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PERSONALITY AND LONGEVITY IN THE PROFESSION OF ATHLETIC TRAINING

By

Tyler Harris

THESIS

Submitted to  
Northern Michigan University  
In partial fulfillment of the requirements  
For the degree of

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2016

SIGNATURE APPROVAL FORM

Title of Thesis: Personality and Longevity in the Profession of Athletic Training

This thesis by Tyler Harris is recommended for approval by the student's Thesis Committee and Department Head in the Department of Psychology and by the Assistant Provost of Graduate Education and Research.

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## Abstract

### PERSONALITY AND LONGEVITY IN THE PROFESSION OF ATHLETIC TRAINING

By

Tyler Harris

A survey was sent to 10,000 certified athletic trainers in various settings to examine personality characteristics and their relationship with satisfaction, intent to leave, and years practiced in the profession. The Employee Personality Inventory, included in the survey, separated respondents into five personality categories: communicators, directors, organizers, soothers and thinkers. Of the 1102 analyzed respondents, 216 were communicators, 51 were directors, 427 were organizers, 331 were soothers, and 77 were thinkers. The distribution of athletic training setting were as follows: academic instruction, 67; administration, 16; clinical medical, 53; clinical rehabilitation, 52; collegiate athletics, 331; high school athletics, 378; other, 65; outreach school athletics, 103; professional/Olympic athletics, 37. Common entry-level positions (high school athletics, outreach athletics, clinical rehab) scored the lowest on satisfaction/intent to leave and years practiced, while academic instruction, administration, and professional/Olympic athletics scored the highest. Thinkers, although small in number, had the most years practiced, followed by soothers. Communicators were the lowest in years practiced. There were no significant differences on intent to leave/satisfaction scores between personality types. An incomplete understanding of the athletic training profession may be what turns those recruits who have a better chance at longevity away from the profession. Additionally, athletic trainers who spend fewer years in the profession may not be leaving because of dissatisfaction.

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## INTRODUCTION

Terranova & Henning (2011) state, “The declining membership of the NATA and the potential loss of experienced clinicians in the profession has become an issue at the forefront of athletic training,” (p. 315) There is a high attrition rate within the profession of athletic training. A study by Capel (1986) found that three-fourths of athletic trainers who had either left the profession or considered quitting, were in their first ten years on the job (Pinto, 2011). The National Athletic Trainers Association (NATA) estimates that there are over 5,000 student members, but only 600 certified graduate students and 1,200 certified members in their first year of employment, further suggesting the attrition away from the profession (Mazerolle, Gavin, Pitney, Casa, & Burton, 2012). There appears to be a clear decline in the number of students becoming athletic trainers (Mazerolle et al, 2012).

The subject of burnout has become something of a hot topic in the profession of Athletic Training, leading to much research on what exactly it is and how it can be prevented (Clapper & Harris, 2008; Kania, Meyer, & Ebersole, 2009; Knight, 2012; Pinto, 2011). Typically, burnout research in athletic training involves determining the external factors, such as salary and hours worked, which cause an athletic trainer to leave the profession. Contrarily, the current study examines the internal factors that may lead an athletic trainer to remain in the profession.

### **Athletic Trainers**

Athletic training encompasses the prevention, diagnosis, and intervention of emergency, acute, and chronic medical conditions involving impairment, functional limitations, and disabilities. Athletic training is practiced by individuals who must collaborate with physicians to

optimize activity and participation of patients and clients. The American Medical Association recognizes athletic trainers as allied health care professionals who are licensed by their state health board or certified by the National Athletic Trainers Association (NATA) (Knight, 2012).

An athletic trainer has the opportunity to practice in a variety of settings. These settings include: academic instruction; administration; clinical medical; clinical rehabilitation; outreach athletics; high school athletics; collegiate athletics; and professional athletics (Pinto, 2011). This list, long as it is, is not exhaustive. Each of these settings has its own unique dynamics that can have a variety of effects on the athletic trainer who works in them.

Raab, Wolfe, Gould, & Piland (2011) examined which characteristics could be identified as those which lead patients to seek athletic training services, in order to identify what it takes to make a quality athletic trainer. My study considers the fact that success is not solely influenced by educational preparation, and test scores don't necessarily predict the ability of an athletic trainer to meet job expectations (Raab et al., 2011). Also critical after obtaining the certified athletic trainer (AT) credential is the development of affective and effective traits. The affective traits include care (caring unconditionally about patients and others with whom they interact), communication (ability to discuss issues with a variety of people in a way they can understand), commitment (availability to those who they treat or tutor), and integrity (a propensity to be honest as well as loyal). Knowledge (both improving their own and sharing it with others) is the effective trait that quality ATs possess. The article states that, "Entry-level athletic trainers who demonstrate conscientious commitment and dedication to developing these characteristics might become quality athletic trainers," (Raab et al. 2011, p. 672).

On average, athletic trainers work with a large number of patients. Kania et al. (2009) found a 70:1 ratio of athletes to athletic trainers. They also found this as one of the most

enjoyable aspects of athletic trainers' jobs, as well as helping or feeling needed, contributing to athletes' safety, improving athlete care, and combining sports with medicine. However, there is a common occurrence of athletic trainers accepting a great deal of responsibility, even in their first job (Malasarn, Bloom, & Crumpton, 2002). In some cases, athletic trainers find themselves in a consuming work environment which strongly affects their quality of life both within and without the workplace (Pitney, 2006). This is one of the factors which could lead athletic trainers to "lose the compassion and excitement that initially drew them to the profession" (Hendrix, Acevedo, & Hebert, 2000, p. 140). Knight (2012) also found lack of control of work schedules, inflexible work schedules, locus of control, and long work hours as primary reasons for athletic trainers to leave the profession entirely.

Another factor that can affect athletic trainers is role complexity. Brumels & Beach (2008) argued that role incongruity (role obligations and personal skills or values are incompatible), role ambiguity (vague expectations), role overload (responsibilities are excessive or impossible to finish), and role incompetence (deficient skills or knowledge to perform responsibilities) can all have an effect on an athletic trainer's job satisfaction or intent to leave the profession. This attrition from the profession of athletic training is often attributed to some form of burnout.

## **Burnout**

The Maslach Burnout Inventory (MBI) is the most universally used instrument in the study of burnout (Clapper & Harris, 2008), and separates burnout into three parts: emotional exhaustion, depersonalization, and decreased personal accomplishment. Research suggests each helping profession have its own version of the MBI, thus the Athletic Training Burnout Inventory (ATBI) was formed (Clapper & Harris, 2008). This instrument sought to include such

factors as role conflict, high time commitment, limited opportunity for career advancement, low salary, and poor working conditions when measuring levels of burnout in athletic trainers. The ATBI provided a reliable way to describe factors that lead to burnout in athletic trainers employed in Division 1 college athletics (Clapper & Harris, 2008).

Pinto (2011) examined burnout in relation to a plethora of factors which included: age; gender; relationship status; certification route; years of initial certification; previous employment setting; work hours per week; education level; number of children; supervisor as an AT; and personal recommendation of the profession. According to this study, workplace setting and years with current employer have an effect on the burnout construct of personal achievement, but setting and years with current employer had no effect on emotional exhaustion or depersonalization. Age and higher pay decreased levels of burnout, but these are typically related to longer careers, which could be a confounding variable. Based on this, it could be suggested that length of career in the profession should be the variable of interest, especially in burnout research.

A limitation of the research on burnout is that it is not the only reason why employees will leave a profession. As stated by Bothma & Roodt (2013, p. 3), “The decision to leave is influenced by many personal and contextual factors such as employability and labour market conditions.” Additionally, Wille & De Fruyt (2014) state:

There is now evidence showing that people are interested in and tend to gravitate toward occupational environments that—at least to some extent—fit their personality traits...People may decide to leave their work environment and change it for another in order to enhance congruence. Research has, for instance, indicated that career changers tend to choose new jobs that are more congruent with their personality profiles (p. 266).

