

# The Relationship Between Spiritual Well-Being and Burnout in Collegiate Athletic Trainers

Leslie W. Oglesby, PhD, LAT, ATC\*;  
Andrew R. Gallucci, PhD, LAT, ATC, CSCS†; Christopher Wynveen, PhD†;  
Kelly Ylitalo, PhD‡; Nicholas Benson, PhD§

\*School of Health Professions, University of Southern Mississippi, Hattiesburg; Departments of †Health, Human Performance and Recreation, ‡Public Health, and §Educational Psychology, Baylor University, Waco, TX

**Context:** Spiritual well-being is the expression of one's spirituality as measured in the dimensions of existential and religious well-being. The Smith Cognitive Affective Model of Athletic Burnout suggests that personality factors such as spiritual well-being and the use of religious coping methods may affect burnout as well as its causes and outcomes. This has not been examined in collegiate athletic trainers (ATs).

**Objective:** To investigate the relationship between spiritual well-being and burnout in collegiate ATs.

**Design:** Cross-sectional study.

**Setting:** Web-based survey.

**Patients or Other Participants:** A total of 783 certified ATs employed full time in the collegiate setting participated. Part-time employees (eg, graduate assistants, interns) were excluded.

**Main Outcome Measure(s):** A 100-item online questionnaire was created for this study. It used items from previously developed scales, including the Spiritual Well-Being Scale, the Brief RCOPE, the Maslach Burnout Inventory, and substance-use questions from the Monitoring the Future study. Participants were able to complete the survey in approximately 10–15 minutes. Multiple regression analyses were used to analyze

survey data. We mapped all independent (existential well-being, religious well-being, positive and negative religious coping) and dependent variables (situational variables, Maslach Burnout Inventory burnout subscales, substance use, and intention to leave) onto the Smith Cognitive-Affective Model of Athletic Burnout to determine which variables altered burnout levels, substance use, and intention to leave. Tests of mediation or moderation were conducted when appropriate.

**Results:** Existential well-being was a significant positive predictor of social support and a significant negative predictor of work-family conflict, decreased sense of personal accomplishment, emotional exhaustion, depersonalization, intention to leave the profession, and binge drinking. Existential well-being also served as a mediator or moderator in several components of the model.

**Conclusions:** Existential well-being was a protective factor against burnout as well as some of the causes and effects of burnout in collegiate ATs.

**Key Words:** existential well-being, religious well-being, religious coping, emotional exhaustion, substance use

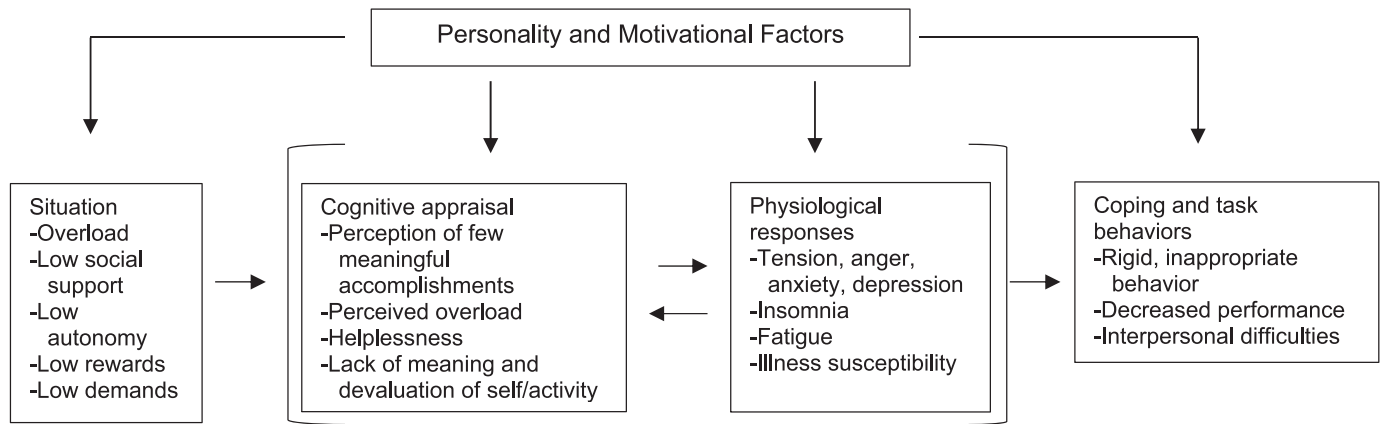
## Key Points

- Existential well-being was directly correlated with social support and sense of personal accomplishment.
- Existential well-being was inversely correlated with work-family conflict, emotional exhaustion, depersonalization, intention to leave the profession, and binge drinking.
- The existential well-being and overall spiritual well-being of athletic trainers experiencing burnout should be evaluated and considered.

The National Interfaith Coalition on Aging<sup>1</sup> defined *spiritual well-being* as “the affirmation of life in a relationship with God, self, community and environment that nurtures and celebrates wholeness.” In other words, spiritual well-being is the expression of one's spirituality. Spiritual well-being has vertical and horizontal dimensions.<sup>2</sup> These concepts are separate from the concept of *religion*, which is a set of organized practices also used to express spirituality.<sup>3</sup> The horizontal dimension, also known as *existential well-being*, refers to one's sense of purpose and satisfaction in life.<sup>2</sup> The vertical dimension, or *religious well-being*, refers to an individual's relationship with God or some other higher power. Existential well-being has been positively correlated with self-reported mental health and physical health.<sup>4</sup> Existential and religious

well-being were negatively correlated with perceived stress.<sup>4</sup>

Individuals in stressful situations may use many different coping strategies to manage their stress. Some use positive methods (eg, seek social support, exercise), whereas others use negative methods (eg, ignore or avoid the situation).<sup>5</sup> Some also use religion as a method of coping with stress.<sup>5</sup> In fact, a researcher<sup>6</sup> found that those with a stronger sense of religiosity reported lower levels of stress. As with stress, a person can use both positive and negative religious coping methods.<sup>7</sup> Similar to other coping strategies, religious coping consists of positive methods (eg, praying, relying on a higher power in times of trouble) and negative methods (eg, blaming higher powers for one's problems).<sup>7</sup> Those who adopted more positive religious coping methods were



**Figure 1. Smith Cognitive-Affective Model of Athletic Burnout.<sup>22</sup>**

less likely to report psychological symptoms of distress<sup>7</sup> and alcohol consumption.<sup>8</sup> Conversely, those who used more negative religious coping methods described increased depressive symptoms and callousness toward others.<sup>7</sup> It is important to note that the use of most of these coping methods does not require adherence to a certain religion. Rather, they require only belief in a higher power.<sup>7</sup> Therefore, religious coping—although it suggests adherence to a certain religion—may be used by many who consider themselves spiritual but not religious.

Despite what is known about the relationships among spiritual well-being, religious coping, and psychological aspects of health (eg, perceived stress),<sup>4</sup> examinations of the relationships between these variables and burnout are lacking. *Burnout* is a psychological condition that expresses itself in 3 components (ie, emotional exhaustion, depersonalization of patients, decreased sense of personal accomplishment).<sup>9</sup> *Emotional exhaustion* is a fatigue that goes beyond physical description and may consist of feeling tired even after a normal night of rest.<sup>9</sup> *Depersonalization* involves objectification of patients, and *decreased sense of personal accomplishment* refers to a perception that one is not achieving goals as often as usual.<sup>9</sup> Burnout is typically seen in helping professions, including among health care workers.<sup>10,11</sup> The potential effects of burnout in these professionals include decreased job satisfaction<sup>12</sup> and an increased risk of heavy episodic drinking<sup>10</sup> and tobacco use.<sup>13</sup> Using meta-analysis, researchers found an inverse relationship between religious coping and all 3 subscales of burnout, especially depersonalization.<sup>14</sup> However, their analysis did not distinguish between positive and negative religious coping methods.

