

An Examination of Relationships Among Resiliency, Hardiness, Affectivity, and Work-Life Balance in Collegiate Athletic Trainers

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Context: A multilevel model has been used to describe the complex nature of work-life balance in sport organizations. Organizational aspects such as work scheduling, hours worked, job demands, and decreased perceived value have been reported as factors that can positively or negatively affect work-life balance. However, the individual factors that contribute to this balance have not been well studied.

Objective: To better understand the individual factors (emotional stability and coping) that may facilitate or inhibit work-life balance among athletic trainers (ATs).

Design: Cross-sectional online survey.

Setting: National Collegiate Athletic Association athletic training setting.

Patients or Other Participants: A total of 423 (193 men, 230 women) ATs employed in the National Collegiate Athletic Association setting.

Main Outcome Measure(s): Data were collected via a Web-based survey instrument consisting of demographic and Likert-scale questions related to resiliency, hardiness, affectivity, work-family conflict (WFC), and work-family enrichment (WFE).

Likert responses were summed and demographic information was analyzed for frequency and distribution. Independent *t* tests, analysis of variance, and Spearman correlations were calculated to evaluate the relationships among variables.

Results: Participants exhibited moderate hardiness scores of 3.9 ± 4.0 (range, –9 to 15). Positive affectivity was weakly negatively correlated with WFC ($r = -0.212$, $P < .001$) and moderately positively correlated with WFE ($r = 0.448$, $P < .001$). Resiliency was weakly negatively correlated with WFC ($r = -0.25$, $P < .001$) and weakly positively correlated with WFE ($r = 0.228$, $P < .001$). Additionally, individuals with less than 10 years of experience had lower positive affectivity scores than those with more than 10 years of experience. Men scored higher than women only in resiliency.

Conclusions: Collegiate ATs demonstrated moderate levels of coping behaviors that allow them to manage their personal and professional lives. Athletic trainers with more years of experience displayed a more positive affect.

Key Words: coping strategies, quality of life, role balance

Key Points

- Athletic trainers employed in the collegiate setting demonstrated positive coping behaviors, which positively influenced their work-life balance.
- Athletic trainers with more years of experience displayed a positive affect, and male ATs self-reported more resiliency.

Work-life balance has become a central focus for athletic trainers (ATs)¹ and others employed in the collegiate practice setting,^{2–4} as the work environment has been described as demanding, with high expectations that are often unyielding.^{4,5} Furthermore, a failure to maintain work-life balance had a negative effect on professional and personal satisfaction.² Work-life balance is a construct that is rooted in the idea that a person can find harmony and satisfaction in all the roles he or she assumes. However, it was negatively affected in those working in the collegiate setting.^{3–6} Conflict arises when the time and demands required of multiple roles outweigh the resources available for the individual to balance each role. Experts have considered that the theory of conflict once proposed by Goode⁷ assumes an individual cannot find balance. Yet Greenhaus and Powell⁸ suggested

that balance can occur, and in fact, engagement in multiple roles can facilitate work-life balance as one gains strengths from each role and performs better in the other roles as a result. The premise that enrichment can facilitate balance has been coined the *work-life enrichment theory*, whereby work and home are viewed as allies.

For ATs, the primary inhibitor of work-life balance is the time commitment of approximately 60 hours per week during the competitive sport season.⁴ Work schedules that are excessive, inflexible, and nontraditional^{5,9} have been documented as organizational inhibitors to work-life balance. Despite this, organizational factors appear to influence men and women differently: men have reported lower levels of burnout despite working more hours than their women counterparts.¹⁰

Although researchers have focused on organizational aspects that inhibit an individual from finding work-life balance, it seems that other factors also affect the work-life interface. Dixon and Bruening¹¹ suggested that, to fully appreciate work-life balance, other factors must be examined, including individual characteristics and socio-cultural factors. Individual characteristics including sex, relationship and family status, and personality have been discussed as playing roles in a person's level of work-life balance.^{6,9,12} Working professionals who were women, part of dual-earning couples, and parents seemed to struggle more with finding work-life balance.^{13–15} Individuals who were neurotic (ie, emotionally unstable) and demonstrated ineffective coping strategies (ie, low hardiness and resiliency) were also at risk for increased levels of imbalance; the insinuation was that they were unable to manage the time constraints and demands of the various roles they assumed.^{16,17} In fact, individuals who demonstrated higher levels of neuroticism presented with higher levels of distress as they used maladaptive coping behaviors and displayed a more negative appraisal of stress and the daily challenges of life.¹⁷

The growing literature offers an understanding of the organizational factors that influence an AT's work-life balance; however, a dearth of information exists on the effects of individual factors. Emotional stability and *affect* (ie, one's emotional response to stress) are primary dimensions of personality that have been linked to work-life balance.¹⁸ Emotional stability and affect speak to one's behaviors on an emotional level.¹⁶ Hardiness and resiliency are linked to stress, adversity, and coping, whereby individuals who demonstrate higher levels of the former are likely to overcome the stresses of everyday life. The ability to do so will likely reduce conflicts when managing the demands and expectations of their personal and professional roles. Hardiness and resiliency are also grounded in behavioral responses, which are mostly founded on one's ability to bounce back and adapt to stress.¹⁶ Some evidence in the athletic training literature relates to these constructs and experiences of job burnout,^{19,20} but they need to be examined in association with work-life balance. Moreover, mindset and affectivity may also provide insights into the perceptions and experiences of conflict, primarily due to previous findings⁶ that indicated the emotional response to stress can mediate the relationship between conflict and balance.