## **Personality**

For decades, industrial and governmental organizations have utilized proficiency, aptitude, intelligence, and personality tests as aids in selecting employees (Ghiselli & Barthol, 1953). Judge (1999), using the five-factor model of personality (The Big Five) argued that conscientiousness positively predicted extrinsic success (income, occupational status), as did general mental ability. Neuroticism negatively predicted extrinsic success. Intrinsic success (job satisfaction) was negatively correlated with neuroticism, but positively correlated with openness to experience, conscientiousness, and general mental ability.

Hurtz and Donovan (2000) added to this claim when they examined the relationship between the Big Five personality factors and job performance. The study found that three of the Big Five dimensions, namely conscientiousness, agreeableness, and emotional stability, had an impact on the interpersonal facilitation criteria of job performance. This falls in line with the study by Judge (1999).

“The general consensus drawn by researchers and practitioners was that personality does in fact hold some utility as a predictor of job performance,” (Hurtz & Donovan, 2000). The main concern of the current study, however, is not job performance but job longevity. Additionally, the current study is examining athletic trainers, which the previous studies did not.

Job satisfaction and burnout, although considered to represent two distinct responses to work, are highly negatively correlated (Tsigilis, Koustelios, & Togia, 2004). Mobley, Horner, & Hollingsworth (1978) asserted that in the process of employee withdrawal (turnover), job dissatisfaction is a precursor to thoughts of quitting, which eventually leads to attrition.

Judge, Heller, & Mount (2002) reexamined the relationship between the Big Five and job satisfaction. The findings were similar to those of Hurtz and Donovan (2000) as they found that

neuroticism had a strong negative correlation to job satisfaction, while conscientiousness and extraversion correlated positively with job satisfaction. This, in combination with the study by Hurtz and Donovan, further propagates the statement by Mathew, Ram, Bhattacharjee, & Sharma (2013) that suggests job satisfaction is positively related with job performance.

Although it has been asserted that personal characteristics such as hardiness, motivation, and coping strategies influence perception of stress, and in turn influence levels of burnout (Hendrix et al., 2000), there is a dearth of literature examining the personality of athletic trainers. For instance, the *personal characteristics* measured in relation to burnout were more demographic variables than personality variables in the study by Kania et al. (2009).

One recent study by Beidler, Covassin, & Donnellan (personal communication, November 12, 2015) examined the Big Five personality profiles of athletic trainers and how they related to the elements of job satisfaction and burnout. According to their study, athletic trainers have a personality profile characterized by high Conscientiousness, low Neuroticism, and moderate levels of Extraversion, Openness to experience, and Agreeableness. Conscientiousness and Extraversion were negatively correlated with burnout and Neuroticism was positively correlated with burnout. These associations with burnout were considered small to moderate. Job enjoyment was most closely related to Agreeableness and Extraversion. The study concluded by considering high conscientiousness and low neuroticism as cardinal aspects of the personality profile of athletic trainers.

Hendrix et al. (2000) used the Hardiness Test in conjunction with a Social Support Questionnaire to examine the relationship between hardiness and perceived stress levels. Hardiness, in this case, is described by control (the tendency to believe in one's ability to influence the course of events and have power in the face of various circumstances),

commitment (having an eager curiosity toward life and having a sense of purpose), and challenge (believing change is the norm in life rather than stability and thinking of it as interesting, positive, and a stimulus for growth). This study found that higher levels of hardiness were related to lower perceived stress, and perceived stress was related to burnout. Based on this study, it could be possible that personality factors, not just hardiness, could play a role in longevity in a profession such as athletic training.

## **Longevity**

The research on burnout is abundant for athletic trainers. But with all the research on what is leading to athletic trainers leaving the profession (environmental factors in particular), there is a lack of research examining the internal factors (namely personality) related to athletic trainers remaining in the profession, otherwise referred to as longevity.

Malasarn et al. (2002) qualitatively examined seven National Collegiate Athletic Association (NCAA) athletic trainers with an average of 29 years of experience in the profession. These athletic trainers were considered to be *expert ATs* because of their “longevity and contributions to the field of athletic training,” (p. 56). The three higher order categories devised from this study were: meaningful experiences (background in athletics, career experiences, job and educational conditions); personal attributes (characteristics, philosophies, and relationships inside and outside the athletic training domain); and mentoring (both as learners and as teachers). Specific to personal characteristics were loyalty, generosity, and strong work ethic, which helped these individuals succeed when they needed to put others over themselves. According to Malasarn (2002), a passionate, service-oriented, caring and hardworking attitude is as important as academic knowledge, if not more important. In

conclusion, Malasarn et al. (2002) state, “Successful individuals in any field seek environments that are congruent with the characteristics that allow them to express their attitudes and values while best using their skills and abilities,” (p. 55).

## **Purpose**

Based on the lack of specific research on the topic in current literature, it was deemed useful for a study to examine the personality of athletic trainers and what relation it has to their job satisfaction, intent to leave, and longevity in the profession. Because this was an exploratory study, no specific hypotheses were put forward.



## METHODS

### **IRB Approval**

This research was approved by the Northern Michigan University Institutional Review Board (IRB) under the administrative review process, proposal number: HS15-646. IRB approval was procured on March 13, 2015.

### **Participants**

An email list request form was filled out and turned in to the National Athletic Trainers Association (NATA) Sales Department. The list was received on May 10, 2015 and included a randomized sample of 10,000 emails of NATA members in the United States who were listed as Certified ATs. All work settings and all ten NATA-defined regional districts of the United States were included.

### **Survey**

An internet-based survey system, Qualtrics, which is available through Northern Michigan University, was used to create a survey to be sent to Certified ATs identified by the NATA. The survey included 5 demographic questions, 3 intention to leave/satisfaction (ITLS) questions, and the Employee Personality Inventory (Aamodt, 1998). The full survey can be found in Appendix B.

Of the five demographic questions, two were about the athletic training setting, current and past [Currently, in what setting do you primarily practice Athletic Training?/In what other setting(s) do you/have you primarily practice(d) Athletic Training?]. Setting options, based on

the study by Pinto (2011), included: professional/Olympic athletics, collegiate athletics, high school athletics, outreach school athletics, clinical rehabilitation, clinical medical, academic instruction, administration, other, and do not currently practice athletic training. Choices *other* and *do not currently practice Athletic Training* provided a text box for the respondent to type in their setting.

In order to assess longevity in the profession, the other three demographic questions asked how many years the respondent had been in their current position, how many years they had practiced athletic training, and how many years ago they had received their athletic training certification. As recommended by Clapper & Harris (2008) these were asked in the form of open-ended questions. Age was not included as a question in the survey, as ATs join the profession at different ages, and this study was designed to assess how long an AT remained practicing in the profession, not at what age they left the profession.

Because turnover intention is correlated to actual turnover (Bothma & Roodt, 2013), the intention to leave/satisfaction (ITLS) questions were self-developed for the survey in a fashion similar to that of Terranova & Henning (2011). Also based on the Mobley model of employee withdrawal (Mobley et al., 1978) and the six-item version of the Turnover Intention Scale (Bothma & Roodt, 2013), three questions on the survey inquired about the respondent's satisfaction with their current position, as well as how often they thought about quitting and what their intentions were on quitting the profession of AT. Likert-scale choices were used in all three of these questions. Satisfaction in current position ranged from *Very Satisfied* to *Very Dissatisfied*, a five-point scale. Thinking about quitting was measured on a five-point scale, the first four of which ranged from *Never* to *Constantly*. Intention to quitting was measured on a six-point scale ranging from *Very Unlikely* to *Very Likely*. Both the thinking about quitting and the

intentions on quitting scales included an additional option labeled *Already Have*. This option was aimed toward those who replied to the first primary setting question as *Do not currently practice Athletic Training*. For the sake of statistics, these scores were added up to make an intention to leave/satisfaction (ITLS) sum. When interpreting the statistics, it must be noted that a higher sum for this score corresponds with a higher intent to leave and lower satisfaction.

### **Employee Personality Inventory (EPI)**

The Employee Personality Inventory (Aamodt, 1998) describes a person's general personality, communication style, leadership style, strengths and weaknesses based on their choices on forty questions. Each inventory item consists of two adjectives (Calm/Efficient, Accurate/Energetic, etc.), of which the respondent picks the one which best describes them, even if they believe neither or both words describes them well. Each word corresponds with one of five personality types which include: communicator, director, organizer, soother, and thinker. The category with the highest score (the one with the most words chosen) became the respondent's personality category.

