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IMPORTANCE OF LEADERSHIP COMPETENCIES IN COLLEGE AND UNIVERSITY
STAFF ATHLETIC TRAINERS: PERCEPTIONS OF HEAD ATHLETIC TRAINERS

By

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Dissertation

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Importance of Leadership Competencies in College and University Staff Athletic Trainers:
Perceptions of Head Athletic Trainers

Chairperson: William P. McCaw, Ed.D.

This quantitative study utilized a survey design to determine the level of importance head athletic trainers at the college and university level place on their staff athletic trainers displaying previously identified leadership competencies. Data were collected using a web-based questionnaire designed for the study. Participants were 326 college and university head athletic trainers closely resembling the characteristics of the population.

Data were analyzed with descriptive statistics to determine the level of importance assigned to each competency and the demographic responses of participants. Inferential statistics were used to identify relationships between the demographic characteristics of participants and the level of importance assigned to the competencies.

The competencies were also sorted into categories of Leadership, Management, and Personal Characteristics using the Competency Coding Matrix designed, and evaluated for internal consistency by the researcher. The Competency Coding Matrix was developed using established definitions of leadership and management, allowing its use for differentiating between management, leadership, and personal characteristics in settings beyond the field of athletic training. The level of importance assigned to the competencies within each category were compared to determine the ranked importance of the categories.

Data collected in this study indicated that (a) a high level of importance was placed on each of the competencies, (b) few demographic factors impacted the level of importance assigned to the competencies by participants, (c) the previously identified competencies included knowledge, skills, and abilities representing leadership, management, and personal characteristics, and (d) the highest level of importance was assigned to competencies in the category of Management followed by Personal Characteristics, and then Leadership.

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Chapter One: Introduction to the Study

Athletic training is a health care profession in which services are provided to physically active people in a variety of settings. The National Athletic Trainers' Association (NATA) was formed in 1950 to increase cooperation between athletic trainers and provide leadership for an expanding profession. The initial members of the association were athletic trainers who worked with collegiate football programs. These individuals recognized the need for increased communication between members of their emerging profession and valued the opportunity for service (O'Shea, 1980). During the 50 years following its creation the NATA was led by these founding athletic trainers and the students they mentored (O'Shea, 1980). The turn of the twentieth century brought an expansion in the settings in which athletic trainers work, an increased scope of practice, major revisions to the educational preparation of athletic training students, and the retirement of the first two generations of athletic trainers (Grantham, 2013; NATA, 2012). These changes led to calls for leadership from athletic trainers to move the profession forward and to address the concerns of an increasingly diverse population of athletic trainers (Dieringer, 2011; Grantham, 2013; NATA, 2009; Prentice, 2013).

In response to the expanding opportunities and changes in athletic training during the past two decades, scholarly literature has touted the benefits of an understanding and practice of leadership by athletic trainers and shown that leadership behaviors exhibited by athletic trainers are similar to those practice by leaders in other professions (Gieck, 2010; Kutz, 2004a; Laurent & Bradney, 2007; Platt, 2002). Most often, the focus of literature on leadership in athletic training has mirrored that of other health care professions which showed benefits of leadership including better working environments, increased employee or student satisfaction, and improved patient outcomes (Hannam, 2000; Laurent & Weidner, 2001). Justification provided

for the study of leadership in athletic training most often emphasized that athletic trainers can use leadership to advance the standing of the profession within the health care community, adapt to new health care practice acts, and implement evidence based medicine practices (Barr & Dowding, 2008; Hunt, 2001; Kutz, 2004a; Platt, 2000). In addition to exploring the outcomes of leadership, researchers examined how athletic trainers in administrative roles display leadership behaviors (Laurent & Bradney, 2007; Laurent & Weidner, 2001). Work also was undertaken to describe the leadership content that should be included in the academic preparation of athletic training students (Kutz, 2006).

Although much time and effort has been directed toward encouraging leadership development in athletic training, major limitations remain. Existing research on leadership competencies important for athletic trainers (Kutz, 2006) included both leadership and management constructs and does not differentiate between the two. Leadership was identified by the Pew Health Professions Commission (1998) as one of the 21 competencies important for allied health professionals, but no definition of the concept was offered. The educational competencies guiding curricular development in professional athletic training programs (ATP) include management concepts, but these competencies are often described as leadership content in the literature. The mixing of leadership and management concepts evident in the literature reflects Rost's (1991, p. 94) industrial-era view that "leadership is good management." Rost (1991) developed postindustrial definitions of leadership and management and a framework with which it can be determined if one's actions are those of leadership or management. In Rost's work, leadership occurs in a multidirectional influence relationship in which roles can be fluid and are not based on assigned positions. This definition allows for informal leadership to occur and for many individuals to contribute to the organization through leadership actions. The

leadership relationship develops around leaders and followers who intend real changes that reflect their mutual purposes (Rost). In contrast, the concept of management is an authority relationship designed to produce goods or services for an organization (Rost). Rost contended that confusion between leadership and management concepts limits our ability to understand or identify either. Barker (1997) also stated that the lack of a clear understanding of the concept of leadership and how it varies from management as a continuing problem in leadership education. Without an understanding of the differences between leadership and management athletic training educators have continued to lump these concepts together and include only management content in their curricula (Barker, 1997). This leaves the development of leadership characteristics and knowledge of leadership content to chance, resulting in disparities between graduates of different programs.

In addition to the problem of a lack of identified knowledge, skills, and abilities related to leadership for athletic trainers, there is confusion between the concepts of leadership and management. This is potentially a result of the limited research on leadership behaviors used by the majority of athletic trainers. Laurent and Bradney (2007) described leadership styles of head athletic trainers and program directors of athletic training education programs, but did not examine leadership practices of athletic trainers in non-administrative roles. Laurent and Weidner (2001) examined the relationship between behaviors exhibited by Clinical Preceptors and student satisfaction. Kutz (2006) generated a list of leadership competencies related to the practice of athletic training using a group of 18 experts in the field. Kutz then surveyed 161 athletic trainers on the level of importance they assigned to each competency for athletic trainers in any practice setting. While Kutz developed the list of competencies, there has been no

additional work to determine if athletic trainers in any setting actually possess or are required to use these leadership skills.

Problem Statement

Although athletic training literature and leaders within the professional association continue to assert that all athletic trainers use leadership in their practice, there is no empirical evidence to support this belief. The college and university setting is the most common setting in which athletic trainers work (NATA, 2013a). In October of 2013, 18.08% of NATA members reported employment in this setting (NATA, 2013a). Of these individuals, some are formally assigned to positions such as head athletic trainer which explicitly involve management and leadership duties. Other members of the athletic training staff are not assigned formal leadership positions within the department and are considered staff athletic trainers.

While a majority of athletic training professionals are not involved in the formal leadership of their organization, they serve an important role in its effectiveness. According to Brown and Thornborrow (1996) the nature and quality of both leaders and followers must be cultivated for an organization to be successful. Rost (1991) described leadership as dependent upon both leaders and followers; both parties must work together for leadership to occur, and argued that people can act both as leaders and followers during the relationship. Rost's description of leadership required work toward change that reflects the mutual purposes of leaders and followers. As participants in a leadership relationship within an organization, followers must accept responsibility for their own roles as well as the roles and actions of those whom they can influence, including leaders (Chaleff, 2009).

Based on these definitions and responsibilities of participants in a leadership relationship, even athletic trainers not assigned to formal leadership positions within the NATA or their work setting must be prepared to contribute to the work of the organization. Within an organization or group, leadership and power can come from a number of sources (French & Raven, 1959). Athletic trainers who are not prepared to act both as leaders and active followers are limiting their contribution to their work settings and professional organization. Athletic trainers assigned to leadership positions do not work alone to advance the profession, they rely on the contributions of followers. Research in the field of business management contends that effective leaders and followers share many of the same characteristics, and that training in leadership and followership can enhance the effectiveness of both (Brown & Thornborrow, 1996).

Research has examined the leadership practices used by athletic trainers in the formal leadership positions of ATP Program Director, Head Certified Athletic Trainer (Laurent & Bradney, 2007), and Clinical Preceptors (Laurent & Weidner, 2001), but these individuals account for only a portion of college and university athletic trainers and represent a small percentage of practicing athletic trainers. All candidates for certification in athletic training must complete a degree in athletic training from a Commission on Accreditation of Athletic Training Education (CAATE) accredited institution. The curricula of these programs are built upon the *Athletic Training Education Competencies* (NATA, 2011) which outline the knowledge, skills, and clinical abilities required of entry-level athletic trainers as described by the *Athletic Trainer Role Delineation Study* (Board of Certification [BOC], 2010). Athletic training educators must instruct and evaluate students in all 229 competencies during their course of study, creating a very prescribed and full curriculum. These competencies include healthcare administration and professional development and responsibility topics, but do not require the instruction or

evaluation of knowledge or skills related to leadership. The lack of research establishing the need for all athletic trainers to possess leadership skills, thereby justifying the addition of leadership content and competencies to the curriculum may have resulted in leadership competencies remaining absent from the latest version of the *Competencies* (NATA, 2011). Without direction from the accrediting body or athletic training education committees, there has been no movement by those working in the field of athletic training education to include standardized leadership content into educational programs. The absence of leadership competencies in the curricula leaves the development of leadership abilities to chance (Kutz, 2004b; Platt, 2000). Revision of the CAATE competencies guiding ATP curriculum to include leadership skills and abilities has not occurred despite calls from the field that the development of future leaders is necessary to sustain the profession (NATA, 2009), and the reality that an organization's future leaders are likely to be drawn from the pool of followers (Brown & Thornborrow, 1996).

