had fewer responsibilities than her, which together contributed to experiences of all three symptoms of burnout. As for Molly and Sue, only the emotional exhaustion and depersonalization symptoms of burnout were experienced, where Sue's experiences of depersonalization were attributed to communicating with student-athlete's parents and managing relationships with her colleagues, and Molly's experience of depersonalization attributed to working with non-compliant athletes.

Among all participants, Grant was the only individual to report not experiencing any symptoms of burnout. However, along with Molly and Maxx, Grant also reported the demanding work hours of the profession as a primary stressor, but maintained that his work hours only contributed to experiences of physical exhaustion. Grant was also unique in reporting working in a high pressure atmosphere as an additional stressor, which he believed was the result of working in a highly competitive athletic conference. For both Molly and Maxx a connection was made between having demanding work hours and a lack of balance between their personal and professional lives, in which both of these stressors were seen as contributing to experiences of emotional exhaustion. Although also reporting lacking balance between work and her personal life, Sue did not identify demanding work hours as a source of stress, emphasizing the difficulty of managing the schedules of student-athletes from three different sport teams.

A sharp contrast was observed between the two graduate assistant athletic trainers, with Grant not reporting experiencing any symptoms of burnout, and Maxx experiencing all three symptoms of burnout. For Maxx, experiences of depersonalization were attributed to having many athletes hovering or hanging around the athletic training room that did not require treatment. More specifically, Maxx viewed these athletes as distracting their injured counterparts from fully focusing on their injury rehabilitation program. Although this was frustrating in itself, more frustrating was that Maxx had to take on a more abrasive tone to effectively deal with these hovering athletes, where Maxx, by nature, prefers a more cordial approach. Lastly, Maxx was unique among all participants in reporting recalling the appropriate injury assessment protocol from his undergraduate training as a source of burnout, which was seen as affecting his perceived sense of personal accomplishment. These primary sources of burnout and their corresponding symptoms of burnout for the participants in this study are presented below in Table 9.

Participant	Perceived Sources of Burnout	Corresponding Burnout Symptoms
Molly	Demanding Hours Poor work-life balance Non-compliant athletes Lack of autonomy with schedule	Emotional Exhaustion Emotional Exhaustion Depersonalization Emotional Exhaustion
Sue	Lack of autonomy with schedule Poor work-life balance Communication with Parents Managing relationships with colleagues	Emotional Exhaustion Emotional Exhaustion Depersonalization Depersonalization
Becca	Communication with colleagues Lack of autonomy with treatments High athlete volume	Personal Accomplishment Personal Accomplishment Emotional Exhaustion, Depersonalization, & Personal Accomplishment
Maxx	Demanding hours Hovering athletes Poor work-life balance Recalling injury assessment protocol	Emotional Exhaustion Depersonalization Emotional Exhaustion Personal Accomplishment
Grant	Demanding hours High pressure work environment	

Table 9- Participant's perceived sources of burnout and corresponding symptoms

Research Questions 3 & 4: (3) Will engaging in positive psychology interventions reduce MBI scores? (4) Which subscales of the MBI are most affected by the positive psychology interventions?

Three Good Things in Life

In short, this intervention asked participants to take 10-15 minutes at the end of each day to reflect on three things that went well that day, as well as to note the perceived cause of these good things. Participants were asked to record their responses in an activity log provided by the researcher. A full description of the purpose and instructions for this intervention is provided in Appendix 1. Findings will begin with qualitative accounts of participant's perceptions of the intervention, followed by a

summary of the data attained from participant's activity log books, and will conclude with a quantitative analysis of participant's MBI scores.

Molly

After engaging in this intervention over the course of seven days, Molly was asked to reflect on her experiences with the intervention,

It was a good experience to actually stop and think about the day a little bit more. By the end of the week it was more positive because the middle of the week it's the grind, and it's like oh god I need to do this right now, and I'm, you know, I had to back log a day or two because I was behind, you know.

Molly had an overall positive impression of the intervention, while also describing having some difficulty with finding time to engage in the activity each day. The fact that Molly, on certain days, was unable to find just 10-15 minutes to engage in this activity further illustrates the demanding work hours of this profession. Molly further describes the experience of searching for a positive in each day below,

I guess during the week just thinking through things it makes you look into your day more and think about, find one good thing even if you had the worst day, is there one good thing, maybe you had the best cup of coffee ever, you know, and I didn't write that down, but there's always something, you know. I had a good day regardless of practice being bad, I mean it was, it was a productive day. So that's a positive even though the girls got yelled at because they didn't practice well, that didn't have to affect my workload in the office. So I just think it was a good exercise to looking into the positive of things.

Having previously reported deriving much of her perceived well-being from work related activities, Molly describes above how this activity encouraged her to look at the positives in both seemingly negative work situations and situations outside of work. She also described this activity as being helpful in putting things in perspective, where she

mentioned “I think it helps you be a little bit more humble, and a little bit more positive, and a little bit more in the reality of things, you know.”

Molly was also asked if she thought engaging in this intervention had influenced how she interacted with colleagues throughout the week, in which she responded,

Oh yeah, absolutely because one of the things that I wrote down, a trainer and I were discussing a plantaris injury, and I was telling her about this article I read, and I was like this is how you test it! I was at her house, we were just shooting the shit for the day, and normally when you get around coworkers and you’re outside of the office it seems to be a lot of just bitching and groaning, and why is this person doing this...And we’re sitting there, I’ve read this article and I was explaining to her how I was testing the plantaris, and she had never seen it before and she was like that’s awesome, I’ve never even seen that! And just the discussion that we’d had about why my kid maybe had this pain, and what she was doing for treatment, it was so positive that we were just kind of teaching each other, and I even made the comment to her that this is awesome because this is what we should be talking about instead just the stupid office drama.

According to Molly, this activity had helped put her in a mindset to collaborate with a coworker on a work performance related issue as opposed to harping on “office drama.”

As for data collected in her activity log, Molly provided an example of looking at the positives in a conversation with her mother, where she listed “Good conversation with mom about the athletic training profession” as one good thing that happened that day, and describes why it was good as follows,

We discussed starting off at a small school and how far I have come in 10 years. This is a tough profession, especially for women. Salaries are not always equal, but are dependent on sport. There were points where, financially, I wouldn’t make it, but I have a job that pays well now. We discussed the negative encounters I’ve had in those 10 years, and how much I’ve grown because of them. I realized how blessed I am to have this job, and the people I work with.

In her explanation of why this was a good conversation, Molly illustrates the very intent of this intervention where earlier hardships in the profession were discussed as a source

of personal growth rather than solely focusing on the inherent challenges of the profession. In short, Molly and her mother simultaneously engaged in this activity identifying not just what went well that day, but what had gone well over the 10 years she had been in the profession.

With regard to her MBI scores after engaging in this activity for one week very little, if any, affect of the intervention on symptoms of burnout could be observed. For the three subscales of the MBI (as shown in the table below) Molly's score for emotional exhaustion (EE) dropped by two points, where depersonalization (DP) remained constant, and personal accomplishment (PA) dropped by three points, moving her from the low to moderate risk range for burnout on this dimension.

Molly	EE	DP	PA
Baseline	36 (High)	13 (High)	39 (Low)
Intervention #1	34 (High)	13 (High)	36 (Moderate)

Table 10- Molly's MBI subscale scores at interval 2

Although the relationship cannot be determined as causal the subscale most affected after this intervention was personal accomplishment, resulting in her being at a higher risk of burnout than that of the previous week. A slight reduction in her experience of emotional exhaustion was observed, however, this reduction did not result in a change in the degree of risk for burnout for this subscale.

Lastly, participants were asked for each intervention if they would engage in the intervention voluntarily in the future, if they would recommend having the full athletic training staff engage in the intervention, and if they would consider using the

intervention with their injured athletes. In response to these questions, Molly reported a willingness to engage in the intervention voluntarily in the future, saying it would be a “good idea” to have the full athletic training staff participate in the intervention, and believed the intervention had utility for injured athletes.

Sue

Sue reported enjoying the activity, and when asked if she felt she had been experiencing any of the symptoms of burnout to a higher degree than in the previous week she responded, “Actually no, I would say I’m less likely to burnout now.” When asked to reflect on her experiences in completing the activity, Sue provided the following,

It was better to think about something positive at the end of your day than something negative. I felt like it made it easier to come in the next day knowing I accomplished three good things at the end of yesterday instead of being like, there were lots of negatives that I could of put down, and I was like you know what, there’s three positives in my day, and its like something that brings you back in the next day. It’s like okay I DID something good so I looked forward to it. I thought it was something that was kind of cool because I’ve never sat down and thought about having three positives, I’ve always thought about one positive, but trying to pick out three was like oh this is kind of interesting.

Sue describes the benefits of the activity as a means to avoid negative thinking, and facilitating positive emotions, engagement, and a sense of personal accomplishment. Overall, it appears from her comments that Sue saw the intervention as effective in promoting her well-being.

Sue also described how engaging in this activity helped her remain positive during a particularly stressful day. On that day Sue’s supervisor had told her that an athletic trainer was needed at the university recreation center to work a few nights a

week throughout the semester, and to assign times for the graduate assistant athletic trainers to cover recreation sports. Later in the day, in professional development staff meeting, another full-time athletic trainer announced that all the graduate assistant trainers were upset with Sue for assigning them these extra hours. Sue described how the second half of the meeting was centered on complaints about her, describing it as “Bash, after bash, after bash.” Below sue describes her reaction to this experience,

It was awful. It was completely awful, and there were other staff members that were really kind of worried about me, because they were like oh my God, like how is she going be the rest of the day. My supervisor just looked at me after the meeting, he was like you would have had no idea that like anything even happened. I’m like that was one negative in my day there’s other positives that are going on too.

The end result of the meeting was that Sue, alone, would cover all the sessions for recreation sports throughout the semester. Despite this negative experience, on top of the extra hours she had been assigned, Sue was able to put things in perspective, knowing that this single negative event would not prevent her from experiencing more positive events throughout the day.

In her activity log, Sue provides another example of how she was able to find the positive in a negative situation, describing the thing that went well that day as,

I got back from a road trip and was sick, very sick. My boss gave me some meds, and told me to go home, even after he had specifically asked me to be at treatments to work with certain athletes.

In her explanation of why this positive event occurred, Sue wrote, “I do believe my work ethic, accountability, and willingness to go the extra mile for others was rewarded.” For Sue, her boss allowing her to take some time off was viewed as a result of her

attempting to work through her illness. Again, with the seemingly negative experience of getting sick, Sue chose to focus on her boss' appreciation of her work ethic.

As for additional questions asked during this interview, Sue stated she was going to voluntarily continue with this activity in the future. Sue reported that not only did she see the activity as useful for her injured athletes, but that she intended to talk to the head coach of her team about implementing this activity after each practice with the healthy athletes as well. In terms of whether she believed this activity would be of use for the full-athletic training staff, Sue stated,

After being a part of it now I think it's something every athletic trainer should do because, I mean we have so many bad things that happen to us daily that I think doing something as simple as thinking of three good things, it makes it easier to come into work the next day.

With regard to her MBI subscale scores, after completing this intervention changes were observed for each symptom of burnout. Specifically, the most dramatic change was seen in the reduction of emotional exhaustion from a score of 22 in her baseline interview to 13, moving her from the moderate to low risk range of burnout for this symptom. A reduction in depersonalization was also observed, again moving her from the moderate to low risk range for this symptom. Lastly, scored in the reverse direction, personal accomplishment was raised, in which Sue scored in the moderate risk range for this symptom. Most significant of these subscales appears to be the observed change in emotional exhaustion.

Sue	EE	DP	PA
Baseline	22 (Moderate)	7 (Moderate)	31 (High)
Intervention #1	13 (Low)	4 (Low)	36 (Moderate)

Table 11- Sue's MBI subscale scores at interval 2

Becca

Becca described having some difficulty in identifying three good things each day.

In addition, she also describes the challenge of taking the time to complete the activity at the end of each day,

I think it was harder at that point because you were tired, and at that point in the day you're like I didn't see anything good that's happened, but then being able to go back and reflect on it, it actually made you feel more decompressed going to sleep that night. It was like I wasn't thinking about anything, just it was on paper and it was done.

Although Becca describes the activity as challenging at the end of a long day, she also describes the perceived benefits of the activity as helping her clear her mind before going to bed. Becca continues to describe the perceived benefits of the activity,

You just look at things more positively, and it's hard for us to do that. Like it's so hard because you just grab onto to the negative immediately, and then like it snowballs so one negative thing happens and then it's another negative, another negative, another negative, and you start like seeing those, whereas this kind of made my brain flip, it actually made it easier to see all the positives.

Becca describes how this activity helped her avoid tendencies to engage in negative thinking by making deliberate attempts to look for the positives in various situations.

Becca adds, "I think that it definitely increased my positive thoughts, which I think diminished my negative thoughts."

Becca was also in attendance at the staff meeting, in which Sue was receiving a lot of complaints from others. Becca describes how after seeing how the meeting got off track she chose to interject,

I said I think each of us need to go back and just email to everybody the one thing that you're going to work on, like if it's a weekly thing something that you want to make better or that you're going to work on so that we each know, and then when you slip, and we hear it or we see it, we can hold each other accountable. I think that's important as a group to trust each other so by the end of the next day everybody had emailed out one thing that they were going to work on to be better at, and so I think that all in all like our staff from that end was definitely more bonded throughout the rest of the week, as much strife and as much I would say like dirt was being thrown on the table at that meeting, it kind of all resolved within us because we focused on something we were going to do, and that was definitely, I think, a direct influence of this activity.

Becca attributed her decision to suggest this activity to the rest of the staff to her involvement with this activity, in which she was able to redirect the negative attention Sue was receiving towards a productive activity that had a positive impact on the cohesion of the staff members.

In her activity log for this intervention Becca provides an example of how she was more likely to engage in positive thinking while completing this activity. She describes as one of the things that went well that day was, "I remembered why I do this. I remembered what I was like as a student, and it made me really happy." Becca elaborates on why this perceived positive event occurred,

I had been thinking about what I had been like as a student. I wouldn't leave the athletic training room except for class and other jobs. I would start my day there. I would sit and read and imagine creative things to make my athletes succeed (some day). I remembered the excitement of the sideline, the work of field set-up, the pride I had about my school and fellow classmates. It was important to reflect. It made my day worth it.

As suggested earlier, this intervention shifted Becca's attention away from negative thoughts, focusing more on the positives in a variety of situations. Here, she illustrates this shifting of attention as she recalls only the positive experiences she had as an athletic training undergraduate assistant.

When asked if she would voluntarily engage in this activity in the future, Becca replied,

Well I can see the benefit of it like maybe if I'm going into a tough time myself, maybe just journaling and trying to revert the journaling to positive things rather than negative because that would make me feel better, but I would also like to do it if it's a point where the staff I'm working with or even the coaching staff is doing it because you know that everybody is going home that night and thinking about good things that are happening instead of bad. Overall, it just changes the synergy of those of your coworkers so it automatically makes you feel better.

Thus, while discussing how she might engage in the activity during difficult times, Becca also supported the idea of having the full athletic training staff engaging in the intervention. Lastly, Becca also believed the intervention would be of benefit for her injured athletes.

With regard to MBI subscale scores at this interval, Becca's observed changes reflect the same trend seen in Sue's scores for this interval in which reductions in emotional exhaustion and depersonalization, and an increase in personal accomplishment was observed. However, the changes in subscale scores did not merit a change in the risk range for any of the symptoms. Most significant appears to be the reduction in her depersonalization subscale score, dropping a total of 9 points.

Becca	EE	DP	PA
Baseline	35 (High)	23 (High)	32 (Moderate)
Intervention #1	30 (High)	14 (High)	34 (Moderate)

Table 12- Becca's MBI subscale scores at interval 2

Maxx

Maxx provided the following summary of his experiences with this intervention,

I thought it was going to be a little easier than what I ended up thinking it actually was. Um, just kind of the things that I think could be good things throughout the day are stuff that happens in a normal day anyway or it's just so routine anyway that it's, I don't even think about the stuff that's going on rather than compared to just doing it and thinking about it later.

Maxx's comments suggest that he has a tendency to overlook positive experiences that occur throughout the workday, seeing positive events as routine. Maxx also discussed how identifying the positives in each day became easier as he continued with the activity, as well as helped him think less about negative experiences,

I think it helps to kind of keep the two (positive & negative thoughts) separated. It kind of lets you know that there are good things even though you're spending however many hours a day doing your job, that there are good things that come out of what's being said in your mind and that you're actually thinking about the good things instead of just focusing on the bad things, waking up tired to go to work and feeling burned out, so.

Consistent with Becca's report, Maxx also found that increases in his positive thinking were associated with less negative thinking.

Being relatively new to the profession of athletic training, Maxx was asked how important he thought performing an activity such as this would be after being in the profession for a few years, in which he responded,

I think it would be really good because it keeps you intrigued. This profession is very easy to get caught up in doing the same thing over and over, and over, and over, and then the care of the patient diminishes.

Here, Maxx touches on the notion that this activity facilitated engagement in his work, which in turn, he thought improved upon the quality of care given to student-athletes.

Maxx went on to describe how he thought this activity influenced the care he is currently providing his student-athletes,

I think with what I'm doing it kind of helps them get more out of their rehab process because I don't worry about becoming callous with them, and pretty much writing the same thing for every single person, try to mix it up throughout the week to where they're kind of wanting to do new things, to challenge their bodies. So I feel like with the activity that we're doing is nice because I feel they get more out of the rehab session than other times.

As he described, this activity resulted in a shift of attention from worrying what he might not be doing well in his treatment of injured athletes to what he could do to improve their injury rehabilitation experience.

Maxx provides an example of how he took a different approach in his treatment of athletes in his activity log for this exercise. Specifically, Maxx cites, "Athletes did not complain about new rehab exercises" as his thing that went well that day, where he attributes this positive event to his engaging with the athletes, "I was able to explain the reason for these new rehab exercises in ways they understood." For this intervention, most significant for Maxx was his perceived sense of increased engagement with his student-athletes.

As for the additional questions posed in this interview, Maxx reported that he would voluntarily engage in this activity in the future. Maxx described thinking this intervention could be of benefit for use with his injured athletes, but was hesitant to

recommend they keep a journal as he thought athletes might perceive the activity as just another homework assignment. Thus, Maxx suggested he might incorporate the activity into his rehabilitation programs by verbally asking the athletes to identify what they felt was going well in their rehabilitation program. Lastly, Maxx reported that he thought this intervention could be of benefit to other athletic trainers who were experiencing particularly stressful periods at work. However, he did not make a strong recommendation for implementing this intervention with the full athletic training staff.

Changes were observed in all three subscales of the MBI for this interval. Maxx's score for emotional exhaustion, although two points lower, did not result in a change in the risk of burnout range for this symptom. Somewhat surprisingly as he discussed feeling more engaged with his athletes, Maxx's score for depersonalization was two points higher, moving him from a moderate to high risk range for this symptom. Lastly, and believed to be the most significantly affected subscale was personal accomplishment, which increased by four points. Perhaps, identifying what he did well each day as opposed to his tendency to overlook the positives in each day left Maxx with a greater sense of personal accomplishment in his work.