The purpose of our study was to examine whether certain individual-level factors can influence the work-life balance of collegiate ATs. We selected resiliency, hardiness, and affectivity as factors to examine, as they are most closely aligned with coping and stress management.¹⁶ As part of this cross-sectional study, we also sought to profile the collegiate AT in regard to resiliency, hardiness, and affectivity. Additionally, because sex is an individual-level factor, we wanted to determine if any sex differences existed between our variables. Our specific hypotheses for this study were

Hypothesis 1: Athletic trainers who are resilient and hardy and have positive affectivity will have lower levels of work-life conflict.

Hypothesis 2: Athletic trainers who are resilient and hardy and have positive affectivity will have a higher level of work-family enrichment.

Hypothesis 3: Athletic trainers with 10 years or more of experience will exhibit higher levels of resiliency, hardiness, and positive affectivity than ATs with less than 10 years of experience.

Hypothesis 4: No sex differences will be present among our variables.

METHODS

Study Design

For our cross-sectional study, we used an online survey (Qualtrics, Provo, UT) to examine the individual factors of resiliency, hardiness, and affectivity among ATs in the collegiate practice setting as well as the relationship those factors have with work-life conflict and enrichment. The institutional review board approved our study before data collection. Completion of the survey was considered informed consent.

Participants

A total of 423 (193 men [46%], 230 women [54%]) ATs employed at National Collegiate Athletic Association (NCAA) institutions completed our study. The inclusion criterion was full-time employment in the collegiate (NCAA Division I, II, III; National Association of Intercollegiate Athletics; or community college) clinical setting. Exclusion criteria were (1) employment outside the collegiate setting, (2) being a graduate assistant, (3) being a part-time employee, and (4) having a full-time academic appointment.

Procedures

After identifying the members in the collegiate practice setting who met our inclusion criteria, the National Athletic Trainers' Association Member Services Department generated a random sample of 3000 e-mails for us to contact. Of the 3000 addresses, 58 were invalid (e-mails were returned to the researchers because of invalid addresses). The invitation e-mail contained the Web link that navigated the participants to the survey in Qualtrics. The survey was live for a total of 30 days, and reminder e-mails were sent to all recruits at 14 and 21 days after the initial request for participation. Researchers e-mailed participants directly so that personal e-mails would not be linked to responses and confidentiality could be assured.

To avoid duplicate responses, settings were established in Qualtrics that allowed only 1 survey entry per Internet protocol address. At the end of our 30-day collection period, we reviewed all surveys for the inclusion criterion, completeness, and duplications. At the close of the data-collection period, 618 survey responses were recorded. All responses met the inclusion criterion, and no identical responses were present. A total of 195 replies were removed due to incomplete responses, resulting in 423 completed surveys.

Table 1. Individual Scales: Summary of Scores

Scale	Score Range	Meaning
Work-family conflict		
Total	10–70	↑ score indicates ↑ total work-family conflict
Work-to-family conflict	5–35	↑ score indicates ↑ work-to-family conflict
Family-to-work conflict	5–35	↑ score indicates ↑ family-to-work conflict
Work-family enrichment		
Total	6–30	↑ score indicates ↑ total work-family enrichment
Work-to-family enrichment	3–15	↑ score indicates ↑ work-to-family enrichment
Family-to-work enrichment	3–15	↑ score indicates ↑ family-to-work enrichment
Hardiness	–18–18	Low hardiness = <0, moderate hardiness = 0–9, hardy = 10–18
Resiliency	1–6	↑ score indicates > resiliency
Positive and Negative Affect Schedule		
Positive	10–50	↑ score indicates ↑ level of positive affect
Negative	10–50	↓ score indicates ↓ level of negative affect

Instrumentation

The survey instrument consisted of a demographic section and 5 scales to measure resiliency, hardiness, affectivity, work-life balance, and work-life enrichment. The demographic section gathered age, sex, race or ethnicity, years of experience, contract length, hours worked, and marital and family status. Upon completion of the background information, respondents completed 44 Likert-scale items pertaining to resiliency, hardiness, affectivity, work-family conflict (WFC), and work-family enrichment (WFE). The scoring range for each scale is shown in Table 1.

Resiliency

Resiliency was examined using the Brief Resilience Scale,²¹ a short-measure scale validated ($\alpha = .80-.91$) among several samples. The 6-item instrument measures resiliency using a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*) and questions 1, 3, and 5 are positively worded. Questions center on the respondent's ability to manage and cope with stress (ie, "I tend to bounce back quickly after hard times," "I have a hard time making it through stressful events").