Athletic trainers without the full understanding of leadership are limited in their ability to participate in the development and leadership of an efficient and effective health care provision model. Kelley (1988) described followers who do not actively participate in the organization and use limited critical thinking skills as sheep. Sheep-like followers who blindly follow the directives of those in formal leadership positions, may result in compromised health care delivery as well as the compromise of ethical standards. In the collegiate and university setting this may be especially problematic due to the intense pressure to keep star athletes on the court or field, even in the face of significant injury (Wolverton, 2013). Pitney (2006) indicated that the work of college and university athletic trainers is especially complex due to the juxtaposition of providing high quality health care in an environment focused on winning and competing at a high level. There is evidence that leadership abilities allow collegiate and university athletic

trainers to play an active role in the development and enforcement of ethically sound policies to ensure patient safety, and also to maintain relationships with formal leaders within their workplace (Kelley, 1988; Pitney, 2006; Wolverton, 2013). Followers with appropriate leadership skills are capable of disagreeing with those in formal leadership positions in defense of their beliefs, and are less likely to be intimidated by the existing hierarchy and organizational structure (Kelley, 1988).

Neither athletic training clinics nor educational programs can realize their full potential without each member of the staff participating in leadership. “When everyone is a leader, each person is responsible for guiding the organization” (Kouzes & Posner, 1993, p. 174). Developing leadership capacity within a group and liberating each member to take action results in a shared responsibility to stay aligned with organizational values (Kouzes & Posner, 1993). When members of an organization have the skills and are empowered to act on the shared values of the organization, credibility with constituents is increased (Kouzes & Posner, 1993). A lack of leadership knowledge, skills, and abilities within any member of the athletic training staff may ultimately impact the focal point of athletic training, namely the patient.

Purpose of the Study

The purpose of this quantitative study was to gather data regarding the importance of college and university staff athletic trainers displaying leadership qualities. Using a survey design, quantitative data were collected to describe the degree of importance head athletic trainers place on their staff athletic trainers demonstrating the leadership competencies identified as important for inclusion in professional athletic training programs by Kutz (2006). In addition, the researcher used Rost’s (1991) post-industrial definitions of leadership and management to

classify Kutz's leadership competencies as leadership or management. An additional category of personal characteristic was developed for classification of the competencies that cannot be described as leadership or management based on Rost's definitions.

Research Questions

Research questions are used to shape survey research and focus the purpose of a study (Creswell, 2003). This quantitative study was guided by the following three research questions.

1. What level of importance do college/university head athletic trainers place on their staff athletic trainers demonstrating each of the identified athletic training leadership competencies?
2. Which demographic factors have a statistically significant relationship to the perceived importance placed upon each of the competencies?
3. What statistically significant relationships exist between the categories (leadership, management, or personal characteristic) into which the competencies are assigned and the perceived level of importance placed upon the competency?

Definition of Terms

For the purposes of this study, the following definitions were used.

Athletic trainer (AT). Athletic trainers are health care professionals who collaborate with physicians to provide services in prevention, emergency care, clinical diagnosis, therapeutic intervention and rehabilitation of injuries and medical conditions (NATA, 2013b).

Athletic training programs (ATP). Athletic training programs are accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The accreditation ensures the institution and the athletic training curriculum of study have meet the minimum CAATE standards and guidelines for entry-level athletic training education (Commission on Accreditation of Athletic Training Education [CAATE], 2006; National Athletic Trainers' Association Education Council [NATAEC], 2009).

Dispositions. A disposition is a tendency to respond to situations with a conscious and voluntary pattern of behavior directed toward a broad goal (Katz, 1993). Dispositions can be developed through educational training (Katz, 1993; Platt, 2002). In this study dispositions were included in the competency category personal characteristics.

Clinical preceptor. Clinical preceptors are credentialed health care professionals participating in the supervision, instruction and assessment of athletic training students enrolled in an accredited athletic training program (University of Montana, 2013).

Educational competencies. The educational competencies are designed to provide entry-level knowledge, skills, and abilities (KSA) to athletic training students in the areas of: (a) evidence-based practice, (b) prevention and health promotion, (c) clinical examination and diagnosis, (d) acute care of injury and illness, (e) therapeutic interventions, (f) psychosocial strategies and referral, (i) healthcare administration, and (k) professional development and responsibilities (NATA, 2011).

Head athletic trainer. Head athletic trainers are responsible for administering the athletic training program including the supervision of the staff of athletic trainers (Laurent & Bradney,

2007). Equivalent titles include director of athletic training and assistant/associate athletic director of athletic training.

Leadership. “Leadership is an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes” (Rost, 1991, p. 102).

Leadership competencies. “Leadership competencies for athletic trainers are the cluster of knowledge, skills, and abilities that an athletic trainer can use to influence and affect the behavior or attitudes of others regardless of context” (Kutz, 2006, p. 14). The 49 leadership competencies used to develop the questionnaire used in this research were identified through the research of Kutz (2006) as important for athletic training practice. See Appendix A for descriptions of the athletic training leadership competencies.

Leadership development. Leadership development is the expansion of a person’s capacity to be effective in leadership roles and processes that enable people to work together in productive and meaningful ways (McCauley & Douglas, 1998).

Management. “Management is an authority relationship between at least one manager and one subordinate who coordinate their activities to produce and sell particular goods and/or services” (Rost, 1991, p. 145).

Personal Characteristics. In the classification of leadership competencies for this study, the category of personal characteristics included attributes that are independent of leadership or management relationships. Personal characteristics include the skills, traits, and dispositions possessed by an individual and applied to the practice of athletic training.

Practice domains of athletic training. Athletic trainers certified by the Board of Certification are educated, trained, and evaluated in the areas of (a) prevention, (b) recognition, evaluation and assessment, (c) immediate care, (d) treatment, rehabilitation, and reconditioning, (e) organization and administration, and (f) professional development (NATAEC, 2009).

Skills. Abilities, proficiencies, facility or talents developed or acquired through training, practice or experience are considered to be skills (*American heritage dictionary*, 2011; VandenBos, 2007). For this study skills were included in the competency category of personal characteristics.

Staff athletic trainers. Within the college and university setting institutions often employ more than one athletic trainer. For the purposes of this study, staff athletic trainers were defined as full- or part-time athletic trainers employed by the institution who are not assigned to the administrative roles described in the definition of head athletic trainer.

Traits. A trait is an enduring personality characteristic that describes or determines behavior across a range of situations (VandenBos, 2007). Traits may be inherited or learned (Allport, 1960). For the purposes of this study traits were included in the Personal Characteristics competency category.

Delimitations

This study was delimited to head athletic trainers employed at four-year institutions in the United States with membership in either the National Collegiate Athletic Association (NCAA) or the National Association of Intercollegiate Athletics (NAIA).

Limitations

The instrument used for this study was a self-administered online questionnaire. Limitations of self-administered questionnaires include low response rate and the potential that the questionnaire could be completed by someone other than the intended recipient (Neuman, 2000). One limitation inherent in questionnaires using Likert scale responses is the potential for response set, or the tendency for the participant to answer a large number of items with the same response out of laziness or psychological predisposition (Neuman, 2000). Participants responded to each item via four-choice ordered Likert scale responses resulting in ordinal data. Ordinal level data does not reflect the amount of agreement or disagreement or a standard distance between categories (Neuman, 2000).

The competencies used in this study were developed by Kutz (2004) and may not be an inclusive list of leadership, management, and personal characteristics important in the field of athletic training. Another limitation concerns the nature of information gathered from participants. The responses to the dependent variable items were the degree of importance head athletic trainers place on their staff athletic trainers displaying each competency. This information is subjective in nature and was gathered through a one-time questionnaire designed specifically for this research. An additional limitation is that the participants in this research are from a single practice setting, it is possible that supervisors of athletic trainers working in other settings may assign a different level of importance to the competencies.

Significance of the Study

While authors have contended that all athletic trainers must exhibit leadership skills in their daily practice, research has only explored the leadership qualities of athletic trainers serving

as educators, program directors, and head athletic trainers. This study collected information about the importance of leadership abilities for athletic trainers working in the college and university setting, as viewed by their supervisors. The college and university setting represents the largest segment of athletic trainers, therefore the results of this research are applicable to much of the field of athletic training.

As in other disciplines, the athletic training literature concerning leadership was not build around a clear definition of leadership and management and therefore confused the two concepts. An analysis of Kutz's (2006) leadership competencies based on Rost's (1991) definitions of leadership and management was conducted to identify to which of three categories, Leadership, Management or Personal Characteristic, each competency belonged. Once the competencies were appropriately assigned to a category, the level of importance assigned to each category could be compared to determine if head athletic trainers place a greater degree of importance on competencies in any one category. This allowed a determination to be made of whether it is truly leadership that is sought in staff athletic trainers, or whether management or personal characteristics are more highly valued.