Maxx	EE	DP	PA
Baseline	26 (Moderate)	12 (Moderate)	32 (Moderate)
Intervention #1	24 (Moderate)	15 (High)	36 (Moderate)

Table 13- Maxx's MBI subscale scores at interval 2

Grant

Grant was the first of this group of participants to report not enjoying this activity. When asked if he was looking forward to doing the intervention, Grant responded,

Not at all, actually. Like I said I kind of already do it (engage in positive thinking), and then it was just like I'm not big on writing anyway, like journaling, stuff like that. So it just seemed like another thing to do at the end of everyday.

Grant's primary complaints were that he has already established a routine for actively identifying the positives in all situations, and that he does not like journaling. In fact, he expressed his views on journaling to a greater extreme in a later interview stating, "I hate journaling." Returning to his experiences of this intervention, Grant found the activity to be somewhat challenging in that with so much going on each day it was hard to recall at the end of the day all the things he did. In response to this challenge Grant described how he thought he could have gotten more from the activity,

So I guess if I would have written stuff down like when it happened, or made a note of it when it happened and then looked over it at the end of the day I probably would have gotten more out of it.

Having already written down what went well during the day, Grant believed this activity would have had a greater influence on his well-being when looking back on the things that went well at the end of each day, rather than try to recall those things at the end of the day.

In his activity log Grant wrote, "Got a compliment from an athlete" as one good thing that happened that day. He wrote that this happened because, "I have been doing

my best to work hard- Do everything I can to keep everyone happy as well as provide the best care possible.”

Grant said he would continue to make deliberate attempts to think about the positives in each day, but would not formally engage in this activity by keeping a journal in the future. He did however report that he thought this exercise was something the full athletic training staff should engage in. Grant was also in favor of using this intervention with injured athletes whom were willing to keep a journal, and would verbally perform this activity with those athletes that did not want to keep a formal journal.

Changes were observed for all three burnout subscales at this interval. Although already scoring in the low risk range for emotional exhaustion during his baseline interview, his score for this symptom marked the biggest change of the three subscales, dropping by seven points. Grant’s score for depersonalization remained in the low risk range, scoring one point lower for this symptom. Grant also remained in the low risk range for personal accomplishment, where his score increased by five points, indicating experiencing an even greater sense of personal accomplishment.

Grant	EE	DP	PA
Baseline	12 (Low)	3 (Low)	41 (Low)
Intervention #1	5 (Low)	2 (Low)	46 (Low)

Table 14- Grant’s MBI subscale scores at interval 2

Using Signature Strengths in a New Way

For this interview participants were asked to complete an online questionnaire that assesses for 24 character strengths. Upon completing the questionnaire participants received a report of their top five character strengths, referred to as “Signature Strengths.” Participants were instructed to read the description of each of their signature strengths, to go about their workday normally, and at the end of the day reflect back on which strengths, if any, they used. Lastly participants were instructed to describe the context in which they used their strengths in the activity log for this intervention. A full description of instructions for this intervention can be found in Appendix 1. Again, participants engaged in this activity for a period of seven days, after which, they were interviewed and completed the MBI.

Molly

Molly’s top five signature strengths are presented below along with a brief description of each strength.

1. **Citizenship, Teamwork, and Loyalty:** You excel as a member of a group. You are a loyal and dedicated teammate. You always do your share, and you work hard for the success of your group.
2. **Gratitude:** You are aware of the good things that happen to you, and you never take them for granted. Your friends and family members know that you are a grateful person because you always take the time to express your thanks.
3. **Humor and Playfulness:** You like to laugh and tease. Bringing smiles to other people is important to you. You try to see the light side of all situations.
4. **Spirituality, Sense of Purpose, and Faith:** You have strong and coherent beliefs about the higher purpose and meaning of the universe. You know where you fit in the larger scheme. Your beliefs shape your actions and are a source of comfort to you.
5. **Honesty, Authenticity, and Genuineness:** You are an honest person, not only by speaking the truth but by living your life in a genuine and authentic way. You are down to earth and without pretense; you are a “real” person.

When asked to reflect back on her experiences with this intervention, again, Molly described having difficulty finding time to complete the activity each day,

Kind of disappointed because in the two weeks, I mean like I said I go back to it again where I wish I didn't do this during season, but for your study, you needed to see during season. So I mean it's, did I enjoy it? No, from the standpoint that I didn't have time for it. Could it have been very helpful? Yeah, but it's, you know, I mean this wasn't just hey I want to go to bed and I'm not trying to do it, but this is I literally am getting to a point where I can't function because I need sleep. So to reflect back on the day was not going to be positive when you're that exhausted.

As Molly stated, she was unable to complete the activity on a daily basis, and felt she may have missed out on the potential benefits of this activity as a result. Molly was asked in light of her difficult week if she was able to still find ample opportunities to display her strengths. Molly reported that she was able to display her strengths during the week, as she put it, "They are part of who I am." Specifically, Molly reported using Loyalty, Honesty, Gratitude, and Humor. As for Spirituality Molly stated, "I probably could have done better in that, taking time for myself." Again, spending two nights in the emergency room with an athlete that week, while dealing with other non-compliant athletes, Molly found little, if any time for herself.

Consistent with her description of how she makes deliberate attempts to incorporate humor in her daily life, Molly states,

I try to laugh all the time. One of my friends told me that one of the things that I taught him the most when we worked together was to laugh at yourself. If you can't laugh at yourself than you know, it's just not, life isn't worth it because we all do things that are funny, and you know, that's just me. That's just who I am.

Molly describes, "This was probably the week from hell," where the phrase "The [blank] from Hell" is anecdote originating from stand-up comedian Richard Lewis. Further

evidence of her ability to see the light side of all situations is provided when Molly describes looking at the other 19 character strengths that did not appear on her report,

Oh I laughed. I looked at the bottom strengths, I know we weren't supposed to, but I laughed because it said the ability to love and the other one was self-control. I laughed, which is terrible. Self-control, self-regulation, well with everything else that you put above you how are you supposed to engage in relationships outside. I have great people in my life, love them dearly, but in terms of relationships and an actual relationship it just doesn't happen because I always put work first. So it's very difficult to do that, and taking care of myself, I mean I barely had time to eat let alone exercise.

Above, Molly describes always putting work and the care of her athletes above herself, in which she is able to laugh as opposed to dwell on the things she sacrifices by doing so. This degree of commitment coupled with her sense of humor provides her with a high degree of hardiness, which although does not prevent her from experiencing symptoms of burnout, likely prevents her from reaching the "end point" of burnout that she described earlier where the individual must leave the profession. Molly offers the following, articulating this notion of persevering through the challenges of the profession, "It's a grind, but you do it because you love it. It's not about me it's about these athletes."

Over the course of the week Molly completed this activity on five of the seven days. Citizenship, Teamwork, and Loyalty as well as Humor and Playfulness were both cited twice, where Spirituality was cited once. For instance, Molly provided the following example of how she was able to use Citizenship, Teamwork, and Loyalty,

Emotionally and physically exhausted, but pushed through to help the team before, during, and after practice. Also did other things to help the team throughout the day.

Molly's description above provides yet another example of her high degree of commitment to her work, pushing through feelings of mental and physical exhaustion.

With regard to additional questions asked during this interview, Molly said she would attempt to engage in this activity voluntarily in the future, expressing that she would have to make a habit out of it if she was to truly benefit from doing the activity. As this intervention required completing a 240 question survey along with keeping a journal of strengths used, Molly said she would only use this intervention with athletes she had a close relationship with or were going to have a "long-term" injury rehabilitation program. Lastly, she believed that this intervention along with the first intervention could be of benefit to all athletic trainers.

Possibly as a result of having a bad week, Molly's scores increased for both the emotional exhaustion and depersonalization subscales of the MBI compared to the previous week's intervention. Already in the high risk range for burnout on both these subscales, Molly's score for emotional exhaustion was six points higher than the previous week, where depersonalization had raised by three points. On a positive note, Molly's personal accomplishment score rose by three points moving her from the moderate risk range into the low risk range for burnout. In speculation, this increased sense of accomplishment could have been the result of her remaining committed to the care of her athletes in the face of mental and physical exhaustion.

Molly	EE	DP	PA
Baseline	36 (High)	13 (High)	39 (Low)
Intervention #1	34 (High)	13 (High)	36 (Moderate)
Intervention #2	40 (High)	17 (High)	39 (Low)

Table 15- Molly's MBI subscale scores at interval 3

Sue

Sue's top five signature strengths are presented below along with a brief description of each strength.

1. Honesty, Authenticity, and Genuineness: You are an honest person, not only by speaking the truth but by living your life in a genuine and authentic way. You are down to earth and without pretense; you are a "real" person.
2. Judgment, Critical Thinking, and Open-mindedness: Thinking things through and examining them from all sides are important aspects of who you are. You do not jump to conclusions, and you rely only on solid evidence to make your decisions.
3. Fairness, Equity, and Justice: Treating all people fairly is one of your abiding principles. You do not let your personal feelings bias your decisions about other people. You give everyone a chance.
4. Industry, Diligence, and Perseverance: You work hard to finish what you start. No matter the project, you "get it out the door" in a timely fashion. You do not get distracted when you work, and you take satisfaction in completing tasks.
5. Forgiveness and Mercy: You forgive those who have done you wrong. You always give people a second chance. Your guiding principle is mercy and not revenge.

Sue began the interview by mentioning that she had continued with the first intervention, keeping a personal journal of three things that went well each day. Sue was also able to complete this second activity each day over the course of the seven-day week. Asked whether or not she agreed with the strengths report she received, Sue said she agreed with all strengths, and in particular, most related to the strength of Fairness, Equity, and Justice as she explains,

Just because I'm always trying to make things fair for everybody because I feel like we have to knock down the entitlement so I'm always trying to make everybody feel equal.

With regard to her comments about entitlement, Sue was referring to an earlier conversation in which she discussed the undergraduate and graduate assistant trainers as having a sense of entitlement, picking and choosing which tasks they were willing to complete each day. Sue elaborated on how she was taking on smaller tasks like filling water bottles and folding towels to set an example that no task is beneath anyone working in the athletic training room. It should be noted that both Becca and Molly made similar remarks, perceiving a sense of entitlement among younger trainers.

Returning to her experiences with the current intervention, Sue described it as a novel activity for her as she articulates, "I try to work on my weaknesses, not my strengths." Sue added that focusing on her strengths versus her weaknesses became easier over time, and describes how shifting her attention to her strengths and away from her weaknesses changed how she approached each day,

It's kind of like a pick me up of okay these are my good traits, how do I use my good traits today, instead of alright this was something I needed to work on, how do I use that today?

It can be inferred from her comments that Sue enjoyed this new perspective of focusing on her strengths more than her previous tendency to focus on her perceived weaknesses. Following this line of inquiry Sue was asked if she noticed a change in her ratio of positive to negative thoughts over the week, in which she responded,

I would say they changed. I bet they were more positive because going into it I try not to have negative thoughts because I feel like it can bring our athletes down so if you keep encouraging them, even if a negative thing needs to get said if you can spin

that in a positive way I feel like they react better. So I've caught myself trying to spin a negative into a positive, and like still being constructive about it.

Sue not only describes a change in her ratio of positive to negative thoughts, but goes on to explain the effect this change had on her interactions with student-athletes. It appears that experiencing more positive thoughts herself encouraged Sue to make a greater effort to cultivate positive thinking in others.

Sue provided the following at the end of the interview, which sums up her experience with this intervention well,

I think seeing the strengths and seeing that they're like, kind of like me, and it kind of sets me apart, I think that kind of helps too knowing that these are my five traits that I am really good at.

Although not asked directly if she previously paid attention to her weaknesses with regard to what sets her apart from others, Sue appears to enjoy this new approach of focusing on her strengths as what defines her.

In her activity log Sue was able to provide an example of how she was able to use each of her five strengths throughout the week, providing two examples for both Industry, Diligence, & Perseverance, and Fairness, Equity, & Justice, with each of the remaining three strengths appearing once. For example, below, Sue describes how she was able to use her strength of Industry, Diligence, & Perseverance,

We had an athlete that needed to finish treatment, however, it was past closing time. I offered to stay an extra hour and a half so that the athlete would receive all of his treatment.

This example is consistent with Sue's previously described strong work ethic.

Sue stated that she would voluntarily engage in this activity in the future, but did not think it would be as useful as the first intervention for use with her injured athletes.

Lastly, Sue said she would recommend this activity for the full athletic training staff, but added that if she had to choose between this strengths-based intervention and the first intervention she would opt for the first intervention.

Shown below, Sue's MBI scores for this study interval remained relatively stable when compared to the previous week. Sue's score for emotional exhaustion increased by one point, while remaining in the low risk range for this symptom. No change was observed for the depersonalization subscale. Finally, marking the greatest change from the previous week was the 10-point increase in personal accomplishment, moving her from the moderate to low risk range for burnout on this subscale.

Sue	EE	DP	PA
Baseline	22 (Moderate)	7 (Moderate)	31 (High)
Intervention #1	13 (Low)	4 (Low)	36 (Moderate)
Intervention #2	14 (Low)	4 (Low)	46 (Low)

Table 16- Sue's MBI subscale scores at interval 3

Becca

Becca's top five signature strengths are presented below along with a brief description of each strength.

1. Industry, Diligence, and Perseverance: You work hard to finish what you start. No matter the project, you "get it out the door" in a timely fashion. You do not get distracted when you work, and you take satisfaction in completing tasks.
2. Caution, Prudence, and Discretion: You are a careful person, and your choices are consistently prudent ones. You do not say or do things that you might later regret.
3. Perspective (Wisdom): Although you may not think of yourself as wise, your friends hold this view of you. They value your perspective on matters and turn to

you for advice. You have a way of looking at the world that makes sense to others and to yourself.

4. Curiosity and Interest in the World: You are curious about everything. You are always asking questions, and you find all subjects and topics fascinating. You like exploration and discovery.
5. Judgment, Critical Thinking, and Open-mindedness: Thinking things through and examining them from all sides are important aspects of who you are. You do not jump to conclusions, and you rely only on solid evidence to make your decisions.

Becca reported being excited about this intervention, describing the perceived benefits of the activity,

I feel like I've been able to, by doing this strengths exercise, actually see how much those strengths are what I use on a regular basis. Like that's kind of how I manage my day is through those strengths.

As Becca described being organized as essential for her well being at work, it makes sense that this activity, providing a structure for managing her strengths was an enjoyable experience. After describing how there are so many negatives throughout her day at work, and even going out for dinner with coworkers would result in perpetual negative talk. Becca describes how this activity influenced her interactions outside of work,

So it was nice to, even after doing that exercise and then this week when like just going out with some friends that I don't work with on Friday. It was so much better to have a positive conversation when they ask you how work's going, it was probably the first time in a group of people that I don't work with I was able to really feed them positive things rather than just kind of the dull drum of oh yeah, everything's great in condescending tones, it was actually like, I could truly say it's going really well.

As Becca previously described that her sense of well-being outside of work was more important than her well-being at work, feeling relatively good about work on this rare

occasion prevented work issues from spilling over into her personal life as had occurred in the past.

Becca also mentioned how this activity had a positive influence on her interactions with colleagues,

I think that my strengths are a lot of other people's like not as good strengths. So it shows me more of the fact that I know why I'm relied on in certain situations or why I'm gone to, and so I guess like looking at it made me realize if somebody is telling me this or they're asking me to do this it's probably because they are just not equipped to do it, and I can respect that, and you know, say I'll get it done when I can for you. I'd help them out or I'll show you this if you want to learn it. So I was definitely more patient, I would say in certain ways with people, whereas before I would just say why can't you do it yourself.

Becca discusses how this activity helped put things in perspective for her, where she was not always being asked to do something because the other person didn't want to do the task, rather they knew that Becca could do it better or teach them her way of doing it. Holding things in perspective, Becca reports being more patient with her colleagues, and less likely to engage in behaviors that resemble the experience of depersonalization. Also knowing that she was being asked for help as a result of her colleagues perceiving her as highly competent may have contributed to a greater sense of personal accomplishment.

As with Sue, Becca also reported a tendency to look at how she could improve upon her perceived weaknesses, stating,

It's hard for me to like translate to them (injured athletes) that I do have compassion, that I do understand what they're going through. So like that would be one example that I feel like I work on regularly, but I'm still not good at it. Like it's still not a strength.

Becca reports as a result of having a high degree of confidence in her ability to develop effective treatment plans for her injured athletes she can often overlook the emotional needs of the athletes. Becca describes this tendency as a perceived weakness, in which she makes regular attempts to improve upon her ability to display compassion for her student-athlete's situation. When asked if she thought this intervention helped provide her with a structure for working on her perceived weaknesses, Becca responded,

I think so, definitely with the assessment aspect of it...You know, it's easier to just be numb to it, and compartmentalize like these are work relationships, these are home relationships, I really don't want to have a relationship with you when you're done because it's too exhausting. So that's what I've kind of done over the past few years, but I don't think it's benefitted me.

Above, Becca describes how having a greater awareness of her strengths also enabled her to see what aspects of her work she could improve upon. Specifically, describing the need to invest more in building relationships with her student-athletes.

With regard to the data attained in her activity log for this intervention, Becca was able to provide examples of how she was able to use four of her five signature strengths. Specifically, Industry, Diligence, & Perseverance, Curiosity and Interest in the World, and Caution, Prudence, & Discretion were all cited on two occasions with Perspective appearing once. Describing how she was able to use her signature strength of Caution, Prudence, & Discretion, Becca wrote, "I was in multiple situations today that was necessary to stay cautious, and be aware of who I was sharing information with."

As for additional questions asked, Becca said she would not voluntarily engage in this intervention in the future, perceiving the first intervention to have a greater influence on her well-being. Becca also supported using the first intervention over this

one with injured athletes because she felt having the athletes write down what went well each day provided her a gauge for understanding what the athlete perceives as “well”. Lastly, Becca thought that this intervention would be the most beneficial for full staff participation.

At this interval changes were observed in two of the MBI subscales, where her score for depersonalization remained constant. The greatest change observed was for emotional exhaustion, falling six points, and moving her from the high to moderate risk range for this symptom of burnout. Although remaining in the moderate risk range for personal accomplishment, this score increased by three points.

Becca	EE	DP	PA
Baseline	35 (High)	23 (High)	32 (Moderate)
Intervention #1	30 (High)	14 (High)	34 (Moderate)
Intervention #2	24 (Moderate)	14 (High)	37 (Moderate)

Table 17- Becca’s MBI subscale scores at interval 3

Maxx

Maxx’s top five signature strengths are presented below along with a brief description of each strength.