Hardiness

We measured hardiness using a 12-item scale with strong internal consistency ($\alpha = .83$).²² The questionnaire measured hardiness on a 5-point Likert scale (0 = *strongly disagree*, 4 = *strongly agree*). Respondents were asked to rate their agreement with statements including "Trying my best at work makes a difference," "Trusting to fate is sometimes all I can do in a relationship," and "It bothers me when I have to deviate from the routine or schedule I have set for myself." Hardiness scores can be split into 3 categories. Individuals with a score <0 would be considered to have low hardiness. A score between 0 and 9 indicates moderate hardiness and a score >10 indicates an individual with a hardy personality.

Affectivity

To measure affectivity, we used two 10-item mood scales.²³ These scales are a valid assessment ($\alpha = .88$) tool of self-rated mood state, which includes both positive and

negative affects. Respondents are asked to rate on a 5-point Likert scale (1 = *very little*, 5 = *extremely*) how often they experienced each mood state on average. The items for positive affects include *enthusiastic, interested, determined, excited, inspired, alert, active, strong, proud, and attentive* and those for negative affects include *scared, afraid, upset, distressed, jittery, nervous, ashamed, guilty, irritable, and hostile*.

Work-Family Conflict

We used the validated, short-form of the WFC scale first developed by Netemeyer et al.²⁴ This scale has been used in athletic training research ($\alpha = .88-.90$) to assess the level of conflict experienced by the collegiate AT in balancing professional and personal roles.⁴⁻⁵ The 10-item instrument is bidirectional (family-work; work-family) and measured on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). Respondents were asked to indicate their level of agreement with items including "The demands of my work interfere with my home and family life," and "There is a conflict between my job and the commitment and responsibilities I have to my family."

Work-Family Enrichment

Using the short measure scale developed by Kacmar et al,²⁵ we assessed WFE. The reliability of this instrument ranges from 0.64 to 0.86.²⁵ The 6-item scale assesses the person's view of work-life balance from an amelioration perspective rather than a conflicting one.

Data Analysis

The independent variables derived from the survey responses were resiliency, hardiness, and positive affectivity scores. Our dependent variables were total WFE, work-to-family enrichment, family-to-work enrichment, total WFC, work-to-family conflict, and family-to-work conflict scores. We set the a priori level at $P < .05$. Data were downloaded from Qualtrics into an Excel (version 2016; Microsoft Corp, Redmond, WA) spreadsheet, which was then converted to an SPSS (version 22.0; IBM Corp, Armonk, NY) worksheet. Before analysis, responses were listwise deleted if the participant did not complete at least 75% of the survey instrument. All descriptive and significance testing was completed using SPSS.

Table 2. Demographic Data for Respondents (N = 423)

Demographic Information	No. (%)
Highest degree earned ^a	
Bachelor's	35 (8.3)
Master's	365 (86.3)
Doctorate	21 (5.0)
Contract length, mo	
9	27 (6.4)
10	88 (20.8)
11	20 (63.4)
12	268 (4.7)
Relationship status ^a	
Married	210 (49.8)
Single	187 (44.3)
Divorced	16 (3.8)
Separated	1 (0.2)
Other	8 (1.9)
Family status ^a	
No children	266 (63.2)
Children	155 (36.8)

^a Missing responses (n = 2).

To examine the normality of our variables, we ran a Kolmogorov-Smirnov test. Next, we calculated Spearman correlations (selected because the data were not normally distributed) on our independent variables to identify any relationships. Separate Mann-Whitney *U* tests were performed to identify differences in hardiness, resiliency, and positive affectivity based on years of work experience (dichotomized to <10 years or ≥10 years) and any sex differences between the independent variables or WFC and WFE. Additionally, we dichotomized resiliency (≤3.8 and >3.8) and positive affectivity (≤36 and >36) based on sample medians and conducted Mann-Whitney *U* tests to assess any differences in WFC and WFE and their subscores. Hardiness was separated into 3 groups, based on the literature: (1) low, (2) moderate, and (3) high. With 3 groups, we ran a Kruskal-Wallis test to determine the effect of hardiness on WFC and WFE and their subscales.

RESULTS

Demographics

After listwise deletion of incomplete survey responses, we included data from 423 participants, resulting in a 14% response rate. The average respondent age was 38 ± 10 (range, 23–68) years. Our respondents were certified by the Board of Certification for 14 ± 10 (range, 1–46) years and were employed by their current institution for 8 ± 8 (range, <1–37) years. All 10 National Athletic Trainers' Association districts were represented, with Districts 2 (n = 63, 14.9%), 4 (n = 89, 21.4%), and 9 (n = 48, 11.3%) having the largest representation. Participants worked 60 ± 14 hours per week providing in-season athletic training services, 46 ± 14 hours during their nontraditional season, and 22 ± 17 hours during the summer months. We present additional data in Table 2. Our participants' average hardiness score was 3.9 ± 4.0 (range, –9 to 15), indicating a moderate level.