Leadership competencies have not been included in the required curricula of athletic training programs. The findings from this research can be used to support the identification of competencies appropriate for inclusion in curricula of ATP and in continuing education offerings for practicing athletic trainers. Standardizing the leadership competencies taught to athletic training students will ensure that practicing athletic trainers are equipped with the skills necessary to engage in the leadership of their athletic training organization. An ability that is especially important in the collegiate and university setting where athletic trainers face pressure that may lead to a compromise the delivery of quality health care services for patients.

Summary

As with other fields of study, the distinction between leadership and management has not been defined in athletic training research. While scholars contend that the practice of leadership is important for all athletic trainers and should be included in professional athletic training programs, there are no data to support these claims (Bradney & Laurent, 2007; Kutz, 2004b; Platt, 2000). Kutz (2006) established competencies that were viewed as important for the practice of athletic training, but his findings did not include distinctions between concepts of leadership, management, professional abilities, or personal characteristics. Additionally, Kutz did not address whether or not the competencies were necessary for athletic trainers not assigned to formal leadership positions.

This quantitative study used a survey design to determine the perceived level of importance head athletic trainers place on their staff athletic trainers displaying each of the athletic training leadership competencies identified by Kutz (2006). The study was guided by three research questions. The first identified the level of importance assigned to the competencies, and the second question identified relationships between demographic characteristics of the respondents and the level of importance they placed on the competencies. To address the third research question, each competency was assigned to one of three categories: (a) Leadership, (b) Management, and (c) Personal Characteristics to allow for a comparison of the level of importance assigned to each category. The Competency Coding Matrix was developed by the researcher using established definitions of leadership and management to allow for categorization of the competencies in this research.

Scholars in nearly all fields of study have written extensively on the topic of leadership. To support the operational definitions and the theoretical framework of this study a review of related literature was conducted. The following chapter examines a number of leadership theories, the role of followers in leadership, and provides the background necessary for categorizing the leadership competencies examined in this study.

Chapter Two: Review of Literature

This review of literature serves a number of purposes. By lending historical perspective, it helps to define the context and scope of a study (Boote & Beile, 2005). Evidence from reviewed literature also creates a case for the necessity of studying the topic under examination (Hart, 1998). Finally, a summary of existing literature and a synthesis of completed findings, including a critical examination of research methods, informed the research questions and design strategies for this study.

This chapter begins with a discussion of skills, traits, and dispositions as they relate to the language of leadership and management studies. In this review of literature, purposefully selected leadership theories are examined to inform the development of the questionnaire, foundations of the study, and to provide a framework for understanding literature involving leadership and management in athletic training. The distinctions between leadership and management are included to establish operational definitions for the study and provide a backdrop for examining competencies identified as important in the field of athletic training. This chapter also describes the field of athletic training, demographics of college and university athletic trainers, and the professional education requirements of the profession. Finally, research on the necessity of leadership in the field of athletic training is examined, and connections are made between existing leadership in athletic training and this study.

Leadership and Management

The concepts of leadership and management have been at the center of innumerable writings in disciplines from business to psychology. The great volume of literature on the topics contains a variety of definitions and descriptions of both phenomena (Rost, 1991). The work of

Rost (1991) provided the framework from which leadership and management was examined in this review and subsequent study.

Terminology of leadership studies. Within the literature on leadership in athletic training the terms skills, traits, and dispositions have all been used to describe qualities necessary for leadership. When the terms have been applied to the examination and development of leadership, scholars have often used them interchangeably rather than drawing sharp distinctions between their definitions and applicability (Bennis & Nanus, 1985). Additionally, scholars often failed to clearly define leadership and management creating confusion between the two distinct concepts (Rost, 1991).

Skills. A skill is defined as an ability, proficiency, facility, or talent developed or acquired through training, practice or experience (*American heritage dictionary*, 2011; Vandenberg, 2007). Skills have also been defined as a coordinated series of actions that serve to reach a goal or accomplish a task (Bierman, 1994). According to Attewell (1990), at the core of every skill definition is the idea of competence and proficiency. Skill implies understanding or knowledge but also encompasses physical proficiency (Attewell, 1990).

The definitions of skill allow for a belief that skills can be learned rather than being innate characteristics. Skill development programs are evident in areas such as writing to motor skills. Bennis (2009) confirmed that leadership development courses can teach skills to participants. Leadership skill development included in educational curricula has been shown to enhance the practice of leadership skills (Laurent & Bradney, 2007).

Traits. Traits have been defined as general directive tendencies that can be described as a manner of behaving (Allport, 1937; Robins & Pervin, 2008). Traits are the underlying

determinants that produce consistent reactions across a range of situations and over time (Allport, 1960; John & Gosling, 2000; VandenBos, 2007). According to Allport (1937) traits must be general rather than specific and can be described in behavioral terms. Traits are expressed with consistency across time and almost all spheres of a person's behavior; and therefore can be described as a way of behaving, thinking, and feeling (Allport, 1937; John & Gosling, 2000). Evaluation of an individual's traits can be used to summarize, predict, and explain conduct (John & Gosling, 2000). Still, behaviors inconsistent with a trait do not disprove the existence of that trait in an individual (Allport, 1960).

Allport (1937) explained that traits are the result of the fusion of habits and endowment and can either be inherited or acquired. Definitions of traits have continued to support a belief that both genetic and environmental factors play a role in trait development (John & Gosling, 2000). Early trait-focused studies of leaders equated inherent factors such as stature, gender, and age with leadership proficiency (Rost, 1991). This approach created a view that each man either possessed the traits to lead or did not; great leaders were simply born with the right combination of traits.

Over time the study of traits in leadership expanded to include behaviors that can be acquired through educational programming or experience. For example, Bennis and Nanus (1985) treated traits and skills equally when developing their leadership competency model. Kirkpatrick and Locke (1991) stated that traits are not a sufficient condition for leadership, but are a precondition as are the possession of other skills and behaviors. In leadership literature it is common practice to use the terms traits and skills interchangeably and to avoid distinguishing between the two (Jokinen, 2004).

Dispositions. During the early and mid-twentieth century dispositions were viewed by psychologists as innate temperamental factors present from birth and influenced by inheritance (Allport, 1955). Boven (1931) described dispositions as innate temperamental factors. Allport (1955) stated that dispositions were common tendencies among a species that allow for survival, bring about characteristic developmental markers, and are gene linked characteristics.

Evolution of this description took place leading to Katz's (1993) description of dispositions as tendencies to exhibit frequently, consciously, and voluntarily a pattern of behavior that is directed to a broad goal. According to Katz and Rath (1985), dispositions are trends in actions rather than an emotional state. Dispositions have been defined as recurrent behavioral or affective tendency that distinguishes an individual from others (VandenBos, 2007). Dispositions are habits of the mind which allow an individual to respond to a situation in a predictable manner, complementing the development of skills in the educational process (Katz, 1993).

Dispositions can be learned in a professional education setting, and are most effectively transferred from instructors to students through modeling (Dirks et al., 1998; Katz, 1993). Including dispositions in educational goals allows for opportunities to strengthen the dispositions associated with skills and increase the chance of a skill being used (Katz, 1993). Wasonga and Murphy (2007) found that educators were aware of the importance of leadership dispositions in successful outcomes for both students and school governance.

Personal characteristics. Bloom (1964) defined characteristics as a measurement of human attributes or behavior. Bloom contended that characteristics could be represented on a quantitative scale indicating the amount or presence of the characteristic. For the purposes of this study the term personal characteristics is used to describe competencies used in the study

that can be demonstrated independently of a relationship. The personal characteristics identified in the study included items identified as skills, traits, and dispositions according to the previous descriptions. Each personal characteristic descriptor used in this research was found in the leadership competencies developed by Kutz (2006).

Competencies. A competency is a capability or ability comprised of a set of related behavioral responses driven by an underlying construct or intent (Boyatzis, 2008). Dye and Garman (2006) defined competencies as a set of professional and personal skills, knowledge, values, and traits that guide a leader's performance, behavior, interaction, and decisions. The inclusion of skills and knowledge in these definitions indicates that leadership competencies can be learned and developed through educational practices or professional experiences.

Health care professions use a competency based educational approach to identify and assess the knowledge and behaviors required for practice of their specialty (Verma, Paterson, & Medves, 2005). The use of a competency approach requires the belief that training programs and educational opportunities can be used to create growth in adult learners (Boyatzis, 2008). Verma, Paterson and Medves (2005) defined competencies in health care professions as “a behavior or set of behaviors that describe excellent performance in a particular work context” (p. 109).

The leadership competencies developed by Kutz (2006) were described as the cluster of knowledge, skills, and abilities used to influence and affect the behavior or attitudes of others regardless of context. In this study Kutz's (2006) leadership competencies were used in their original form when assessing the level of importance assigned to each by head athletic trainers in the college and university setting. Kutz's definition asserted that each knowledge, skill, and ability in the competencies is used to influence others, but in this research each competency was

classified as leadership, management, or personal characteristic using the operational definitions of each category.