1. Fairness, Equity, and Justice: Treating all people fairly is one of your abiding principles. You do not let your personal feelings bias your decisions about other people. You give everyone a chance.
2. Kindness and generosity: You are kind and generous to others, and you are never too busy to do a favor. You enjoy doing good deeds for others, even if you do not know them well.
3. Capacity to love and be loved: You value close relationships with others, in particular those in which sharing and caring are reciprocated. The people to whom you feel the most close are the same people who feel most close to you.

4. Humor and Playfulness: You like to laugh and tease. Bringing smiles to other people is important to you. You try to see the light side of all situations.
5. Bravery and Valor: You are a courageous person who does not shrink from threat, challenge, difficulty, or pain. You speak up for what is right even if there is opposition. You act on your convictions.

Maxx reported agreeing with all five of the signature strengths he received, while describing Humor and Playfulness to be his most dominant strength,

I try to lighten up the work area every once in a while with humor, and just little nit picking here and there on people, just doing it in fun. Whether they take it that way or not is a different story, but I feel like I try to lighten up the mood and stuff like that.

Maxx reported that he saw humor as an effective means of keeping the workplace fun. Maxx described enjoying this strengths intervention more than recording three things that went well each day because it allowed him to see how he could create positive experiences by using his strengths. Maxx discusses below how this activity gave him a broader perspective when reflecting back on his day,

With the three good things is sometimes you can be trying to focus on three things to where you kind of lose others. This one, (strengths intervention) I felt broadened the whole day. Took the whole day as a broad, and kind of let you focus on a couple main points, like with your mood rather than three actual main times.

For Maxx, it was easier to identify which strengths he used throughout the day than it was to pinpoint three different things that went well that day. Maxx did however have one day over the course of the week where he felt he did not have an opportunity to display one of his signature strengths, describing himself as “feeling out of it” on that day.

Maxx was asked if he would like to make a habit of reflecting on his day in terms of his strengths, in which he responded,

I think so, yeah. Whether it be a journal everyday and just kind of do either one or the two strengths everyday or whatever it may be. I feel like that would help keep you on task and everything like that.

Maxx saw this intervention as a means for monitoring how he approached each day, where by keeping a journal he could recognize which strengths he was able to display, and focus his efforts on improving those strengths he was using less often. Following this thought Maxx mentioned how he thought this activity could be of benefit to injured student-athletes if they were to set a goal of using one signature strength each day as opposed to going about their day normally and reflecting back on which strengths they used.

In his activity log, despite encountering one day where he felt he did not use a signature strength, Maxx was able to provide an example of how he used all five of his signature strengths. Specifically, Humor and Playfulness was cited on two days, where the remaining four strengths were cited on one day each. In describing how he was able to use his strength of Humor and Playfulness Maxx wrote,

I noticed a fellow workmate was in a bad mood, so I tried lightening them up with some playful jokes to get their mind off what they were stressing about. I also reassured them that everything would work out for the best.

In his interview Maxx discussed how he saw humor as a common way for trainers to provide social support to one another. As shown above, Maxx demonstrates providing social support to his coworker, beginning with a humorous approach before formally reassuring them that everything would work out for the best.

As Maxx touched on earlier in the interview, he reported a willingness to engage in this intervention voluntarily in the future. Also discussed earlier, Maxx wanted to use

this intervention with his injured student-athletes with an added goal-setting approach rather than simply reflecting on what strengths they used. Given the choice of implementing either the first intervention or this strengths intervention with the full athletic training staff, Maxx recommended using the strengths intervention because he believed staff members would be more willing to share their signature strengths with one another than sharing what they thought went well each day. As Maxx stated, “This could help keep everybody on the same page.”

The most significant change in scores for the three subscales of the MBI was observed for emotional exhaustion, which fell by six points. Maxx’s score for depersonalization was two points lower at this interval, but still remained in the high risk range for burnout. Lastly, Maxx’s score for personal accomplishment lowered by one point, still remaining in the moderate risk range for this symptom.

Maxx	EE	DP	PA
Baseline	26 (Moderate)	12 (Moderate)	32 (Moderate)
Intervention #1	24 (Moderate)	15 (High)	36 (Moderate)
Intervention #2	18 (Moderate)	13 (High)	35 (Moderate)

Table 18- Maxx’s MBI subscale scores at interval 3

Grant

Grant’s top five signature strengths are presented below along with a brief description of each strength.

1. Fairness, Equity, and Justice: Treating all people fairly is one of your abiding principles. You do not let your personal feelings bias your decisions about other people. You give everyone a chance.

2. Humor and Playfulness: You like to laugh and tease. Bringing smiles to other people is important to you. You try to see the light side of all situations.
3. Kindness and Generosity: You are kind and generous to others, and you are never too busy to do a favor. You enjoy doing good deeds for others, even if you do not know them well.
4. Leadership: You excel at the tasks of leadership: encouraging a group to get things done and preserving harmony within the group by making everyone feel included. You do a good job organizing activities and seeing that they happen
5. Capacity to Love and Be Loved: You value close relationships with others, in particular those in which sharing and caring are reciprocated. The people to whom you feel the most close are the same people who feel most close to you.

Grant stated that he agreed with the five signature strengths he received, and said that he was most able to relate to his top three strengths. Specifically, Grant mentioned that being kind and treating all people equally was part of who he was. Grant elaborates on how he sees the importance of incorporating humor into his work,

I think it's huge because I feel like if you can joke around with your athletes then it's just another connection that you have versus I feel like they come off as like just an object, like if they come in and you give them their treatment and then they leave, like I mean I guess it's just that simple for me.

Grant saw building personal and positive relationships with his student-athletes as a critical component of his work, where humor was viewed as an effective means for strengthening those relationships. Without establishing personal relationships with his student-athletes, Grant believes those athletes can feel as if they are being treated as objects rather than people. The act of treating people as inanimate objects is a characteristic of the experience of depersonalization. As Grant states throughout the course of this study that he does not believe he is experiencing any symptoms of burnout, it can be inferred that his emphasis on building relationships with his student-

athletes has diminished the likelihood of him experiencing the depersonalization symptom of burnout.

As for his other two signature strengths, Grant said he found difficulty in identifying opportunities at work to display his capacity to love and be loved, believing he demonstrated this strength more in his personal life. With regard to Leadership, Grant stated, “I’m not necessarily a lead by voice type of person, more of a lead by how I do things.” Although describing his leadership style as untraditional, Grant said that he leads by example on regular basis while performing his work related responsibilities.

In this interview Grant was asked to compare his experiences with these first two interventions, in which he offered,

I like this one a lot better just because rather than looking through an entire day and trying to think about the positive things that happened, it was easier to narrow it down to like within different categories.

Like Maxx, Grant saw these two interventions as similar in nature, viewing times when he displayed his signature strengths as things that went well during the day. For Grant, these strengths provided him a structure for recalling positive moments in each day, making this activity easier to complete than the previous intervention.

Grant was asked if he believed this intervention influenced how he interacted with colleagues. In response, Grant described a point in the week where he offered to cover a shift for a colleague so they could spend more time with their family who was visiting that week. Grant provides his reasoning for helping this colleague, “I guess it’s something that’s really important to me, and at the end of the day it makes me feel better than if I were to just let them suffer on their own.” Grant saw his offer to help

this colleague as a display of his Kindness and Generosity strength. However, Grant made clear that he would offer to help out his colleagues because it was the right thing to do, regardless of whether he was engaging in a positive psychology intervention. As he describes helping others as making him feel better at the end of the day, Grant's helping behaviors provide him a means for generating positive emotions, which likely contribute to his ability to prevent experiencing symptoms of burnout.

Not currently experiencing symptoms of burnout, Grant was asked if he was able to detect symptoms of burnout among his colleagues. Grant provided the following with regard to how he perceived symptoms of burnout in others,

You can just tell either they're having a bad day for like a consistent amount of time or like they're just not the person you know them to be anymore. Like someone who was once bright and cheery all of the time like all of a sudden kind of sits by themselves and does their own stuff, you know what I mean. I guess the easiest way for me to put it is they're just not who you know them to be.

Grant distinguishes between colleagues who are just having a bad day and those who are experiencing burnout, where burnout is characterized by a change in persona of the individual that occurs over an extended period of time. Grant also made a distinction in how symptoms of burnout are more observable in interactions with colleagues as opposed to interactions with student-athletes,

I feel like with athletic trainers...like we get really good at like putting on a face with the athletes so they don't notice it, but you can tell with like interactions with other colleagues like when it so much doesn't matter if you snap at somebody.

Grant's comments suggest that, from his point of view, athletic trainers are aware of their tendencies to become more callous toward others, and in-turn, make deliberate attempts to reframe from becoming callous with their student-athletes.

Grant also suggests that it is more socially acceptable for athletic trainers to become callous with one another than it is to become callous toward a student-athlete.

In his activity log for this intervention, Grant was able to cite an occasion where he used four of his signature strengths, not finding an opportunity to display his capacity to love and be loved. Grant was also the first participant to cite using multiple strengths on each day. For example, Grant wrote that he was able to display Fairness, Kindness, and Humor on all seven days, where Leadership was cited in addition to these strengths on three of the seven days throughout the week. As an example of how he displayed Fairness on each day, Grant wrote “I help athletes in the order they come in, regardless of status on the team or who I like.”

Grant stated that he would voluntarily engage in this activity in the future mentally, as he does not like keeping a journal. Grant also said he would recommend this activity over the first intervention for full athletic training staff participation. However, Grant did not believe that student-athletes would be willing to complete the strengths questionnaire required in this activity, and thus, remained in favor of using the first intervention with injured athletes.

As for his MBI scores at this interval, Grant remained in the low risk range of burnout for all three subscales. However, Grant’s score for emotional exhaustion increased by two points, where his score for depersonalization increased by a single point. In addition, Grant’s score for personal accomplishment decreased by five points. Thus, for all three subscales Grant’s scores moved in the direction of having a higher risk of burnout. Most surprising was that this shift towards burnout occurred during a week

where Grant could not recall experiencing any significantly stressful moments at work, and where he reported enjoying this activity more than the first intervention.

Grant	EE	DP	PA
Baseline	12 (Low)	3 (Low)	41 (Low)
Intervention #1	5 (Low)	2 (Low)	46 (Low)
Intervention #2	7 (Low)	3 (Low)	41 (Low)

Table 19- Grant's MBI subscale scores at interval 3

Peer Support

For this intervention participants were asked to observe their colleagues over the course of one week, paying particular attention to strengths displayed by their colleagues. At the end of the week participants were instructed to select one colleague, to whom they would write and deliver a letter describing the strengths they observed that colleague display over the week. A full description of the instructions for this intervention can be found in Appendix 1.

Molly

Having now completed all three interventions Molly was asked which intervention she enjoyed the most, in which she replied, "I think the letter. I was late getting it done, but still put a lot more thought into it... When you go heartfelt you're writing truly what you feel." Molly appeared to enjoy this activity most because it provided her an opportunity to express her genuine appreciation of one of her colleagues. Molly goes on to describe how she went about choosing which colleague to write a letter to,

I was thinking about just different people, positions, what not, and I decided on one of our graduate assistants, and how he had kind of stepped out, and...There's drama in every place you work, but there's one kid in particular that, he's kind of, went against the norm, you know, to include him in on things, watching him work with his athletes in the very first week to now, just watching him interact with other people. His leadership is outstanding at this point for being a first year, and only being here a couple months, and so I just wrote him a letter about it.

Molly describes choosing a graduate assistant athletic trainer based on his demonstrated leadership abilities, which she believed distinguished him from the other graduate assistant athletic trainers. As Molly stated, "he's kind of one of those diamonds in the rough."

Molly also discussed how writing a letter to this individual allowed her to learn something about herself,

I told him, that a leader isn't just that person in the top role. I mean, we're all leaders by nature with our teams, we're all leaders, but you know, I can definitely get better at that. I'm loyal, but I don't know that I'm always a good leader, and so you know, it kind of opened my eyes up a little in that standpoint.

In describing the content of her letter Molly illustrates how this activity encouraged her to reflect on her own leadership skills, and inspired her to improve as a leader. Molly discussed her interactions with this individual after he had received and read her letter,

I was doing some biodex and testing on one of my kids, and he came up and put his arm around me, didn't say anything, but just smiled, and you could tell he was glowing inside. He's one that has come and put his arm around me and just been buddies before, but you could tell there was a little glow to him, that he had the appreciation of that. Guys aren't one to talk about their feelings, and I didn't expect him to be like, are you glowing from this, I already knew that you know he appreciated the feedback.

In the quote above Molly mentions how she had already established a positive relationship with this individual. For Molly, the letter she wrote to this individual served to strengthen this positive relationship, as evidenced by his gesture of appreciation.

Appearing to have had a positive experience with this intervention, Molly was asked to elaborate on what she felt she gained from this experience,

I felt good about it because it made me think more outside of athletic training, even like into my coaching staff. I could write a letter to one of them saying some things that I've noticed, you know, taking it one step further. I was thinking mostly with my head coach because we don't sit down and visit a lot, but there's a lot of things she's done for me. One, giving me the opportunity here, and I mean across the board, but it's more than just things that she's given or done. It's watching her interact and how she gives a hundred percent of her time to whomever she's with, whether it's her kids, her family, her coworkers, you know, inside and outside of work, her players. When she's at practice she's a hundred percent focused on that, and just, you know, it makes you start to look at people outside than just athletic training. So it was making me think a lot on the bigger scale of things I guess.

As Molly describes reflecting on those whom she is grateful to have the opportunity to work with, she also describes how this activity encouraged her to make more deliberate attempts to express gratitude to individuals she works with outside of the athletic training staff. Below, Molly sums up the perceived benefits of this intervention,

It opens your eyes up especially when we deal with so much negative, you know, that it opens your eyes up to the goodness that is out there. I mean I've got some good relationships with some of my players. I'll just do little things like 'hey, that's awesome,' you know, it just makes people feel good. It puts that pep in their step for the day, and I mean we're all just so stuck inside ourselves that most people don't even look up to have and engage in conversations. It seems conversations are just going by the wayside because we're involved in so much other stuff that we're not thinking like we used to. So yeah, I do think there's a huge value in it.

Molly saw this activity of formally acknowledging other's strengths as providing a structure for taking the time to engage in more meaningful conversations with those around her.

Molly indicated that she would voluntarily engage in this activity in the future. Believing that her injured student-athletes should be focusing on what they are doing to progress through their injury rehabilitation program, she did not think having her

athletes write letters describing their peer's strengths would be of benefit to them.

Lastly, Molly thought it would be difficult to have the full athletic training staff engage in this activity, unable to think of a way to ensure that each member of the staff received at least one letter from a colleague. For this reason, Molly proposed that the strengths activity would be of greatest benefit for full staff participation, in that it encouraged interaction among colleagues as opposed to keeping a personal journal of three things that went well each day.

Changes were observed for all three subscales of the MBI at this interval.

Although remaining in the high risk range of burnout for both emotional exhaustion and depersonalization, these scores were reduced by two and three points, respectively. For personal accomplishment a one point decrease was observed, placing her at the cut off for a moderate risk designation.

Molly	EE	DP	PA
Baseline	36 (High)	13 (High)	39 (Low)
Intervention #1	34 (High)	13 (High)	36 (Moderate)
Intervention #2	40 (High)	17 (High)	39 (Low)
Intervention #3	38 (High)	14 (High)	38 (Moderate)

Table 20- Molly's MBI subscale scores at interval 4

Sue

To begin the interview Sue was asked, after reading the instructions for this intervention, whether she was looking forward to writing a letter to one of her colleagues, in which she responded,

Yeah. It was very interesting. I thought it would be really hard, but it wasn't. The hard part was, because throughout the week I wrote different things down about different people, it was choosing whom to write the letter to.

Sue was surprised by how easy it was to write a letter to one of her colleagues once she had identified whom she wanted to write the letter to which she found to be the most challenging aspect of performing this activity. When asked how she went about making this decision, Sue offered,

I made it based on the amount of help the person had given me, and sometimes it wasn't, for me, the letter was more about showing them that I really respected what they've done, and I felt like certain people deserve them more than others.

Sue made her decision of whom to write the letter to based on both how helpful that colleague had been to her in the past, and how much that individual had accomplished in the profession of athletic training. Following these criterion Sue chose to write her letter to one of her supervisors.

Sue elaborated on her relationship with this colleague, and how she believed delivering the letter to them influenced their current relationship,

I kind of look at him as a dad, but also like our mentor in a way because you can learn a lot of things.... like how he handles the little things of our profession, like he does so well and sometimes it's just understood, and it's not really spoken. So I think appreciating those little things and just taking the time out of the middle of the day to appreciate that. I think he was very appreciative, and it's kind of made our relationship throughout this month a lot closer because he can call on me. I'll come in and work and do extra stuff for him, or I can stay late. I'm not going to complain about him asking me to do something that I really didn't want to do, and I think the appreciation that I have had for him has made it reciprocate to me, like okay I really trust her, she's the bigger person in a lot of situations, and she doesn't care to not get recognized for that.

Sue believed that by formally acknowledging all the little things this individual does, the individual, in-turn, reciprocated this appreciation. Specifically, the individual

acknowledged how she his willing to go above and beyond because it is the right thing to do as opposed to giving the extra effort in anticipation of being praised for her work ethic. In short, the unspoken appreciation for the strengths these individuals possess, once openly acknowledged served to strengthen the level of trust they have for one another.

Sue also discussed how this activity influenced her perceptions of her other colleagues,

I think it was good seeing how I see other coworkers because everybody has something different that they can contribute to the team. It was interesting to see how I looked at that because I had never really thought about some things until I started watching what they did, and it was like okay they really contribute this to our team.

In a prior interview when discussing her level of commitment to the profession Sue acknowledged her tendency to focus solely on providing quality care to her student-athletes, often overlooking what her colleagues were doing, Sue describes above how this activity encouraged her, for the first time, to deliberately look at the strengths her colleagues bring to the table. Sue also mentioned that engaging in the strengths intervention in the previous week made this task easier, providing her some terminology for assessing the strengths of her colleagues. Sue continued to describe the perceived benefits of this intervention on staff cohesion,

I think as a staff we have kind of like cliques with our staff so looking at someone that you don't normally talk to and being like man they really do that well, I think you're stepping outside of it, and I think that would show them that you know, wow they really do care about me.

Sue's comments above further illustrate how this activity encouraged her to engage with colleagues she does not regularly associate with, and touches on the importance of maintaining communication with all members of the athletic training staff.

Sue mentioned in this interview that as a result of this activity she would make more deliberate attempts to verbally praise her colleagues in the future. However, she also reported that she had continued to keep a journal of the three things that went well each day, and, due to time constraints, was less likely to write a formal letter of praise to her colleagues. Thus, although more likely to verbally praise her colleagues, Sue was more likely to formally engage in the first intervention voluntarily in the future. Personally, finding the first intervention to be most beneficial, Sue remained supportive of having the full athletic training staff engage in this intervention over the other two. Furthermore, Sue stated that she would be most likely to have her injured student-athletes engage in the first intervention. Sue also expressed she would recommend having her healthy-student athletes write a letter to their teammates, particularly for athletes on teams where there is a higher level of turmoil between teammates.