Table 3. Independent Variable Correlations

Independent Variable	Resiliency	Hardiness	Positive Affectivity
Resiliency	1.000	0.446 ^a	0.304 ^a
Hardiness	0.446 ^a	1.000	0.456 ^a
Positive affectivity	0.304 ^a	0.456 ^a	1.000

^a Correlation is significant at the 0.01 level (2 tailed).

Independent and Dependent Variables

All of our independent variables were positively correlated with each other. Correlations are shown in Table 3. The average positive affectivity score was 35.5 ± 7.2 (range, 12 to 50), hardiness score was 3.9 ± 4.0 (–9 to 15), and resiliency score was 3.7 ± 0.7 (range, 1.5–5). We did not find specific cutoff values in the literature for positive affectivity or resiliency and therefore defined 35.5 as *moderate affect* (range, 10 to 50), and 3.7 as *moderate resiliency* (range, 1 to 6). We used the mean scores of our participants to set these ranges.

Hypothesis 1: ATs Who Are Resilient and Hardy and Have Positive Affectivity Will Have Lower Levels of Work-Life Conflict

The mean WFC scores for all participants can be found in Table 4. Statistically significant but weak negative relationships were noted between resiliency and total WFC score ($r = -0.25$, $P < .001$), work-to-family conflict subscore ($r = -0.185$, $P < .001$), and family-to-work conflict subscore ($r = -0.159$, $P < .001$). Additionally, statistically significant but weak relationships were present between positive affectivity and total WFC ($r = -0.212$, $P < .001$), work-to-family conflict subscore ($r = -0.218$, $P < .001$), and family-to-work conflict subscore ($r = -0.140$, $P < .001$).

Based on the Mann-Whitney *U* test, we concluded that participants with higher positive affectivity scores had lower total WFC scores ($U = 18499$, $P = .016$) and work-to-family conflict subscores ($U = 18596$, $P = .013$). Additionally, participants with higher positive affectivity had higher total WFE scores ($U = 15779$, $P < .001$), work-to-family enrichment subscores ($U = 16724$, $P < .001$), and family-to-work enrichment subscores ($U = 16405$, $P < .001$). Those participants with higher resiliency had lower total WFC scores ($U = 15951$, $P < .001$), work-to-family conflict subscores ($U = 17313$, $P = .005$), and family-to-work conflict subscores ($U = 17797$, $P = .019$). Higher resiliency also indicated higher total WFE scores ($U = 16323$, $P < .001$), work-to-family enrichment subscores ($U = 16723$, $P = .001$), and family-to-work enrichment subscores ($U = 17382$, $P = .004$).

We found differences among groups for all 3 scales (total WFC, work-to-family subscale, and family-to-work subscale) in regard to hardiness scores. Total WFC scores differed among ATs in different hardiness categories ($H = 24.964$, $P < .001$), work-to-family conflict subscale scores ($H = 20.124$, $P < .001$), and family-to-work conflict subscale scores ($H = 7.181$, $P = .28$). The pairwise comparison of hardy personality and moderate hardiness was nonsignificant. The average total WFC score and work-to-family subscale score of the low hardiness group were lower than in the moderate hardiness and hardy personality groups. Total WFC scores as well as each score for each

Table 4. Work-Family Conflict Scores Based on Hardiness (Mean \pm SD)

Hardiness	Total Work-Family Conflict Score	Work-to-Family Conflict Subscore	Family-to-Work Conflict Subscore
Low hardiness	42.6 \pm 7.1	38.8 \pm 4.4	13.8 \pm 5.5
Moderate hardiness	36.7 \pm 9.3	24.9 \pm 6.5	11.8 \pm 5.0
Hardy personality	32.7 \pm 10.2	21.9 \pm 7.6	10.9 \pm 5.1
Total	37.2 \pm 9.4	24.2 \pm 6.5	12.0 \pm 5.1

subscale broken down by hardiness levels are provided in Table 4.

Hypothesis 2: ATs Who Are Resilient and Hardy and Have Positive Affectivity Will Have a Higher Level of Work-Family Enrichment

The total WFE score for all participants are available in Table 5. A statistically significant but weak positive relationship existed between resiliency and total WFE score ($r = 0.233$, $P < .001$), work-to-family enrichment subscore ($r = 0.228$, $P < .001$), and family-to-work enrichment subscore ($r = 0.156$, $P < .001$). Additionally, a statistically significant but weak relationship was present between positive affectivity and family-to-work enrichment subscore ($r = 0.360$, $P < .001$) and a statistically significant moderate relationship occurred between positive affectivity and both the total WFE score ($r = 0.448$, $P < .001$) and work-to-family enrichment subscore ($r = 0.405$, $P < .001$).

The groups differed for all 3 scales (total WFE, work-to-family subscale, and family-to-work subscale) with regard to hardiness scores. A statistically significant difference was demonstrated in total WFE scores among ATs in different hardiness categories ($H = 27.663$, $P < .001$) and work-to-family enrichment subscores ($H = 40.866$, $P < .001$). The groups did not differ on the family-to-work enrichment subscore ($H = 5.952$, $P = .51$). The average total WFE score and work-to-family enrichment subscale score were different among all groups: individuals in the hardy personality group had the highest mean score and those in the low hardiness group had the lowest score. Total WFE scores as well as the score for each subscale by hardiness level are shown in Table 5.