Burnout associated with athletic trainers (ATs) has been understudied relative to burnout in other health care professionals. Moreover, the existing research is becoming outdated. Investigators<sup>11</sup> suggested that ATs suffered from burnout at lower rates than other health care professionals but noted that ATs, especially those in the collegiate setting, had an off-season in which they could recover from stress by working fewer hours.<sup>11</sup> However, recent legislative changes of the National Collegiate Athletic Association (NCAA) have increased the amount of organized practice time allowed for many collegiate sports in their off-season.<sup>15</sup> Because organized practices require the provision of medical care, collegiate ATs are now required to increase their workload accordingly. Large workloads and

burnout are associated with an increased intention to leave the profession of athletic training,<sup>16</sup> so the effects of these legislative changes on burnout and intention to leave the profession should be examined.

Burnout in collegiate ATs is of concern because this condition is associated with increases in work-family conflict.<sup>17</sup> Researchers<sup>18</sup> who studied collegiate ATs found that large workloads and low salaries both led to increases in burnout. An inverse relationship exists between social support and burnout; therefore, social support serves as a protective factor against burnout.<sup>19</sup> Potential consequences of burnout in collegiate ATs include leaving the profession<sup>16</sup> and increased substance use.<sup>20</sup>

The effects of spiritual well-being on the consequences of burnout in ATs are unknown. Existential well-being was inversely correlated with intention to leave one's job,<sup>21</sup> but whether a similar correlation is present in collegiate ATs was unclear. Burnout is a risk factor for binge drinking of alcohol by collegiate ATs,<sup>18</sup> yet the effects of spiritual well-being or the use of religious coping methods on substance use in this population are uncertain.

The Smith Cognitive-Affective Model of Athletic Burnout (Figure 1) provides a theoretical framework for explaining the process of burnout in athletes and ATs.<sup>22</sup> This model has found support within the athletic training literature for use with collegiate ATs.<sup>18</sup> Smith proposed that situational variables (eg, work-family conflict, low level of social support) provoke cognitive appraisal (eg, decreased personal accomplishment) and a physiological response (eg, emotional exhaustion), which in turn lead to coping behaviors such as depersonalization, substance use, and leaving the profession.<sup>22</sup> Smith also suggested that personality and motivational factors (eg, existential well-being, religious well-being, positive religious coping, negative religious coping) may influence all other components of the model.<sup>22</sup> In the only published study<sup>23</sup> examining spiritual well-being and burnout in health care professionals, existential well-being was a significant protective factor against burnout in counselors and psychotherapists. However, these relationships have not been reported in the published literature on collegiate ATs.

Thus, the purpose of our study was to examine possible relationships between personality factors (ie, existential well-being, religious well-being, positive religious coping, negative religious coping) and burnout in collegiate ATs. We chose collegiate ATs due to the aforementioned support

of the use of the Smith model in this population as well as recent NCAA legislative changes that may have led to a change in the burnout prevalence in this population. Because of a lack of research in this subject area, we adopted null hypotheses for relationships between spiritual well-being, use of religious coping methods, burnout, and intention to leave the profession. Based on previous work,<sup>24</sup> we hypothesized that inverse relationships would be present between spiritual well-being, positive religious coping, and substance use and a direct relationship would exist between negative religious coping and substance use.

## METHODS

### Participants

All participants in this study ( $N = 783$ ) were certified ATs working full time in the collegiate setting. They consisted of ATs from all divisions of the NCAA as well as from the National Association of Intercollegiate Athletics and the National Junior College Athletic Association. To be included in this study, each participant had to be a member of the National Athletic Trainers' Association (NATA) and employed full time in the collegiate setting. Volunteers who indicated that they were not full-time employees (eg, graduate assistants, interns) or no longer worked in the collegiate setting were excluded from data analysis. Additionally, any person who identified as working academically full time was also excluded.

### Procedures

This study received approval from the Baylor University Institutional Review Board. A cross-sectional study design in the form of a one-time online survey was used for data collection. This survey was formatted electronically using Qualtrics (Provo, UT) survey software. We then contacted the NATA Membership Directory Service to send emails to 7000 NATA members who were working full time in the collegiate setting. We were informed by the NATA that only 6867 members met our criteria, so the emails were sent to all qualifying members.

The recruitment email contained a description of the study, an informed consent page, and a hyperlink to the survey. We did not want to be able to identify participants due to the sensitive nature of questions pertaining to illegal behaviors. To avoid identification of participants and thereby increase the likelihood of truthful responses, passive consent was obtained by asking participants to answer *yes* to an initial consent statement on the survey. The Membership Directory Service also sent reminder emails 1 week and 2 weeks after initial delivery, which encouraged recipients to complete the survey if they had not yet done so. The survey contained 16 demographic questions and several previously used scales that measured each of the variables of interest for our study.

### Questionnaire

The questionnaire consisted of multiple previously used scales that measured spiritual well-being,<sup>2</sup> religious coping,<sup>25</sup> work-family conflict,<sup>26</sup> social support,<sup>27</sup> workload, burnout,<sup>28</sup> intention to leave the profession,<sup>29</sup> and substance use.<sup>30</sup> We briefly describe how each variable was measured.

**Spiritual Well-Being.** The Spiritual Well-Being Scale (SWBS)<sup>2</sup> is a 20-item instrument divided into two 10-item subscales. One subscale measures religious well-being (RWB) and examines one's relationship with God. The other subscale measures existential well-being (EWB), that is, one's view of one's purpose and overall view on life. Each item is answered and scored on a 6-point Likert scale from 1 (*strongly disagree*) to 6 (*strongly agree*) with no neutral option. Items in each subscale were totaled to create EWB and RWB scores. A higher subscale score indicates greater well-being. In an assessment of internal consistency for these subscales across diverse populations, coefficient  $\alpha$  values were 0.78 (EWB) and 0.87 (RWB).<sup>31</sup>

**Religious Coping.** Use of religious coping techniques was assessed using the Brief RCOPE.<sup>25</sup> The Brief RCOPE is a 14-item instrument that assesses the use of positive religious coping (PRC) and negative religious coping (NRC) techniques when dealing with major life stressors. The instrument consists of two 7-item subscales that each measure PRC and NRC. Each item is answered and scored on a 4-point Likert scale from 0 (*not at all*) to 3 (*a great deal*). Items from each subscale are summed to create PRC and NRC totals, with a higher subscale score indicating greater use of that technique. In a study<sup>25</sup> that assessed the internal consistency of the subscales across diverse populations, the PRC subscale had a median  $\alpha$  of .92 and the NRC subscale had a median  $\alpha$  of .81.

**Work-Family Conflict.** Perception of work-family conflict was measured using an instrument developed by Netemeyer et al.<sup>26</sup> This instrument has been used previously in AT research<sup>32</sup> and consists of 5 items that each speak to different forms of work-family conflict. Each item is answered on a 7-point Likert scale ranging from *strongly disagree* to *strongly agree*. The items are then totaled, and a higher score indicates a higher degree of perceived work-family conflict.

When used in athletic training research, the work-family conflict scale is administered twice, each with a different definition of *family*. One version defines family as a partner, spouse, or children, and the other defines family as close relatives, such as parents, siblings, or grandparents.<sup>32</sup> We administered the work-family conflict scale in a manner consistent with the previous studies. In a study with ATs as a sample, the 2 scales demonstrated Cronbach  $\alpha$  levels of .95 and .94, respectively.<sup>32</sup>

**Social Support.** The Multidimensional Scale of Perceived Social Support (MSPSS)<sup>27</sup> was used to measure perceived social support. It consists of 12 items that measure the perceived support one receives from family, friends, and significant others. Each item is answered and scored on a 7-point Likert scale ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). The items are summed to create 1 overall score, with a higher score indicating a higher degree of perceived social support. The scale has a reported internal consistency coefficient of  $\alpha = .79$ .<sup>33</sup>

**Workload.** Participants were asked to estimate how many hours they worked per week on average. This was divided into 3 times of the year to mirror the typical college semester system by inquiring about time spent working in the fall (August–December), spring (January–May), and summer (June–July).