The Employee Personality Inventory was found to be a reliable test for all of its categories (Aamodt, personal communication, 2015).

Descriptions of each personality category are based on Aamodt's (1998) classification of communicators, directors, organizers, soothers, and thinkers.

Communicators (Aamodt, 1998) are described as outgoing, friendly, talkative individuals who are much more interested in people than they are in projects or paperwork. They get along with people. Concerned with fun and excitement, communicators are easily bored, and also need a lot of attention. Communicators prefer to talk about fun things, tell jokes, and exchange stories,

and shy away from business and serious discussions. A strength among communicators is that they are best at dealing with angry or difficult people. Unfortunately, they are often late to appointments or miss work and deadlines.

Directors (Aamodt, 1998), in the work place, are more interested in quantity than quality. They are often fast-paced, efficient, assertive, and set high goals for themselves. Directors prefer working alone over working with a group. A job will be done ahead of schedule when in the hands of a director. Small talk is not good for directors, who speak in a direct fashion and are impatient and easily agitated. They have a reputation of possessing poor interpersonal skills. The “take charge” attitude of directors means they are able to get high volumes of work done and are able to quickly make tough decisions. But the director can also be seen as overly competitive.

While directors are concerned with quantity, organizers (Aamodt, 1998) are perfectionists who prefer quality of work. Organizers’ greatest strength is their ability to organize people and things, as they have a system for everything. Organizers tend to prefer work with data than people, and tend to be overly critical of others. They follow rules, and expect others to do the same. When it comes to carrying out the ideas of a job, organizers are doers rather than talkers (communicators) or thinkers (thinkers). Like directors, organizers prefer just the facts over chit-chat. Strengths of Organizers are that they are good risk managers and are able to understand the process of things. Some weaknesses are that they may struggle to see the big picture or accept change.

Soothers (Aamodt, 1998) have the great strength of getting along with a variety of people, as they tend to be warm, caring people who are loyal to their friends and their organization. Soothers enjoy stability, thus tend to keep the same friends or the same jobs for long periods of time. Although they are calm and steady, they dislike conflict and will do much

to avoid it, leading them to be taken advantage of. Soothers tend to set low goals for themselves, are responsive to praise, and are easily hurt by criticism. Soothers rarely yell, are good listeners, and communicate in a positive fashion. They are good team players, but often have difficulty making tough decisions involving people.

Lastly, thinkers (Aamodt, 1998) are creative, unconventional, insightful individuals who love the process of thinking, analyzing, and creating. Thinkers consider the idea the end result and seldom get excited about the process of carrying through on a project. These free-spirits hate schedules and dislike rules and policy, valuing the latitude to do things their own way. Thinkers are the most difficult of the five personality types to predict. The *big picture* is typically the topic of discussion with thinkers. Thinkers are not afraid of change and are good problem solvers. Like communicators, thinkers can easily become bored or distracted.

### **Inclusion/Exclusion Criteria**

As responses were received, it was evident that some of these respondents, although listed as certified ATs, were not currently practicing Athletic Training. This became an issue in the data collection, especially when they chose “Do not currently practice Athletic Training” but did not select “Already Have” for the thinking and intention of quitting questions. For these reasons, the respondents who selected “Do not currently practice...” as their current AT setting were not included in the data analysis.

Additionally, there were a number of respondents who scored highest in none or more than one of the personality categories. These respondents were also not included in the data analysis, so that only those respondents who fell into a single personality category would be included in the data analysis.

## **Statistical Analysis**

Statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS, version 26; IBM Corporation, Armonk, NY). A two way between groups analysis of variance (ANOVA) was used to determine the relationship between EPI category, current job setting and years in the profession, as well as with the sum of ITLS scores (higher scores indicate higher intention to leave and lower satisfaction). Post-hoc Tukey tests were used to make multiple comparisons within the EPI categories and within the job settings.

Pearson correlations were also calculated for years practiced, ITLS sum, and scores of each of the five EPI categories separately. This was done to determine the specific relationship between each of the EPI categories and the variables of intention to leave/satisfaction and years practiced, regardless of the respondent's highest category.

## RESULTS

### **Descriptive Statistics**

A total of 1413 responses were received between the dates of June 23, 2015 and July 27, 2015. The total response rate was therefore 14.13%. Of the 1413 responses, 1186 had only one high EPI score. The other 227, which did not have exactly one high EPI score, were removed from data analysis. Additionally, there were 84 responses of the 1186 remaining which had the answer *Do not currently practice athletic training*. Those 84 responses were removed from data analysis as well. The final total of responses included in data analysis was 1102, 11.02% of the surveys sent out.

From the data collected, the distribution of personality types based on the EPI were as follows: communicator, 216 (19.6%); director, 51 (4.6%); organizer, 427 (38.7%); soother, 331 (30%); thinker, 77 (7%). The distribution of athletic training setting were as follows: academic instruction, 67; administration, 16; clinical medical, 53; clinical rehabilitation, 52; collegiate athletics, 331; high school athletics, 378; other, 65; outreach school athletics, 103; professional/Olympic athletics, 37 (See Table 1).

		EPI					Total
		C	D	O	S	T	
Current Position	Academic Instruction	12	3	33	14	5	67
	Administration	1	1	7	7	0	16
	Clinical Medical	12	5	22	9	5	53
	Clinical Rehabilitation	9	2	21	18	2	52
	Collegiate Athletics	63	13	125	107	23	331
	High School Athletics	78	16	145	117	22	378
	Other	14	4	20	22	5	65
	Outreach School Athletics	23	5	37	32	6	103
	Professional/Olympic Athletics	4	2	17	5	9	37
Total	216	51	427	331	77	1102	

Table 1. Frequency table of AT setting and EPI category.

A Chi Squared Goodness of Fit test was used to determine if the distribution of athletic training settings matched that of the population. Membership statistics for June 2015 could be found on the members only section of the NATA website. There were two problems with this process. Firstly, the NATA website includes those members who are certified but are not practicing athletic training in any particular setting. These respondents were thrown out of the current study; therefore, the proportions were adjusted according to the membership statistics of practicing athletic trainers. Secondly, the membership statistics were not categorized in the same way as the current study. For instance, *rehabilitation* was a subcategory of the categories *hospital* and *clinic*, and the categories of *academic instruction* and *administration* were non-existent. These two categories were also not included when performing the test, to represent the statistics given on the website as closely as possible. As presented in Table 2, the significant



differences in percentage are found in the settings of clinical medical, high school, and other,  $X^2$  (df = 6) = 38.66: data suggest that in this study, general medical was underrepresented, high school was overrepresented, and other was underrepresented.

Categories	Academic	Admin	Medical	Rehab	College	HS	Other	Outreach	Pro	Total	Included
Frequency	67	16	53	52	331	378	65	103	37	1102	1019
Observed %			5.20	5.10	32.48	37.10	6.38	10.11	3.63	100	
Expected %			24.38	2.15	28.2	19.43	12.23	10.06	3.52	99.97	

Table 2: Expected and Observed Percentages of setting as compared to NATA statistics

### **Intent to Leave/Satisfaction**

An ANOVA determined that current position had a significant relationship with ITLS sum,  $F(8, 1058) = 3.324, p < .01$  (Table 3), while the EPI category did not significantly relate to the ITLS sum,  $F(4, 1058) = .379, p > .05$  (Table 4). No interaction effect was found for current position and EPI category on intention to leave/satisfaction ( $F(31, 1058) = .995, p > .05$ ).

Post-hoc Tukey tests revealed that the position of academic instruction showed the lowest scores on the ITLS sum, implicating that those who are in this position have the highest satisfaction and lowest intent to leave the profession. Academic instruction was closely followed by administration and professional/Olympic athletics. Otherwise, academic instruction showed significantly more desirable scores than clinical medical, clinical rehabilitation, collegiate athletics, high school athletics, outreach school athletics, and other settings.