Theoretical definitions of leadership terminology. Based on the definitions previously provided, scholars appeared to be using multiple descriptors for concepts that are quite similar. For the purposes of this study, competencies describing skills, traits, and dispositions were described as personal characteristics. For the purposes of this study personal characteristics were defined as abilities of an individual that contribute to consistent behaviors in the provision of athletic training services. The personal characteristics category of competencies can be exercised independently of a relationship, while leadership and management competencies must be exercised within a relationship as described by Rost (1991). An individual may innately possess personal characteristics but they can also be developed through education and experience (Bennis, 2009; Katz, 1993). The questionnaire used in this study utilizes the leadership competencies identified through the research of Kutz (2006). While Kutz labeled these items leadership competencies, there are many items that can be categorized as skills, traits, and dispositions based on the definitions previously provided. Additionally the competencies used in this study include items that can be defined as essential components of leadership and management as defined by Rost (1991). In order to differentiate between the two concepts, an understanding of leadership and management as well as clear definitions of each are presented.

Leadership. “Leadership is an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes” (Rost, 1991, p. 102). Rost (1991) followed the definition of a post-industrial view of leadership with an outline of essential components that can be used to distinguish leadership from management. The first two elements of Rost’s definition described the type of leadership relationship. Leadership occurs within a

relationship where influence is multidirectional, though not inherently equal, and the influence is created through noncoercive behaviors (Rost, 1991). Rost's second essential element of leadership was that leaders and followers are active participants in the relationship. There must be more than one follower in the relationship, and often there is more than one leader (Rost, 1991).

Rost's (1991) leadership description included factors related to the purpose of the leadership relationship. According to Rost, leaders and followers engaging in leadership have come together because they purposely desire changes that are substantive and transforming. Rost stated that leaders and followers intend several changes at once, but that it is not essential that the changes are realized for leadership to have occurred. The intended changes reflect mutual purposes developed between leaders and followers in the leadership relationship (Rost, 1991). Through the process of leaders and followers engaging in leadership together the mutual purposes become common purposes as they are adopted by a community of believers (Rost, 1991).

Management. Rost's (1991) definition of management corresponds with his leadership definition, allowing for clear distinctions between the concepts. "Management is an authority relationship between at least one manager and one subordinate who coordinate their activities to produce and sell particular goods and/or services" (Rost, 1991, p. 145). Members of a management relationship are formally assigned their positions within an organization and subordinates accept the authority of managers and follow their directions to accomplish the work of the organization (Rost, 1991). In a management relationship the goal is production and sale [provision] of goods or services (Rost, 1991).

Select Leadership Theories. The field of leadership studies includes many distinct theories on the origins, nature, and development of leadership. Rost (1991) completed a thorough review of the topic including hundreds of resources, and outlined the distinct theories of leadership prominent in the twentieth century. In his analysis, Rost contended that each of the theories identified from the literature were manifestations of an industrial paradigm of leadership, in which good management was equated with leadership. The focus of literature examining the industrial paradigm of leadership was on the personal characteristics required of leaders who could produce results in industry (Rost, 1991). In addition to the works included in Rost's review, there has been a number of additional theories described pertaining to the practice of leadership. In this review the focus has been narrowed to the examination of the trait theory of leadership because it relates to both the development of leadership competencies examined in this research and common models of leadership education.

Trait theories of leadership. The trait theory of leadership is one of the areas Rost (1991) identified as suffering from the absence of a clear definition. An emphasis on innate personal traits characterized early models of leadership, but that idea soon branched out to include an emphasis on behaviors and interpersonal skills possessed by leaders (Fulmer, 1997). The shift allowed for an environment in which leadership skills and behaviors can be taught and developed rather than simply being present in some individuals and lacking in others.

During the twentieth century, many authors studied leaders to determine what traits and behaviors enabled them to successfully lead. Kirkpatrick and Locke (1991) created six categories of traits. Leaders differ from non-leaders in the areas of (a) drive: achievement, ambition, energy, tenacity, and initiative; (b) leadership motivation; (c) honesty and integrity; (d) self-confidence, including emotional stability; (e) cognitive ability; and (f) knowledge of the

business. Kirkpatrick and Locke also found weaker support for the characteristics of charisma, creativity, originality, and flexibility. After identifying this wide range of characteristics, Kirkpatrick and Locke expressed a belief that traits alone are not sufficient for leadership, but are a precondition for individuals to take on leadership roles. Traits in combination with actions are necessary for a leader to be successful.

Bennis and Nanus (1985) stated that leadership required the use of skills possessed by a majority but used by a minority. In an attempt to describe leadership abilities Bennis and Nanus defined four areas of competence, each requiring the leader to display certain skills and traits. The competency areas identified by Bennis and Nanus were the ability to (a) create focus or vision, (b) share vision through good communication skills, (c) position one's self to create mutual trust, and (d) continually learn more about one's organization and self. Bennis (1995) also identified persistence, consistency, focus and confidence as essential traits possessed by leaders. The abilities of the leaders placed them in a position of power from which they could translate intention into reality through transactions with followers (Bennis & Nanus, 1985).

Reynolds (1993) identified (a) the ability to communicate clearly, (b) needs recognition, (c) analytical skills, (d) ethics, (e) organizational skills, (f) risk taking, and (g) an international background as seven necessary abilities for effective business leadership. Hersey and Blanchard (1993) used three categories to describe traits and skills necessary for effective leadership: (a) diagnosing the situation, (b) adapting behavior and other resources to meet the contingencies of the situation, and (c) communicating in a way people can easily understand and accept.

From the lists of traits identified in leadership literature, scholars began to combine similar traits to form behavioral practices evident in leaders. The shift from a focus on traits to a focus on learnable behaviors was in line with an expanding focus on leadership development

programs (Saratoga Institute, 1998). Kouzes and Posner (2007) outlined 20 characteristics of effective leaders. The characteristics included traits such as ambition, courage, and independence; but also some skills including self-control and knowledge. Of these characteristics, honesty, forward-looking, competence, and inspiring ranked the highest as tools leaders use to create an effective environment (Kouzes & Posner, 2007). Five practices of effective leaders were identified by Kouzes and Posner. These practices were (a) modeling the way, (b) inspiring a shared vision, (c) challenging the process, (d) enabling others to act, and (e) encouraging the heart are used by leaders to create successful organizations (Kouzes & Posner, 2007).

The large body of research on traits of effective leaders created an extremely long record of desired traits ranging from physical characteristics to personality (Northouse, 2007). Northouse's (2007) criticism of the trait approach to leadership study was focused on the difficulty of selecting any characteristics as definitive leadership traits. The qualities and skills of intelligence, alertness to the needs of others, insight into situations, responsibility, initiative, persistence, and self-confidence were found more frequently in leaders than non-leaders by Stogdill (1974). Still, these characteristics could not be used to predict leadership ability or fully explain the concept of leadership, leading Stogdill to emphasize the need for an understanding of leadership broader than individual characteristics.

Leadership is not a matter of passive status, or mere possession of some combination of traits. It appears rather to be a working relationship among members of a group, in which the leader acquires status through active participation and demonstration of his capacity for carrying cooperative tasks through to completion. (Stogdill, 1948/1995, p. 131)

The importance of relationship and cooperative tasks were central themes in Rost's (1991) definitions of both leadership and management. Rost began his examination of the topics with a review of past research describing leadership, including traits and behavioral practices. Rost then introduced his models of industrial and post-industrial leadership which allowed for clear definitions of both leadership and management as they are used in this study.

Industrial model of leadership. Rost (1991) noted that a majority of literature from the twentieth century used the terms leadership and management interchangeably. Rost contended that this practice was a reflection of the industrial model in which leadership authors of the time lived and worked (1991). Rost's study of the industrial model of leadership produced evidence that leadership was being defined as good management which was necessary to create the industrial culture and economy (1991).

According to Rost (1991), this model of leadership as good management persisted through years of leadership research and perpetuated the habit of interchangeably using the terms leader and manager, follower and subordinate. Leadership as good management theories include a focus on the characteristics and actions of those in positions of authority, and described leadership as a tool to increase the contributions of subordinates within an organization (Rost, 1991). According to Rost, the paradigm of the leadership as good management was appropriate for much of the 1900s during which nations and organizations needed strong management to survive in a changing world. The upheaval of our society during this time of rapid change required that leaders could stand as guideposts and anchors for employees, using their leadership skills to inspire and restore hope and confidence while taking responsibility for the effectiveness of the organization (Bennis, 2009).

Bradford and Cohen (1984) defined leadership as occurring when a manager acts as a developer of subordinates' skills and abilities, making them more valuable and able to participate in the business of the organization. While the building of a management team was the goal of manager-developer, vision and mission are still the property of those at the top of the organization, subordinates are simply groomed and encouraged to participate in carrying out the plan laid before them (Bradford & Cohen, 1984). Similarly, Bennis and Nanus (1985) described leadership as a transaction between leaders and followers. The role of the leader was to influence and guide followers using vision and judgment to create effectiveness in an organization (Bennis & Nanus, 1985). In contrast, Bennis and Nanus described the goal of management as the development of efficiency.

A leadership model focused on the role of a powerful leader-manager was also evident in popular literature during the 1970s and early 1980s. Blanchard & Johnson's (1982) *One Minute Manager* provided a template for leadership behaviors designed to increase productivity and the status of the manager. This style of leadership meshed well with the 1980s image of powerful and charismatic managers transforming businesses and nations amidst a climate of change and uncertainty (Bennis & Nanus, 1985; Rost, 1991). Rost (1991) pointed out that this tendency to treat management and leadership as the same concept was common until the end of the twentieth century because it was an accurate reflection of the industrial world.