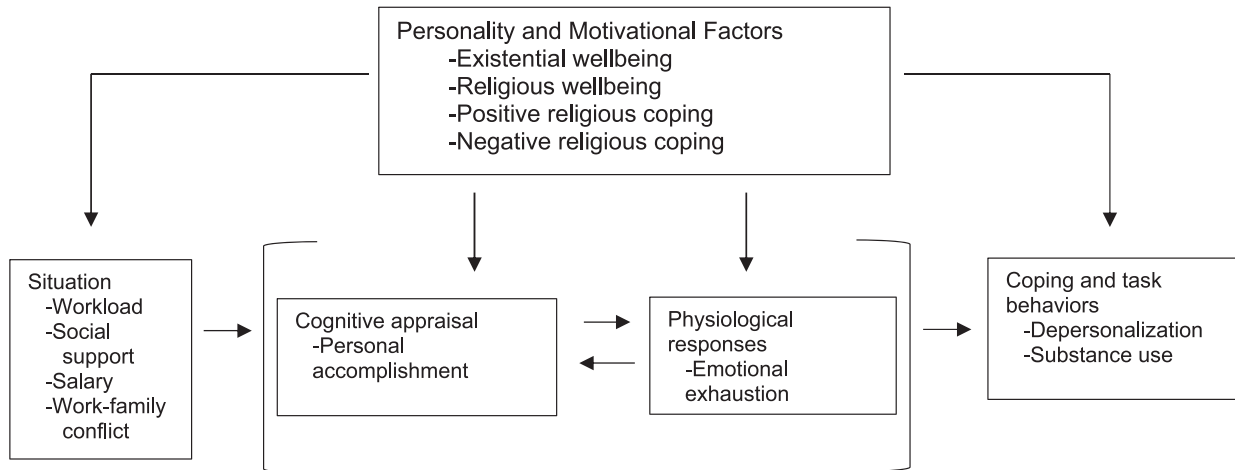


Figure 2. Variables mapped onto the Smith model.<sup>22</sup>

**Burnout.** The Maslach Burnout Inventory–Health Human Services edition<sup>28</sup> was used to measure burnout in participants. It has been applied previously in athletic training research.<sup>19</sup> The tool is divided into 3 subscales that measure emotional exhaustion, depersonalization, and sense of personal accomplishment. It consists of 22 items: 9 items pertain to emotional exhaustion, 5 to depersonalization, and 8 to personal accomplishment. Each item is answered and scored on a 7-point Likert scale from 0 (*never*) to 6 (*every day*). All items in a subscale are totaled to generate a subscale score. A higher subscale score in emotional exhaustion and depersonalization indicates greater burnout, whereas a higher score in personal accomplishment indicates less burnout. Each subscale is a separate measure of burnout, and the subscales cannot be totaled to create an overall burnout score.<sup>28</sup> The 3 subscales have reported internal consistency coefficients of 0.89 (emotional exhaustion), 0.77 (depersonalization), and 0.74 (personal accomplishment).<sup>28</sup>

**Intention to Leave the Profession.** The Intention to Leave Survey<sup>29</sup> was developed to measure the intent of ATs to either leave their current position for another AT job or leave the profession altogether. For our study, we modified this survey by using a single question that assessed one's intention to leave the profession altogether. It was measured and scored on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*), with a higher score indicating a greater intention to leave the profession. Only 2 authors<sup>29</sup> reported use of this survey, and they identified an internal consistency coefficient of  $\alpha = .86$ .

**Substance Use.** We selected questions from the Monitoring the Future Study<sup>30</sup> to assess the use of cigarettes, smokeless tobacco, marijuana, and energy drinks in the previous 30 days. We also asked each participant to report alcohol binge-drinking frequency (*How many times, if any, have you had 5 or more drinks in a row over the last 30 days? [4 or more drinks for females]*). The item assessing cigarette use had 7 possible answers (ie, *not at all, less than 1 cigarette per day, 1 to 5 cigarettes per day, about one-half pack per day, about 1 pack per day, about 1 and one-half packs per day, 2 packs or more per day*) and the other substance-use items offered 7 possible answers (ie, *never, 1–2, 3–5, 6–9, 10–19, 20–39, 40+*).

## Statistical Analysis

All statistical analyses were performed using SPSS (version 24; IBM Corp). We downloaded all participant data from Qualtrics and transferred them to an SPSS worksheet. The variables of interest analyzed in this study were existential and religious well-being, positive and negative religious coping, work-family conflict, workload, perceived social support, burnout subscales (ie, emotional exhaustion, depersonalization, personal accomplishment), intention to leave the profession of athletic training, and use of various substances in the previous 30 days.

Descriptive statistics (eg, mean, standard deviation, range, skewness, kurtosis) were calculated to examine the distribution and central tendency of responses. The assumptions of normality and homoscedasticity were checked using normal P-P plots, scatterplots, skewness, and kurtosis. Most hypotheses were tested using multiple regression. The variables were all mapped onto the Smith model (Figure 2). All personality and motivational variables (ie, existential well-being, religious well-being, positive religious coping, negative religious coping) were placed into multiple regression models to assess their relationship with situational variables (ie, work-family conflict, perceived social support, salary, average hours of work per week). They were also used to assess emotional exhaustion, personal accomplishment, and every coping behavior (ie, depersonalization, substance use, intention to leave the profession). The situational variables were then placed into multiple regression models to assess emotional exhaustion and personal accomplishment. Finally, emotional exhaustion and personal accomplishment were placed into multiple regression models to predict depersonalization, intention to leave the profession, and substance use. Significance testing for all regression analyses used an a priori level of  $\alpha = .05$ .

Skewness ranged from  $-1.037$  to  $2.808$  in the variables that were used for multiple regression. Kurtosis ranged from  $-1.281$  to  $10.211$  in these same variables. Evaluation of skewness (range =  $2.571$ – $10.938$ ), kurtosis (range =  $6.018$ – $118.672$ ), and normal P-P plots revealed that several substance-use variables (ie, cigarettes, marijuana, energy drinks) closely followed a Poisson distribution rather than a normal distribution. Therefore, we used a Poisson model in place of multiple regression for these analyses. Smokeless



tobacco use displayed a bimodal curve that did not align with either a normal or Poisson distribution. The smokeless-tobacco variable was therefore dichotomized (0 = *no use*, 1 = *use*) and a binary logistic regression was computed.

Tests of mediation were required when any spiritual variable (ie, existential well-being, religious well-being, positive religious coping, negative religious coping) was significantly associated with another variable that was also a significant variable in the model. Mediation testing was performed as described by Baron and Kenny.<sup>34</sup> Analyses that did not indicate mediation were then tested for moderation as described by Baron and Kenny.<sup>34</sup>

## RESULTS

### Demographics

Of the 6867 participants contacted, 1211 started the survey and 857 completed it (29.2% dropout rate). Of those who completed the survey, 74 did not meet the inclusion criteria. This resulted in a sample size of 783, an 11.4% response rate. Participants were  $36.4 \pm 11.1$  years old (range = 22–79 years), with  $12.6 \pm 9.8$  years (range = 0–45 years) of athletic training experience. Similar workloads were reported for the fall and spring semesters. The ATs averaged  $57 \pm 11.6$  (range = 30–100) hours worked per week during the fall (August–December) and  $53.6 \pm 11.2$  (range = 30–100) hours worked per week during the spring (January–May). The average workload of the sample during the summer (June–July) was  $23.3 \pm 17.4$  (range = 0–80) hours per week. The sample mostly identified as White, non-Hispanic ( $n = 713$ , 91.1%), and single ( $n = 409$ , 52.2%). Most respondents did not have children ( $n = 484$ , 61.8%). Those who did report children had an average of  $2.05 \pm 0.86$  (range = 1–6). Additional demographic information for our sample can be found in Table 1. Compared with statistics from the NATA membership database,<sup>35</sup> the demographics of our sample were representative of the overall collegiate AT population in terms of gender, ethnicity, and NATA district.