Professional/Olympic athletics showed the next lowest scores on the ITLS sum. This showed a significant difference from clinical rehabilitation and outreach athletics.

CurrPos		IntLeaveSatSum	YrsPrac
Academic Instruction	Mean	2.28	16.97
	N	67	67
	Std. Deviation	1.799	9.675
Administration	Mean	2.31	26.25
	N	16	16
	Std. Deviation	2.120	8.394
Clinical Medical	Mean	3.72	11.68
	N	53	53
	Std. Deviation	2.222	11.213
Clinical Rehabilitation	Mean	4.04	12.07
	N	52	52
	Std. Deviation	2.619	9.851
Collegiate Athletics	Mean	3.56	13.12
	N	331	331
	Std. Deviation	2.448	10.332
High School Athletics	Mean	3.30	12.55
	N	378	378
	Std. Deviation	2.387	10.344
Other	Mean	3.58	14.36
	N	65	65
	Std. Deviation	2.721	10.904
Outreach School Athletics	Mean	3.79	11.25
	N	103	103
	Std. Deviation	2.504	9.369
Professional/Olympic Athletics	Mean	2.32	15.31
	N	37	37
	Std. Deviation	1.987	12.740
Total	Mean	3.39	13.20
	N	1102	1102
	Std. Deviation	2.424	10.499

Table 3: Table of means of athletic training settings

HiEPII		IntLeaveSatSum	YrsPrac
C	Mean	3.34	11.72
	N	216	216
	Std. Deviation	2.484	10.159
D	Mean	3.16	13.78
	N	51	51
	Std. Deviation	2.370	9.790
O	Mean	3.41	12.96
	N	427	427
	Std. Deviation	2.448	10.472
S	Mean	3.47	13.63
	N	331	331
	Std. Deviation	2.331	10.578
T	Mean	3.18	16.48
	N	77	77
	Std. Deviation	2.584	11.090
Total	Mean	3.39	13.20
	N	1102	1102
	Std. Deviation	2.424	10.499

Table 4: Table of means of EPI categories

Clinical rehabilitation and outreach school athletics showed the highest scores on the ITLS sum score. These scores were significantly different from those of professional/Olympic athletics in addition to academic instruction.

Clinical medical, collegiate athletics, high school athletics, and other showed no significant differences on the intention to leave/satisfaction score with any category other than academic instruction.

## **Years Practiced**

An ANOVA determined that athletic training setting was significantly related to years practiced in athletic training overall,  $F(8, 1058) = 2.933, p < .01$ , while EPI category did not have a significant relationship overall,  $F(4, 1058) = .646, p > .05$ . There was also no interaction found between current position and EPI category on years practiced.

Although the EPI category did not seem to have a significant relationship to years practiced, post-hoc Tukey statistical analysis tests revealed a number of significant differences in years practiced for specific EPI categories. In particular, thinkers had the highest numbers for years practiced. Thinkers spent a significantly longer time in the profession compared to organizers and communicators ( $HSD(4) = 4.76$ ). Soothers and directors, however, had no significant differences with any of the other EPI categories.

Administration was, by far, the setting with the most longevity, with significantly more years practiced as compared to all other athletic training settings. The next highest longevity was in the academic instruction setting, which was followed closely by professional/Olympic athletics.

High school athletics and outreach school athletics were the two settings with the shortest time in the profession. The time was significantly different when compared to administration and academic instruction, but not for any of the other athletic training settings.

## **EPI Categories**

Pearson correlation coefficients were used to determine the relationship of the two dependent variables (ITLS and years practiced) and the scores on each of the EPI categories. Therefore, the score for each category can be considered when analyzing respondents, rather than just the category with the highest score.

		ITLS Sum	Years Practiced	T	C	D	O	S
ITLS Sum	Correlation	-	-.162**	.012	-.004	-.016	.020	-.013
Years Practiced	Correlation	-.162**	-	.119**	-.095**	-.046	-.024	.071*

Table 5: Pearson r correlations of survey scores and EPI categories

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

There is a relatively weak negative correlation between ITLS score and years practiced ( $r = -.162, p < .01$ ). Note that a lower score on the intent to leave/satisfaction score implicates less likelihood to leave and higher satisfaction in this data analysis. Therefore, this negative correlation would be interpreted as higher intent to leave correlating with fewer years in the profession.

There were no significant correlations between any of the EPI category scores and ITLS scores.

Of the five EPI categories, three categories had small but significant correlations with number of years practiced. Two categories, namely thinkers and soothers, had positive correlations ( $r = .119, p < .01$  and  $r = .071, p < .05$ , respectively) with years practiced. This can be interpreted as higher scores on the thinker and soother scales correlating to more years practiced. Only the communicator's scores showed a negative correlation with years practiced, ( $r = -.095, p < .01$ ). The scores on the categories of director and organizer both showed negative correlations with years practiced, but neither of these were significant.

Note: Multiple attempts were made at using alternate statistical analyses. Pooling of EPI categories, pooling of years practiced into three categories of experience, and pooling of AT setting derived no new information. Principal Component Analysis formed 3 components which accounted for 76% of the variance, but was not related to ITLS overall.

## DISCUSSION

Due to the vast research on burnout in athletic trainers, the current study examined the relationship between personality factors and longevity in the profession. Because previous research has focused on external, or environmental, factors, the current study used the EPI to categorize athletic trainers into five personality types. This has not been done with particular focus on athletic trainers.

### **AT Setting**

This study found differences in intention to leave and satisfaction between some athletic training settings (academic instruction vs clinical rehabilitation), but not for all settings. This could explain why there is conflicting evidence in previous research as to whether satisfaction is related to where an athletic trainer practices (Pinto, 2011).

The athletic training settings of administration, academic instruction, and professional/Olympic athletics were the three highest in years practiced as well as the settings which scored as most satisfied and least likely to leave. The administration setting was highest in years practiced and second best in intention to leave/satisfaction. This is consistent with Pinto's (2011) finding that administrative positions had the lowest depersonalization scores. The academic instruction setting was lowest in ITLS and highest in years practiced. The professional/Olympic athletics setting was third in both categories. On the other hand, the clinical rehab, outreach athletics, and high school athletics were the lowest. Outreach athletics was in the bottom two for both ITLS and years practiced. The clinical rehab setting had the lowest ITLS, and the high school athletics setting had the fewest years practiced.

These findings may be attributed to the distribution of job settings in the real world. High school athletics, outreach athletics, and clinical rehab are typically considered to be entry-level jobs, especially because they often do not require further education beyond an accreditation from an athletic training education program. Administration, academic instruction (particularly in higher education), and professional/Olympic athletics often require more education or more experience before applicants would be accepted into that position. Therefore, athletic trainers in these settings report more years practiced. It would be very unlikely to find an athletic trainer with fewer than five years of experience working in a professional setting or as an administrator.

The results offer mixed messages as to whether burnout decreases with age. Since age was not asked in the demographics portion of the survey, the correlation between years practiced and ITLS was measured. According to the statistical analysis, satisfaction increases and intent to leave decreases with more years practiced, although the relationship was small. This finding is in agreement with that of Pinto (2009). However, some articles (Kania et al. 2009; Terranova & Henning, 2011) would argue against this.

A decrease in burnout with increases in age was not found in the study by Kania et al. (2009). This article describes however, that most of their subjects were beyond the first five years of experience, so the *young professional* group was not well-represented. Terranova and Henning (2011) state:

Researchers have suggested that the new generation of health care professionals is more willing than ever to leave a job within the first few years if it does not meet their immediate goals and that younger employees, especially those with less than 10 years of experience, have greater intentions to leave. Our results were contrary to this literature (p. 316).



Additionally, Pinto (2011) found a relationship between salary and burnout. A higher salary is typically something that comes with time spent in the profession. Therefore, this study argued that salary would be a potential confounding variable in the study of burnout. If entry-level athletic trainers had higher salaries, it is possible that they would have similar burnout and satisfaction scores compared to those who have been in the profession for longer.