Changes were observed in all three subscale scores of the MBI at this interval. Specifically, demonstrating the greatest change, Sue's score for emotional exhaustion fell by four points, remaining in the low risk range of burnout for this symptom. Sue's score for depersonalization was reduced by two points, also remaining in the low risk range of burnout for this symptom. Lastly, Sue's score for personal accomplishment increased by one point over the week. In short, the desired affect, although not

determined to be causal, was observed for all three subscales of the MBI after engaging in this final positive psychology intervention.

Sue	EE	DP	PA
Baseline	22 (Moderate)	7 (Moderate)	31 (High)
Intervention #1	13 (Low)	4 (Low)	36 (Moderate)
Intervention #2	14 (Low)	4 (Low)	46 (Low)
Intervention #3	10 (Low)	2 (Low)	47 (Low)

Table 21- Sue's MBI subscale scores at interval 4

Becca

To begin the interview Becca was asked how she approached this activity. Becca described not quite being sure what she was looking to see in others as she observed her colleagues, stating, "I was just paying attention to see if there was something that like set someone apart from the others." Becca, then continued to describe her experiences observing her colleagues,

I kind of just watched everybody the whole week. I didn't feel like any of my peers in my full-time staff really did anything that separated them for the week. A lot of times I watch them and they just put more stuff on other people, they don't necessarily take anything off of other people, and so that was kind of like disappointing because I was really hoping that I would see something that was great.

Somewhat disappointed that she was unable to readily observe one of her full-time athletic training colleagues demonstrate a work behavior worth praising, Becca turned her attention to the group of graduate student athletic trainers. Becca then described the process of identifying a graduate assistant athletic trainer to write a letter to,

I was paying attention to the whole staff, and some of our graduate assistant staff, two in particular. One, I really like just enjoyed watching her grow and evolve over not just the week but the whole semester, but then another one really stepped up and even took responsibilities for her because she was having a family member come into town. He took on two to three hours of a conditioning practice that was abrupt, and wasn't scheduled, and did that for her. Right then was like the example that I remember as a graduate assistant, that's what you did is you helped each other out, and you helped the staff out so somebody had a family coming in town or had something planned, you didn't feel guilty about going and doing it because you knew somebody else was going to be there to help you because they wanted to, not because you were putting a burden on them. They would just volunteer for it, and so that's what I kind of picked out, the thank you was for that more than anything else.

Becca recalled the importance of having the support of her peers as a former graduate assistant athletic trainer. Becca describes the current lack of such helping behaviors among the athletic training staff, stating, "We have a lot more negative behaviors around our group of staff than positives, people aren't jumping up to help other people with the health care for their student-athletes." This lack of current helping behaviors among the staff served as the primary factor for Becca choosing to write a letter of praise for what she perceived to be a rare occurrence of a staff member volunteering to help out a colleague.

Becca goes on to describe the process of writing the letter, "I'm one of those people that I would just more talk to the person face-to-face so it was definitely out of my comfort zone in some ways." Having chosen a graduate assistant that she personally mentors, Becca describes the perceived benefits of giving more formal rather than verbal praise to this individual,

I don't think he hears me say thank you enough, and I think that's where it was like good for him, and it felt good to see his happiness about it. It was like a really good thing. I think that like just the sheer words of saying thank you, in a formal way, probably meant more to him than me just saying it as like a thanks because it really meant that I like took the time to write it out rather than saying it.

Although finding it somewhat uncomfortable to give more formal praise, as through a letter, Becca was able to see the added value in being more formal in her appreciation of her mentee.

Becca describes having two opposite reactions to this activity, as she states, “From a personal standpoint I feel like I’ve grown from this. From a group standpoint there’s still like a lot of people that need to learn together.” Two significant themes for Becca over the course of the study were her perceiving a lack of effort among her colleagues, and feeling that she was over relied upon, being asked to complete tasks for others on a regular basis. For example, while engaging in the previous week’s strength intervention, Becca described how the activity shifted her perspective of other’s shirking their responsibilities onto her to her being utilized by others as a result of her personal strengths. However, when asked if she had ever received the kind of praise she had given her mentee for her own helping behaviors, Becca responded,

No. I mean, I think a lot of it is Becca is just gonna do it. It’s like she’ll take care of it, and so that is frustrating because it’s not even like wanting appreciation, it’s more just wanting them to act like they care enough to do something and not just put it on me.

Unable to recall an instance when she was praised for helping her colleagues, it appeared Becca returned to her previous perspective of other’s simply relying upon her to lighten their workload. Furthermore, Becca describes how observing her colleagues over the course of the week merely reinforced her perception of a lack of effort among her colleagues when asked what she learned from engaging in this activity,

I think I learned how much I don’t like the people I work with. I mean, I think that it’s more respect. I mean I don’t really dislike anybody. It’s more of like just how much do I trust them, and how much do I respect them, and I’ve never ever, ever, ever,

ever since I've worked here, truly trusted and respected the people I work around. I think that was kind of one of those things that, I don't know if it's been from a competence standpoint, that's something that I've always worked on, like knowing that there's no one way to do things so I can respect that there's different ways to do things, and there's different ways to accomplish an end goal, but like at the same time I think that a large part of where I am and what I do is like this isn't all of me. And so I don't want to put all the parts of me into this anymore. Um, and they don't necessarily always put all the parts of themselves into this so you don't really get a good product. Like I think I did at one point, put everything in, and then I just realized well I can't do that because it's killing yourself, you're just putting all emotional investment, all physical investment into just one thing for somebody else. And so now it's like I see the younger staff, like they have time to do that so why they're not doing that I don't understand, and it's just frustrating more than anything else.

Becca makes a connection between her previous demonstrated commitment to developing her competencies, and the resulting frustration of being over relied upon as a result of these developed competencies. Becca believes that this lack of commitment among her peers has resulted in her inability to trust or respect those with whom she works with. Most interesting, although Becca acknowledges how her total commitment to the profession negatively impacted her personal well-being, and was unsustainable over the course of her career, Becca still expects this level of commitment from the graduate assistant athletic trainers on her staff. Perhaps, it is this process expending all of one's personal resources in attempt to provide the highest quality of care to student-athletes that serves as a rite of passage for earning Becca's trust and respect.

With the act of formally writing a letter of appreciation to her colleagues falling outside of her comfort zone, Becca maintained that she would make more deliberate attempts to give verbal praise to colleagues, but would not voluntarily write a letter in the future. With regard to using this intervention with injured athletes, Becca said she did not see how it would be of benefit to them. She did however add that she had

implemented the first intervention with two of her postoperative student-athletes, stating, “They are like so good right now with their mindsets, and it’s really helpful in their rehabs.” Again, Becca recommended implementing the strengths intervention over the other two interventions for full athletic staff participation.

For the MBI subscale scores at this interval both emotional exhaustion and depersonalization subscale scores fell by three points each. The reduction in her depersonalization subscale score was believed to be the most significant change, resulting in a shift from the high to moderate risk range of burnout for this symptom. The reduction in her emotional exhaustion subscale score did not result in a change in risk level for burnout. Lastly, Becca’s personal accomplishment subscale score fell by seven points, placing her in the high risk range of burnout for this symptom.

Becca	EE	DP	PA
Baseline	35 (High)	23 (High)	32 (Moderate)
Intervention #1	30 (High)	14 (High)	34 (Moderate)
Intervention #2	24 (Moderate)	14 (High)	37 (Moderate)
Intervention #3	21 (Moderate)	11 (Moderate)	30 (High)

Table 22- Becca’s MBI subscale scores at interval 4

Maxx

Maxx chose to write his letter to another graduate assistant athletic trainer who he believed was having a hard time at work. Maxx provides the following summary of this individual’s current situation,

She has kind of a rough job right now. She has two off-season sports so it's kind of, she's like what am I really doing other than just rehabbing all the time, I don't really get to enjoy any of the other stuff that's going on.

Perceiving that this colleague would benefit from receiving the social support of one of her peers, Maxx continues to describe the content of his letter to her,

I just wrote her the letter on resilience pretty much, and how we give her a hard time, and how she kind of has a tough job right now, and how she still fights through and does a great job and everything like that. She thanked me then, and then has been more pleasant throughout, and I think she's getting better. I mean there's always days that she's kind of like, gets frustrated and stuff like that, but she can kind of know that she's, somebody has told her that she's doing a good job so she knows what's going on. She's feeling a little better I think.

Maxx describes above how we wrote her a letter to acknowledge the resiliency she has demonstrated in working through the less enjoyable aspects of her job, while also being given "a hard time" about her unfortunate circumstances from her other peers. For Maxx, the primary purpose of his letter was twofold. First, he acknowledged the tough time she was having, a form of social support referred to as *reality confirmation*. Second, he praised her ability to demonstrate resiliency and continue to perform her job to the best of her abilities, a form of social support known as *task appreciation*. Maxx also mentions how she was appreciative of his support, and appeared to be feeling better about her situation after receiving his letter.

As Maxx noted that he received a letter himself from one of the other study participants, he was asked to reflect on his own experience receiving a letter of recognition, in which he offered,

I greatly appreciated it. It's always nice to hear whenever you're doing things right, a lot of the times you don't really get that, you get the times whenever you're doing something wrong. So positive affirmations are always good.

For Maxx, receiving feedback about things he had done well as opposed to what he might have done wrong was a novel and most gratifying experience. He indicated that this letter had added significance as it was written by a full-time as opposed to graduate assistant athletic trainer. As Maxx had previously mentioned having some difficulty recalling and applying the appropriate injury assessment protocols in his new position as a graduate assistant, receiving feedback from someone who had more experience as an athletic trainer, appeared to provide him a sense of confidence in his ability to progress within this profession. Furthermore, Maxx added that,

If I get a higher up position I would try to incorporate writing a letter to one of your peers, at least once a month, once a semester or something like that, to where you can kind of get a whole team cohesion between the staff.

Maxx's intention to have others engage in this activity reflects his desire to provide other beginning graduate assistant athletic trainers the same sense of validation he experienced by receiving a letter from a more experienced colleague.

Maxx stated that he would voluntarily engage in both this intervention and the strengths intervention in the future, finding the first intervention to be the least beneficial in terms of enhancing his personal well-being. However, Maxx did remain most supportive of having his injured student-athletes engage in the first intervention, believing this intervention encouraged student-athletes to think more about the progress they have made in their injury rehabilitation program rather than how far they still have to go to return to competition. Although personally finding the letter writing activity to be highly beneficial, Maxx noted that as a care provider for his student-athletes he would recommend an activity that encouraged them to look at their own

strengths rather than the strengths of their peers. As for which intervention he would recommend for full athletic training staff participation, Maxx was torn between the letter writing activity and the strengths intervention. Specifically, Maxx's first inclination was to recommend writing the letter, however, he was also able to see how there was no way to ensure that everybody would receive at least one letter of support from a colleague. Thus, Maxx suggested the strengths intervention would be best for full staff participation as everyone would benefit from learning about their top strengths.

Changes were observed for all three subscale of the MBI at this interval. For emotional exhaustion Maxx's score increased by six points, remaining in the moderate risk range of burnout for this symptom. The depersonalization subscale score lowered by one point just making the cutoff to place him in the moderate risk range of burnout. Although remaining in the moderate risk range for personal accomplishment, Maxx's score on this subscale fell by three points.

Maxx	EE	DP	PA
Baseline	26 (Moderate)	12 (Moderate)	32 (Moderate)
Intervention #1	24 (Moderate)	15 (High)	36 (Moderate)
Intervention #2	18 (Moderate)	13 (High)	35 (Moderate)
Intervention #3	24 (Moderate)	12 (Moderate)	32 (Moderate)

Table 23- Maxx's MBI subscale scores at interval 4

Grant

In choosing who to write a letter to Grant stated that he was “looking for someone who was working really hard.” When asked to expound upon what he meant by working hard, Grant offered the following clarification,

Like, I mean I don’t know if I would call it working hard because it’s not so much as working hard so much as like doing things that aren’t asked of you or like helping people when you didn’t really need to.

Similar to Becca’s approach to this activity, Grant observed his colleagues over the course of the week looking for someone who went above and beyond what was expected of them. For Grant, finding such an individual came rather easy as he describes below having a situation where he needed a colleague to cover a shift for him,

My younger brother came into town this last weekend, and so he covered for my lunch on Friday so that I could hangout with my brother on Friday when he was here. So I wrote a message to him about that, and I also commented on the fact that I had seen him help other people. Basically I just wanted to let him know that it didn’t go unnoticed.

Grant describes how a fellow graduate assistant trainer offered to cover his lunch shift so he could spend time with his younger brother who was in town visiting. Grant added, “And there was no expectation that I would make it up to him, you know.” The altruistic nature of his colleague’s offer to help with no expectation of earning a favor in return provided a sense of camaraderie between Grant and his colleague.

Grant goes on to describe his experience of delivering the letter,

I guess it was weird giving him the letter just because it’s like guy-to-guy, and it’s just something that, I guess I don’t know what it is. Even if I have given it to a girl it would have been, I don’t know, it’s just like a weird feeling, and so like afterward it was almost like I tried to avoid them for a while. It sounds dumb and I don’t know why, I mean, but the most important thing, to me anyway, like he didn’t change anything about what he did.

For Grant, delivering a letter of recognition of his peer's strengths was a foreign and slightly uncomfortable process. Perhaps, the "weird" feeling Grant was describing was a result of his both wanting to let this individual know that their helping behaviors didn't go unnoticed, while also not wanting to openly acknowledge that he was the one noticing this helpful behavior, as evidence by his efforts to avoid this individual for a short period of time after delivering the letter. To his relief, the individual receiving the letter did not feel the need to openly express his appreciation for the letter he received.

Like Maxx, Grant also received a letter of appreciation from a full-time staff member, describing this experience as follows,

Considering that it came from someone higher up than me, like I don't know, like it was one thing to get a compliment from someone that's your age, but it's another thing to get a compliment from someone that kind of has an outcome on your job. So I guess that it meant a lot coming from her.

Grant described how this individual had written a letter to him acknowledging how he had offered to cover his peer's shifts on several occasions. As Grant cited his volunteering to cover his colleague's shifts in his activity log for the strengths intervention as an example of his strength of kindness and generosity he was asked if being recognized for what he believed to be a personal strength of his added any sense of validation, in which he responded,

Yes and no, I mean the other part of it is like, so like yeah it was cool that she picked me, she could have picked anybody, but I also know that it was like something that she was doing for this study. So like it was really cool that other people noticed it, but I don't know. There is some bit of, and maybe it's just me being cynical, but like the knowledge that she was doing it for this study, so it's like I don't know, but I guess at the same time it was something that she noticed regardless of whether she wrote a letter about it.

Grant clearly had a mixed reaction to receiving a letter from his colleague, initially describing it as something that meant a lot coming from someone in a higher position, and then describing how the knowledge that the individual who wrote him a letter was participating in the same study somewhat detracted from the meaning of the letter. There may be some truth to his perceiving the letter as less meaningful because it was an activity associated with the present study. However, when reflecting on this activity later in the interview Grant stated, "It's like hard to give and receive compliments. I don't know why, I don't. I have a weird way of looking at things." Describing compliments as hard to give and receive, it is possible that Grant may have focused on the letter he received being part of a study as a means of staying within his emotional comfort zone.

More comfortable with supporting his peers by assisting them with their work related activities, Grant did not express a willingness to formally write letters of peer support voluntarily in the future. Grant also remained consistent in his recommending the first intervention for use with injured student-athletes, and recommending the strengths intervention for full staff participation.

No change was observed in Grant's subscale score for personal accomplishment at this interval. Grant's score for emotional exhaustion did increase by one point, but remained in the low risk range of burnout for this symptom. Showing the largest change, Grant's score for depersonalization fell by two points, keeping him in the low risk range of burnout for this symptom.

Grant	EE	DP	PA
Baseline	12 (Low)	3 (Low)	41 (Low)
Intervention #1	5 (Low)	2 (Low)	46 (Low)
Intervention #2	7 (Low)	3 (Low)	41 (Low)
Intervention #3	8 (Low)	1 (Low)	41 (Low)

Table 24- Grant's MBI subscale scores at interval 4

Cross-case analysis:

For the first intervention (*Three Good Things in Life*), only Molly was unable to find the time to complete the activity on all seven days. However, Molly was still able to identify perceived benefits of engaging in this activity. Grant, on the other hand, was the sole trainer to report being unable to recognize any benefits from engaging in this intervention. Reporting that he already engages in positive thinking on a regular basis, for Grant, keeping a journal of the positive events that occurred throughout each day was viewed as just another item added to his to do list at the end of the day. Although, Grant did offer that he thought he would have benefitted from this activity had he recorded the positive events in each day as they occurred as opposed to reflecting on them at the end of the day.

As for the other participants in this study, all reported enjoying engaging in this intervention with the primary perceived benefit being that the intervention increased the ratio of positive to negative thoughts experienced each day. Molly, Becca, and Maxx all described how it is easy to develop a tendency to focus only on the negative aspects of one's work in the athletic training profession. Sue, also acknowledging this tendency

reported personally making attempts to develop the habit of identifying one positive event in each day, in which keeping a journal of three positive events further increased her ratio of positive to negative thoughts each day. Overall, for these four participants, this intervention resulted in a shifting of their attention away from negative events toward positive aspects of their daily work. Furthermore, where all four participants reported experiencing more positive thoughts throughout the week, both Becca and Maxx added that this increase in positive thinking was associated with a reduction in negative thinking.

In regard to additional perceived benefits, both Maxx and Sue reported that this activity facilitated a greater sense of engagement in their work, where Maxx added that this enhanced level of engagement improved the quality of care he was able to provide his injured student-athletes. Becca and Molly indicated that the quality of care provided to student-athletes was enhanced indirectly via making greater efforts to engage in dialogue with colleagues focusing on the topic of improving the care provided to student-athletes. For Becca, this activity also served as a means of clearing her mind or providing her a sense of closure at the end of each day.

In regard to MBI Scores, all participants showed a reduction in their emotional exhaustion subscale score from their initial baseline scores. Scores for the depersonalization subscale were reduced for Becca, Sue, and Grant, with Molly's score remaining constant, and Maxx's score increasing by three points for this subscale. Lastly, scores for the personal accomplishment subscale increased for all participants with the exception of Molly, who's score fell by three points after engaging in this

intervention. Thus, the greatest affect of this intervention appeared to be a reduction in the experience of emotional exhaustion among participants.

With the exception of Grant, all participants reported a willingness to voluntarily engage in this intervention in the future. However, of this group, only Sue reported that she continued with this intervention throughout the duration of this study. All participants, including Grant, reported that they were willing to use this intervention with their injured student-athletes. Lastly, all but Maxx recommended implementing this intervention for full athletic training staff participation.

For the second intervention (*Using Signature Strengths in a New Way*), again, Molly was the only participant that was unable to complete the activity on all seven days. Maxx, did encounter in instance where he was unable to identify a signature strength he demonstrated on one day during the week, however, Maxx was able to find the time to engage in the activity on all seven days. Feeling that she missed out on the potential benefits of this intervention, Molly was the only participant to report not enjoying engaging in this activity. The participants appeared to find the strengths questionnaire used in this study to be an accurate assessment, with all trainers agreeing with the top five signature strengths they received.