Means, standard deviations, and ranges of results for the SWB subscales, Brief RCOPE, work-family conflict scales, MSPSS, and MBI subscales are shown in Table 2. A high level of burnout with an emotional exhaustion score  $>26$  was endorsed by 38.9% of participants.<sup>36</sup> Similarly, 33.6% of respondents displayed a high level of burnout with a depersonalization score  $>9$ . Additionally, 17.7% of the sample demonstrated a high level of burnout with a personal accomplishment score of  $<34$ . More than 46% of participants recounted at least 1 binge-drinking episode in the previous 30 days, and nearly 23% described consuming at least 1 energy drink in the same time frame. Fewer participants reported the use of other substances: smokeless tobacco, 5.4%; marijuana, 4.2%; and smoking at least 1 cigarette in the previous month, 1.8%. Approximately 18.1% of participants agreed or strongly agreed that they were actively searching for a job outside the athletic training profession. A full report on substance use and current career intentions of our sample is available in Table 3.

### Multiple Regression Analyses

Due to the large number of regressions completed (25), only those that produced significant results are described in

detail. An analysis of the relationship between situational variables and personal accomplishment indicated that social support ( $B = 0.113$ ,  $P < .001$ ; 95% CI = 0.08, 0.15), salary ( $B = 0.468$ ,  $P < .001$ ; 95% CI = 0.22, 0.72), and work-family conflict with family being a spouse or children or both ( $B = -0.239$ ,  $P < .001$ ; 95% CI = -0.33, -0.15) were all significantly associated with personal accomplishment ( $R^2 = 0.133$ ). An analysis of situational variables influencing emotional exhaustion revealed that increases in the average hours worked per week in the spring semester ( $B = 0.084$ ,  $P = .029$ ; 95% CI = 0.01, 0.16), work-family conflict with family being a spouse or children or both ( $B = 0.475$ ,  $P < .001$ ; 95% CI = 0.33, 0.62), and work-family conflict with family being other close relatives ( $B = 0.416$ ,  $P < .001$ ; 95% CI = 0.27, 0.56) were all associated with increases in emotional exhaustion. Salary ( $B = -0.630$ ,  $P = .002$ ; 95% CI = -1.03, -0.24) and social support ( $B = -0.172$ ,  $P < .001$ ; 95% CI = -0.23, -0.012) were inversely related to emotional exhaustion ( $R^2 = 0.375$ ).

We conducted subsequent analyses to evaluate the relationships between emotional exhaustion, personal accomplishment, and the coping behaviors of depersonalization and intention to leave the profession. Emotional exhaustion ( $B = 0.288$ ,  $P < .001$ ; 95% CI = 0.26, 0.32) and personal accomplishment ( $B = -0.174$ ,  $P < .001$ ; 95% CI = -0.23, -0.12) were both significant predictors of depersonalization ( $R^2 = 0.460$ ). Emotional exhaustion ( $B = 0.044$ ,  $P < .001$ ; 95% CI = 0.036, 0.051) and personal accomplishment ( $B = -0.023$ ,  $P < .001$ ; 95% CI = -0.037, -0.009) were also significantly associated with one's intention to leave the profession of athletic training ( $R^2 = 0.228$ ).

Statistical analyses were used to determine the extent to which emotional exhaustion and personal accomplishment were correlated with substance use. Emotional exhaustion ( $B = 0.008$ ,  $P = .023$ ; 95% CI = 0.001, 0.015) and personal accomplishment ( $B = -0.016$ ,  $P = .02$ ; 95% CI = -0.029, -0.003) were correlated with binge-drinking behaviors ( $R^2 = 0.022$ ). Emotional exhaustion ( $\text{Exp}[B] = 1.017$ ,  $P < .001$ ; 95% CI = 1.009, 1.026) was also a significant predictor of energy-drink use.

Next, statistical analyses were performed to determine the extent to which spiritual variables (ie, existential well-being, religious well-being, positive religious coping, and negative religious coping) influenced all other components of the model. For situational variables, we found that greater existential well-being was related to decreases in work-family conflict with family being a spouse or children or both ( $B = -0.238$ ,  $P < .001$ ; 95% CI = -0.31, -0.17), work-family conflict with family being other close relatives ( $B = -0.237$ ,  $P < .001$ ; 95% CI = -0.31, -0.17), and workload in the fall ( $B = -0.228$ ,  $P < .001$ ; 95% CI = -0.346, -0.110) and spring ( $B = -0.240$ ,  $P < .001$ ; 95% CI = -0.35, -0.13). Greater existential well-being was also related to increased social support ( $B = 0.709$ ,  $P < .001$ ; 95% CI = 0.59, 0.83) and salary ( $B = 0.026$ ,  $P = .005$ ; 95% CI = 0.008, 0.044). Furthermore, greater existential well-being was related to increases in personal accomplishment ( $B = 0.380$ ,  $P < .001$ ; 95% CI = 0.32, 0.44) and decreases in emotional exhaustion ( $B = -0.827$ ,  $P < .001$ ; 95% CI = -0.93, -0.72). With respect to coping behaviors, increases in existential well-being were related to decreased depersonalization ( $B = -0.328$ ,  $P < .001$ ; 95% CI = -0.38, -0.27).

**Table 1. Participants' Demographics**

Characteristic	No. (%)
Gender	
Male	326 (41.6)
Female	453 (57.9)
Ethnicity	
White	713 (91.1)
Hispanic	29 (3.7)
Black	23 (2.9)
Multiracial	15 (1.9)
Asian	13 (1.7)
Native American	5 (0.6)
Other	6 (0.8)
Marital status	
Single	409 (52.2)
Married	333 (45.5)
Divorced	37 (4.7)
Widowed	3 (0.4)
National Athletic Trainers' Association district	
1. (CT, ME, MA, NH, RI, VT)	62 (7.9)
2. (DE, NJ, NY, PA)	91 (11.6)
3. (DC, MD, NC, SC, VA, WV)	100 (12.8)
4. (IL, IN, MI, MN, OH, WI)	157 (20.1)
5. (IA, KS, MO, NE, ND, OK, SD)	96 (12.3)
6. (AR, TX)	51 (6.5)
7. (AZ, CO, NM, UT, WY)	36 (4.6)
8. (CA, HI, NV, Guam, American Samoa)	68 (8.7)
9. (AL, FL, GA, KY, LA, MS, TN, Puerto Rico, Virgin Islands)	87 (11.1)
10. (AK, ID, MT, OR, WA)	32 (4.1)
Level of Competition	
NCAA Division I	296 (37.8)
NCAA Division II	143 (18.3)
NCAA Division III	189 (24.1)
National Association of Intercollegiate Athletics	70 (8.9)
National Junior College Athletic Association	63 (8)
Other	21 (2.7)
Salary, \$	
<20 000	38 (4.9)
20 000–29 999	25 (3.2)
30 000–39 999	147 (18.8)
40 000–49 999	236 (30.1)
50 000–59 999	167 (21.3)
60 000–69 999	65 (8.3)
70 000–79 999	51 (6.5)
80 000–89 999	23 (2.9)
90 000–99 999	13 (1.7)
>100 000	14 (1.8)