Post-industrial views of leadership. Rost (1991) stated that the understanding of leadership and its definition must reflect current reality and break from the industrial paradigm of being equated with good management. According to Chaleff (2009), the decentralization of organizations in the information age required the relationship between leaders and followers to change as units were required to process and rapidly act on information within the design and

purpose of the organization. The post-industrial definition Rost developed for leadership in the twenty-first century involved a multidirectional relationship between leaders and followers, with both groups participating in the act of leadership. According to Rost, a multidirectional relationship “involves interactions that are vertical, horizontal, diagonal and circular” (p. 105). Rost’s description of multidirectional relationships allows for anyone to participate as a leader, a follower, or both with fluid positions in the relationship. Both leaders and followers can persuade others and many different relationships may compose the overall leadership relationship (Rost, 1991). Rost contended that four key elements must be present in a relationship in order for leadership to be occurring: (a) multidirectional influence relationship; (b) noncoercive influence behaviors, both leaders and followers play an active role; (c) desire for purposeful changes that are substantive and transforming; and (d) common purposes are developed between leaders and followers. In a relationship model of leadership, followership is the natural complement of leadership and is essential for organizational success (Brown & Thornborrow, 1996).

The role of followers in post-industrial leadership. Leadership is a relationship requiring reciprocity between participants willingly engaged in the exchange (Kouzes & Posner, 1995). Followers are distinguished from leaders in the role they play, not in their abilities (Kelley, 1998). Brown and Thornborrow (1996) stated that successful followers possess many of the same characteristics identified in successful leaders. Within the leadership relationship the similarities between participants allows for an exchange of ideas and shared responsibilities for organizational achievement. Regardless of the assigned role within an organization individuals are responsible for their own actions and the actions of those whom they can influence (Chaleff, 2009). Chaleff (2009) supported the active role of followers in the leadership relationship stating that their authority to initiate change is based in an understanding and ownership of the common

purposes defined in the leadership relationship and their responsibility for the work of the organization. Every participant in leadership has a responsibility to keep people aligned with shared values and to guide the organization toward its future (Kouzes & Posner, 1993).

Differentiating between leadership and management. According to Rost (1991), “confusing leadership and management and treating the words as if they were synonymous have a long and illustrious history in leadership studies” (p. 129). As demonstrated by the lack of clear definitions of leadership or management in much of the literature, and the frequent view of leadership as a higher level of management, many scholars do not have a clear strategy for differentiating between the two concepts (Rost, 1991). Without identifying the distinctions between leadership and management it is impossible to clarify the distinguishing factors between leaders and non-leaders (Bennis & Nanus, 1985).

Rost’s (1991) extensive study of leadership involved an exploration of many different theories about leaders and leadership. A major problem identified by Rost was the lack of a clear definition of leadership that could be used to focus research or enable an understanding of the concept by readers. The post-industrial leadership and management definitions developed by Rost lead to four essential differences between the two types of relationships. Differences between leadership and management relationships can be identified as (a) type of power in relationship, (b) participants in the relationship, (c) purpose of relationship, and (d) how participants work together to achieve the purpose of the relationship. Table 1 includes the defining characteristics of leadership and management related to these four features.

Table 1

Rost's (1991) Components of Leadership and Management

	Leadership	Management
Source of power in relationship	Influence	Authority
Participants in relationship	Leaders and followers	Managers and subordinates
Purpose of relationship	Intend real change	Produce and sell goods and/or services
Achievement of purpose through	Mutual purpose development	Coordination of activities and individual goals

(Rost, 1991, p. 149)

Other leadership scholars have described leadership in similar ways. Leadership should not be confused with status, power, or official authority (Gardner, 1990). Kouzes and Posner's (2007) discussion of leadership supported the contention that both leaders and followers must actively make a choice to become involved in the leadership relationship. "Leadership is a relationship between those who aspire to lead and those who choose to follow" (Kouzes & Posner, 2007, p. 24). Reciprocity is an essential component of the effective leadership relationship which allows for cooperation and a focus on the collective purpose (Kouzes & Posner, 2007). These definitions of leadership can be applied to the interactions that take place in any arena, including the relationships of health care professionals.

Athletic Training

Athletic trainers are health care professionals who collaborate with physicians to deliver services in the areas of prevention, diagnosis, and intervention of emergency, acute, and chronic medical conditions involving impairment, functional limitations, and disabilities (NATA, 2013).

The athletic training profession has its roots in college athletics but over time has expanded to include health care professionals working in a number of settings (NATA, 2012; O'Shea, 1980). Approximately 39,000 athletic trainers practice in the United States, working in diverse practice locations from high school athletics to physician offices (NATA, 2012).

Historical setting and development of the national association. Athletic training first emerged as a profession when football gained popularity as a collegiate sport in the early 1900s (O'Shea, 1980). The inevitability of injuries in American football led to a need for individuals trained to care for athletic injuries and provide preventative services. Early athletic trainers had no formalized training, many worked in solitude using methods developed through experience and occasionally collaboration with team physicians (O'Shea, 1980). Athletic trainers often chose, or were required, to keep their methods secret so as to give their team the upper hand in competition (O'Shea, 1980). During the late 1930s athletic trainers began to realize that sharing information could benefit the emerging profession and felt that an organization should be formed to advance the field of athletic training. Initial efforts to organize a professional organization for athletic trainers stalled during the World War II years (Arnheim & Prentice, 2000). Following the war, collegiate athletic trainers once again began to organize themselves and in 1950 the National Athletic Trainers' Association (NATA) was officially formed.

The organization of this professional association signaled the arrival of Athletic Training as a recognizable discipline in the health field (O'Shea, 1980). From this solid footing work began to standardize and protect the practice domains of the field and advance the profession (NATAEC, 2009). According to McLaughlin (1994), the main role of a profession is to develop educational policies that determine curricula designed to effectively train health profession

students. Students must learn skills, values, and temperament needed to meet the needs of their client population and to work with other health care practitioners.

Current settings and scope of practice for athletic trainers. Athletic trainers provide health care services to physically active individuals in a variety of settings. In addition to the traditional settings of professional, collegiate, and high school athletics, athletic trainers work with members of the armed forces and performing arts (NATA, 2012). Athletic trainers are also employed as physician extenders, members of clinic and hospital based rehabilitation teams, and as a part of industrial and occupational safety departments (NATA, 2012).

While athletic trainers in different settings may specialize in certain areas of health care delivery, all entry-level athletic trainers are prepared with skills in the five domains of athletic training identified by the *Role Delineation Study/Practice Analysis* (BOC, 2010). This document described the work of practicing athletic trainers and was used to guide the development of the *Athletic Training Education Competencies* (NATA, 2011) and the national certification examination. The five domains of athletic training are (a) injury/illness prevention and wellness protection, (b) clinical evaluation and diagnosis, (c) immediate and emergency care, (d) treatment and rehabilitation, and (e) organizational and professional health and wellbeing (BOC, 2010).

There has been a steady increase in the number of athletic trainers employed by colleges and universities since the early 1990s (D. Eason, personal communication, January 28, 2014; Hootman, Dick, & Agel, 2007; NATA, 2013a). According to NATA (2013a) membership statistics indicate more athletic trainers work at colleges and universities than in any other practice setting. Review of the demographic information and job responsibilities of college and

university athletic trainers was conducted to provide information about the population from which the stratified random sample for this research was drawn.

College and university athletic trainers. The college and university setting represents the largest employment category for athletic trainers (NATA, 2013a). Over 99% of NCAA institutions employ athletic trainers (Acosta & Carpenter, 2012). At the NAIA level approximately 96% of colleges and universities employ one or more athletic trainers (NAIA, 2012). In 1995 2,654 athletic trainers reported employment in the college and university setting, by 2005 this number increased to 4,947 (Hootman, Dick, & Agel, 2007). In January of 2014 7,789 athletic trainers reported employment in this setting (D. Eason, personal communication, January 28, 2014). The questionnaire used in this study included demographic information regarding head athletic trainers and their work environment. The following sections describe findings of previous research related to college and university athletic trainer demographics.

Work place responsibilities. Within the college and university setting athletic trainers work in a number of different roles, each with its specific responsibilities. Institutions offering professional athletic training education programs employ athletic trainers in full time faculty and academic administration positions. In addition to teaching responsibilities, these athletic trainers work to maintain accreditation for the ATP and work closely with clinical preceptors to evaluate athletic training student clinical skill development (CAATE, 2008). Most frequently these full time academic appointments are separate from the institution's athletic training staff charged with providing patient care (CAATE, 2008). At institutions without accredited ATP, athletic trainers may also fill dual appointment positions in which they provide patient care to student-athletes and serve as instructors of course work in the areas of emergency care, exercise science, health care or other disciplines (NATA, 2012).

Athletic trainers providing patient care in the college and university setting may work in a student-health center, in a recreation facility, for the department of intercollegiate athletics, or may be contracted through an outside health care provider such as an orthopedic medicine group (Pitney, 2006). The roles and responsibilities for athletic trainers can vary widely based upon their employment and job description, but there are many similarities. Athletic trainers in institutions associated with ATP work as preceptors, supervising athletic training students assisting with patient care (Brumels & Beach, 2008). Head athletic trainers must balance administrative responsibilities with clinical patient care which, based on staff size and number and type of sports offered, may include travel with athletic teams (Brumels & Beach, 2008; Winterstein, 1998).