One consistent finding among the full-time athletic trainers participating in this study, was their having a tendency to focus more on their weaknesses than their strengths. For Molly, the focus was more on the professional responsibilities that prevent her from improving upon her perceived weaknesses, where both Becca and Sue focused more on how they could make deliberate attempts to improve upon their

perceived weaknesses. Maxx, reported a similar tendency to focus more on what aspects of his work performance he could improve upon than those he is currently performing well, while Grant was unique among this group in reporting a greater tendency to focus solely on expanding upon his strengths, paying little attention, if any, to his perceived weaknesses.

Although four of the trainers participating in this study reported a greater tendency to focus on their weaknesses, each had unique reaction to this activity of focusing on their strengths. Specifically, being unable to regularly engage in this intervention Molly did not report any change in her tendency to pay more attention to her perceived weaknesses. Sue, was able to abandon her tendency of looking at her weaknesses altogether over the course of the week, reporting this new approach both energized her and boosted her perceived self-efficacy. Becca described how this activity provided her with the realization that capitalizing on her signature strengths was how she was able manage her daily activities. However, after completing the activity over the course of the week, Becca emphasized how this activity provided her with a structure for identifying the weaknesses she could improve upon, thus reverting to her previous tendency. Maxx, reported recognizing the importance of incorporating his strengths into his daily work activities, and saw this intervention as most useful in identifying which strengths he could make more deliberate efforts to incorporate into his work.

Becca, Sue, and Maxx also reported that this intervention increased their ratio of positive to negative thoughts. For Becca, previously reporting resenting being

frequently called upon to assist colleagues in completing their work related tasks, this intervention allowed her to see how she was asked for assistance as a result of her strengths as opposed to others just trying to lighten their workload. This change in perception of why she was asked to assist colleagues resulted in more positive interactions with both colleagues and friends outside of work. Lastly, both Grant and Maxx reported finding this intervention easier to complete than intervention one.

Perhaps as a result of her reverting back to her tendency to focus more on her weaknesses than her strengths, Becca was the sole participant reporting that she would not voluntarily engage in this activity in the future. Grant, stating that he already engaged in a mental version of this activity said he would continue to reflect back on his day in terms of the strengths he used, but would not continue to keep a journal of strengths used. Maxx and Molly were the only two participants to report a willingness to use this intervention with their injured student-athletes. All participants supported use of this intervention with the full athletic training staff.

An increase in scores for the personal accomplishment subscale was observed among all three full-time athletic trainers, where both graduate assistant athletic trainers showed a decrease in scores for this subscale after engaging in this intervention. Both Molly and Grant showed increases in both their emotional exhaustion and depersonalization subscale scores, while Maxx showed a decrease in scores for both these subscales. Both Becca and Sue remained constant for their depersonalization subscale score, where Becca showed a decrease in emotional exhaustion scores, while Sue's score for emotional exhaustion increased. Thus,

similarities were found in an enhanced sense of personal accomplishment among full-time athletic trainers, and a decreased sense of accomplishment in the graduate assistant athletic trainers.

For the final intervention (*Peer Support*), all but Grant reported enjoying engaging in this intervention, with Grant finding the activity to be outside of his comfort zone. Each participant held a slightly different intent in writing their letters to colleagues. For example, the purpose of Becca's letter was to both acknowledge her appreciation of a colleague offering to help other colleagues and to further encourage such helping behaviors, while Grant wrote his letter to express his appreciation for a colleague who had directly helped him on one occasion. Molly wrote her letter to acknowledge the progress a younger colleague had made over the semester, and to praise his demonstrated leadership abilities. Sue wrote her letter to demonstrate her level of respect for a particular colleague. Finally, Maxx wrote his letter to offer support and encouragement to a colleague whom he perceived to be going through a difficult time.

Among the full-time athletic trainers, both Molly and Sue found that this activity expanded their awareness of their colleague's strengths, and enhanced their appreciation for what their colleagues bring to the table. For Molly, this enhanced sense of appreciation was extended to others outside the profession of athletic training. In contrast, Becca had the opposite reaction, finding herself disappointed in the work performance of her fellow full-time colleagues. Furthermore, this activity drew Becca's attention to how seldom she receives appreciation from her colleagues for the

assistance she offers them. However, Becca did describe how this activity helped her realize the potential benefits of giving more verbal praise to the graduate assistant athletic trainers she mentors. Another significant difference among the full-time athletic trainers was that Sue saw this activity as an effective means for improving staff cohesion, motivating her to interact with colleagues that fall outside of her social clique.

The two graduate assistant athletic trainers, both receiving letters from colleagues, appeared to be most impacted by this intervention among the participants in this study. For example, Maxx stated that if he were to move into a full-time role he would implement this intervention in effort to provide others the same sense of validation he experienced when receiving his letter from a full-time staff member. Furthermore, both Grant and Maxx initially recommended this activity for full athletic training staff participation, however, foreseeing the potential for certain members of the staff to not receive a letter from a colleague, both Grant and Maxx then opted for the strengths-based intervention believing this intervention ensured that all staff members could benefit from the activity. Becca, Sue, and Molly held a similar sentiment with regard to implementing this intervention for use with the full athletic training staff, with both Molly and Becca opting for the strengths intervention over the letter, and Sue recommending the first intervention over the other two for full staff participation.

Consistency was also seen in participant's responses to whether they would use this intervention with injured student-athletes, where Sue said she would recommend this intervention for teams with a high degree of turmoil between teammates, and none of the participants reporting they would use this intervention with injured student-

athletes. Both Molly and Maxx said they would voluntarily engage in this activity in the future, while Becca and Sue stated they would simply make greater efforts to give more verbal praise. Grant maintained that he would continue to support his colleagues through his helping behaviors, finding giving written or verbal praise to be outside of his comfort zone.

A high degree of similarity was seen among the full-time athletic trainers with regard to their MBI subscale scores after engaging in this intervention. Specifically, both Molly and Becca showed identical trends with a reduction in scores for all three subscales of the MBI. Sue's scores decreased for both the emotional exhaustion and depersonalization subscales, and increased for the personal accomplishment subscale score. Consistency was also found between the graduate assistant athletic trainers with both Grant and Maxx showing an increase in emotional exhaustion scores, and a decrease in depersonalization subscale scores. However, no change was observed for Grant's personal accomplishment subscale score, where Maxx's score decreased for this subscale. In sum, likely the result of engaging in an activity designed to facilitate positive interactions among colleagues, a reduction in depersonalization subscale scores was observed among all participants.

Research Question 5: Which positive psychology intervention do athletic trainers perceive as most effective?

A follow-up interview was conducted with each participant approximately two months after they had completed the Peer Support Intervention. In addition to answering this research question, the purpose of this interview was to assess whether

participants voluntarily continued with any of the three interventions, and what changes, if any, occurred in participants MBI subscale score over this two-month period.

Molly

To begin this final interview Molly was asked to describe her current well-being, in which she responded, “Right now, I think I thought I was exhausted before, but I’m officially exhausted now, mentally and physically.” In the middle of the competitive season for the sport team Molly works with, Molly describe being in the middle of the “grind” portion of her season, appearing to contribute to her experiences of emotional exhaustion. Molly discussed having little, if any, personal time at this point of the season, mentioning she would have to miss the baptism of her first nephew as a result of being on the road with her team. However, Molly did add that she still felt as if she was working at a “capstone” job, finding ample opportunities to experience both positive emotions and a sense of accomplishment in her work.

Molly reported that she did not voluntarily engage in any of the interventions during this two-month period after completing the final intervention as a result of her not being able to find the time to engage in such interventions or any other self-care behaviors. When asked how she responds when recognizing she is engaging in negative thinking, Molly offered,

You just shut it off. You got to focus on what’s going on...and if you gotta go take walk to clear your mind, you go take a walk...So I mean you just find a way to balance it. It’s all about your thoughts, and you know at the end of the day you have to look at the blessing that you have. In the grand scheme of things, of other people in this world, and you know, some of them don’t even have running water, so when you look at it like that, yeah days are hard, but they’re not that hard.

Molly expresses an awareness of the importance of monitoring her ratio of positive to negative thoughts. Her first reaction is to refocus on the task at hand, and if necessary, take a walk to clear her head in effort to refocus on what she needs to do. Finally, at the end of the day she describes the importance of putting things in perspective by counting her blessings.

Molly was asked which of the three symptoms of burnout she felt she was experiencing most at this point, in which she responded,

Probably the emotional burnout part, just the exhaustion part more than anything. I don't think I'm too callous toward the athletes. The one, I mean I could say I'm callous towards one's that have a very low pain tolerance, or that does things that they shouldn't do.

Molly describes experiencing a high degree of emotional exhaustion, while from time-to-time encountering athletes that evoke a callous response, reflecting the symptom of depersonalization. When asked which of the three positive psychology intervention in this study she believed had the greatest affect in terms of reducing her experiences of emotional exhaustion, Molly offered, "Probably the strengths, just looking at what you're doing well, you know, reflect back, and that will help you, you know, put a little pep in your step." Viewing the strengths intervention as energizing and providing positive reinforcement, Molly continues to describe the perceived benefits of this intervention compared to those of the other two,

I mean it's really more of a self-reflection I think. Like, even the letter, I'm just not interacting with colleagues as much as I have so to write somebody a letter is not, I mean it's just not doable right now. You could be like hey you're doing this great, but I don't even know what you're doing right now, and so I mean I think the strengths one is probably by far the best. I would say one, it's the easiest, but two, it gives you the positive reinforcement instead of just something that went well, you know.

It appears that Molly found the strengths based intervention to be the most effective in boosting well-being or reducing symptoms of burnout in that reflecting on her strengths had a more significant impact on her well-being than simply reflecting on events that went well. Furthermore, compared to the Peer Support letter, this intervention was the most applicable throughout the various stages of a given year.

When asked if there was anything about this study that she would like to comment on, Molly spoke about her desire to see further research on the topic of burnout within the athletic training profession,

I think this needed to be done for athletic trainers, in general, because it is such a big thing, I mean we're losing people in the profession, really good people in the profession because of burnout so I was hoping it would give an insight, you know, and maybe some more further studies into athletic trainers, because we all look at the athletes, we all look every which way, but nobody really stops and looks at the people that are taking care of the athletes. I would say that the first thing that goes out the window is our ability to take care of ourselves, you know, our relationships are out the window...I still honestly think that somebody needs to study the relationship aspects, you know, and I don't care what orientation people are, I want to know how many people have been treated in athletic training for cheating on spouses, to are you married, to do you have children, to, you know, you could even take it one step further in, you know, who's been treated for mental illness stuff because you see people breakdown, and that kind of stuff. I think on just a grander scale on how do athletic trainers take care of athletic trainers? How do athletic trainers take care of themselves? They say your number one thing should be taking care of yourself, well, I sure as hell don't have time to exercise, you know, if I am it's getting up earlier, but I'm valuing sleep right now more than I am my diet and my own physical well-being, and that should be your number one priority when you're an athletic trainer, but it's not.

From her comments, it appears that in addition to exploring how, and to what extent, athletic trainers engage in self-care, Molly would like to see research extended to what impact the demanding nature of the profession has on individual's personal relationships, and overall mental health.

As for her MBI subscale scores at this interval, consistent with her description of being the most exhausted she had been all year, Molly recorded her highest score for emotional exhaustion in this study, which increased by six points over this two-month interval. Molly score for depersonalization also exceeded her scores on this subscale at all other assessment intervals, increasing by five points after completing the third intervention in this study. Again, consistent with her report of still experiencing a relatively high sense of personal accomplishment, Molly's score for this subscale increased by seven points placing her in the low risk range of burnout for this symptom.

Molly	EE	DP	PA
Baseline	36 (High)	13 (High)	39 (Low)
Intervention #1	34 (High)	13 (High)	36 (Moderate)
Intervention #2	40 (High)	17 (High)	39 (Low)
Intervention #3	38 (High)	14 (High)	38 (Moderate)
Follow-up	44 (High)	19 (High)	45 (Low)

Table 25- Molly's MBI subscale scores at interval 5

Sue

Sue began her interview stating that she had continued with the first intervention since completing the study. In regard to the perceived benefits of engaging in this intervention, Sue offered,

It makes each day easier to come to work. It's kind of like a reminder of no matter what the bad things that happen during that day or anything like that, it kind of keeps you motivated coming in the next day.

For Sue, this activity was seen as an effective means of maintaining her motivation, as well as provides her a positive mindset going into each day, knowing that whatever seemingly negative things that occur she will be able to find at least one positive in each day. In fact, Sue was asked if she had encountered any days over this two-month period where she was unable to identify at least one positive in her day, in which Sue responded,

I thought I was going to have one, but surprisingly someone else stepped up and brightened my day that day. Usually I feel like it's something that I have to do, it's like not something people do for me, but the one day that I was struggling to find anything good about my day someone else stepped in and made it for me, and for me, that hadn't happened since I'd been here. So I don't know if that person had just saw everything that I've done, everything that I've been through, and just wanted to make sure I knew I was appreciated, and that the things that happened wouldn't happen again, and that type of stuff. So I think that really helped hearing it from someone outside of my profession.

Sue described, above, how on this day she was surprised by someone in the athletic department, but was not an athletic trainer asked her to step into his office after seeing her in the hall way. Sue described having a two-hour conversation with this individual who expressed his appreciation for the work she had done with one of her sport teams. This experience of receiving verbal praise was likened to what Sue believed it would be like to receive a formal letter of appreciation as with the Peer Support intervention. Furthermore, Sue notes that the positive things she records at the end of her day are typically instances that she created, where on this occasion someone outside the profession stepped in and provided her with a positive experience for that day. Thus, receiving appreciation from this individual evoked positive emotions, strengthened her relationship with this individual, and provided her with a sense of

accomplishment, meeting three of the five components of Seligman's (2011) theory of well-being.

Sue was asked what she did when she recognizes that she is engaging in negative thinking, in which she offered,

I usually try think of, I have my former volleyball coach, her and I are great friends, and she has two little boys that I babysat since they've been babies, and I have pictures of them in my office. So like if I'm having a bad day or something I kind of just look at those pictures because they're a happy thought for me.

Sue has developed a go to strategy when she recognizes she is experiencing more negative than positive thoughts. Specifically, by looking at a picture of the children of a friend whom she babysat Sue is able to cultivate positive emotions, and return her focus to her work related responsibilities.

Sue was also asked if she had followed through on her previously stated intent to give more verbal praise to her colleagues after engaging in the Peer Support intervention, in which she replied,

I have, especially with our athletic training students because I feel they are the one's that, I don't know if it's the entitlement they feel right now, but I feel like their the ones that need the acknowledgment the most. So I've been trying to really help with that aspect. It's just kind of to reassure them that they're doing things right, that things will get easier, it's not this hard. So I try to help them look at the positives of their day instead of frowning on stuff like not getting to go to a bowl game, or this person doesn't like me, why is that? And it's like you know what, those are the things you can't control, these are the things we can control. I just try to put things in perspective for people.

Sue not only followed through on her intention to give more verbal praise to her colleagues, but had done so by incorporating a verbal approach to the Three Good Things in Life Intervention, encouraging her colleagues to focus both on the positives in their day and the things that are directly under their own control. Having previously

experienced some turmoil between her colleagues, Sue provided the following with regard to how her efforts to give more verbal praise had affected her relationships with colleagues,

I would say the students have definitely changed their perspective of me because they come to me a lot for classwork, they come to me a lot if they need help practicing to tape. I think they feel that I'm more approachable now. Colleagues, I still feel like I'm kind of an outcast with a certain group, like the older group I feel like I fit in better than I do the younger group because I'm not the type of person that goofs off all day at work. When I come into work I want to get stuff done, I want to be professional the whole time. I don't want to go out of those boundaries. I keep my personal life separate, so I think that separates me from my age group of colleagues, and then the graduate assistants still don't speak to me because of everything that has happened.

Although not a total success, with certain colleagues still avoiding interactions with her, Sue describes how those with whom she is able to interact with have come to see her as more approachable as a result of her efforts to engage in more positive dialogue with these individuals.

Despite not having a positive relationship with all of her colleagues Sue did not believe she was experiencing a high degree of depersonalization, rather she believed she experienced emotional exhaustion more than any other symptom of burnout. Sue also indicated that she found the first intervention to be the most effective with regard to reducing her experiences of emotional exhaustion. Sue offered the following with regard to the relationship between both positive and negative thoughts and burnout,

I think finding the positives each day will help you. I think burnout literally comes to dealing with the negatives of everyday, and if you go home thinking about them that's what kind of puts you in that mood of I don't want to be here, why am I going into work, and stuff like that.

Sue describes the Three Good Things in Life intervention as effective in combatting symptoms of burnout by cultivating positive thoughts as opposed to dwelling on the negatives of each day. Reporting the first intervention to be of greatest personal benefit, Sue was asked to rank the other two interventions in order of perceived benefits. Sue stated that she saw the Peer Support intervention as the second most effective, believing this activity had a positive impact on her sense of cohesion among her colleagues. In contrast to Molly, Sue saw the strengths intervention as the least beneficial of the three. Sue offers the following with regard to why she found this intervention to be less beneficial,

I think because as athletic trainers we always have to evaluate what our strengths are, I think for us we kind of already know what they are so it's not something that is new to us. We have to write our strengths and weaknesses down every year. So I think knowing, we already kind of know what they are, I think it was a good exercise because some on there that you might not necessarily have thought of before, but I think we do it so often because we have to, I would say for good athletic trainers you always re-evaluate, like you might do it every week, you might do it by month, you always re-evaluate what I can do better, and I think that's something maybe not every profession does because we have to interact with so many people, we have so many negative that go on throughout our days that we may look at our days differently.

For Sue, the strengths intervention had little affect, if any, on her experiences of the three symptoms of burnout because she regularly assesses her strengths and weaknesses in effort to improve upon her overall work performance. Although recognizing how this activity could allow individuals to identify certain strengths they were previously unaware they possessed, this benefit did not outweigh those she associated with the other two interventions. On a final note, Sue mentioned in this interview that she hoped this study would catalyze the creation of more positive

psychology interventions designed to enhance staff cohesion. Perhaps as a result of her believing that she would likely not receive a letter of Peer Support if this intervention had been implemented with the full athletic training staff, Sue ranked the Peer Support intervention as the second most beneficial intervention, believing that this intervention would have a positive impact on staff cohesion for some, but that other positive psychology interventions could be created to more effectively enhance staff cohesion.

At this interval Sue's score for emotional exhaustion increased by four points over these two months, but remained in the low risk range of burnout for this symptom. Sue's score for the depersonalization subscale increased by five points, moving her into the moderate risk range of burnout for this symptom. Lastly, Sue's score for personal accomplishment decreased by four points, but still remained in the low risk range of burnout.