## **Personality**

Soothers are typically considered to be most persistent when it comes to staying with the same job over time, which could be an explanation as to why higher scores in this personality type would have a weak positive correlation with years practiced. Also, this personality type is thought to be the most caring. Malasarn et al. (2002) state that, "Part of the success of the ATCs can be traced to their genuine concern for the well-being of each of their athletes," (p. 61).

Communicators were the lowest in years practiced (significantly lower than thinkers), and higher scores on the communicator score were the only EPI category which negatively correlated with years practiced, although relatively weakly. On the contrary, Mensch & Mitchell (2008) state that some of the primary attractors of students to a career in athletic training were the relationship with sports, helping people, and the feeling of being a part of the team. The sociability of communicators was something that may have been expected to last longer in the profession of athletic training due to this fact. However, Mensch and Mitchell (2008) concluded that students considering a program in athletic training have an incomplete understanding of the profession. Perhaps this limited understanding of the profession led these communicators to believe that athletic training was nothing more than the social aspect. By the time these athletic training students become young professionals, they need to be aware of the demands of the

profession beyond just the interpersonal skills and taping skills that these students know of before joining the program (Mensch & Mitchell, 2008). For example, a common trait among all expert athletic trainers surveyed by Malasarn et al. (2002) was that they all had to accept a great deal of responsibility at their first job out of college. For communicators, this could be what leads to what Hendrix et al. (2000) describe as athletic trainers losing the compassion and excitement that initially drew them to the profession. And Mazerolle et al. (2012) stated that many athletic training students have a shift away from athletic training because it does not meet their expectations.

### **Further Research**

Future studies could examine the factors that could account for what was found in this study. Although most of the relationships between variables were weak correlations, the importance of addressing these relationships should not be deemphasized.

### *Student Recruitment*

Mensch and Mitchell (2008) state that, “In athletic training, we know very little about the recruits who enter programs and what they know about athletic training.” This may get to the root of the problem of attrition in athletic training students and young professionals. As stated earlier, many students, whether they are interested in the profession or not, see the team model and helping people as attractors. Knowledge about the profession did not, however, include the critical thinking and problem solving skills which many athletic trainers know are a large part of the profession. This may explain why communicators made up 19.6% of the respondents, and only 7% of respondents were thinkers. If the analytical thinking involved with athletic training

waw emphasized along with the attractor of being a part of a team, recruitment of thinkers might improve. This could decrease attrition, as thinkers had the most longevity of all the personality types (specifically with significance compared to communicators).

### *Socialization*

Wille & De Fruyt (2014) argue that there is substantial evidence to support that personality continues to change during adulthood. The study further states that, “People are interested in and tend to gravitate toward occupational environments that fit their personality traits.” This could set the framework for understanding other reasons for athletic trainers leaving the profession.

Athletic training students are already provided with one of two types of socialization, namely professional socialization. “Professional socialization is a developmental process whereby individuals acquire the norms, knowledge, and skills that allow them to function in a particular role,” (Pitney, 2006). Throughout an athletic training education program, an athletic training student will learn the necessary skills and knowledge to be a competent athletic trainer at an entry-level position.

Organizational socialization occurs in the workplace when the athletic trainer socializes into specific work environment roles. If this is unsuccessful, athletic trainers can find themselves in an all-consuming environment which has a detrimental effect on their quality of life, both inside and outside the organization. For this reason, and not just due to burnout, athletic trainers could leave the profession, and look for a job that more properly fits their personalities and interests. Wille and De Fuyt (2014) make a similar argument, stating that, “People may decide to leave their work environment and change it for another in order to enhance congruence.

Research has, for instance, indicated that career changers tend to choose new jobs that are more congruent with their personality profiles” (p. 266).

There are also theories arguing that there is a reciprocal relationship between a people’s personalities and their work environment, not just in the direction of an individual’s personality having an effect on his/her work environment. Armstrong & Anthony (2009) mention the socio-analytic model, which predicts that, “Interests will have an effect on the development of personality traits and abilities because the self-selection of educational and work environments impacts the range of experiences an individual has, thus influencing which traits are developed and refined over time.” In an evolutionary sense, this is to say that the work environment forces the athletic trainer to adapt in order to survive in the profession. If the athletic trainer is not readily prepared to adapt to their work environment, they may end up leaving the profession entirely.

This concept is similar to the issue that was proposed in the study by Judge (1999):

The general question is, ‘Is it worthwhile for an individual to know he or she lacks conscientiousness or adjustment, when this deficiency may hinder his or her career?’ We would answer in the affirmative. To be sure, there may be limits to what we can do about the causes of our failures, but if we know our tendencies, we are better prepared to counteract their effects (p. 647).

The study by Judge (1999) was specifically looking at the relationship between personality and job success, not longevity, but the take home message is still applicable to this study. Say, for instance, that an athletic training student finds out that his/her highest EPI category is communicator, and the categories of soother and thinker are relatively low. This student might fear that he/she is setup for failure. Judge (1999) argues, however, that the fact that

this student is aware of his/her disadvantageous personality can work in their favor, as long as they choose to properly transition into the field.

### *Mentorship*

Interpersonal experience often plays a role in an athletic trainer's career. Initial exposure at the high school level played a role in the recruitment of students to a career in athletic training (Mensch & Mitchell, 2008). Senior athletic training students who persisted in athletic training after graduation noted that part of their decision was based on faculty and clinical support (Mazerolle et al., 2012). Students are influenced by the perceptions of their mentors, whether it be positive or negative. By fostering an interpersonal relationship and addressing the educational needs of individuals, mentoring becomes a necessary socialization strategy.

One of the three higher-order categories that significantly influenced the development of expert male NCAA Division-I athletic trainers in the study by Malasarn et al. (2002) was mentoring. Especially early on in a career, these expert athletic trainers were influenced by individuals with more experience. In this case, it was beneficial not only for the athletic trainers to have someone with more experience from whom they could learn, but also younger professionals whom they could teach. The certified athletic trainers in this study "developed their skills and gained experience in athletic training while simultaneously promoting and changing the profession in a positive direction."

It should be mentioned that mentoring is not only important at the beginning of an athletic trainer's career, but throughout the athletic trainer's career. Mentoring is further recommended by Giacobbi (2009), especially for athletic trainers showing signs of burnout. If the interpersonal relationships are maintained throughout an athletic trainer's career, they may be more able to remain in the profession.

### *Occupational Engagement*

Occupational engagement involves learning, energy, development (both personal and occupational), job involvement, and occupational efficacy. According to Giacobbi (2009), burnout is an erosion of job engagement or job satisfaction. Athletic trainers already show higher rates of engagement compared to other health care professions (Giacobbi, 2009), which may explain why research has shown athletic trainers to have lower signs of burnout than some other professions (Brumels & Beach, 2008; Knight, 2012; Pinto, 2011). Occupational engagement might provide individuals with a certain level of resilience in the face of occupational stress.

### *Coping Strategies*

Pinto (2011) found that nurses who experienced high rates of burnout utilized the coping methods of escape/avoidance, self-control, and confrontation. Nurses who experienced low rates of burnout utilized the coping methods of problem solving, positive appraisal, and seeking social support.

Further research could delve deeper into this phenomenon as it could help athletic trainers to increase levels of hardiness. Hendrix et al. (2000) state that higher levels of hardiness correlate with lower perceived stress, which is in turn related to burnout. Development of coping strategies, along with other previously mentioned strategies, can help athletic trainers who are susceptible build certain “individual and contextual resiliencies that enable them to ward off burnout and the associated negative consequences.”

### *The Big Five*

Although the EPI is a reliable test and was of interest for the purpose of this study, the Big Five personality profile is more widely accepted. The current study could be used in comparison to other studies to strengthen our understanding of athletic trainers' personalities. For instance, if the traits in Conscientiousness are the same adjectives used to describe a thinker, the current study would strengthen the position of Beidler (personal communication, November, 12, 2015) that this factor is negatively correlated with burnout. Further research is necessary to determine if there is more to the research on athletic trainers' attrition than environmental and demographic factors. Personality factors should also be considered.