Abbreviation: NCAA, National Collegiate Athletic Association.

and intention to leave the profession ( $B = -0.058$ ,  $P < .001$ ; 95% CI =  $-0.07$ ,  $-0.05$ ). Increases in existential well-being ( $B = -0.023$ ,  $P < .001$ ; 95% CI =  $-0.033$ ,  $-0.013$ ) and PRC methods ( $B = -0.024$ ,  $P = .018$ ; 95% CI =  $-0.044$ ,  $-0.004$ ) were also linked to a decrease in binge-drinking frequency. Finally, a Poisson regression showed that existential well-being ( $\text{Exp}[B] = 0.970$ ,  $P = .035$ ; 95% CI =  $0.944$ ,  $0.998$ ) and religious well-being ( $\text{Exp}[B] = 0.960$ ,  $P = .003$ ; 95% CI =  $0.935$ ,  $0.986$ ) were protective factors against marijuana use. Another Poisson regression demonstrated that PRC ( $\text{Exp}[B] = 0.969$ ,  $P = .024$ ; 95% CI =  $0.943$ ,  $0.996$ ) was a protective factor against energy-drink use, whereas NRC ( $\text{Exp}[B] = 1.041$ ,  $P = .028$ ; 95% CI =  $1.004$ ,  $1.079$ ) was a

risk factor for energy-drink use. A summary of these analyses can be found in Tables 4–7.

## Mediation

In every instance that a personality variable was associated with a variable that was also associated with another variable (15), a test of mediation was performed. Due to the large number of mediation analyses performed, only those that produced significant results (3) are described in detail (Table 8). The mediation effect of existential well-being on social support's relationship with emotional exhaustion resulted in a decrease in the unstandardized coefficient from  $B = -0.270$  ( $P < .001$ ) to  $B = -0.048$  ( $P = .132$ ). The mediation effect of existential well-being on personal accomplishment predicting binge drinking resulted in a decrease in the unstandardized coefficient from  $B = -0.022$  ( $P < .001$ ) to  $B = -0.006$  ( $P = .377$ ). Finally, the mediation effect of existential well-being on emotional exhaustion's relationship with binge drinking resulted in a decrease in the unstandardized coefficient from  $B = 0.012$  ( $P < .001$ ) to  $B = 0.003$  ( $P = .479$ ).

## Moderation

Of the 15 models tested for mediation, 12 did not yield significant results. These models were then tested for moderation, which yielded 1 significant result (Table 9). In an analysis of the moderation effect of existential well-being on personal accomplishment predicting emotional exhaustion, the unstandardized coefficient for both existential well-being and personal accomplishment changed slightly from step 1 to step 2 of the model, but the interaction effect of these 2 variables yielded significant results when included in step 2 ( $B = -0.014$ ,  $P = .036$ ; 95% CI =  $-0.028$ ,  $-0.001$ ). From step 1 to step 2, explained variance in the model changed from  $R^2 = 0.318$  to  $R^2 = 0.322$ , and the F value of the model increased by 4.394 when the interaction effect was included ( $P = .036$ ).

## DISCUSSION

To our knowledge, we offer the first published study to examine spiritual well-being in collegiate ATs. This makes it difficult to compare our findings with the previous literature. The average score for existential well-being in our sample was comparable with the scores of counselors and psychotherapists,<sup>23</sup> but the average score for religious well-being in our sample was nearly 43% higher.

## Spiritual Well-Being and Situational Variables

We found that existential well-being influenced several situational variables. Existential well-being was a significant negative predictor of both forms of work-family conflict, regardless of the definition of *family*. We believe this is the first published investigation examining the relationship between existential well-being and work-family conflict in health care professionals. Lambert and Dollahite<sup>37</sup> observed that married couples who had a “shared secret vision or purpose” were able to prevent conflict and reduce marital stress. As existential well-being speaks to one's sense of purpose, this could possibly explain the relationship between it and work-family

**Table 2. Survey Instrument Results**

Questionnaire Component	Scale or Subscale	Scale Range	Score, Mean $\pm$ SD (Range)
Spiritual Well-Being Scale	Existential Well-Being	10–60	48.1 $\pm$ 7.8 (22–60)
	Religious Well-Being	10–60	43.1 $\pm$ 13.8 (10–60)
Brief RCOPE	Positive Religious Coping	0–21	9.3 $\pm$ 7.0 (0–21)
	Negative Religious Coping	0–21	1.6 $\pm$ 2.7 (0–20)
Work-Family Conflict	Scale A <sup>a</sup>	5–35	25.5 $\pm$ 7.1 (5–35)
	Scale B <sup>b</sup>	5–35	25.8 $\pm$ 7.2 (5–35)
Multidimensional Scale of Perceived Social Support		12–84	67.1 $\pm$ 13.2 (12–84)
Maslach Burnout Inventory	Emotional Exhaustion	0–54	23.7 $\pm$ 11.9 (0–53)
	Depersonalization	0–30	7.7 $\pm$ 5.9 (0–27)
	Personal Accomplishment	0–48	38.9 $\pm$ 6.3 (13–48)

<sup>a</sup> Scale A defined *family* as “a spouse and/or children.”

<sup>b</sup> Scale B defined *family* as “other close relatives.”

conflict. However, this idea needs to be further verified via an assessment of the existential well-being of the spouses or partners of our participants. Other factors must also significantly influence the perceptions of work-family conflict in collegiate ATs because our model explained only approximately 6% of the variance in each work-family conflict scale. These factors may include additional work responsibilities outside of athletic training or extenuating circumstances at home (eg, caring for a sick family member).

Our results suggested that existential well-being was positively correlated with social support. These results agree with those of Lambert and Dollahite<sup>37</sup> but only in terms of social support from significant others. Having individuals with similar ideals in one’s social network may make it easier to rely on those persons in times of trouble.

Fall and spring workloads (as measured by the average hours of work per week) were significantly associated with existential well-being. To our knowledge, we are the first to evaluate the relationship between hours worked and existential well-being in health care professionals. Those who work less may be able to engage more in spiritual

practices, thereby increasing their existential well-being. Future researchers should further examine this relationship to determine which variable is causal. Given that our model explained only approximately 3% of the variance in the fall and spring workload, investigators should also explore this relationship. Other factors (eg, nature of work, in season versus out of season) likely contribute to workload and influence the relationship between existential well-being and workload.

Existential well-being was positively correlated with salary in our sample. This relationship has not been assessed in previous literature. Those with a higher salary may be more inclined to believe they are fulfilling their purpose in life, as their monetary concerns are more assuaged than those with a smaller salary. Although these variables were significantly associated, the model explained only 2% of the variance.

### Spiritual Well-Being and Burnout

Existential well-being was correlated with all 3 burnout subscales (ie, emotional exhaustion, depersonalization,

**Table 3. Substance Use and Intention to Leave the Profession Demographics, No. (%)<sup>a</sup>**

Answer	Binge Drinking	Marijuana	Smokeless Tobacco	Energy Drink	Cigarettes	Intention to Leave the Profession
Never	418 (53.4)	750 (95.8)	741 (94.6)	602 (76.9)		
1–2	208 (26.6)	12 (1.5)	6 (0.8)	76 (9.7)		
3–5	92 (11.7)	4 (0.5)	6 (0.8)	38 (4.9)		
6–9	37 (4.7)	1 (0.1)	3 (0.4)	18 (2.3)		
10–19	21 (2.7)	4 (0.5)	0 (0.0)	24 (3.1)		
20–39	4 (0.5)	2 (0.3)	7 (0.9)	18 (2.3)		
40+	1 (0.1)	5 (0.6)	18 (2.3)	5 (0.6)		
Not at all					769 (98.2)	
<1 cigarette/d					6 (0.8)	
1–5 cigarettes/d					4 (0.5)	
About one-half pack/d					1 (0.1)	
Strongly disagree						304 (40.2)
Disagree						155 (20.5)
Neutral						157 (20.8)
Agree						98 (12.5)
Strongly agree						42 (5.6)

<sup>a</sup> Answers to questions on binge drinking, marijuana, smokeless tobacco, and energy drink referred to use in the past 30 days.