Sue	EE	DP	PA
Baseline	22 (Moderate)	7 (Moderate)	31 (High)
Intervention #1	13 (Low)	4 (Low)	36 (Moderate)
Intervention #2	14 (Low)	4 (Low)	46 (Low)
Intervention #3	10 (Low)	2 (Low)	47 (Low)
Follow-up	14 (Low)	7 (Moderate)	43 (Low)

Table 26- Sue's MBI subscale scores at interval 5

Becca

Becca began her interview describing how she had periodically engaged in the first intervention over this two-month period,

I have done the three good things. Not everyday, but I would say at least once a week. I went ahead and just kind of started journaling some of my thoughts because I thought that would help with just like a better coping strategy. I found that by just putting stuff on paper, and then finding like the three positive things that might have happened that week I was able to, like I felt better. I'll put it that way, I just felt better.

Becca describes how engaging in this activity has left her feeling better about her work.

In addition, Becca indicated that she developed this habit of recording the positive events of each day as a coping mechanism for when she finds herself engaging in more negative than positive thinking. Sue elaborates on the perceived benefits of deliberately engaging in positive thinking,

I would say by going into a reflection I can see how it might be like negative thoughts have lead me into being like snappy with a person, or short with a person. It may be a coworker, it may be someone that I don't work with directly, but I found that like I now do it less around my student-athletes because I'm more cognizant of it.

For Becca, the reflection period she describes does not necessarily consist exclusively of positive thoughts. Rather, in this case Becca was able to see how she had a tendency to become callous with others, which in-turn has encouraged her to take a more conscientious approach when interacting with others. Reflecting on her ability to improve upon this weakness, then, further elicits more positive thinking.

On this note, Becca was asked if she found that positive thinking, in itself, promoted more positive thinking, in which she responded,

Yeah. I mean, I think all in all you just don't focus on the, like the negatives are just not that big a deal. When you're starting to like condition yourself to think more positively the negative things become benign, and the positive things really turn into the focus.

Although Becca did not report recognizing a relationship where positive thinking leads to more positive thinking, she did find that engaging in positive thinking reduced the

affect negative thoughts previously had on her subjective well-being. In short, for Becca, this activity brought positive thoughts to the forefront of her attention, where negative thoughts became in afterthought.

Asked if she had made an effort to give more verbal praise to her colleagues, Becca provided,

Yeah, I've definitely kicked that up quite a bit. Just thanking them at the end of the day, and appreciating them, you know, like I have students that are coming in now for four hours here, four hours there, just covering training room for me as I'm wrapping up a lot of stuff. So they've been really helpful and respectful, and haven't complained, and seemed to actually want to come in and help out. So that's been nice.

Becca appeared to follow through on her intention to give more verbal praise to the assistant athletic trainers she mentors. Becca attributes the enhanced motivation and mutual respect among the training students she mentors to her increased efforts to express her appreciation for these individuals.

When asked to reflect on the symptoms of burnout she was currently experiencing, Becca reported that she believed, at the start of the study, she believed her experiences of depersonalization would have been much higher than they were at present. Becca also reported believing that she has experienced a greater sense of personal accomplishment over the course of the study. Lastly, Becca indicated that she was likely experiencing some degree of emotional exhaustion, but not to the extent that she was at risk of experiencing burnout.

Similar to Sue, Becca listed Three Good Things in Life, Peer Support, and Using Signature Strengths in a New Way in order of perceived benefits. With regard to the perceived benefits of the Three Good Things in Life intervention, Becca described this

intervention as most effective in reducing the frustration she felt towards her colleagues and student-athletes, stating, "Being able to control my thoughts immediately so that it doesn't spiral out of control, that's kind of, I would say definitely a positive." Here, Becca refers back to how she realized how negative thoughts could create a tendency for her to become more callous with others, where paying more attention to the positives in her day helped to reverse this tendency.

Becca offered the following with regard to the perceived benefits of the Three Good Things in Life intervention,

I like that one the best because I think that the way I look at it is if I can keep myself positive and my outlook with my job then I can stay positive around my peers, and hopefully that becomes contagious, and then some of those things that I said that really bother me start to change because, you know, I basically am showing more of positive nature rather than just a like numb nature.

For Becca, the main affect of this intervention was the enhanced positivity she brought to the workplace, which she hoped would, in-turn, encourage her colleagues to adopt a similar positive mindset. As for the perceived benefits of the Peer Support intervention, Becca states,

I think definitely, like the benefits were actually opening up to somebody to like really show that you're paying attention to what they do, and you're respecting it, and that's hard for me to do.

Although initially uncomfortable openly expressing her appreciation for her colleagues, Becca was able to see how stepping outside her comfort zone had a positive impact on the working relationships she has with the students she mentors. Lastly, when asked why she thought the strengths intervention was the least beneficial, Becca simply responded, "For me, I mean, I just think I know what my strengths are." Thus,

compared to the other two interventions, the strengths activity did not provide Becca with a novel learning experience nor did it influence how she approached her work.

At this interval Becca recorded her lowest score for the emotional exhaustion subscale, which had decreased by two points although not designating a change in risk level for burnout. Becca's score for depersonalization increased by two points, moving her back into the high risk range of burnout for this symptom. The greatest change observed at this interval was for personal accomplishment, which increased by nine points and placed her into the low risk range of burnout for this symptom for the first time in this study.

Becca	EE	DP	PA
Baseline	35 (High)	23 (High)	32 (Moderate)
Intervention #1	30 (High)	14 (High)	34 (Moderate)
Intervention #2	24 (Moderate)	14 (High)	37 (Moderate)
Intervention #3	21 (Moderate)	11 (Moderate)	30 (High)
Follow-up	19 (Moderate)	13 (High)	39 (Low)

Table 27- Becca's MBI subscale scores at interval 5

Maxx

Maxx's two-month follow-up interview was scheduled during the week after returning from Christmas break. As a result of his time off Maxx reported that he was feeling refreshed, and described himself as "feeling pretty good," and adding, "I feel like I'm taking stressors pretty well. I'm able to listen to others and suggestions they have." Thus, Maxx indicated that he was experiencing a relatively high state of subjective well-

being at this interval. Maxx stated that he had not formally engaged in any of the interventions over this two month period. However, Maxx commented on how he had been making efforts to improve upon his perceived weaknesses with regard to following injury assessment protocols. When asked if he had been giving more verbal praise to his colleagues, Maxx responded,

The other day one of the other graduate assistants was asking me a question about one of his athletes and how I would handle it, and I just gave him my opinion and then kind of just helped him through that. I haven't really been doing a whole lot of positive affirmations to individuals, but as a group I've just been saying hey we need to work on this more or stuff like that.

Although not deliberately making efforts to give verbal praise to his colleagues, Maxx describes himself as becoming more vocal and taking on a leadership role among his peers.

Maxx reported that he had implemented a form of the Three Good Things in Life with an injured student-athlete, as he describes pointing out potential positives for this individual,

I do kind of ask her, I'm like 'You're still getting stronger, it's not as bad as it was, correct?' to where she can kind of see them for herself, but I'm kind of putting those forward. So I think after a little more rehab and stuff like that, I can kind of get her to start seeing the light at the end of tunnel, and kind of to get her going through some positive affirmations herself.

Maxx describes this student-athlete as having a tendency to focus only on the negatives of her injury rehabilitation to where he has to take a more active approach in pointing out the positives for this athlete. Furthermore by continuing with this approach, Maxx believes this student-athlete will recognize the benefits of focusing on the positives, and begin to recognize positive aspects of her situation on her own.

When asked what he does when he recognizes that he is engaging in negative thinking, Maxx offered,

I try to think of ways to remedy it. I always think of how things could always be worse. I'm pretty fortunate with everything I have, and everything that I've been through. So I think that if I can just get through this, get to the end of the day, go to bed earlier, you won't be as tired the next day or won't be as stressed out and all that. I just kind of think of it like that, one day at a time.

First, attributing negative thinking to particular problems or stressors at work, Maxx evaluates potential solutions to perceived stressors or problems. Second, similar to Molly, Maxx reports a tendency to put things in perspective by reminding himself of the things he has to be grateful for. Along with these two strategies, Maxx also follows the law of the ladder directing his attention only to the task at hand, taking one day at a time. Stating that he believed his ratio of positive to negative thoughts had improved favorably over the course of the study, Maxx was asked to describe the extent to which he experiences negative thoughts, in which Maxx responded,

I think that I maybe spend less time on the negative thoughts. I think I still think about them the same number of times throughout the day, but just spending less time on them to where I can try to kind of remedy it earlier rather than let it linger on for a half hour, hour, or however long it may be.

As Maxx describes, he found that his increased positive thinking had a more significant affect on the duration of his negative thoughts than on the frequency in which these thoughts occurred.

Of the three primary symptoms of burnout, Maxx describes experiencing more depersonalization than any other symptom,

I would have to say the depersonalization. I think I'm still, I'm not quite yet callous towards my coworkers or anything like that, but there are times that I do realize that I'm stressed out, and I just need to relax and kind of take a step back, and then go at

it again. So I don't think I'm one hundred percent doing depersonalization yet or anything like that, but I do find myself where I am callous sometimes, and just kind of try to remedy that before it gets to be a big problem.

Maxx describes himself as becoming callous toward colleagues during particularly stressful times. Maxx also stated that he was able to keep a professional demeanor with his student-athletes during these stressful moments, reserving any callousness for his interactions with colleagues. Maxx continued, describing how he believed the strengths intervention was most effective in helping him manage experiences of depersonalization,

With the strengths one with kind of realizing that I can handle a whole lot of things at one time whatever it may be, personal items or work, or a combination of the two, or school, just kind of realizing that I can handle those tasks pretty well, and then it just kind of gives me a little more confidence and positive affirmations to kind of take a step back and look at it and be like okay I gotta do this, this, this, and this. Then I kind of put it in a trauma order, and get the most severe one done first and then just work my way down.

With the strengths intervention Maxx perceived two primary benefits. First, was that he was able to gain a sense of accomplishment by reflecting on the strengths he displayed during a particular day. Second, this reflection also provided him with a sense of confidence in his ability to successfully manage what initially seemed to be a daunting variety of tasks.

Maxx listed the interventions as Using Signature Strengths in a New Way, Peer Support, and Three good things in Life in order of perceived benefits. Having previously discussed the perceived benefits of the strengths intervention, Maxx describes the perceived benefit of the Peer Support intervention,

For the letter I like that you're giving positive affirmations to your coworkers, and it's just like it's nice to hear that. Like I mentioned before with the person I got a letter

from, it's just nice to hear that somebody is observing what you're doing and that you're doing something well.

For Maxx, the primary benefits of the Peer Support activity were feeling that his work was both recognized and appreciated, and that this activity facilitated positive interactions with colleagues. With regard to the Three Good Things in Life intervention, Maxx provides the following,

With the three good things of the day it's nice to be able to look back and see that there were good things in your day even if you're looking like if you're at the end of the day and you're tired, you're at the end of the rope and you're just kind of fatigued out whether it be mentally or physically, and just kind of realize that you were able to help people throughout the day, and that there are good things that you have. It's not all just fatigue and stress and stuff like that.

Most beneficial for this intervention was that rather than reflecting on the emotional and physical toll of his work at the end of the day this intervention encouraged reflection focused on drawing out the positives in each day despite his being fatigued.

Overall, Maxx did appear to develop a habit of cultivating positive thoughts over this two-month period, although doing so on his own terms as opposed to formally engaging in these positive psychology interventions. This increase in positive thinking, although not determined as causal, did appear to have a desirable affect on Maxx's experiences of the three primary symptoms of burnout as indicated by decreases in both emotional exhaustion and depersonalization, along with an increase in his personal accomplishment subscale score. Specifically, marking the greatest change of the three subscale scores, Maxx's emotional exhaustion score fell by ten points, which resulted in his having a low risk designation for this subscale for the first time in the study. Still remaining in the moderate risk range of burnout for depersonalization, Maxx's score

was reduced by five points for this symptom. Finally, Maxx's score for personal accomplishment increased by seven points, also meriting designation in the low risk range of burnout for this symptom for the first time in this study.

Maxx	EE	DP	PA
Baseline	26 (Moderate)	12 (Moderate)	32 (Moderate)
Intervention #1	24 (Moderate)	15 (High)	36 (Moderate)
Intervention #2	18 (Moderate)	13 (High)	35 (Moderate)
Intervention #3	24 (Moderate)	12 (Moderate)	32 (Moderate)
Follow-up	14 (Low)	7 (Moderate)	39 (Low)

Table 28- Maxx's MBI subscale scores at interval 5

Grant

Grant reported that he was still, by his nature, focusing more on the positive aspects of his work than the negatives, but had not formally or informally continued with any of the interventions over this two-month interval. When asked what he does when he recognizes that he is engaging in negative thinking, Grant responded, "I just try to look at things in a more positive light. It's about that simple, I guess." Grant added that if there was a negative situation he would be more apt to look for the positives in that situation as opposed to focusing on other positive aspects of his work unrelated to this hypothetical negative situation.

Grant reported that he did not think his use of these interventions made him any more or less susceptible to burnout, however, he did state that he felt his knowledge of these interventions provided him a more effective means of helping others reduce their

susceptibility to burnout. Grant was asked what it was about his demeanor that he believed made him less susceptible to burnout than others, in which he described,

Probably that I'm easy going and I kind of make, I don't know. I remember one of my strengths was humor, and I guess I kind of make light of rough situations. I mean I don't let little things affect me very much. I love what I do. I probably wouldn't be an athletic trainer if I didn't love it.

Grant discusses using humor as a means of reducing the affect negative situations have on his well-being. Coupled with his perceived sense of fulfillment from his work, Grant appears to have developed an effective buffer for combatting experiences of burnout.

As indicated by his MBI subscale scores, Grant appeared to be experiencing little, if any, symptoms of burnout. For this reason, Grant was asked which of the three symptoms of burnout he thought would have the greatest negative impact on his well-being, in which he responded, "Probably the lack of accomplishment because I feel like if I hated everyone I worked with then I would just like leave to a different place." For Grant, believing that he is able to cope with the time commitments of the profession, and that he could simply remedy experiences of depersonalization by choosing to work at another institution, feeling that he was ineffective in his work was the sole factor that would contribute to experiences of burnout or considerations of leaving the profession.

With regard to the perceived benefits of each intervention, Grant stated that he thought the Peer Support intervention would have the greatest impact on staff cohesion if it could be implemented in a manner that ensured everyone on the staff received at least one letter from a colleague. Following this response, Grant was asked to describe the current level of cohesion among his colleagues, in which he offered,

I think it's great. We all get along for the most part, I mean obviously at any job you go to there's the people that you don't like as much as other people, but I think that's just how it works, but I like working here, and I think everyone gets along too.

Grant added that although he personally did not like some colleagues as much as others, he did both trust and respect all of his colleagues on a professional level. When asked which intervention he found to be the most personally beneficial, Grant ranked the strengths intervention as the most beneficial with the Three Good Things in Life intervention being the second most beneficial, and the Peer Support intervention as least beneficial. Grant reported that he enjoyed reflecting on positive events throughout his day in terms of the strengths he displayed as opposed to simply reflecting on the positive events alone, as with the Three Good Things in Life intervention.

With regard to his MBI subscale scores at this interval, Grant's score for depersonalization remained unchanged. Both Grant's emotional exhaustion and personal accomplishment subscale scores decreased by five points over this two-month period. This decrease in personal accomplishment resulted in Grant moving into the moderate risk range for the first time in this study on this subscale, while he remained in the low risk range for emotional exhaustion.

Grant	EE	DP	PA
Baseline	12 (Low)	3 (Low)	41 (Low)
Intervention #1	5 (Low)	2 (Low)	46 (Low)
Intervention #2	7 (Low)	3 (Low)	41 (Low)
Intervention #3	8 (Low)	1 (Low)	41 (Low)
Follow-up	3 (Low)	1 (Low)	36 (Moderate)

Table 29- Grant's MBI subscale scores at interval 5

Cross-Case Analysis:

Among the graduate assistant athletic trainers in the study, both Grant and Maxx reported perceiving the Using Signature Strengths in a New Way intervention as the most effective in reducing symptoms of burnout. For Grant, this intervention simply added terminology for his already established tendency to reflect on what he had done well each day. For Maxx, this intervention provided him a sense of accomplishment and enhanced confidence in his ability to continue to perform his job at a high level, which he also believed helped him reframe from becoming callous with colleagues. Molly also reported this intervention as most effective, finding the activity to provide an added sense of positive reinforcement over the first intervention by focusing on the positive events she was able to create by displaying her signature strengths rather than focusing on positive events alone.

Both Becca and Sue reported the Three Good Things in Life activity as the most effective intervention. Where Sue reported engaging in this intervention on a daily basis throughout the study including the two-month follow up period, Becca began to

engage in this activity on a weekly basis during the two-month follow up period only. In Sue's opinion, bringing negative work related thoughts home with her at the end of her day placed her on a track leading toward burnout, where reflecting on three positive events that occurred in each day helped keep her off this burnout track. Becca mentioned that this activity left her "feeling better," in general, in which being in a more positive mood decreased her tendency to become callous with others. Lastly, Becca and Sue were the only participants in this study that continued to formally engage in any of three interventions during the two-month follow up period. Participant's rankings of each intervention in order of perceived benefits are shown in Table 30.

	Intervention #1	Intervention #2	Intervention #3
Becca	1	3	2
Sue	1	3	2
Molly	2	1	3
Grant	2	1	3
Maxx	3	1	2

Table 30- Participant's ranking of interventions in order of perceived efficacy

As for which intervention the participant's would recommend implementing with the entire athletic training staff, all but Sue suggested the Using Signature Strengths in a New Way intervention, which they believed would have the greatest potential to increase staff cohesion. Molly, Grant, and Maxx also reported this intervention as the most personally beneficial. Sue recommended the Three Good Things in Life intervention for full staff participation, as she believed this intervention would offer the greatest personal benefits to each individual staff member. In addition, Sue also reported this intervention as the most personally beneficial of the three. In contrast to the other participants in this study, Becca did not recommend the intervention she

found to be of greatest personal benefit for full staff participation. Specifically, recommending the Using Signature Strengths in a New Way intervention for full staff participation, while also finding this intervention to be the least beneficial to her personally, Sue appeared to give the potential benefits to staff cohesion precedence over the potential benefits to the individual staff member.

Several similarities and differences emerged in participant's descriptions of how they respond to situations where they find themselves engaging in negative thinking. For example, both Molly and Maxx reported that their primary response was to clear their minds of the negative thoughts in effort to refocus on the task at hand. Furthermore, Molly and Maxx described cultivating positive thoughts after completing a day's work by reminding themselves of the things they are fortunate to have in their lives. Where Molly and Maxx would first attempt to shut off negative thoughts and return to work, and then attempt to cultivate positive thoughts at the end of the day, Sue's immediate response was to cultivate positive thoughts, which she did by looking at photos of individuals in her personal life who evoked positive emotions, and then would refocus on her work. Molly's approach also encompassed both cognitive and behavioral strategies, where she would first look at the behaviors such as becoming "snappy" with others that resulted from her negative thinking, and then attempt to correct those behaviors, which would in-turn promote more positive thinking. Grant, on the other hand, took a primarily cognitive approach, actively seeking out the positives in seemingly negative situations, while also reminding himself to not give too much significance to negative thoughts.