Hypothesis 3: ATs With 10 Years or More of Experience Will Exhibit Higher Levels of Resiliency, Hardiness, and Positive Affectivity Than ATs With Less Than 10 Years of Experience

Individuals with less than 10 years of experience had lower positive affectivity scores than those with 10 or more years of experience ($U = 10\,749$, $P < .001$). Individuals with less than 10 years of experience had lower hardiness scores than those with 10 or more years of experience ($U = 10\,613$, $P = .007$). Years of experience did not statistically affect resiliency scores ($U = 14\,054$, $P = .168$).

Hypothesis 4: No Sex Differences Will Be Present Among Our Dependent Variables

We found no sex differences for positive affectivity scores ($U = 113\,238$, $P = .212$), hardiness scores ($U = 12\,721.5$, $P = .935$), WFC scores ($U = 21\,409.5$, $P = .699$), or WFE scores ($U = 21\,565$, $P = .613$). However, the resiliency score in men was higher than in women ($U = 13\,224.5$, $P = .027$).

Table 5. Work-Family Enrichment Scores Based on Hardiness (Mean \pm SD)

Hardiness	Total Work-Family Enrichment Score	Work-to-Family Enrichment Subscore	Family-to-Work Enrichment Subscore
Low hardiness	19.3 \pm 4.0	8.4 \pm 2.9	10.9 \pm 2.2
Moderate hardiness	21.7 \pm 3.5	10.4 \pm 2.2	11.2 \pm 1.9
Hardy personality	24.3 \pm 3.1	12.2 \pm 1.8	12.1 \pm 2.0
Total	21.5 \pm 3.7	10.2 \pm 2.5	11.3 \pm 2.0

DISCUSSION

The goal of our study was to gain a better understanding of the relationships that may exist between certain individual factors and work-life balance. In 2007, Dixon and Sagas²⁶ proposed that the work-life interface extends beyond organizational factors and that other factor levels contribute to balancing these challenges. Their model suggests that individual and sociocultural factors, along with those inherent aspects related to working hours, work schedules, and job demands, confound the lines between work roles, home life, and personal interests.²⁶ We have a strong understanding of those professional and organizational demands that stimulate conflict, but little evidence exists in our field related to the individual facets of work-life balance. We believe our findings add to the literature by providing more data on the individual circumstances that may contribute to the work-life interface. Several key findings emerged from our data and are discussed in the following sections.

Mindset and Conflict

We hypothesized that ATs with higher levels of resiliency, hardiness, and positive affectivity would experience less work-life conflict, a finding that was confirmed. Our hypothesis was based on the premises of emotional stability and resiliency, which were strong positive predictors of work-life balance.²⁷ *Neuroticism*, a personality trait that is often viewed as an unstable and irrational response to stress, has been linked to work-life imbalance in other professional fields (ie, business professionals, teachers, nurses)^{18,28} but not yet linked to ATs. However, neuroticism has been identified as a confounding variable for job satisfaction and burnout¹⁹ and, therefore, a likely determinant in work-life conflict for the AT. Neuroticism is often seen as a destructive coping mechanism that places the individual at greater risk for experiences of conflict.²⁹ Constructive coping, in contrast, allows individuals to deal effectively with stress: they view it as a natural aspect of life and respond with healthy habits (ie, acceptance, positive appraisal, humor).³⁰ People who demonstrate positive appraisal, energy, and acceptance (ie, positive affectivity, the ability to bounce back, resiliency) and the ability to preserve and adapt (ie, hardiness) are able to “weather the storm” when stress is at a high level and navigate conflicts between their personal and professional lives.^{16,29}

Mindset and Enrichment

We also hypothesized that an AT who possessed higher levels of resiliency and hardiness as well as a positive affect

would be more likely to have a work-life enrichment perspective, a finding also confirmed within our sample. Having a positive coping style or better coping behaviors¹⁶ helps to mitigate the stress and conflict associated with balancing work, family, and personal lives. In fact, positive coping behaviors indicate a mindset that is adaptable, flexible, and able to bounce back from stressors. The work-life enrichment theory is predicated on the supposition that engaging in multiple roles improves the quality of life in other roles because the strengths used in one role facilitate performance in the other roles.⁸ The theory appears to be based on the premise that an individual's mindset is influential: he or she must demonstrate positive affectivity and constructive coping behaviors (ie, acceptance, flexibility). Our findings thus lend credence to this theory as our participants who were resilient and hardy and had a positive affect also had an enrichment perspective.

A longstanding theory^{31,32} addressed the relationships among work, family, and life as roles that are always in contrast and rarely in concert. More recently, researchers have suggested that perspective may be a mitigating factor in the level of conflict experienced by an individual. The work-life enrichment theory has grown out of the idea that engagement in various work and life roles may, in fact, stimulate productivity and satisfaction, which reduces the conflict.³⁰ The rationale is thus grounded in the idea that coping and mindset could be key to understanding how individuals manage their work, family, and life roles. Individuals who demonstrate positive coping strategies (ie, optimism, resourcefulness) tend to competently handle stress and conflict.³³ We selected 3 constructs that are directly related to personal outlook and coping skills but have yet to be fully explored in relation to work-life conflict in ATs. Quantifying these constructs initially affords us the chance to appreciate the level at which our participants could handle stress and possible conflict when it arose. They demonstrated moderate levels of resiliency and hardiness, indicating they possessed the underpinnings of positive coping behaviors.