Competition division and size of staff. Intercollegiate athletics in four-year institutions in the United States are primarily governed by the National Collegiate Athletic Association (NCAA) or the National Association of Intercollegiate Athletics (NAIA). NCAA Division I institutions sponsor an average of 19 sports with opportunities for 500 student-athletes (NCAA, 2013a). At the NCAA Division II level institutions sponsor an average of 14 sports and 330 student-athletes (NCAA, 2013b). With 444 members, the NCAA Division III offers the most participation opportunities for student-athletes. On average these institutions sponsor 18 sports and over 400 student-athletes (NCAA, 2013c). The NAIA offers 13 championship level sports with a requirement that institutions must sponsor a minimum of 6 sports (NAIA, 2013). On average, 230 student-athletes participate at each NAIA institution (NAIA, 2013).

Universities employing athletic trainers in the intercollegiate athletics setting are encouraged to provide an adequate level of staffing to meet the needs of their student-athletes. Guidance is provided in the *Recommendations and Guidelines for Appropriate Medical*

Coverage of Intercollegiate Athletics, but no institution is mandated to employ a specific number of athletic trainers (NATA, 2010). As with other staff and administrative positions in college and university athletic departments, the size of the student-athlete population is a main determinant in the number of athletic trainers employed. At institutions with more than one athletic trainer common practice is a structure that includes a head athletic trainer who oversees a staff composed of one or more additional athletic trainers. For the purposes of this research the term staff athletic trainers included both full-time athletic trainers and graduate assistants as both are appropriately credentialed in the field of athletic training and licensed in their state of practice.

Age and gender. Examination of the gender distribution in the college and university setting reveals that males compose 51% of athletic trainers while females account for 49% (D. Eason, personal communication, January 28, 2014). Despite the balance in the setting, only 30% of head athletic trainers in the college and university setting are female (Acosta & Carpenter, 2012). Though the overall proportion of male and female athletic trainers is similar, the gender distribution varied by age group (D. Eason, personal communication, January 28, 2014). Kahanov and Eberman (2011) found that the number of athletic trainers working in the college and university setting peaks at age 27 for both men and women before sharply declining. As of January 2014, 66% of the female college and university athletic trainers were under the age of 35 while 66% of males in the setting were age 35 and older (D. Eason, personal communication, January 28, 2014). Females in the setting outnumber males from ages 20 to 34, but in age groups above 34 years males average 63% of the population. Male participants composed 70% of the responses in Laurent and Bradney's (2007) research, which included head athletic trainers, and 90% of these participants over the age of 30. The shift toward a greater percentage of males

in the field after age 35 aligns with the findings of Acosta and Carpenter (2012) that 70% of college and university head athletic trainers are male. See Table 2 for information regarding the gender and age of athletic trainers reporting employment in the college and university setting (D. Eason, personal communication, January 28, 2014).

Table 2

College and University Athletic Trainer (CUAT) Age and Gender

Age	Total CUAT	Male		Female	
		Number	% of Age Group	Number	% of Age Group
20-24	758	256	34	502	66
25-29	2126	852	40	1274	60
30-34	1409	640	45	769	55
35-39	1106	644	58	462	42
40-44	856	540	63	316	37
45-49	539	328	61	211	39
50-54	433	264	61	169	39
55-59	340	241	71	99	29
60+	222	172	77	50	23
Totals	7789	3937	51	3852	49

(D. Eason, personal communication, January 28, 2014)

Years of employment in college and university setting. Since 1995 there has been a 162% increase in the number of athletic trainers working in the college and university setting (Hootman, Dick & Agel, 2007; NATA, 2013c). While it does collect information from members

on employment setting and number of years of certification as an athletic trainer, the NATA does not collect demographic information regarding length of tenure in a setting (K. Carlin, personal communication, November 25, 2013). The findings of Kahanov and Eberman (2011) suggested that there is a great deal of turnover in the athletic trainers working in the setting as there was a drastic change in number of athletic trainers employed after the age of 30. Winterstein (1998) concluded a summary of research involving collegiate head athletic trainers with the suggestion that scholars include adequate tenure categories in demographic information to allow for better analysis of data. Despite Winterstein's encouragement over 15 years ago to use adequate tenure categories in athletic training research, there continues to be an inconsistent use of tenure categories in the literature.

Athletic training education. Professional athletic training programs (ATP), as well as many other health profession education programs, underwent dramatic change beginning in the mid-1990s (Hunt, 2001; Starkey, 1997). Initially, educational opportunities existed as both internship and curriculum programs (NATAEC, 2009). Internship programs emphasized hands-on learning while curriculum programs focused on classroom based knowledge acquisition (Arnheim & Prentice, 2000). Upon completion of either type of educational program, athletic training students were eligible to register for the national certification examination administered by the Board of Certification for Athletic Training (NATAEC, 2009).

In 1994 the NATA formed the Education Task Force to investigate athletic training education and address concerns about the dual routes to certification (Starkey, 1997). The task force recommendations included a change to a single education route, to include the best elements from the internship and curriculum programs in a new educational model (Starkey, 1997). The educational competencies, clinical proficiencies, and Commission on Accreditation

of Allied Health Education Program (CAAHEP) standards and guidelines, were used to design, implement, and accredit the new programs. The conversion to a single type of professional education program was phased in with the switch becoming complete in 2004.

In July of 2006 The Commission on Accreditation of Athletic Training Education (CAATE) replaced CAAHEP to become the official accrediting body of athletic training education programs (CAATE, 2006). CAATE is co-sponsored by the American Academy of Family Physicians, the American Academy of Pediatrics, the American Orthopaedic Society for Sports Medicine, and the NATA (CAATE, 2008). Only athletic training students graduating from ATPs accredited by CAATE are eligible to take the national certification examination to earn the Certified Athletic Trainer credential required to practice athletic training under most state practice laws (CAATE, 2008). In 2014 there were the 343 undergraduate and 25 entry-level master's degree programs accredited by CAATE through which students can earn athletic training degrees (CAATE, 2014).

The *Athletic Training Education Competencies* (NATA, 2011) represent the minimum requirements ATP must develop in athletic training students to achieve entry-level competency in the field of athletic training and provide the framework for athletic training program curricula (NATAEC, 2009). Additional educational content may be added at the discretion of the university and program directors. The competencies are considered the minimum standards for the educational experience of students, but ATPs are encouraged to exceed the minimums to provide students with high-quality educations (NATA, 2011). The freedom of universities to include other courses and topics creates educational experiences unique to each ATP. Although leadership skills and abilities are not addressed in the standardized CAATE educational competencies for athletic training, they may be included in the curriculum for some athletic

training students at specific institutions. The clinical component of athletic training education also provides unique experiences to students of different education programs. It is quite possible that development of leadership skills and qualities is emphasized by some clinical preceptors while others do not devote time to these topics.

Competency driven education in health care. Educational leaders in each health care discipline are responsible for development of competencies necessary for the practice of their specialty (Verma, Patterson, & Medves, 2006). Health profession education began experiencing significant reforms following the release of the 1998 PEW Health Commission workforce competencies (Verma et al., 2006). Verma, Patterson, and Medves (2006) noted that competency driven education was one of the important outcomes of the changes in educational reform. While each specialty includes competencies tailored to the legal scope of practice, many additional competencies are shared between health care disciplines (Verma et al., 2006).

In the field of health care, competencies are used to define discipline and specialty standards and expectations (Verma et al., 2006). In health care education, the identification of competencies and the models for implementing them increases the effectiveness of educational programs by linking them to defined, measurable criteria (Verma et al., 2006). Students in professional health care programs are required to acquire and demonstrate their abilities in many ways, clearly defined competencies allow students to understand the expectations regarding the knowledge, skills, and abilities they must acquire (Stephenson et al., 2002).

Athletic training program competencies. The 5th edition of the *Athletic Training Education Competencies* was published in 2011 and provides athletic training program personnel with the knowledge, skills, and clinical abilities students must master to provide athletic training

services to clients and patients of varying ages, lifestyles, and needs (NATA, 2011). The competencies for athletic training students are grouped into eight content areas.

1. Evidence-based practice which insures practitioners incorporate the best available information with their clinical skills to maximize patient outcomes.
2. Prevention and health promotion competencies are used by athletic trainers to prevent the incidence of injuries and illnesses and optimize patients' overall health and quality of life.
3. Clinical examination and diagnosis skills are necessary for accurate classification of injury and illness and effective on-going treatment.
4. Acute care of injuries and illnesses requires knowledge, skills, and abilities to evaluate and immediately manage acute and/or emergency situations.
5. Competencies related to therapeutic interventions allow athletic trainers to maximize the patient's participation and health-related quality of life.
6. Psychosocial strategies and referral competencies involve identification of abnormal social, emotional, and mental behaviors for appropriate referral and the role of mental health in the response of patients to injury and recovery.
7. Healthcare administration topics include risk management, healthcare delivery mechanisms, insurance, reimbursement, documentation, patient privacy and facility management.