Less consistency was seen in participant's explanations of the affect positive thinking had on their negative thinking. Molly, experiencing more emotional exhaustion than any other symptom of burnout reported that the strengths intervention provided her a source of positive reinforcement, but had little to no affect on the frequency or duration of her negative thoughts. Sue also reported experiencing emotional exhaustion more than any other burnout symptom, and believed the Three Good Things in Life intervention helped her focus on the positives in each day. In short, Sue still experienced negative situations, but rather than dwell on them her attention was directed toward identifying other positive events in her day. Both Becca and Maxx reported that increasing their positive thinking diminished the affects negative thinking had on their well-being. Specifically, Maxx reported that although the frequency in which he experienced negative thoughts remained constant, the duration of those negative thoughts decreased significantly, where Becca described negative thoughts as more benign as a result of her increased positive thinking. Both Becca and Maxx also reported experiencing more depersonalization than any other burnout symptom, where Maxx found the strengths intervention and Becca the Three Good Things In Life intervention to most effective in managing experiences of depersonalization. Lastly, Grant, described himself as already having a tendency no to pay too much attention to negative thoughts in the first place.

As for the MBI subscale scores at this interval, The depersonalization scores increased for all three full-time athletic trainers, where this increase represented the greatest change among the subscale scores for Sue. Where Sue's score for personal

accomplishment decreased over this two-month period, the increase in scores for this symptom marked the greatest change in subscale scores for both Becca and Molly at this interval. Lastly, Becca's score for emotional exhaustion decreased at this interval, while scores for this symptom increased for both Sue and Molly. Among the graduate assistant athletic trainers Maxx's scores decreased for both emotional exhaustion and depersonalization, and increased for personal accomplishment, where the greatest change observed was in his decreased emotional exhaustion scores. Grant's depersonalization subscale score remained constant, while both his emotional exhaustion and personal accomplishment subscale scores decreased by five points each.

To assess whether participant's qualitative reports of the perceived personal benefits of each intervention corresponded with the quantitative data collected from MBI subscale scores tables were created for each participant displaying the observed change in subscale scores from the previous week's scores. In the heading of each table are the names of the intervention in the order participants ranked the intervention in terms of perceived efficacy.

Molly

Using Signature Strengths in a New Way			Three Good Things in Life			Peer Support		
EE	DP	PA	EE	DP	PA	EE	DP	PA
6	4	3	2		3	2	3	1
increase	increase	increase	decrease	No Change	decrease	decrease	decrease	decrease

Table 31- Molly's MBI subscale score change after each intervention

Although reporting the Using Signature Strengths in a New Way as the most personally effective intervention, shown in the table above Molly's scores for both emotional exhaustion (EE) and depersonalization (DP) increased by six and four points respectively from the prior week's MBI subscale scores. However, this was the only intervention in which Molly's personal accomplishment (PA) subscale score increased. Ranking the Three Good Things in Life intervention second, Molly's score for emotional exhaustion decreased by two points from the previous week's MBI subscale scores. No change was observed for the depersonalization subscale, and her score for personal accomplishment decreased by three points. Although ranked as the least effective, Molly's subscale score for emotional exhaustion decreased by two points, and decreased by three points for depersonalization. Despite the one point decrease in personal accomplishment, this Peer Support intervention appeared to have reduced Molly's symptoms of emotional exhaustion and depersonalization more than the other two interventions.

Sue

Three Good Things in Life			Peer Support			Using Signature Strengths in a New Way		
EE	DP	PA	EE	DP	PA	EE	DP	PA
9	3	5	4	2	1	1	No Change	10
decrease	decrease	increase	decrease	decrease	increase	increase		increase

Table 32- Sue's MBI subscale score change after each intervention

Consistent with her reporting the Three Good Things in Life as the most personally effective intervention, shown in the table above Sue's scores for both emotional exhaustion (EE) and depersonalization (DP) decreased by nine and three points respectively from the prior week's MBI subscale scores. Compared to the other two interventions the Three Good Things in Life exercise produced the greatest decrease in emotional exhaustion and depersonalization subscale scores. In addition, Sue's personal accomplishment (PA) subscale score increased by five points. Ranking the Peer Support intervention second, Sue's scores for emotional exhaustion and depersonalization decreased by four and two points respectively, where a one point increase was seen for the personal accomplishment subscale. Lastly, for the Using Signature Strengths in a New Way intervention Sue showed a one point increase for emotional exhaustion, where no change was observed for the depersonalization subscale. However, Sue's score for personal accomplishment increased by 10 points, marking the greatest increase for this subscale of any of the interventions.

Becca

Three Good Things in Life			Peer Support			Using Signature Strengths in a New Way		
EE	DP	PA	EE	DP	PA	EE	DP	PA
5	9	2	3	3	7	6	No Change	3
decrease	decrease	increase	decrease	decrease	decrease	decrease		increase

Table 33- Becca's MBI subscale score change after each intervention

Reporting the Three Good Things in Life as the most personally effective intervention, shown in the table above, Becca's scores for both emotional exhaustion (EE) and depersonalization (DP) decreased by five and nine points respectively from the prior week's MBI subscale scores. This marked the largest reduction for the depersonalization subscale scores of any of the three interventions. Becca also showed a increase of two points in her personal accomplishment (PA) subscale score. Ranking the Peer Support intervention second, Becca's scores for both emotional exhaustion and depersonalization decreased by three points, where a seven point decrease was observed for the personal accomplishment subscale. Lastly, for the Using Signature Strengths in a New Way intervention Becca showed her greatest reduction in emotional exhaustion of the three interventions with her score falling by six points following this intervention. Furthermore, Becca also showed the greatest increase in the personal accomplishment subscale of the three interventions with this score being raised by three points. Although no change was observed for the depersonalization subscale it is possible that Becca may have under estimated the efficacy of this intervention.

Maxx

Using Signature Strengths in a New Way			Peer Support			Three Good Things in Life		
EE	DP	PA	EE	DP	PA	EE	DP	PA
6	2	1	6	1	3	2	3	4
decrease	decrease	decrease	increase	decrease	decrease	decrease	increase	increase

Table 34- Maxx's MBI subscale score change after each intervention

Consistent with his reporting the Using Signature Strengths in a New Way as the most personally effective intervention, shown in the table above, Maxx's scores for both emotional exhaustion (EE) and depersonalization (DP) decreased by six and two points respectively from the prior week's MBI subscale scores. Although Maxx's score for the personal accomplishment (PA) subscale decreased by one point, the decrease in his emotional exhaustion score was the largest of any intervention. Ranking the Peer Support intervention second, Maxx's score for emotional exhaustion actually increased by six points. In addition, Maxx's scores for depersonalization and personal accomplishment decreased by one and three points respectively, and thus this intervention appeared to be the least beneficial of the three. Perceiving the Three Good Things in Life intervention to be the least beneficial, Maxx showed a small two point reduction in his emotional exhaustion subscale score, where his depersonalization subscale score fell by three points. This intervention produced the greatest change of the three interventions for the personal accomplishment subscale score, which increased by four points.

Grant

Using Signature Strengths in a New Way			Three Good Things in Life			Peer Support		
EE	DP	PA	EE	DP	PA	EE	DP	PA
2	1	5	6	1	3	2	3	4
increase	increase	decrease	increase	decrease	decrease	decrease	increase	increase

Table 35- Grant's MBI subscale score change after each intervention

Although reporting the Using Signature Strengths in a New Way as the most personally effective intervention, Grant's score for emotional exhaustion (EE) increased by two points, where his score for depersonalization (DP) increased by a single point. Furthermore, Grant's personal accomplishment (PA) subscale score decreased by five points, thus showing the least desirable trend for all three subscales. Ranking the Three Good Things in Life intervention second, Grant's score for emotional exhaustion showed the greatest change of all the interventions, increasing by six points. A decrease of just one point was observed for the depersonalization subscale, where a decrease of three points was seen for the personal accomplishment subscale. With Peer Support being ranked as the least effective, Grant's subscale score for emotional exhaustion decreased by two points, where his score for depersonalization increased by three points. Lastly, Grant's personal accomplishment subscale score increased by four points, and thus the Peer Support intervention was the only intervention resulting in an increase for this subscale.

Although some degree of correlation between participant's rankings of perceived efficacy of each intervention and the MBI subscale scores for those interventions was observed, for the most part participant's MBI subscale scores did not reflect their qualitative reports of these interventions. Potential sources for these inconsistencies such as the order in which the interventions were administered, and critical events that took place during the weeks of each intervention will be discussed in the proceeding chapter.

To provide a snapshot of the affect of these interventions participant's final follow up interview subscale scores were subtracted from their initial baseline MBI interval scores for each subscale. The results of this basic analysis are presented below in Table 36.

		EE	DP	PA
Molly	Baseline	36	13	39
	Follow up	44	19	45
	Result	(+8)	(+6)	(+6)
Sue	Baseline	22	7	31
	Follow up	14	7	43
	Result	(-8)	0	(+12)
Becca	Baseline	35	23	32
	Follow up	19	13	39
	Result	(-16)	(-10)	(+7)
Maxx	Baseline	26	12	32
	Follow up	14	7	39
	Result	(-12)	(-5)	(+7)
Grant	Baseline	12	3	41
	Follow up	3	1	36
	Result	(-9)	(-2)	(-5)

Table 36- Differences in participant's subscale scores from MBI intervals 1 & 5

As shown above, all but Molly had lower emotional exhaustion and depersonalization subscale scores upon completion of the study. On the other hand, all participant's with

the exception of Grant had higher personal accomplishment subscale scores upon completion of the study.

Summary of Findings:

Upon entering the study four of the five participants in this study showed significant evidence of their experiences of burnout. Specifically, for the symptom of emotional exhaustion both Molly and Becca scored in the high risk range for burnout on this symptom during their baseline interview. Where Molly remained in the high risk range throughout the duration of the study, Becca's scores for this symptom shifted into the moderate risk range after the second week of the study, and remained in the moderate range for the remainder of the study. Both Sue and Max fell into the moderate risk range for emotional exhaustion after their baseline interview. Maxx remained in the moderate range until his two-month follow up interview in which his score for this symptom designated him in the low risk range. Sue, on the other hand scored in the low risk range for emotional exhaustion after her second week in the study, and remained at this level for the duration of the study. Grant was the sole participant to score in the low risk range for emotional exhaustion at all MBI intervals. In summary, the full-time athletic trainers (i.e. Molly, Becca, Sue) entered the study experiencing a higher degree of emotional exhaustion than did the two graduate assistant athletic trainers.

For the symptom of depersonalization a similar trend was observed. Specifically, Molly and Becca began the study in the high risk range for this symptom, where Molly remained at this level for the duration of the study. Becca scored in the moderate risk

range after completing the Peer Support intervention, and scored in the high risk range at all other MBI intervals. Sue and Max both began and finished the study scoring in the moderate risk range for depersonalization. However, Sue scored in the low risk range after each of the three positive psychology interventions, where Maxx scored in the high risk range after interventions one and two, returning to the moderate range after the Peer Support intervention and in his follow up interview. Again, Grant remained in the low risk range for this symptom throughout the duration of the study. Most interesting, despite some fluctuations throughout the study, each participant scored in the same risk range for depersonalization in their baseline and follow up interviews.

For the symptom of personal accomplishment only Sue scored in the high risk range during the baseline interview, with Becca and Maxx scoring in the moderate risk range, and Molly and Grant scoring in the low risk range during their baseline interviews. Of the full-time athletic trainers Becca appeared to have the lowest sense of personal accomplishment, scoring in the moderate range during her baseline interview and after interventions one and two, and scoring in the high risk range after the Peer Support intervention. However, Becca did score in the low risk range in her final follow up interview. Overall, all of the full-time athletic trainers and one graduate assistant athletic trainer showed an increase in personal accomplishment scores, and a reduction in risk level from their baseline to follow up interviews. Although Molly scored in the low risk range in both these intervals, her personal accomplishment scores during her baseline interview was a 39 and a 45 in her follow up interview, increasing by six points. Grant remained consistent as the outlier of this group of participants, where his

personal accomplishment subscale score fell into the low risk range at all intervals expect for the follow up interview, in which his subscale score shifted into the moderate range for the first time in the study. Thus, Grant was the sole participant to not show an increased sense of personal accomplishment from the baseline and follow up intervals.

With regard to their descriptions of burnout both Molly and Sue described burnout as an endpoint where one should make the decision to leave the profession. Becca described burnout as a state of physical and mental exhaustion that one must continue to work through. As Molly and Sue both provided evidence of experiencing some degree of burnout it is possible that they held a similar view to Becca's, continuing with their work despite those symptoms. In addition, with both Molly and Sue having relatively high scores for the personal accomplishment subscale, this healthy sense of personal accomplishment may have prevented them from reaching the "endpoint" of burnout they described. Both the graduate assistant athletic trainers described burnout as an inevitable consequence of working in the athletic training profession, making no reference to whether experiences of burnout would result in a decision to leave the profession. In brief, the graduate assistant athletic trainers held the viewpoint that burnout was something they would experience and would be willing to work through, while the full-time athletic trainers held the view that burnout was something they were both experiencing and working through.

As for their perceptions of well-being, both the graduate assistant athletic trainers cited positive relationships with colleagues as contributing to their subjective well-being. On the other hand, Becca and Sue believed their personal relationships

outside of work had a greater affect on their perceived well-being than did relationships with colleagues, while Molly emphasized the importance of having positive relationships with her student-athletes for sustaining a healthy degree of well-being. Furthermore, All of the full-time athletic trainers reported employing compartmentalization strategies to protect their well-being, making deliberate attempts to not engage in any work related activities or conversations outside of the workplace. While Maxx described learning the importance of creating boundaries between his personal and professional life, Grant appeared to derive much of his sense of well-being from his work and interactions with colleagues. Having an innate tendency to focus on the positives of seemingly negative situations, Grant did not perceive a need to make a clear distinction between his personal and professional lives.

On the whole, all participants in this study reported that at least one of the interventions they engaged in was seen as an effective means of both enhancing well-being and reducing experiences of burnout. Intuitively, several of the participants described a relationship where increases in well-being resulted in decreased experiences of burnout. Some similarities emerged in how participants ranked the three positive psychology interventions in order of perceived efficacy. For example, Both Becca and Sue ranked the interventions in the following order: (1) Three Good Things in Life, (2) Peer Support, & (3) Using Signature Strengths in a New Way. Molly and Grant both ranked the interventions in the following order: (1) Using Signature Strengths in a New Way, (2) Three Good Things in Life, & (3) Peer Support. Lastly, Maxx provided the following ranking: (1) Using Signature Strengths in a New Way, (2) Peer

Support, & (3) Three Good Things in Life. The three participants who reported the Using Signature Strengths in a New Way as the most personally effective intervention also recommended this intervention for full athletic training staff participation. Sue remained consistent reporting the Three Good Things in Life intervention as the most personally beneficial, and as the intervention she would recommend for full athletic training staff participation. Only Becca deviated from this trend where she reported the Three Good Things in Life intervention to be of greatest personal benefit, while recommending the Using Signature Strengths in a New Way intervention for full athletic training staff participation.

Participants described these interventions as novel activities in that they encouraged the athletic trainers to make deliberate attempts to engage in positive thinking. All of the athletic trainers in this study reported that the time demands of the profession limited opportunities to engage in self-care. Molly was the sole participant who was unable to complete the requirements of each intervention on a daily basis. This lack of time for self-care was evidenced by her MBI subscale scores, in which Molly was the only participant to not show a decrease in emotional exhaustion and depersonalization subscale scores from her initial baseline interval to the final two-month follow up interval.

CHAPTER 5: DISCUSSION

The primary purpose of this study was to address a lack of empirically validated research on interventions to reduce symptoms of burnout, and generally enhance well-being among collegiate athletic trainers through use of a positive psychology approach. To achieve this purpose this study posed the following research questions: (1) What are athletic trainer's perceptions of their experiences of burnout and well-being? (2) What factors do athletic trainers perceive as contributing to experiences of burnout? (3) Will engaging in positive psychology interventions reduce MBI scores? (4) Which subscales of the MBI are most affected by the positive psychology interventions? (5) Which positive psychology intervention do athletic trainers perceive as most effective?

This study employed a symbolic interactionist theoretical framework, exploring how athletic trainers internalize the meaning of burnout through social interaction, and how this perceived meaning of burnout influences athletic trainer's behaviors. The symbolic interactionism framework includes three major assumptions: (1) human beings act toward objects based on the meaning that the items have for them, (2) meaning is a product of social interaction in our society, and (3) the attribution of meaning to objects through symbols is a continuous interpretive process (Blumer, 1969).

The findings of this study suggest that athletic trainers believe that burnout is an inevitable experience of the athletic training profession, and an experience that significantly reduces both their ability to perform their work related responsibilities and motivation to work in the athletic training profession. Overall, burnout was viewed as a

result of the time demands of the profession, allowing little, if any, time for self-care. Developed by Smith (1986) the Cognitive-Affective Model of Burnout consists of three components: (1) personal and situational characteristics, (2) the cognitive stress appraisal, and (3) coping strategies. The personal and situational characteristics component includes hardiness, social support, motivation, and work related issues. Hardiness, referring to one's belief that they are able to influence the course of events, or have autonomy (control), having a sense of purpose and willingness to commit to relationships (commitment), and the belief that change as opposed to stability in life is normal, interesting, and a stimulus for growth (challenge), serves as a buffer against burnout (Hendrix et al., 2000). When these components or beliefs along with social support are lacking, coupled with a high degree of work related issues, individual's becomes more susceptible to burnout (Hendrix et al., 2000). The findings of this study support this relationship between hardiness and burnout, where Grant was the sole participant to report experiencing the control, commitment, and challenge components of hardiness and had the lowest scores for the emotional exhaustion and depersonalization MBI subscales among the participants in this study.

Three participants in this study showed lower subscale scores at the final two month follow up interval for both emotional exhaustion and depersonalization compared to their initial baseline scores. Sue showed a reduction in emotional exhaustion, but remained constant for her depersonalization subscale. Molly was the sole participant to show an increase in emotional exhaustion and depersonalization between the baseline and final follow up intervals. However, Molly showed reductions

in emotional exhaustion after interventions one and three, where reductions in depersonalization were observed only after intervention three. Furthermore, four participants showed an increase in their personal accomplishment subscale scores from the baseline to final follow up intervals. Grant was the only participant to show an increase in personal accomplishment from the baseline interval at the conclusion of the study. Grant did however show an increase in personal accomplishment after the first intervention. These findings suggest that the positive psychology interventions employed did effectively reduce the severity of burnout symptomology.