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APPENDIX A:

TABLES

Table 6: Descriptive Statistics of Survey Scores

	N	Minimum	Maximum	Mean	Std. Deviation
ITLS Sum	1102	0	13	3.39	2.424
Years Practiced	1102	0	52	13.20	10.499
Valid N (listwise)	1102				

Table 7: ANOVA for Years Practiced

Dependent Variable:

Years Practiced

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8662.089 <sup>a</sup>	43	201.444	1.891	.001
Intercept	54780.487	1	54780.487	514.217	.000
EPI	275.133	4	68.783	.646	.630
Current Position	2499.400	8	312.425	2.933	.003
EPI * Current Position	2713.256	31	87.524	.822	.744
Error	#####	1058	106.532		
Total	#####	1102			
Corrected Total	#####	1101			

a. R Squared = .071 (Adjusted R Squared = .034)

Table 8: Multiple Comparisons between EPI categories

Dependent Variable:		Years Practiced	Tukey			
(I) EPI		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
C	D	-2.06	1.607	.702	-6.45	2.33
	O	-1.24	.862	.603	-3.59	1.12
	S	-1.91	.903	.216	-4.37	.56
	T	-4.76*	1.370	.005	-8.50	-1.02
D	C	2.06	1.607	.702	-2.33	6.45
	O	.82	1.529	.983	-3.36	5.00
	S	.16	1.553	1.000	-4.09	4.40
	T	-2.70	1.863	.596	-7.79	2.39
O	C	1.24	.862	.603	-1.12	3.59
	D	-.82	1.529	.983	-5.00	3.36
	S	-.67	.756	.904	-2.73	1.40
	T	-3.52*	1.278	.047	-7.01	-.03
S	C	1.91	.903	.216	-.56	4.37
	D	-.16	1.553	1.000	-4.40	4.09
	O	.67	.756	.904	-1.40	2.73
	T	-2.86	1.306	.185	-6.42	.71

T	C	4.76*	1.370	.005	1.02	8.50
	D	2.70	1.863	.596	-2.39	7.79
	O	3.52*	1.278	.047	.03	7.01
	S	2.86	1.306	.185	-.71	6.42

Based on observed means.

The error term is Mean Square(Error) = 106.532.

\*. The mean difference is significant at the 0.05 level.

Table 9: Multiple Comparisons between athletic training settings

Dependent Variable: Years Practiced		Tukey				
(I) Current Position		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Academic Instruction	Administration	-9.28*	2.872	.034	-18.21	-.35
	Clinical Medical	5.29	1.897	.120	-.61	11.19
	Clinical Rehabilitation	4.90	1.908	.200	-1.03	10.83
	Collegiate Athletics	3.85	1.383	.122	-.45	8.14
	High School Athletics	4.42*	1.368	.034	.17	8.67
	Other	2.61	1.797	.877	-2.98	8.19
	Outreach School Athletics	5.72*	1.620	.013	.68	10.76
	Professional/Olympic Athletics	1.66	2.114	.997	-4.91	8.23

Administration	Academic Instruction	9.28*	2.872	.034	.35	18.21
	Clinical Medical	14.57*	2.944	.000	5.42	23.72
	Clinical Rehabilitation	14.18*	2.951	.000	5.01	23.35
	Collegiate Athletics	13.13*	2.642	.000	4.91	21.34
	High School Athletics	13.70*	2.634	.000	5.51	21.89
	Other	11.89*	2.880	.001	2.94	20.84
	Outreach School Athletics	15.00*	2.774	.000	6.38	23.62
	Professional/Olympic Athletics	10.94*	3.088	.012	1.34	20.54
Clinical Medical	Academic Instruction	-5.29	1.897	.120	-11.19	.61
	Administration	-14.57*	2.944	.000	-23.72	-5.42
	Clinical Rehabilitation	-.39	2.015	1.000	-6.65	5.87
	Collegiate Athletics	-1.44	1.527	.990	-6.19	3.30
	High School Athletics	-.87	1.514	1.000	-5.57	3.84
	Other	-2.68	1.910	.896	-8.62	3.26
	Outreach School Athletics	.43	1.745	1.000	-4.99	5.85
	Professional/Olympic Athletics	-3.63	2.211	.781	-10.50	3.24
Clinical Rehabilitation	Academic Instruction	-4.90	1.908	.200	-10.83	1.03
	Administration	-14.18*	2.951	.000	-23.35	-5.01
	Clinical Medical	.39	2.015	1.000	-5.87	6.65
	Collegiate Athletics	-1.06	1.540	.999	-5.84	3.73
	High School Athletics	-.48	1.527	1.000	-5.23	4.26
	Other	-2.29	1.920	.958	-8.26	3.67

	Outreach School Athletics	.82	1.756	1.000	-4.64	6.27
	Professional/Olympic Athletics	-3.24	2.220	.873	-10.14	3.66
Collegiate Athletics	Academic Instruction	-3.85	1.383	.122	-8.14	.45
	Administration	-13.13*	2.642	.000	-21.34	-4.91
	Clinical Medical	1.44	1.527	.990	-3.30	6.19
	Clinical Rehabilitation	1.06	1.540	.999	-3.73	5.84
	High School Athletics	.58	.777	.998	-1.84	2.99
	Other	-1.24	1.400	.994	-5.59	3.11
	Outreach School Athletics	1.87	1.165	.800	-1.75	5.49
	Professional/Olympic Athletics	-2.19	1.789	.952	-7.75	3.37
High School Athletics	Academic Instruction	-4.42*	1.368	.034	-8.67	-.17
	Administration	-13.70*	2.634	.000	-21.89	-5.51
	Clinical Medical	.87	1.514	1.000	-3.84	5.57
	Clinical Rehabilitation	.48	1.527	1.000	-4.26	5.23
	Collegiate Athletics	-.58	.777	.998	-2.99	1.84
	Other	-1.81	1.386	.929	-6.12	2.49
	Outreach School Athletics	1.30	1.147	.969	-2.27	4.86
	Professional/Olympic Athletics	-2.76	1.778	.829	-8.29	2.76
Other	Academic Instruction	-2.61	1.797	.877	-8.19	2.98
	Administration	-11.89*	2.880	.001	-20.84	-2.94
	Clinical Medical	2.68	1.910	.896	-3.26	8.62



	Clinical Rehabilitation	2.29	1.920	.958	-3.67	8.26
	Collegiate Athletics	1.24	1.400	.994	-3.11	5.59
	High School Athletics	1.81	1.386	.929	-2.49	6.12
	Outreach School Athletics	3.11	1.635	.612	-1.97	8.19
	Professional/Olympic Athletics	-.95	2.126	1.000	-7.56	5.66
Outreach School Athletics	Academic Instruction	-5.72*	1.620	.013	-10.76	-.68
	Administration	-15.00*	2.774	.000	-23.62	-6.38
	Clinical Medical	-.43	1.745	1.000	-5.85	4.99
	Clinical Rehabilitation	-.82	1.756	1.000	-6.27	4.64
	Collegiate Athletics	-1.87	1.165	.800	-5.49	1.75
	High School Athletics	-1.30	1.147	.969	-4.86	2.27
	Other	-3.11	1.635	.612	-8.19	1.97
	Professional/Olympic Athletics	-4.06	1.978	.507	-10.21	2.09
Professional/Olympic Athletics	Academic Instruction	-1.66	2.114	.997	-8.23	4.91
	Administration	-10.94*	3.088	.012	-20.54	-1.34
	Clinical Medical	3.63	2.211	.781	-3.24	10.50
	Clinical Rehabilitation	3.24	2.220	.873	-3.66	10.14
	Collegiate Athletics	2.19	1.789	.952	-3.37	7.75
	High School Athletics	2.76	1.778	.829	-2.76	8.29
	Other	.95	2.126	1.000	-5.66	7.56

Outreach School Athletics	4.06	1.978	.507	-2.09	10.21
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Based on observed means.

The error term is Mean Square(Error) = 106.532.

\*. The mean difference is significant at the 0.05 level.