Work Experience and Conflict

Individuals with 10 or more years of work experience had higher hardiness and positive affectivity scores than those with less than 10 years of work experience. Several thoughts are behind this finding, rooted in the idea that personality is not constant but rather developmental and likely influenced by environment and experience.³⁴ Research³⁴ on personality has shown that emotional stability increases steadily over time; therefore, older individuals are more apt to adapt positively to stress and handle conflict with adaptive coping behaviors. Environmental factors have also been discussed as influential in coping and personality development; some authors²⁹ have suggested that personality evolution can be a consequence of one's working environment. Socialization is a framework often used to understand development, particularly from a role-development standpoint. Thus, our finding of coping adaptation speaks to the possible development of role understanding and the continuance process,³⁵ whereby ATs develop specific attitudes and behaviors that reflect their working environment. Athletic training as a profession can be challenging in that it is a medical profession operating

within the confines of an athletic organization in many instances. These challenges include nontraditional hours, travel seasons, extended competitive seasons due to playoff berths, and schedule changes due to weather. Acceptance of the challenges that accompany working in an athletic organization has been previously reported as an important aspect of career longevity within athletic training.³⁶ This indicates that accommodating coping behaviors and attitudes may develop due to role continuance. Accepting the challenges of working in an athletic organization reflects the nature of the work, whereby ATs are aware of the expectations and responsibilities of their role in the collegiate setting and develop coping behaviors that positively address the workplace setting.

Our participants' positive affectivity scores (35.5 ± 7.2) were higher than those found by Watson et al (29.7),²³ who studied undergraduate psychology students. The benefits of positive emotions have been explained via the *broaden-and-build theory of positive emotions*, which proposed that positive emotions produce optimal functioning over time and not just in the pleasant moment.³⁷ In addition to broadening an individual's momentary experiences, the theory contends that positive emotions build the personal reserves of the individual, which may include physical, intellectual, social, and psychological resources. More importantly, developing these resources promotes successful coping and survival by providing reserves from which an individual can draw.³⁷ Positive affectivity was negatively correlated with burnout and explained 52% of the variance in burnout scores.³⁸

Hardiness and affectivity are also constructs that reflect mindset and perspective; thus, those who are positive and hardy epitomize self-control and optimism.^{39,40} Moreover, hardy people feel positively about life's stressful fluctuations and often embrace stressors as challenging rather than threatening.³⁹ Affect and hardiness appear to be constructs that are analogous for ATs, as they are founded by an appraisal response. Hardiness and affectivity may grow in a positive direction as many ATs employed in the collegiate setting have experience in that setting before assuming the role.³⁵ Past experiences, therefore, may provide a foundation for understanding expectations but also awareness of how to cope with demanding working environments.

Individuals who are described as hardy often moderate the influence of stress via an internal sense of strength, confidence in their coping abilities, and taking the initiative related to managing their stressors.⁴¹ Our result that more experience was related to higher levels of hardiness and affect was not surprising as it indicates a degree of growth and maturity that can accompany more years of experience and more time working and adapting to the culture of the workplace. This ideology is founded on the socialization paradigm that speaks to *organizational socialization*, whereby an individual develops the values, beliefs, and attitudes that facilitate successful acclimation to and onboarding into the organization.³⁵ Interestingly, we did not identify a relationship between years of experience and resiliency, which may speak to the individuality of the construct. Resiliency is a positive adaptation despite adversity.⁴² So this may indicate that our sample, despite the number of years certified, was able to adapt to the adversity and stress that accompanied working in the collegiate setting.

Sex and Work-Life Balance

We did not observe any sex differences between WFC and WFE scores for our participants, which was consistent with our hypothesis. This is also consistent with the literature^{13,43–45} and indicates that neither sex was more negatively or positively affected with regard to work-life balance. Work-life balance may not be related to sex but rather the product of multiple factors, including sex-role views, personality, and the nature of one's job. Again, this supports the framework proposed by Dixon and Bruening¹¹ of a multilevel framework of work-life balance and one that must appreciate a person's individuality. Although hardiness and positive affectivity did not differ by sex, our male participants scored higher in resiliency than our female participants. This is in contrast to the literature, which often demonstrated higher levels of resiliency in women than in men.⁴⁶ The explanation of our result is unclear, but resiliency often develops when the person is optimistic and engaged in healthy activities, including taking care of oneself, and strong, close relationships with others. So perhaps our sample of women ATs focused on taking care of others, not themselves, which decreased their perceived resiliency.