The context in which these findings were obtained adds greater support for the conclusion that positive psychology interventions serve as an effective means for reducing burnout symptomology. Specifically, all participants in this study completed their baseline interviews and MBI assessments in the month of September, when beginning the Fall academic semester and prior to the start of the competitive football season, burnout symptomology was expected to be less severe. With participants completing the final two-month follow up interview and MBI assessment in January, one would likely expect to see more severe burnout symptomology having worked full-time, and traveling with athletic teams for a period of four months with little, if any, time off. That burnout scores for both emotional exhaustion and depersonalization either remained stable or decreased (with personal accomplishment scores increasing) for four of the five participants in this study after spending four months in this time demanding profession lends greater support to the efficacy of positive psychology interventions for reducing symptoms of burnout.

Of the three burnout subscales, emotional exhaustion appeared to be the most significantly affected subscale with all participants in the study showing a difference of eight points or greater at a least one MBI interval during the study. For depersonalization, only one participant showed a difference in scores between intervals greater than eight points. Lastly, only one participant showed a difference greater than eight points over all intervals for the personal accomplishment subscale.

As for which intervention participants perceived as most effective, three participants (i.e. Molly, Grant, and Maxx) reported the *Using Signature Strengths in a New Way* intervention as the most personally effective of the three. On the other hand, Becca and Sue reported the *Three Good Things in Life* intervention as the most effective, and ranked *Using Signature Strengths in a New Way* as the least effective intervention. Only Molly and Grant ranked the *Peer Support* intervention as the least effective, where the remaining three participants ranked this intervention as the second most effective.

Existing research on the relationship between social support and burnout proposes that adequate social support mediates the cognitive stress appraisal, reducing the effects of perceived stress (Kelley & Gill, 1993). In addition, in a study of 85 athletic trainers at the Division-I level it was found that trainers most commonly received listening support and task appreciation, while tangible and personal assistance were the least commonly received forms of social support (Barefield & McCallister, 1997). As shown below, the findings from this study were relatively consistent with those of Barefield & McCallister (1997) with four of the five participants reporting receiving listening support, and only two participants receiving task appreciation.

Participant	Most Commonly Received Social Support	Most Commonly Given Social Support
Molly	Listening Support, Task Appreciation, & Reality Confirmation	Personal Assistance
Sue	Listening Support, Task Appreciation, & Task Challenge	Personal Assistance
Becca	Listening support & Emotional Support	Reality Confirmation & Task Challenge
Maxx	Reality Confirmation	Listening Support
Grant	Emotional Challenge & Listening Support	Listening Support & Personal Assistance

Table 37- Most commonly received and given forms of social support

This study adds to the existing research on social support, reporting on which forms of social support participants believed they most commonly offered their colleagues. Two participants reported they most commonly offered listening support, while three participants reported offering personal assistance. Becca was the only participant to report offering reality confirmation and task challenge.

As for work related issues, Pitney (2006) reported organizational structures hindering autonomy, and working in a high pressure environment, inherent in collegiate athletics, both contributed to diminished hardiness. In the present study, only Becca discussed experiencing a lack of autonomy as a result of working within a highly organized leadership structure. Additionally, only Grant reported experiencing pressure to return injured-student athletes to competition in a timely manner. Perhaps a result of differences in work environments between the athletic trainers sampled in Pitney's study and those recruited for this study, only limited support was obtained for the effects of work related issues on burnout in this study.

With regard to coping strategies, interviewing six certified athletic trainers at three intervals over a nine-month period, Reed & Giacobbi (2004) proposed that problem-focused coping strategies (seeking instrumental social support, and planning) and emotion-focused coping strategies (positive evaluations, and humor) held the greatest efficacy for reducing perceived stress. Grant, Maxx, and Molly all emphasized the importance of incorporating humor in their work as a means to lighten up the working environment. Becca and Sue appeared more inclined to take a problem-focused coping approach, regularly engaging in planning. It is likely the case that coping methods employed vary in efficacy according to individual differences. Furthermore, four of the five trainers in this study emphasized the importance of compartmentalizing their professional and personal lives, which can be described as a form of mental or behavioral disengagement, either ignoring or physically avoiding stressful situations. Becca, appearing to be the strongest proponent of compartmentalization strategies also reported not being invested in developing relationships with colleagues or student-athletes, which could explain her recording the highest depersonalization subscale score among the group of trainers at the baseline MBI interval.

Referring back to the PERMA framework of well-being used in this study, all participants reported that the *Peer Support* intervention had a positive impact on their relationships with colleagues. For the two participants in this study (i.e. Maxx and Grant) who also received letters from their colleagues, receiving a letter of recognition for the strengths they displayed added to their perceived sense of personal accomplishment, as well as enhanced their experiences of positive emotions.

For the *Three Good Things in Life* intervention, participants described this activity as beneficial in that it reduced their tendency to reflect on only those things they did not do well each day. For example, Sue described how this activity both left her feeling excited to come to work the next day, and provided her a sense of optimism in the face of adverse circumstances. For all participants, it seemed this intervention had the greatest effect on the extent to which they experience positive emotions on a daily basis.

The *Using Signature Strengths in a New Way* intervention was described by Molly and Maxx as facilitating engagement in their work or keeping them on their toes. Other participants discussed how this intervention contributed to their sense of personal accomplishment by allowing them to document and monitor which signature strengths they were able to utilize on a daily basis. Furthermore, Becca described how this activity expanded her awareness of her colleague's strengths, allowing her to see why she was called upon by her colleagues so frequently to assist with particular tasks, and thus increased her sense of cohesion among the athletic training staff. Overall, this intervention appeared to offer the greatest benefits for enhancing the engagement and accomplishment components of well-being.

Research on positive psychology interventions has shown that the efficacy of any intervention for enhancing well-being is contingent on the personality characteristics and life circumstances of the individual engaging in the intervention (Seligman, 2011). In short, interventions employed should be tailored specifically to the individuals receiving them. The findings of this study support this notion, where participants rated

different interventions as most effective for different reasons. For example, in a study of 411 individuals, examining the efficacy of six positive psychology interventions for increasing perceived happiness, the *Gratitude Visit* produced the single largest increase in happiness for a period of one month (Seligman et al., 2005). For this intervention participants were asked to write and then deliver a letter of gratitude in person to someone who had been especially kind to them, but had never been properly thanked. The *Peer Support* intervention used in this study was viewed as an adapted version of the *Gratitude Visit*, in which participants were asked to write a letter of appreciation for the strengths their colleagues brought to the workplace. All participants reported that this intervention had a positive impact on staff cohesion, however, only two participants ranked this intervention as the second most beneficial, and three participants ranked this intervention as the least beneficial. Although happiness was not directly assessed for this intervention, this finding suggests the need for both individualized interventions as well as the need for further research on positive psychology interventions tailored specifically for an athletic training context.

Existing research on the topic of burnout has provided a variety of practices for improved self-care, such as balancing work and leisure activities, increasing access to positive social support, and finding ways to reduce work load (Norcross & Guy, 2007; Wicks, 2008). The present study is consistent with past research in suggesting improving the extent to which individuals engage in self-care is the most effective means of reducing burnout, and adds the use of positive psychology interventions as a method for improving self-care.

Implications

As with any service profession, when individuals enter the field of athletic training they make a commitment to place the needs of the student-athletes they care for above their own. Furthermore, athletic trainers wholeheartedly commit to providing the best possible quality of care to their student-athletes. Although the athletic trainers in this study reported that they were most able to provide the best possible care to their student-athletes when experiencing a high level of subjective well-being, these trainers often sacrificed opportunities for self-care in effort to ensure the needs of their student-athletes were met. Thus, working in a profession that requires placing the needs of others over their own, offers little time for self-care, and requires some degree of self-care to adequately meet the needs of the student-athletes they care for, the paramount question becomes by what means can athletic trainers engage in self-care without diminishing their ability to meet the needs of their student-athletes.

Requiring just 10-15 minutes per day, the positive psychology interventions used in this study appear to offer a feasible and effective means for enhancing emotional well-being. The institution from which this sample of athletic trainers was drawn currently holds monthly staff meetings with the aim of improving both the quality of care given to student-athletes as well as the efficiency in which that care is delivered. Incorporating positive psychology interventions in staff meeting such as these would both serve the purpose of improving the quality of care delivered to student-athletes as well as provide athletic trainers a scheduled time to engage in self-care on a monthly

basis. In short, already being required to attend monthly staff meetings, athletic trainers would then be required to engage in self-care by implementing this approach.

Findings from this study suggest various strategies that can be employed by Athletic Directors, Directors of Sports Medicine, and Athletic Trainers themselves to reduce occupational burnout. Here I list several of these strategies.

Athletic Directors. The Athletic Directors can provide valuable resources as well as set the culture for athletics at the university or college. Here are strategies that Athletic Directors can implement to reduce occupational burnout:

- Model self-care practices.
- Educate Athletic Staff members on strategies for self care.
- Provide Athletic Staff members with tools for monitoring burnout symptomology (i.e. Maslach Burnout Inventory).

In their role as Athletic Director, these individuals can influence the degree to which all personnel in athletic departments incorporate daily self-care practices into their work routine.

Sports Medicine Director. Directors of Sports Medicine are responsible for prioritizing job related responsibilities in the athletic training room, as well as communicating key staff objectives. Below are strategies Directors of Sports Medicine can implement to reduce occupational burnout:

- Allocate 15-20 minutes of monthly staff meetings to discussing strategies for enhancing well-being.
- Require all athletic trainers to complete the MBI at the beginning and end of each academic semester.
- Provide constructive feedback of athletic trainer's work performance.
- Include one 30 minute block per week in which athletic trainers may engage in self-care related activities.

- Implement the Using Signature Strengths in a New Way intervention with the athletic training staff.
- Encourage athletic trainers to discuss self-care strategies among their peers.
- Model self-care practices

In their role as Director of Sports Medicine, these individuals can set precedence for engaging in self-care practices. By modeling and actively incorporating self-care practices into job related duties Directors of Sport Medicine can convey to their athletic trainers the extent to which personal well-being positively influences the quality of care provided to student-athletes.

Athletic Trainers. As Athletic Trainers, these individuals have the most control over their personal well-being. The following strategies can be implemented by Athletic Trainers themselves to reduce occupational burnout:

- Reflect back on what you did well at the end of each day.
- Openly acknowledge the strengths your colleagues bring to the workplace.
- Seek Instrumental social support for difficult tasks.
- Spend a minimum of 15 minutes per day engaging in self-care practices.
- Regularly assess burnout symptomology through use of the MBI.
- Keep a journal of positive work related events.
- Reflect on your purpose for becoming an Athletic Trainer as often as possible.

In their role as Athletic Trainers, these individuals can hold themselves and their colleagues accountable for engaging in activities designed to promote their well-being. Athletic Trainers can influence the nature of social interactions with colleagues by emphasizing the positives of work performances as opposed to harping on the negatives or venting one's frustrations. By expanding their awareness of colleague's strengths,

and providing opportunities for colleagues to utilize their strengths Athletic Trainers can actively contribute to staff cohesion.

Limitations

Due to the limited sample size of this study significant differences in MBI subscale scores across individuals or positive psychology interventions could not be attained. This limited sample size is believed to be the most significant limitation of the present study. Due to the design of the present study participant's MBI subscale scores were treated more as evaluative than diagnostic of burnout symptomology.

Further limitations of the present study included a lack of autonomy, and monitoring of when participants completed the MBI. As for lack of autonomy, participants in this study were not presented with a choice of which interventions they would engage in nor the order they would complete the interventions in. Providing the MBI in participant's activity logs for each intervention the time at which they completed the MBI for each intervention was not recorded. That is, whether the MBI was completed before, after, or during one's workday was unknown, as well as the effect of the time interval may have had on participant's response to the MBI questions. Lastly, certain participants in this study experienced particularly stressful days or weeks during the study. With participants completing each intervention for a period of one week only, a particularly stressful event may have influenced participant's responses on the MBI. By extending the duration of each intervention greater accuracy of the affects of each intervention on both burnout and well-being could be attained.

Directions for Future Research

To advance research on the efficacy of positive psychology interventions for reducing symptoms of burnout the following recommendations have been made for future research on this topic:

- Replicate current study with larger sample size, drawing participants from multiple athletic departments.
- Further investigation into and development of Positive Psychology Interventions adapted specifically to the athletic training context.
- Development of interventions to enhance physical as well as mental health.
- Development of interventions designed to enhance the components of hardiness (i.e. Control, Commitment, Challenge).

Future research should aim to replicate the current study, recruiting larger sample sizes to allow for use of statistical analyses to determine significant differences in burnout subscale scores between both participants and interventions used. Furthermore, such studies should attempt to draw participants from multiple athletic departments. With a study sample that includes participants working in different environments, greater affects of work environments (i.e. situational characteristics) on burnout could be obtained.

This study marked the first attempt to adapt a positive psychology intervention specifically to the athletic training context. As the *Peer Support* intervention was designed to address a potential lack of social support, and was reported by several participants as effective in increasing staff cohesion, participants also reported potential drawbacks of this intervention, such as the possibility that one or more staff members would not receive a letter of *Peer Support* from a colleague. Thus, future research

efforts should be directed towards the development of interventions that ensure potential benefits for all members of the athletic training staff.

Studies should seek to explore the efficacy of the full spectrum of positive psychology interventions available. The three interventions used in this study had a cognitive or social focus. For example, the *Three Good Things in Life* and the *Using Signature Strengths in a New Way* interventions served to enhance the extent to which individuals engaged in positive thinking on a daily basis. *The Peer Support* intervention was designed to facilitate positive interactions among the athletic trainers. When asked to describe the term “well-being” in their own words the participants in this study described emotional, social, and physical components of well-being. For this reason, interventions aimed at increasing physical well-being should be explored to the same extent of interventions with an emotional or social focus.

Lastly, as the personal characteristic of Hardiness has been documented to greatly influence susceptibility to burnout in previous studies, further research into the development of positive psychology interventions designed to enhance Hardiness is well merited. Specifically, interventions should be tailored to enhance each component of Hardiness (i.e control, commitment, and challenge).

APPENDIX A: POSITIVE PSYCHOLOGY INTERVENTION INSTRUCTIONS

1.) Three Good Things in Life:

We think too much about what goes wrong and not enough about what goes right in our lives. Of course, sometimes it makes sense for us to analyze bad events so that we can learn from them and avoid them in the future. However, people tend to spend more time thinking about what is bad in life than is helpful. Worse, this tendency to focus on bad events sets us up for anxiety and depression. One way to keep this from happening is to develop our ability to think about the good in life. Most of us are not nearly as good at analyzing good events as we are at analyzing bad events, so this is a skill that needs practice. As you become better at focusing on the good in your life, you will likely become more grateful for what you have and more hopeful about the future. So let's get started.

Your assignment is as follows:

Every night for one week, set aside 10 minutes before you go to bed. Use that time to write down three things that went really well on that day and why they went well. You may use a journal or your computer to write about the events, but it is important that you have a physical record of what you wrote. It is not enough to do this exercise in your head. The three things you list can be relatively small in importance ("My husband picked up my favorite ice cream for dessert on the way home from work today") or relatively large in importance ("My sister just gave birth to a healthy baby boy"). Next to each positive event in your list, answer the question, "Why did this good thing happen?" For example, someone might write that her husband picked up ice cream "because my husband is really thoughtful sometimes" or "because I remembered to call him from work and remind him to stop by the grocery store." When asked why her sister gave birth to a healthy baby boy, someone might write that "God was looking out for her" or "She did everything right during her pregnancy."

Writing about "why" the positive events in your life happened may seem awkward at first, but please stick with it for one week. It will get easier.

To review, here are the steps of this exercise:

- 1) Every night before bed for one week, think about three good things that went well that day.
- 2) Write down the three things that went well.
- 3) Then write down why each thing went well.
- 4) Turn in a physical copy of your record of what you wrote down each night over the course of the week to the individual conducting the study.

2.) Using Signature Strengths in a New Way:

Honesty. Loyalty. Perseverance. Creativity. Kindness. Wisdom. Courage. Fairness. These and about 16 other character strengths are valued in almost every culture in the world. We believe that people can get more satisfaction out of life if they learn to identify which of these character strengths they possess in abundance and then use them as much as possible whether working, loving, or playing.

Here are the specific steps to follow for this exercise:

- 1) Visit the following website: www.authentic happiness.sas.upenn.edu. Click register, and create an account. Go to the “Questionnaires” tab and click on the “VIA Survey of Character Strengths” link and complete the questionnaire.
- 2) Print out the feedback you receive about your five highest strengths (your signature strengths).
- 3) During the next week try to use your signature strengths more often each day.
- 4) At the end of each day enter in the log provided to you the strength(s) you used that day, and provide an example of how you used one or more particular strengths.
- 5) Turn in a physical copy of your log to the individual conducting the study.

3.) Peer Support:

Receiving positive feedback about your performance in any endeavor elicits positive emotions. Feeling that one recognizes and appreciates your talents enhances well-being. When working with others it is easy to overlook what others do well, focusing on your own performance. Paying attention to what strengths others bring to the work environment can inspire how you approach your own work. Furthermore, pointing out others' strengths can enhance team cohesion, and may encourage recipients of praise to reciprocate praise or praise other members of the group or team.

Your assignment is as follows:

Over the course of one week pay attention to particular strengths your colleagues display. Choose one individual, and deliver a letter to them describing at least one strength you observed them display. In addition, in your letter describe how your peer's strength influenced how you approach your work-related activities.

To review:

- 1) Observe what others you work with do well.
- 2) Select one particular individual and deliver a letter to them describing the strengths you observed them displaying, and how those strengths influenced your approach to your work-related activities.
- 3) Turn in a physical copy of the letter you delivered to the individual conducting the study.

*Descriptions of exercises 1 & 2 are reprinted from the following study with permission from the authors:

Seligman, Martin, Park, Nansook, & Peterson, Christopher. (2005). Positive Psychology Progress: Empirical validation of interventions. *American Psychologist*, 60(5), 410-421.

APPENDIX B: INTERVIEW PROTOCOL

All participant interviews were held in the office of the researcher. Participants were interviewed the following Monday after engaging in a particular positive psychology intervention for one week.

- Participants first completed the MBI.
- Participants were then asked the following questions during a 45-60 minute semi-structured interview:
 - Please describe any burnout symptoms you have experienced in the past week.
 - What factors do you believe are contributing to your experience of these symptoms?
 - How many hours did you work in the training room in the past week?
 - After reading the directions for the intervention you completed this week, was this an exercise you looked forward to completing?
 - Please describe your experience engaging in the intervention over the past week.
 - Did you have any challenges completing this intervention?
 - Do you believe this intervention was successful in reducing symptoms of burnout?
 - Did this intervention influence how you approached interactions with clients or colleagues?
 - If yes, how so?
 - Do you believe this intervention influenced the ratio of positive to negative emotions you experienced throughout the week?
 - Would you engage in this intervention in the future without it being required as part of a study?
 - Did you intentionally engage in any behaviors over the past week in effort to reduce symptoms of burnout or stress?
 - If so what were they?
 - Do you have any other comments about your experience with this intervention?

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