Table 10: ANOVA for ITLS sum

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	386.757 <sup>a</sup>	43	8.994	1.564	.012
Intercept	2230.568	1	2230.568	387.956	.000
EPI	8.720	4	2.180	.379	.824
Current Position	152.891	8	19.111	3.324	.001
EPI * Current Position	177.289	31	5.719	.995	.476
Error	6083.014	1058	5.750		
Total	19122.000	1102			
Corrected Total	6469.771	1101			

a. R Squared = .060 (Adjusted R Squared = .022)

Table 11: Multiple Comparisons of ITLS between EPI categories

Dependent Variable:

ITLS Sum		Tukey HSD				
(I) HiEPI1		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
C	D	.18	.373	.989	-.84	1.20
	O	-.07	.200	.996	-.62	.47
	S	-.14	.210	.967	-.71	.44
	T	.16	.318	.988	-.71	1.03
D	C	-.18	.373	.989	-1.20	.84
	O	-.26	.355	.952	-1.23	.72
	S	-.32	.361	.904	-1.30	.67
	T	-.02	.433	1.000	-1.21	1.16
O	C	.07	.200	.996	-.47	.62
	D	.26	.355	.952	-.72	1.23
	S	-.06	.176	.997	-.54	.42
	T	.23	.297	.938	-.58	1.04
S	C	.14	.210	.967	-.44	.71
	D	.32	.361	.904	-.67	1.30
	O	.06	.176	.997	-.42	.54
	T	.29	.303	.871	-.54	1.12
T	C	-.16	.318	.988	-1.03	.71
	D	.02	.433	1.000	-1.16	1.21

O						
		-23	.297	.938	-1.04	.58
S						
		-.29	.303	.871	-1.12	.54

Based on observed means.

The error term is Mean Square(Error) = 5.750.

Table 12: Multiple Comparisons of ITLS sum between settings

Dependent Variable: ITLS Sum		Tukey HSD				
(I) Current Position		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Academic Instruction	Administration	-.03	.667	1.000	-2.10	2.04
	Clinical Medical	-1.43*	.441	.032	-2.80	-.06
	Clinical Rehabilitation	-1.75*	.443	.003	-3.13	-.38
	Collegiate Athletics	-1.28*	.321	.002	-2.28	-.28
	High School Athletics	-1.02*	.318	.038	-2.01	-.03
	Other	-1.30*	.417	.049	-2.60	.00
	Outreach School Athletics	-1.50*	.376	.002	-2.67	-.33
	Professional/Olympic Athletics	-.04	.491	1.000	-1.57	1.49
Administration	Academic Instruction	.03	.667	1.000	-2.04	2.10
	Clinical Medical	-1.40	.684	.506	-3.53	.72
	Clinical Rehabilitation	-1.73	.686	.224	-3.86	.40
	Collegiate Athletics	-1.25	.614	.515	-3.16	.66
	High School Athletics	-.99	.612	.796	-2.89	.91
	Other	-1.27	.669	.613	-3.35	.81

	Outreach School Athletics	-1.47	.644	.351	-3.48	.53
	Professional/Olympic Athletics	-.01	.717	1.000	-2.24	2.22
Clinical Medical	Academic Instruction	1.43*	.441	.032	.06	2.80
	Administration	1.40	.684	.506	-.72	3.53
	Clinical Rehabilitation	-.32	.468	.999	-1.78	1.13
	Collegiate Athletics	.15	.355	1.000	-.95	1.25
	High School Athletics	.42	.352	.960	-.68	1.51
	Other	.13	.444	1.000	-1.25	1.51
	Outreach School Athletics	-.07	.405	1.000	-1.33	1.19
	Professional/Olympic Athletics	1.39	.514	.145	-.20	2.99
Clinical Rehabilitation	Academic Instruction	1.75*	.443	.003	.38	3.13
	Administration	1.73	.686	.224	-.40	3.86
	Clinical Medical	.32	.468	.999	-1.13	1.78
	Collegiate Athletics	.47	.358	.924	-.64	1.59
	High School Athletics	.74	.355	.489	-.37	1.84
	Other	.45	.446	.984	-.93	1.84
	Outreach School Athletics	.25	.408	1.000	-1.02	1.52
	Professional/Olympic Athletics	1.71*	.516	.026	.11	3.32
Collegiate Athletics	Academic Instruction	1.28*	.321	.002	.28	2.28
	Administration	1.25	.614	.515	-.66	3.16
	Clinical Medical	-.15	.355	1.000	-1.25	.95

	Clinical Rehabilitation	-.47	.358	.924	-1.59	.64
	High School Athletics	.26	.181	.874	-.30	.82
	Other	-.02	.325	1.000	-1.03	.99
	Outreach School Athletics	-.22	.271	.996	-1.06	.62
	Professional/Olympic Athletics	1.24	.416	.071	-.05	2.53
High School Athletics	Academic Instruction	1.02*	.318	.038	.03	2.01
	Administration	.99	.612	.796	-.91	2.89
	Clinical Medical	-.42	.352	.960	-1.51	.68
	Clinical Rehabilitation	-.74	.355	.489	-1.84	.37
	Collegiate Athletics	-.26	.181	.874	-.82	.30
	Other	-.28	.322	.994	-1.28	.72
	Outreach School Athletics	-.48	.267	.669	-1.31	.34
	Professional/Olympic Athletics	.98	.413	.304	-.31	2.26
Other	Academic Instruction	1.30*	.417	.049	.00	2.60
	Administration	1.27	.669	.613	-.81	3.35
	Clinical Medical	-.13	.444	1.000	-1.51	1.25
	Clinical Rehabilitation	-.45	.446	.984	-1.84	.93
	Collegiate Athletics	.02	.325	1.000	-.99	1.03
	High School Athletics	.28	.322	.994	-.72	1.28
	Outreach School Athletics	-.20	.380	1.000	-1.38	.98

	Professional/Olympic Athletics	1.26	.494	.209	-.27	2.80
Outreach School Athletics	Academic Instruction	1.50*	.376	.002	.33	2.67
	Administration	1.47	.644	.351	-.53	3.48
	Clinical Medical	.07	.405	1.000	-1.19	1.33
	Clinical Rehabilitation	-.25	.408	1.000	-1.52	1.02
	Collegiate Athletics	.22	.271	.996	-.62	1.06
	High School Athletics	.48	.267	.669	-.34	1.31
	Other	.20	.380	1.000	-.98	1.38
	Professional/Olympic Athletics	1.46*	.460	.040	.03	2.89
Professional/Olympic Athletics	Academic Instruction	.04	.491	1.000	-1.49	1.57
	Administration	.01	.717	1.000	-2.22	2.24
	Clinical Medical	-1.39	.514	.145	-2.99	.20
	Clinical Rehabilitation	-1.71*	.516	.026	-3.32	-.11
	Collegiate Athletics	-1.24	.416	.071	-2.53	.05
	High School Athletics	-.98	.413	.304	-2.26	.31
	Other	-1.26	.494	.209	-2.80	.27
	Outreach School Athletics	-1.46*	.460	.040	-2.89	-.03

Based on observed means.

The error term is Mean Square(Error) = 5.750.

\*. The mean difference is significant at the 0.05 level.

## APPENDIX B:

### SURVEY

Hello,

My name is Tyler Harris, and I am a Graduate Teaching Assistant in the Athletic Training department at Northern Michigan University. I am also in the graduate program for Psychology here at NMU. The following survey is part of my master's thesis. You are receiving this survey because you are, or once were, a BOC certified Athletic Trainer (AT).

The profession of Athletic Training has a high burnout rate, but little research has been done on the roles of setting and personality on that burnout. My goal is to determine whether or not there is a relationship between job personality and longevity in the profession of Athletic Training.

This survey should take no more than 15 minutes to complete. Although there are no immediate benefits to participants, there are minimal risks, and I hope to help others in the future with this study.

All personal information and identifiers will be removed when the data are analyzed. Taking part in this research study is completely voluntary. If you decide not to be in this study, or if you stop participating at any time, you won't be penalized or lose any benefits for which you otherwise qualify. Participation is anonymous. All answers are private and nobody will know whether or not you have taken the survey. Participation in this survey is voluntary and can be discontinued at any time without penalty. Completion of the survey will be considered informed consent.