Limitations and Future Directions for Research

Our study is not without limitations. Our sample was drawn only from those ATs employed in the collegiate setting; thus, our findings may speak only to the experiences of those who selected this setting. Workplace fit is based on a matching of interests and personal needs, which is important to consider when evaluating our findings. A larger sample drawing on ATs in a variety of employment settings will help to establish the generalizability of the results.

The methods used in this study did not allow us to determine cause and effect. The cross-sectional nature of the data prevented us from understanding the temporal relationship between individual factors related to coping and affectivity and work-life balance. Additionally, we were not able to analyze our participants' behavior over time. In the future, longitudinal data may offer a different perspective of the relationships among these constructs and solidify our understanding of work-life balance from a comprehensive lens.

We used a self-report survey to quantify our participants' self-assessments of coping, affectivity, and work-life balance. Although this is a relevant and practical way to collect the information, honesty and introspection can be inherent limitations of self-reports. Furthermore, participants completed the survey at only 1 point in time. Mood can be transient, and therefore, a longitudinal study may capture a fuller picture of the moods of collegiate ATs. Future authors can use a mixed-methods design to quantify and provide context to measures of individual factors and work-life balance.

Finally, we selected a specific set of individual variables related to coping and affectivity. Other measures, such as personality, have also been studied in relation to work-life balance. Therefore, we believe future researchers may wish to include a measure of personality, such as the Big Five Personality Test (ie, openness, conscientiousness, extroversion, agreeableness, neuroticism), as a means of fully

understanding how the individual can influence and navigate work-life balance. Other measures can also be included to fully assess coping behaviors and perceived levels of stress.

CONCLUSIONS

At the outset of our study, we proposed 4 primary hypotheses, and our findings corroborated all but the fourth, which centered on sex. First, we found that ATs who perceived themselves to be hardy, resilient, and positive demonstrated lower levels of work-life conflict. Second, those same constructs also produced a work-family enrichment perspective. We did note that ATs with experience were more likely to demonstrate effective coping behaviors and attitudes. Finally, we identified no sex differences in regard to hardiness, positive affectivity, WLE, or WFC. However, contrary to the literature, we did find that the men in our sample scored higher in resiliency than the women.

REFERENCES

1. Mazerolle SM, Pitney WA, Goodman A, Eason CM. National Athletic Trainers' Association position statement: work-life balance recommendations. *J Athl Train*. In press.
2. Greenhaus JH, Collins KM, Shaw JD. The relation between work-family balance and quality of life. *J Vocat Behav*. 2003;63(3):510–531.
3. Lange C. A matter of balance: work and life in intercollegiate athletics. National Collegiate Athletic Association Web site. <https://www.ncaa.org/sites/default/files/aMatterOfBalanceHandbook.pdf>. Accessed May 2, 2018.
4. Mazerolle SM, Bruening JE, Casa DJ. Work-family conflict, part I: antecedents of work-family conflict in National Collegiate Athletic Association Division I-A certified athletic trainers. *J Athl Train*. 2008;43(5):505–512.
5. 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.
6. Nein B. *Work-Family Conflict Among Youth, High School, and Collegiate Soccer Coaches* [dissertation]. Daphne, AL: US Sports Academy; 2016.
7. Goode WJ. A theory of role strain. *Am Sociol Rev*. 1960;25(4):483–496.
8. Greenhaus JH, Powell GN. When work and family are allies: a theory of work-family enrichment. *Acad Manage Rev*. 2006;31(1):77–92.
9. Bruening JE, Dixon MA. Work-family conflict in coaching II: managing role conflict. *J Sport Manage*. 2007;21(4):471–496.
10. Naugle KE, Behar-Horenstein LS, Dodd VJ, Tillman MD, Borsia PA. Perceptions of wellness and burnout among certified athletic trainers: sex differences. *J Athl Train*. 2013;48(3):424–430.
11. Dixon MA, Bruening JE. Perspectives on work-family conflict in sport: an integrated approach. *Sport Manage Rev*. 2005;8(3):227–254.
12. Mazerolle SM, Eason CM. Perceptions of National Collegiate Athletic Association Division I female athletic trainers on motherhood and work-life balance: individual- and sociocultural-level factors. *J Athl Train*. 2015;50(8):854–861.
13. Mazerolle SM, Eason CM, Ferraro EM, Goodman A. Career and family aspirations of female athletic trainers employed in the National Collegiate Athletic Association Division I setting. *J Athl Train*. 2015;50(2):170–177.
14. Eberman LE, Kahanov L. Athletic trainer perceptions of life-work balance and parenting concerns. *J Athl Train*. 2013;48(3):416–423.