**Table 4. Spiritual Well-Being and Religious Coping Predicting Situational Variables**

Variable	Value			Adjusted $R^2$
	B	$\beta$	$t$	
Work-Family Conflict Scale A <sup>a</sup>				0.057
Existential well-being	-0.238	-0.261	-6.596 <sup>c</sup>	
Religious well-being	0.027	0.054	0.797	
Positive religious coping	0.021	0.021	0.303	
Negative religious coping	-0.015	-0.006	-0.142	
Work-Family Conflict Scale B <sup>b</sup>				0.060
Existential well-being	-0.237	-0.253	-6.446 <sup>c</sup>	
Religious well-being	0.001	0.002	0.028	
Positive religious coping	0.077	0.073	1.073	
Negative religious coping	0.062	0.022	0.573	
Social support				0.187
Existential well-being	0.709	0.423	11.561 <sup>c</sup>	
Religious well-being	0.019	0.020	0.322	
Positive religious coping	-0.063	-0.034	-0.533	
Negative religious coping	-0.249	-0.051	-1.391	
Salary				0.014
Existential well-being	0.026	0.112	2.801 <sup>d</sup>	
Religious well-being	0.002	0.012	0.177	
Positive religious coping	-0.008	-0.029	-0.423	
Negative religious coping	-0.040	-0.058	-1.439	
Workload, fall				0.023
Existential well-being	-0.228	-0.151	-3.791 <sup>c</sup>	
Religious well-being	0.073	0.088	1.284	
Positive religious coping	-0.024	-0.014	-0.203	
Negative religious coping	0.214	0.047	1.178	
Workload, spring				0.028
Existential well-being	-0.240	-0.167	-4.200 <sup>c</sup>	
Religious well-being	0.071	0.089	1.299	
Positive religious coping	-0.028	-0.017	-0.251	
Negative religious coping	0.208	0.048	1.201	

<sup>a</sup> Scale A defined *family* as “a spouse and/or children.”

<sup>b</sup> Scale B defined *family* as “other close relatives.”

<sup>c</sup>  $P < .001$ .

<sup>d</sup>  $P < .01$ .

**Table 5. Spiritual Well-Being and Religious Coping Predicting Burnout Subscale**

Variable	Value			Adjusted $R^2$
	B	$\beta$	$t$	
Emotional exhaustion				0.268
Existential well-being	-0.827	-0.539	-15.450 <sup>a</sup>	
Religious well-being	0.021	0.025	0.424	
Positive religious coping	0.142	0.083	1.382	
Negative religious coping	-0.012	-0.003	-0.079	
Depersonalization				0.166
Existential well-being	-0.328	-0.429	-11.612 <sup>a</sup>	
Religious well-being	0.001	0.003	0.044	
Positive religious coping	0.069	0.080	1.252	
Negative religious coping	-0.037	-0.017	-0.448	
Personal accomplishment				0.199
Existential well-being	0.380	0.470	12.892 <sup>a</sup>	
Religious well-being	-0.052	-0.116	-1.863	
Positive religious coping	0.033	0.037	0.577	
Negative religious coping	0.021	0.009	0.248	

<sup>a</sup>  $P < .001$ .

**Table 6. Spiritual Well-Being and Religious Coping Predicting Binge Drinking and Intention to Leave the Profession**

Variable	Value			Adjusted $R^2$
	B	$\beta$	$t$	
Binge drinking				0.067
Existential well-being	-0.023	-0.539	-4.362 <sup>a</sup>	
Religious well-being	-0.001	0.025	-0.237	
Positive religious coping	-0.024	0.083	-2.375 <sup>b</sup>	
Negative religious coping	0.004	-0.003	0.286	
Intention to leave the profession				0.112
Existential well-being	-0.058	-0.353	-9.195 <sup>a</sup>	
Religious well-being	0.001	0.013	0.194	
Positive religious coping	0.011	0.058	0.880	
Negative religious coping	-0.003	-0.006	-0.143	

<sup>a</sup>  $P < .001$ .

<sup>b</sup>  $P < .05$ .

decreased sense of personal accomplishment) in our sample. These results agree with those in an earlier study of counselors.<sup>23</sup> Contrary to previous work,<sup>14</sup> PRC and NRC were not correlated with any of the burnout subscales in our sample. Because existential well-being is concerned with life satisfaction, a person who is more satisfied with life and has a greater sense of purpose may be less likely to report the negative symptoms of burnout.

### Spiritual Well-Being and Coping Behaviors

Further analysis of the model showed that existential well-being was negatively correlated with one's intention to leave the profession of athletic training. These results agree with those of earlier authors<sup>21</sup> who examined religiosity and turnover intentions in various occupations. Athletic trainers

**Table 7. Spiritual Well-Being and Religious Coping Predicting Other Substance Use<sup>a</sup>**

Variable	B	SE	Exp(B)	Wald $\chi^2$
Cigarettes				
Existential well-being	-0.061	0.034	0.941	3.150
Religious well-being	0.004	0.034	1.004	0.014
Positive religious coping	-0.042	0.072	0.959	0.345
Negative religious coping	-0.056	0.119	0.945	0.223
Smokeless tobacco				
Existential well-being	0.022	0.027	1.022	0.628
Religious well-being	-0.021	0.025	0.979	0.686
Positive religious coping	-0.002	0.056	0.998	0.001
Negative religious coping	0.097	0.063	1.102	2.371
Marijuana				
Existential well-being	-0.030	0.014	0.970	4.428 <sup>b</sup>
Religious well-being	-0.040	0.014	0.960	8.767 <sup>c</sup>
Positive religious coping	-0.040	0.036	0.960	1.266
Negative religious coping	-0.080	0.063	0.923	1.614
Energy drinks				
Existential well-being	-0.012	0.007	0.988	3.174
Religious well-being	0.006	0.007	1.006	0.831
Positive religious coping	-0.031	0.014	0.969	5.112 <sup>b</sup>
Negative religious coping	0.040	0.018	1.041	4.836 <sup>b</sup>

<sup>a</sup> The cigarettes, marijuana and energy-drink analyses used a Poisson regression. The smokeless-tobacco analysis used a binary logistic regression.

<sup>b</sup>  $P < .05$ .

<sup>c</sup>  $P < .01$ .



**Table 8. Mediation Analyses**

Variable	Value			Adjusted $R^2$
	B	$\beta$	$t$	
Emotional exhaustion				0.072
Social support	-0.244	-0.270	-7.717 <sup>a</sup>	
Emotional exhaustion				0.268
Social support	-0.048	-0.052	-1.509	
Existential well-being	-0.751	-0.495	-14.238 <sup>a</sup>	
Binge drinking				0.015
Personal accomplishment	-0.022	-0.128	-3.569 <sup>a</sup>	
Binge drinking				0.049
Personal accomplishment	-0.006	-0.035	-0.833	
Existential well-being	-0.029	-0.208	-5.190 <sup>a</sup>	
Binge drinking				0.016
Emotional exhaustion	0.012	0.131	3.648 <sup>a</sup>	
Binge drinking				0.049
Emotional exhaustion	0.003	0.029	0.708	
Existential well-being	-0.028	-0.2010	-5.047 <sup>a</sup>	

<sup>a</sup>  $P < .001$ .

with a greater sense of existential well-being would be less likely to leave the profession as they may view their career as a calling.