This study has been approved by the Institutional Review Board of Northern Michigan University under the administrative review process, proposal number HS15-646.

If you have any further questions regarding your rights as a participant in a research project you may contact Dr. Brian Cherry of the Human Subjects Research Review Committee of Northern Michigan University (906-227-1823) [bcherry@nmu.edu](mailto:bcherry@nmu.edu).

Any questions you have regarding the nature of this research project will be answered by me, Tyler Harris, [tyharris@nmu.edu](mailto:tyharris@nmu.edu).

Please answer the following questions as honestly as possible.



**Currently, in what setting do you primarily practice Athletic Training?**

- Professional/Olympic Athletics
- Collegiate Athletics
- High School Athletics
- Outreach School Athletics
- Clinical Rehabilitation
- Clinical Medical
- Academic Instruction
- Administration
- Other
- Do not currently practice Athletic Training. (If this is selected, in what field is your current job?)

**In what other setting(s) do you/have you primarily practice(d) Athletic Training?**

- Professional/Olympic Athletics
- Collegiate Athletics
- High School Athletics
- Outreach School Athletics
- Clinical Rehabilitation
- Clinical Medical
- Academic Instruction
- Administration
- Other

**How long have you been in your current position/setting (in years)? (If not currently an Athletic Trainer, how many years did you practice Athletic Training?)**

**How many years total have you practiced Athletic Training?**

**How many years ago did you receive your Athletic Training certification?**

**Overall, how satisfied are you with your current/most recent Athletic Training position?**

Very Dissatisfied  Dissatisfied  Neutral  Satisfied  Very Satisfied

**How often do you think about quitting the profession of Athletic Training?**

Never  Rarely  Often  Constantly  Already Have

**What are your intentions on quitting the profession of Athletic Training?**

Very Unlikely  Unlikely  Undecided  Likely  Very Likely  Already Have

**The following is the Employee Personality Inventory (EPI). Choose the word in the pair that is most like you. Even if both words are like you, you must choose only one word. If neither word is like you, you must still choose one of the words.**

- |                       |                       |                       |                         |
|-----------------------|-----------------------|-----------------------|-------------------------|
| <b>Calm</b>           | <input type="radio"/> | <input type="radio"/> | <b>Efficient</b>        |
| <b>Accurate</b>       | <input type="radio"/> | <input type="radio"/> | <b>Energetic</b>        |
| <b>Original</b>       | <input type="radio"/> | <input type="radio"/> | <b>Competitive</b>      |
| <b>Inroverted</b>     | <input type="radio"/> | <input type="radio"/> | <b>Extroverted</b>      |
| <b>Careful</b>        | <input type="radio"/> | <input type="radio"/> | <b>Bold</b>             |
| <b>Resourceful</b>    | <input type="radio"/> | <input type="radio"/> | <b>Trusting</b>         |
| <b>Empathic</b>       | <input type="radio"/> | <input type="radio"/> | <b>Inquiring</b>        |
| <b>Assertive</b>      | <input type="radio"/> | <input type="radio"/> | <b>Exact</b>            |
| <b>Playful</b>        | <input type="radio"/> | <input type="radio"/> | <b>Dominant</b>         |
| <b>Curious</b>        | <input type="radio"/> | <input type="radio"/> | <b>Detailed</b>         |
| <b>Precise</b>        | <input type="radio"/> | <input type="radio"/> | <b>Tolerant</b>         |
| <b>Ambitious</b>      | <input type="radio"/> | <input type="radio"/> | <b>Helpful</b>          |
| <b>Outgoing</b>       | <input type="radio"/> | <input type="radio"/> | <b>Imaginative</b>      |
| <b>Talkative</b>      | <input type="radio"/> | <input type="radio"/> | <b>Agreeable</b>        |
| <b>Enterprising</b>   | <input type="radio"/> | <input type="radio"/> | <b>Friendly</b>         |
| <b>Persuasive</b>     | <input type="radio"/> | <input type="radio"/> | <b>Sociable</b>         |
| <b>Patient</b>        | <input type="radio"/> | <input type="radio"/> | <b>Convincing</b>       |
| <b>Organized</b>      | <input type="radio"/> | <input type="radio"/> | <b>Inventive</b>        |
| <b>Conversational</b> | <input type="radio"/> | <input type="radio"/> | <b>Self-disciplined</b> |
| <b>Confident</b>      | <input type="radio"/> | <input type="radio"/> | <b>Creative</b>         |
| <b>Loyal</b>          | <input type="radio"/> | <input type="radio"/> | <b>Chatty</b>           |
| <b>Outspoken</b>      | <input type="radio"/> | <input type="radio"/> | <b>Soft-spoken</b>      |
| <b>Clever</b>         | <input type="radio"/> | <input type="radio"/> | <b>Socializer</b>       |
| <b>Powerful</b>       | <input type="radio"/> | <input type="radio"/> | <b>Insightful</b>       |
| <b>Dependable</b>     | <input type="radio"/> | <input type="radio"/> | <b>Self-Assured</b>     |
| <b>Frisky</b>         | <input type="radio"/> | <input type="radio"/> | <b>Intense</b>          |
| <b>Peaceful</b>       | <input type="radio"/> | <input type="radio"/> | <b>Smart</b>            |
| <b>Spontaneous</b>    | <input type="radio"/> | <input type="radio"/> | <b>Cautious</b>         |
| <b>Innovative</b>     | <input type="radio"/> | <input type="radio"/> | <b>Systemic</b>         |
| <b>Orderly</b>        | <input type="radio"/> | <input type="radio"/> | <b>Cooperative</b>      |

- |                   |                       |                       |                   |
|-------------------|-----------------------|-----------------------|-------------------|
| <b>Daring</b>     | <input type="radio"/> | <input type="radio"/> | <b>Sincere</b>    |
| <b>Methodical</b> | <input type="radio"/> | <input type="radio"/> | <b>Outgoing</b>   |
| <b>Sharp</b>      | <input type="radio"/> | <input type="radio"/> | <b>Fun</b>        |
| <b>Rebellious</b> | <input type="radio"/> | <input type="radio"/> | <b>Punctual</b>   |
| <b>Fun-loving</b> | <input type="radio"/> | <input type="radio"/> | <b>Fearless</b>   |
| <b>Bright</b>     | <input type="radio"/> | <input type="radio"/> | <b>Dynamic</b>    |
| <b>Modest</b>     | <input type="radio"/> | <input type="radio"/> | <b>Perceptive</b> |
| <b>Detailed</b>   | <input type="radio"/> | <input type="radio"/> | <b>Ingenious</b>  |
| <b>Mingler</b>    | <input type="radio"/> | <input type="radio"/> | <b>Courteous</b>  |
| <b>Supportive</b> | <input type="radio"/> | <input type="radio"/> | <b>Logical</b>    |

This concludes the survey. Thank you for your participation.

If you wish to be provided with more information on this survey, or have any questions, feel free to contact me.

Tyler Harris, AT  
tyharris@nmu.edu

## APPENDIX C:

### HUMAN SUBJECTS APPROVAL FORM

Signed copies to follow via campus mail

Memorandum

TO: Tyler Harris  
Department of Psychology

CC: Shelia Burns  
Department of Psychology

FROM: Dr. Brian Cherry  
Assistant Provost/IRB Administrator

DATE: March 16, 2015

SUBJECT: IRB Proposal HS15-646  
"Personality and Longevity in the Athletic Training Profession"  
IRB Approval Dates: 3/13/2015-3/1/2016\*\*  
Proposed Project Dates: 3/1/2015-3/1/2016

Your proposal "Personality and Longevity in the Athletic Training Profession" has been approved under the administrative review process. Please include your proposal number (HS15-646) on all research materials and on any correspondence regarding this project.

Any changes or revisions to your approved research plan must be approved by the Institutional Review Board (IRB) prior to implementation.

\*\*If you do not complete your project within 12 months from the date of your approval notification, you must submit a Project Renewal Form for Research Involving Human Subjects. You may apply for a one-year project renewal up to four times.

All forms can be found at the NMU Grants and Research website:  
<http://www.nmu.edu/grantsandresearch/node/102>

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