15. Kahanov L, Loeb sack AR, Masucci MA, Roberts J. Perspectives on parenthood and working of female athletic trainers in the secondary school and collegiate settings. *J Athl Train*. 2010;45(5):459–466.
16. Byron K. A meta-analytic review of work–family conflict and its antecedents. *J Vocat Behav*. 2005;67(2):169–198.
17. Gunthert KC, Cohen LH, Armeli S. The role of neuroticism in daily stress and coping. *J Pers Soc Psychol*. 1999;77(5):1087–1100.
18. Lin A. The relationship between work/family demands, personality and work–family conflict. *Business Rev Camb*. 2013;21(1):272–277.
19. Barrett J, Eason CM, Lazar R, Mazerolle SM. Personality traits and burnout among athletic trainers employed in the collegiate setting. *J Athl Train*. 2016;51(6):454–459.
20. Hendrix AE, Acevedo EO, Hebert E. An examination of stress and burnout in certified athletic trainers at Division I–A universities. *J Athl Train*. 2000;35(2):139–144.
21. Smith BW, Dalen J, Wiggins K, Tooley E, Christopher P, Bernard J. The brief resilience scale: assessing the ability to bounce back. *Int J Behav Med*. 2008;15(3):194–200.
22. Kardum I, Hudek-Knežević J, Krapić, N. The structure of hardiness, its measurement invariance across gender and relationships with personality traits and mental health outcomes. *Psihologijske Teme*. 2012;21(3):487–507.
23. Watson D, Clark LA, Tellegen A. Development and validation of brief measures of positive and negative affect: the PANAS scales. *J Pers Soc Psychol*. 1988;54(6):1063–1070.
24. 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.
25. Kacmar KM, Crawford WS, Carlson DS, Ferguson M, Whitten D. A short and valid measure of work–family enrichment. *J Occup Health Psychol*. 2014;19(1):32–45.
26. Dixon MA, Sagas M. The relationship between organizational support, work–family conflict, and the job–life satisfaction of university coaches. *Res Q Exerc Sport*. 2007;78(3):236–247.
27. Keeton K, Fenner DE, Johnson TR, Hayward RA. Predictors of physician career satisfaction, work–life balance, and burnout. *Obstet Gynecol*. 2007;109(4):949–955.
28. Bruck CS, Allen TD. The relationship between big five personality traits, negative affectivity, type A behavior, and work–family conflict. *J Vocat Behav*. 2003;63(3):457–472.
29. Roberts BW, Caspi A, Moffitt TE. Work experiences and personality development in young adulthood. *J Pers Soc Psychol*. 2003;84(3):582–593.
30. Folkman S, Moskowitz JT. Coping: pitfalls and promise. *Annu Rev Psychol*. 2004;55:745–774.
31. Allen TD, Herst DE, Bruck CS, Sutton M. Consequences associated with work-to-family conflict: a review and agenda for future research. *J Occup Health Psychol*. 2000;5(2):278–308.
32. Werbel J, Walter MH. Changing views of work and family roles: a symbiotic perspective. *Hum Resource Manage Rev*. 2002;12(3):293–298.
33. Lazarus RS, Folkman S. *Stress, Appraisal, and Coping*. New York, NY: Springer; 1984.
34. Roberts BW, Mroczek D. Personality trait change in adulthood. *Curr Dir Psychol Sci*. 2008;17(1):31–35.
35. Pitney WA. Organizational influences and quality-of-life issues during the professional socialization of certified athletic trainers working in the National Collegiate Athletic Association Division I setting. *J Athl Train*. 2006;41(2):189–195.
36. Mazerolle SM, Eason CM, Lazar RA, Mensch JM. Exploring career longevity in athletic training: factors influencing persistence in the NCAA Division I setting. *Int J Athl Ther Train*. 2016;21(6):48–57.
37. Fredrickson BL. The broaden-and-build theory of positive emotions. *Philos Trans R Soc Lond B Biol Sci*. 2004;359(1449):1367–1378.
38. Gloria CT, Faulk KE, Steinhardt MA. Positive affectivity predicts successful and unsuccessful adaptation to stress. *Motiv Emot*. 2013;37(1):185–193.
39. Sheard M. Hardiness commitment, gender, and age differentiate university academic performance. *Br J Educ Psychol*. 2009;79(pt 1):189–204.
40. Maddi SR. Hardiness: the courage to grow from stresses. *J Positive Psychol*. 2006;1(3):160–168.
41. Soderstrom M, Dolbier C, Leiferman J, Steinhardt M. The relationship of hardiness, coping strategies, and perceived stress to symptoms of illness. *J Behav Med*. 2000;23(3):311–328.
42. Luthar SS, Cicchetti D, Becker B. The construct of resilience: a critical evaluation and guidelines for future work. *Child Dev*. 2000;71(3):543–562.
43. Hatfield LM, Johnson JT. A discussion of work–family conflict and related theories in NCAA Division I sports information professionals. The Sport Journal Web site. <http://thesportjournal.org/article/work-family-conflict-and-related-theories-in-ncaa-division-ii-sports-information-professionals/>. Accessed June 3, 2018.
44. Mazerolle SM, Eason CM, Trisdale WA. Work–life balance perspectives of male NCAA Division I athletic trainers: strategies and antecedents. *Athl Train Sports Health Care*. 2015;7(2):50–62.
45. Mazerolle SM, Ferraro EM, Eason CM, Goodman A. Factors and strategies contributing to the work–life balance of female athletic trainers employed in the NCAA Division I setting. *Athl Train Sports Health Care*. 2013;5(5):211–222.
46. Isaacs AJ. Gender differences in resilience of academic deans. *J Res Educ*. 2014;24(1):112–119.

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