Existential well-being and use of positive religious coping techniques were protective factors against heavy episodic drinking, which was in agreement with previous research.<sup>8</sup> Those with a stronger sense of life satisfaction may have less need to abuse substances such as alcohol to cope with their problems. The same logic can be applied to those who are more likely to use positive religious coping techniques, as these individuals rely on religious acts rather than alcohol to manage their stress.

Existential well-being and religious well-being were both protective factors against marijuana use in our sample. This supports earlier findings.<sup>38</sup> Many religions view the body as dear and therefore disapprove of the use of illicit drugs that may harm it,<sup>39</sup> so an inverse relationship between religious well-being and marijuana use is logical. A stronger sense of purpose and life satisfaction may also lead to less need for illicit substances to cope with stress.

Positive religious coping methods were a protective factor against energy-drink use, while negative religious coping methods were a risk factor for energy-drink use. We believe we are the first to evaluate this relationship. Individuals who use positive religious coping methods may be more likely to believe that the harmful side effects of energy drinks outweigh the benefits. Those who use more negative religious coping techniques may be less inclined to view their body as sacred and therefore ignore the potential risks.

## Mediation

After controlling for existential well-being, we determined that social support was no longer significantly associated with emotional exhaustion. In conjunction with another analysis that established a relationship between existential well-being and social support, this new model suggests that the relationship between social support and emotional exhaustion is partially mediated by existential

**Table 9. Moderation Analysis**

Variable	Value			Adjusted $R^2$
	B	$\beta$	$t$	
Emotional exhaustion				0.316
Existential well-being	-0.598	-0.393	11.466 <sup>a</sup>	
Personal accomplishment	-0.497	-0.264	-7.710 <sup>a</sup>	
Emotional exhaustion				0.319
Existential well-being	-0.607	-0.398	-11.623 <sup>a</sup>	
Personal accomplishment	-0.528	-0.281	-8.002 <sup>a</sup>	
Existential well-being $\times$ personal accomplishment	-0.014	-0.067	-2.096 <sup>b</sup>	

<sup>a</sup>  $P < .001$ .

<sup>b</sup>  $P < .05$ .

well-being. Our study is the first to assess this relationship in health care professionals. Our findings suggested that existential well-being was more important than social support in the management of burnout.

Although both personal accomplishment and emotional exhaustion appeared to be contributing factors for binge-drinking behaviors, they were insignificant when controlling for existential well-being. These results indicated that existential well-being was a partial mediator in the relationship between these burnout subscales and binge drinking. Previous authors<sup>10</sup> who explored substance use and burnout in health care professionals did not include spiritual well-being variables in their data collection or analysis, which makes our work unique. This would suggest that burnout itself is not a direct contributor to one's risk of engaging in heavy episodic drinking. Rather, the relationship between these 2 burnout subscales and binge drinking is largely explained by their relationship with existential well-being. We admit that other factors besides spiritual well-being must contribute to one's risk of binge drinking, as the model that used all spiritual variables as independent variables explained only 7.2% of the variance in binge drinking in our sample.

## Moderation

Existential well-being moderated the relationship between personal accomplishment and emotional exhaustion in our participants, results that are unique to the literature. A greater sense of purpose and life satisfaction may protect an individual from feelings of decreased accomplishment, which would in turn lead to less emotional exhaustion.

## Limitations and Future Directions

Our research had several limitations. The response rate for our survey was 11.4%, which is somewhat low. This may have increased the risk of selection bias. It is possible that those suffering the most from burnout felt too overworked to complete a survey. The amount of time required to complete the survey may have discouraged participation or caused some to begin but not finish the survey. It is also possible that some potential participants did not take the survey based on the title. However, our sample size was still larger than that of a previous study<sup>36</sup> of ATs using the Smith model, and our sample was representative of collegiate ATs in terms of gender, ethnicity, and geographical location. Because we used the

NATA membership directory, access to the survey depended on the current contact information available to the NATA. Any former ATs who had already left the profession could not be reached. Also, because our survey asked questions about substance use, social desirability may have affected the responses. We attempted to control for this by not collecting identifying information such as name, address, phone number, or email address from our participants.

Due to the cross-sectional nature of our investigation, we were unable to infer causality from any of our statistical analyses. Because we collected data only from collegiate ATs to maintain the homogeneity of the sample, our results may only be generalizable to collegiate ATs. Because we used and modified only 1 item from the Intention to Leave scale to assess intention to leave the profession, we acknowledge that we did not assess other aspects of intention to leave that this scale would normally address (eg, leaving one's current job but staying in the profession). Any reported results for that item should be interpreted while considering this limitation. Some participants reported not having a spouse, a child, or either. This would have affected their responses to the work-family conflict scale, which defined *family* as such. After dividing the sample into those with both a spouse and children, either a spouse or children, or neither, we found that the group mean scores for work-family conflict did not differ from the overall mean score by more than 5%. Furthermore, work-family conflict in each group was still significantly associated with emotional exhaustion, personal accomplishment, and existential well-being. Many items in the original form of the Brief RCOPE (which we selected) use the term *God*. These items may have alienated participants who did not believe in God, whether they believed in any higher powers at all.

Future researchers should continue to evaluate the effects of spiritual well-being and religious coping techniques on burnout in ATs. Specifically, it would be beneficial to characterize spiritual well-being as it relates to burnout and work-family conflict from a longitudinal perspective, following ATs throughout their various sport seasons. Such work would provide a better understanding of the influence of spiritual well-being on the overall well-being of ATs.

## CONCLUSIONS

Our study indicated that existential well-being may serve a role in managing burnout symptoms. Although spiritual well-being and its effects on collegiate ATs have not received adequate attention in the literature, we determined that existential well-being was a protective factor against work-family conflict, emotional exhaustion, depersonalization, decreased sense of personal accomplishment, binge drinking, and intention to leave the profession. We also demonstrated that existential well-being was positively correlated with perceived social support. Further analyses revealed that existential well-being served a mediating role in several relationships, specifically those between social support and emotional exhaustion, personal accomplishment and binge drinking, and emotional exhaustion and binge drinking. Our results also suggest that existential well-being was a moderator in the relationship between personal accomplishment and emotional exhaustion. The use of practices to improve spiritual well-being in

collegiate ATs may promote better health outcomes for these professionals, which may in turn result in fewer ATs leaving the profession and better outcomes for patients. Therefore, a greater emphasis on the spiritual well-being of collegiate ATs, both in awareness of and improvement in one's own spiritual well-being, is warranted. As spiritual well-being is a concept that can vary greatly from person to person, this process must begin with each individual rather than with the organization.

## ACKNOWLEDGMENTS

We acknowledge Jeff Levin, PhD, for his contributions to this research.