8. Professional development and responsibility competencies prepare athletic trainers to maintain competence in an ever evolving world of healthcare and work collaboratively with other healthcare providers. (NATA, 2011)

Leadership and the athletic training educational competencies. The *Athletic Training Education Competencies* define the entry-level knowledge, skills, and abilities of athletic trainers that must be developed in athletic training students through the required courses of the ATP (NATA, 2011). A search through the introduction, competencies, and supporting documents of the *Competencies* did not yield a single use of the word leadership. Within the *Competencies* (NATA, 2011) the term management is only included in the context of injury and risk management.

The 5th edition of the *Competencies* (2011) included a new section on Foundational Behaviors necessary for the practice of athletic training. The foundational behaviors list knowledge, skills, and abilities required of professional athletic trainers and include a few items which can be related to findings within the leadership literature. Athletic trainers are encouraged to demonstrate effective communication skills which are also include in a number of identified lists of leadership traits and skills (Bennis & Nanus, 1985; Hersey & Blanchard, 1993; Reynolds, 1993). Reynolds (1993) identified ethics as important for business leadership; this concept is included in the *Athletic Training Education Competencies* as the category of ethical practice (NATA, 2011). Honesty is the final foundational behavior aligning with descriptions of essential leadership traits as described by Kouzes and Posner (2007).

Leadership Research in Athletic Training

Despite repeated assertions from scholars in the field of athletic training that leadership is necessary for the practice of athletic training and calls for greater involvement of athletic trainers

in the national association (Hertel, West, Buckley, & Denegar, 2001), there is no evidence of a consistent definition of leadership in athletic training or a coordinated approach to conduct research on the topic. Much of the justification provided by researchers calling for leadership in athletic training comes from textbooks on athletic training management, which have rarely included a clear definition of leadership. Prominent athletic training management text authors such as Ray (2000), Hannam (2000), and Rankin and Ingersoll (2001) identified leadership as an important content area for athletic training students. Examination of their concepts of leadership reveals a mix of leadership and management components with a heavy emphasis on resource and personnel management.

In addition to textbooks, many of the journal articles related to leadership and athletic training focused on increasing the awareness of leadership styles and components rather than seeking to describe how leadership is practiced in the field. No clear description of how athletic trainers engage in leadership has emerged from these works. In his discussion of leadership qualities for athletic trainers, Nellis (1994) used the leadership and management definitions of Rost, but never discussed the relationship aspect of either, choosing instead to focus on the appearance and behaviors required for leaders to be viewed as effective. Gieck (2010) referred to the practices identified by Kouzes and Posner (2002) as effective strategies for athletic trainers to implement, but did not apply them directly to the practice of athletic training or leadership of the profession.

Original research examining how leadership functions in athletic training is limited. The reviewed literature for this study included work from scholars seeking to describe the practice of leadership in athletic training, or identify leadership content important in the field of athletic training. These works represent the leadership literature in athletic training and informed the

development of the research methods and questionnaire used in this study. A description of methodologies and findings from research dealing specifically with leadership and practicing athletic trainers is included in the following sections. The chapter concludes with the examination of how existing research relates to this study.

Methodologies used in athletic training leadership research. Platt (2000) used a questionnaire to evaluate the relationship between leadership skills and abilities and clinical preceptor effectiveness in one university's ATP. Platt's research included five leadership variables (a) professional attitudes, (b) characteristics of effective leaders, (c) communication skills, and (d) teaching abilities and attitudes, and personal attributes. Participants in the Platt quantitative study included 41 clinical instructors and 54 students and alumni of a single ATP. A response rate of 89% for students and alumni and 93% for clinical instructors was obtained. Platt used the survey data to calculate correlations between five leadership variables and the perceived effectiveness of clinical instructors reported by both students and the clinical instructors. Platt found that clinical instructors shared characteristics with effective leaders. Additionally, clinical instructor effectiveness can be evaluated using an assessment of professional attitudes, professional actions, and communication skills (Platt, 2000). Response rates for this survey were high but represented a convenience sample drawn from only one university's ATP. This design limits generalizability of findings regarding athletic training clinical instructors and leadership behaviors.

Leadership skills were included in a survey to determine the importance of hiring criteria to athletic training employers (Kahanov & Andrews, 2001). The survey was a modification of a previously validated quantitative survey used with entry-level positions being filled in the business sector (Kahanov & Andrews, 2001). Leadership skills were listed as one criterion, but

many characteristics described as important for leadership in athletic training were included within the 33 criteria. The criteria included in the survey were grouped into factors for reporting. Kahanov and Andrews (2001) found that the factors of personal characteristics, educational experience, professional experience, and work-related attributes accounted for 64% of the variance in employers' hiring criteria. The survey response rate was 74% and included 82 participants from 3 of the 10 districts within the NATA (Kahanov & Andrews, 2001).

A modified Delphi technique was employed by Kutz (2006) in his work to produce a list of leadership competencies important for the practice of athletic training and for inclusion in different types of athletic training programs to include undergraduate and post graduate entry-level as well as advanced post-certification degree programs at the master's and doctoral level. A Delphi exercise makes use of a small group to generate the survey instrument used with a larger respondent group. In the traditional Delphi method, survey results are reviewed by the expert panel and then shared with the respondents before a second survey is administered (Linstone & Turoff, 2002). Kutz enlisted an expert panel of 18 athletic trainers with roles as a program director and involvement in the field of athletic training. The panel of experts developed a list of leadership competencies and leadership content as the first step in the Delphi exercise. Using these competencies and content, Kutz developed survey instruments designed to determine the perceived level of importance of each in the practice of athletic training and in four different types of athletic training education programs. As the second phase in the Delphi technique, participation in the national survey was offered to faculty of ATP through an email sent to the Program Director of each institution and to a random sample generated by the NATA of 1,000 certified athletic trainers with membership in the association and a current email

address. A public invitation to participate in the survey was made to athletic trainers subscribing to an athletic training educators listserv.

The Delphi technique and many of its modifications have been evaluated by nursing researchers to determine if it is an appropriate methodology for their field. The technique has been criticized for a lack of validity and reliability and questions have been raised about the lack of anonymity offered to the expert panel which is purposefully selected by the researcher (Keeney, Hasson, & McKenna, 2001). While modifications, which may cause methodological challenges, to the Delphi technique are common in allied health research, Kenney et al. (2001) found that it is an acceptable method for use in the study of health professions. Although Kutz (2006) stated that he was unsure of exactly how many invitations were offered, he estimated that the 161 completed surveys represented a 9% response rate. Using an estimated invitation and response rate calls into question the validity of work and according to Newman (2000) low response rates poses threats to the external validity of the findings.

In 2007 Laurent and Bradney used the 3rd edition of the Leadership Practices Inventory (LPI) developed by Kouzes and Posner (2003) to study leadership behaviors of Program Directors and Head Athletic Trainers from colleges and universities with CAAHEP -accredited ATP. A comparison of leadership behaviors reported by Program Directors and Head Athletic Trainers was made, and the leadership behaviors of these two groups of athletic trainers were compared to leaders in other professions. Participants were able to complete the LPI as a web-based survey, to save an electronic copy of the survey distributed with the recruitment email, or to have a paper copy of the survey mailed to them. The response rate obtained by Laurent and Bradney was 46% with 95% of those participants completing the web-based survey and 5% returning a copy of the survey via email. The results of the study demonstrated that athletic

trainers practice leadership behaviors that are similar to those reported in leaders in other professions.

Findings of existing literature and theoretical foundations of this study. Laurent and Bradney (2007) found that head athletic trainers and program directors exhibited leadership behaviors that were similar to other professions. Platt (2000) determined that successful clinical instructors in athletic training programs shared characteristics with effective leaders. Kanahov and Andrews (2001) identified leadership characteristics as important in the hiring criteria for athletic trainers. Leadership competencies were identified by Kutz (2006) as important for the practice of athletic training as well as in the educational preparation of athletic trainers.

Existing research on leadership in athletic training focused on athletic trainers assigned to positions with administrative responsibilities or the beliefs of athletic training experts on the need for leadership in education programs. An examination of the importance of leadership qualities in athletic trainers not assigned to formal leadership or management roles is missing from this body of literature.

Summary

The review of existing literature for this study began with an examination of leadership and management. Scholars have described leadership and management in a number of ways. Rost (1991) contended the body of leadership and management literature suffered from a lack of clear definitions from which distinctions could be drawn between the two concepts. Leadership literature included a broad range of traits identified in leaders, but did not clearly distinguish between the acts of leadership and management and qualities that enable individuals to serve in leadership and management positions. Rost's definitions allowed for actions to be categorized as leadership or management based on the source of power within, and the purpose of the

relationship. According to Rost, leadership must occur within a relationship and requires participation of both leaders and followers. Based on Rost's definitions, clarification between the terms used describe and educate leaders were necessary. Rost's distinctions were used to develop the Competency Coding Matrix developed for this research to categorize competencies. Though it was important to categorize the competencies used in this study, the practice of leadership and management do not always occur independently. Sutton (2010) contended that effective leaders must practice a mixture of leadership and management to be effective. Leaders must be able to contribute to the management of the organization

Existing literature in athletic training was the second general area reviewed in this chapter. Athletic training emerged during the 1950s as a health care profession tied to collegiate athletics. As the number of athletic trainers increased, the settings in which they work also expanded. The college and university setting has remained the largest setting and includes athletic trainers working in patient care, education, and administrative roles. The day to day duties of athletic trainers in the college and university setting vary based on the employment assignment and can be influenced by external stakeholders as well as the evolving scope of health care.