## REFERENCES

1. National Interfaith Coalition on Aging. *Spiritual Well-Being: A Definition*. Athens, GA: National Interfaith Coalition on Aging; 1975.
2. Ellison CW. Spiritual well-being: conceptualization and measurement. *J Psychol Theol*. 1983;11(4):330–340.
3. Reed PG. Religiousness among terminally ill and healthy adults. *Res Nurs Health*. 1986;9(1):35–41. doi:10.1002/nur.4770090107
4. Edmondson KA, Lawler KA, Jobe RL, Younger JW, Piferi RL, Jones WH. Spirituality predicts health and cardiovascular responses to stress in young adult women. *J Relig Health*. 2005;44(2):161–171. doi:10.1007/s10943-005-2774-0
5. Reed S, Giacobbi PR II. The stress and coping responses of certified graduate athletic training students. *J Athl Train*. 2004;39(2):193–200.
6. Ross CE. Religion and psychological distress. *J Sci Study Relig*. 1990;29(2):236–245. doi:10.2307/1387431
7. Pargament KI, Smith BW, Koenig HG, Perez L. Patterns of positive and negative religious coping with major life stressors. *J Sci Study Relig*. 1998;37(4):710–724. doi:10.2307/1388152
8. Martin RA, Ellingsen VJ, Tzilos GK, Rohsenow DJ. General and religious coping predict drinking outcomes for alcohol dependent adults in treatment. *Am J Addict*. 2015;24(3):240–245. doi:10.1111/ajad.12181
9. Maslach C. *Burnout: The Cost of Caring*. Prentice-Hall; 1982.
10. Oreskovich MR, Shanafelt T, Dyrbye LN, et al. The prevalence of substance use disorders in American physicians. *Am J Addict*. 2015;24(1):30–38. doi:10.1111/ajad.12173
11. Capel SA. Psychological and organizational factors related to burnout in athletic trainers. *Res Q Exerc Sport*. 1986;57(4):321–328. doi.org/10.1080/02701367.1986.10608093
12. Charoensukmongkol P, Moqbel M, Gutierrez-Wirsching S. The role of co-worker and supervisor support on job burnout and job satisfaction. *J Adv Manage Res*. 2016;13(1):4–22. doi:10.1108/JAMR-06-2014-0037
13. Losa Iglesias ME, Becerro de Bengoa Vallejo R, Salvadores Fuentes P. The relationship between experiential avoidance and burnout syndrome in critical care nurses: a cross-sectional questionnaire survey. *Int J Nurs Stud*. 2010;47(1):30–37. doi:10.1016/j.ijnurstu.2009.06.014
14. Shin H, Park YM, Ying JY, Kim B, Noh H, Lee SM. Relationships between coping strategies and burnout symptoms: a meta-analytic approach. *Prof Psychol Res Pr*. 2014;45(1):44–56. doi:10.1037/a0035220
15. Mazerolle SM, Eason CM, Goodman A. Exploring summer medical care within the National Collegiate Athletic Association Division I setting: a perspective from the athletic trainer. *J Athl Train*. 2016;51(2):175–183. doi.org/10.4085/1062-6050-51.3.03
16. Capel SA. Attrition of athletic trainers. *Athl Train J*. 1990;25:34–39.

17. Mazerolle SM, Bruening JE, Casa DJ, Burton LJ. Work-family conflict, part II: job and life satisfaction in National Collegiate Athletic Association Division I-A certified athletic trainers. *J Athl Train*. 2008;43(5):513–522. doi:10.4085/1062-6050-43.5.513
18. Oglesby LW, Gallucci AR, Wynveen CJ, Ylitalo KR, Benson NF. Burnout and substance use in collegiate athletic trainers. *J Athl Train*. 2020;55(7):744–751. doi:10.4085/1062-6050-178-19
19. DeFreese JD, Mihalik JP. Work-based social interactions, perceived stress, and workload incongruence as antecedents of athletic trainer burnout. *J Athl Train*. 2016;51(1):28–34. doi:10.4085/1062-6050-51.2.05
20. Campbell D, Miller M, Robinson W. The prevalence of burnout among athletic trainers. *Athl Train J*. 1985;20:110–113.
21. Olowookere EI, Adekeye OA, Adejumo GO, Agoha BC, Sholarin MA. Influence of religiosity on turnover intention: empirical evidence from selected employees in Lagos and Ogun states. *IFE Psychologia*. 2016;24(2):132–138.
22. Smith RE. Toward a cognitive affective model of athletic burnout. *J Sport Exerc Psychol*. 1986;8(1):36–50. doi:10.1123/jsp.8.1.36
23. Hardiman P, Simmonds JG. Spiritual well-being, burnout and trauma in counsellors and psychotherapists. *Ment Health Relig Cult*. 2013;16(10):1044–1055. doi:10.1080/13674676.2012.732560
24. Parenteau SC. Religious coping and substance use: the moderating role of sex. *J Relig Health*. 2017;56(2):380–387. doi:10.1007/s10943-015-0166-7
25. Pargament K, Feuille M, Burdzy D. The brief RCOPE: current psychometric status of a short measure of religious coping. *Religions (Basel)*. 2011;2(1):51–76. doi:10.3390/rel2010051
26. Netemeyer RG, Boles JS, McMurrian R. Development and validation of work-family conflict and family-work conflict scales. *J Appl Psychol*. 1996;81(4):400–410. doi:10.1037/0021-9010.81.4.400
27. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. *J Pers Assess*. 1988;52(1):30–41. doi:10.1207/s15327752jpa5201\_2
28. Maslach C, Jackson SE. *Maslach Burnout Inventory: Manual*. Consulting Psychologists Press; 1986.
29. Terranova AB, Henning JM. National Collegiate Athletic Association division and primary job title of athletic trainers and their job satisfaction or intention to leave athletic training. *J Athl Train*. 2011;46(3):312–318. doi:10.4085/1062-6050-46.3.312
30. Johnston LD, O'Malley PM, Miech RA, Bachman JG, Schulenberg JE. Monitoring the future national survey results on drug use, 1975–2015: overview, key findings on adolescent drug use. Ann Arbor: Institute for Social Research, University of Michigan; 2016. ERIC database. <https://files.eric.ed.gov/fulltext/ED578539.pdf>. Accessed September 30, 2020.
31. Paloutzian R, Ellison C. Loneliness, spiritual well-being and the quality of life. In: Peplau LA, Perlman D, eds. *Loneliness: A Sourcebook of Current Theory, Research, and Therapy*. Wiley; 1982.
32. Pitney WA, Mazerolle SM, Pagnotta KD. Work-family conflict among athletic trainers in the secondary school setting. *J Athl Train*. 2011;46(2):185–193. doi:10.4085/1062-6050-46.2.185
33. Kazarian SS, McCabe SB. Dimensions of social support in the MSPSS: factorial structure, reliability, and theoretical implications. *J Community Psychol*. 1991;19(2):150–160. doi:10.1002/1520-6629(199104)19:2<150::AID-JCOP2290190206>3.0.CO;2-J
34. Baron RM, Kenny DA. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *J Pers Soc Psychol*. 1986;51(6):1173–1182. doi:10.1037//0022-3514.51.6.1173
35. March 2018 NATA membership by job setting. National Athletic Trainers' Association Web site. <https://members.nata.org/members1/documents/membstats/2018-03.htm>. Updated 2018. Accessed April 13, 2018.
36. Kania ML, Meyer BB, Ebersole KT. Personal and environmental characteristics predicting burnout among certified athletic trainers at National Collegiate Athletic Association institutions. *J Athl Train*. 2009;44(1):58–66. doi:10.4085/1062-6050-44.1.58
37. Lambert NM, Dollahite DC. How religiosity helps couples prevent, resolve, and overcome marital conflict. *J Fam Relat*. 2006;55(4):439–449. doi:10.1111/j.1741-3729.2006.00413.x
38. Palamar JJ, Kiang MV, Halkitis PN. Religiosity and exposure to users in explaining illicit drug use among emerging adults. *J Relig Health*. 2014;53(3):658–674. doi:10.1007/s10943-012-9660-3
39. Herman-Kinney NJ, Kinney DA. Sober as deviant: the stigma of sobriety and how some college students “stay dry” on a “wet” campus. *J Contemp Ethnogr*. 2013;42(1):64–103. doi:10.1177/0891241612458954

---

Address correspondence to Leslie W. Oglesby, PhD, LAT, ATC, School of Health Professions, University of Southern Mississippi, 118 College Drive No. 5122, Hattiesburg, MS 39406. Address email to Leslie.Oglesby@usm.edu.