Concluding the review of literature for this study was the leadership research in athletic training. While athletic training services are provided to a diverse population of patients, all athletic trainers are educated in common competencies guided by the CAATE accreditation process. The competencies ensure the development of knowledge, skills, and abilities related to athletic training, but do not include mention of leadership or management relationships. Authors have written about the necessity of leadership in the field of athletic training and asserted that athletic trainers do practice leadership. Without the examination of this work based on Rost's

(1991) definitions of leadership and management a confusion between the topics continues to exist.

The next chapter will introduce the methodology used to complete a study of the level of importance college and university head athletic trainers place on their staff athletic trainers displaying competencies related to leadership, management, and personal characteristics. The competency categories, which represent one of the dependent variables in this study, were created from Rost's (1991) definitions of leadership and management to distinguish between concepts that have not been separated in other literature on leadership in athletic training. The descriptions of the characteristics of college and university athletic trainers presented in this literature review were used to inform the selection of participants and guide the demographic items to be included on the questionnaire. The research questions, null hypotheses, and anticipated data analysis procedures are guided by the discussion of existing research outlined above which has informed the development of this study.

Chapter Three: Methodology

This study sought to identify the perceived level of importance college and university head athletic trainers place on their staff athletic trainers displaying leadership qualities. In this chapter the research design is first described, followed by the protocol for selecting participants, and discussion pertaining to the generalizability of the findings. The next section outlines the research questions guiding the study and includes research hypotheses. The data collection procedures include a description of the variables, survey instrument, distribution method, and a discussion of internal validity. The chapter concludes with a discussion of the statistical procedures selected for data analysis.

Research Design

The research design for this study was a quantitative, correlational survey design. The study was descriptive in nature as it does not seek to establish any cause and effect relationships and utilized a non-experimental survey design. Survey design is appropriately used by researchers to collect information directly from people about their ideas, feelings, and beliefs (Fink & Kosecoff, 1985). The data sought in this study was the level of importance head athletic trainers place on their staff athletic trainers displaying leadership competencies, therefore the survey method is an appropriate design to gather this information.

Participants

Participants in this study were head athletic trainers at four-year public and private colleges and universities in the United States sponsoring athletic programs through either the NCAA or NAIA. Head athletic trainers of each institution were identified through the use of the institution's online athletic department staff directory.

Population. Across the United States 1,368 colleges and universities offer athletic programs through the NCAA or NAIA (NAIA, 2011; NCAA, 2011). The head athletic trainers at each of these institutions were the population for this study. The institutions for which these athletic trainers work are classified by their membership in divisions of the NCAA or the NAIA. NCAA Division I includes 351 members, representing 25.7% of the total institutions. The 314 members the NCAA Division II level compose 23.0% of these institutions. NCAA Division III includes 447 institutions accounting for 32.7% of the total (NCAA, 2011). The remaining 18.7% of colleges and universities offering athletics are the 256 members of the NAIA (NAIA, 2011). Table 3 includes the population and sample data for this research.

Sample. The research sample was created using random stratified sampling techniques. Using the Raosoft (2004) sample size calculator to achieve a 95% confidence interval, it was determined that a sample size of 301 athletic trainers is desired. Stratification of the sample based on the distribution of institutions within the athletic associations resulted in the following target sample from each strata: 77 head athletic trainers from NCAA Division I, 69 head athletic trainers from NCAA Division II, 98 NCAA Division III head athletic trainers, and 57 head athletic trainers from NAIA institutions. Meta-analyses of response rates for web-based surveys have provided an estimate of expected return rate in survey research. The average of response rates cited in the literature results in an estimated 30% response rate for web-based surveys (Shih & Fan, 2008). To account for this expected return level an adjusted sample was used when inviting participants. Table 3 displays the sample stratification designed to achieve the desired number of participants based on the anticipated response rate. The adjusted sample size resulted in the invitation to participate in the study being extended to 73% of the population.

Table 3

Sample Stratification

Division	Membership	% of Population	Desired Responses	% of Sample	Invitations ^a
NCAA I	351	25.7	77	25.6	256
NCAA II	314	23.0	69	22.9	229
NCAA III	447	32.7	98	32.6	327
NAIA	256	18.7	57	18.9	189
Totals	1368	100.0	301	100.0	100.03

Note. ^aInvitations represent the adjusted sample size

If response rates had exceeded the expected level of 30%, additional steps would have been taken to ensure appropriate distribution of the sample. Once the 301 desired responses were received, the percentage of respondents from each membership category was calculated. If a response rate exceeding 30% resulted in an overrepresentation of a stratum, a random selection of participants from each category would be conducted to create a sample approximating the distribution outlined in Table 3.

Generalizability. The ability to generalize from a study is based on its external validity (Neuman, 2000). This study used a stratified random sampling technique to gather information from participants who are representative of the population of college and university head athletic trainers at institutions within the United States. The target sample size of 301 participants represented 22% of the population while the use of 100 invitations extended the opportunity to participate in the study to 73% of the population. The sample distribution strategy outlined in

Table 3 was used to increase the possibility of obtaining a representative sample of head athletic trainers at four-year colleges and universities within the United States. Based on a population total of 1,369 head athletic trainers at NCAA and NAIA institutions the Raosoft (2004) sample size calculator was used to determine the appropriate sample size of 301 head athletic trainers for a 95% confidence level that the results were within the margin of error.

Research Questions

The research questions for this study are related to the level of importance college and university head athletic trainers place on their staff athletic trainers demonstrating leadership competencies. Three research questions guided the data collection and analysis in this study.

Research Question #1. What level of importance do college and university head athletic trainers place on their staff athletic trainers demonstrating each of the identified athletic training leadership competencies?

The original 49 leadership competencies identified by Kutz (2006) were separated into 69 single-sentence descriptors of the competencies. Participants selected a level of importance for each competency descriptor from a four-choice Likert scale. Response options were (a) *very unimportant*, (b) *unimportant*, (c) *important*, and (d) *very important*. Descriptive statistics were used to determine the level of importance assigned to each descriptor.

Research Question #2. Which demographic factors have a statistically significant relationship to the perceived importance placed upon each of the competencies?

The questionnaire contained nine questions designed to gather demographic information from participants. Participants indicated the *Athletic Competition Division* in which their college

or university competes, the *NATA District* in which they reside, whether or not they have been elected or appointed to a *Leadership Position* at the local, state, district, or national level, and their *Gender*. Using ranges of responses participants indicated their *Age*, *Years of Work as an Athletic Trainer*, *Years of Experience as Head Athletic Trainer*, and the *Number of Staff Athletic Trainers Supervised*. In the final demographic question participants indicated which of the following were part of their assigned duties: (a) *Daily Patient Care*, (b) *Travel with Athletic Teams*, (c) *Clinical Preceptor*, (d) *Course Instructor*, (e) *Athletic Training/Health Care Administration*, and (d) *Department or Institutional Committee Assignments*.

Research Question #3. What relationships exist between the categories into which the competencies are grouped (Leadership, Management, or Personal Characteristic) and the perceived level of importance placed upon the competency?

The descriptors for the 49 competencies described in Kutz's (2006) work were broken into 69 single-sentence descriptors for use in this research. Each of the descriptors was evaluated using a coding matrix (See Appendix B) based on Rost's (1991) definitions of leadership and management. The descriptors that could be practiced independently of a relationship were classified as personal characteristics, while descriptors dependent upon a relationship were sorted between leadership and management.

Hypotheses. According to Creswell (2003) hypotheses are predictions the researcher holds about the relationship among variables. For this study both research or alternative hypotheses and null hypotheses were used. The research or alternative hypothesis is a predication about the relationship among the variables, while the null hypothesis asserts that

there is no relationship between the variables (Creswell, 2003). In this section each of the three research questions are restated, followed by the research and null hypotheses for each.

Research Question #1. What level of importance do college and university head athletic trainers place on their staff athletic trainers demonstrating each of the identified athletic training leadership competencies?

Rather than testing a null hypothesis for Research Question #1, descriptive statistics were used to report the frequency of each response choice for each of the competencies. Additionally Pooled Unimportance, a combination of *very unimportant* and *unimportant*, and Pooled Importance, composed of *important* and *very important* were calculated.

Research Question #2. Which demographic factors have a statistically significant relationship to the perceived importance placed upon each of the competencies?

Hypothesis One.

H₁1: There was a statistically significant relationship between the athletic competition division of the institution for which the head athletic trainer works and the level of importance they assign to each of the competencies.

H₀1: There was no statistically significant relationship between the athletic competition division of the institution for which the head athletic trainer works and the level of importance they assign to each of the competencies.

Hypothesis Two.

H₁2: There was a statistically significant relationship between the age of the participants and the level of importance they assign to each of the competencies.

H₀2: There was no statistically significant relationship between the age of the participants and the level of importance they assign to each of the competencies.

Hypothesis Three.

H₁3: There was a statistically significant relationship between the participants' years of work as an athletic trainer and the level of importance they assign to each of the competencies.

H₀3: There was no statistically significant relationship between the participants' years of work as an athletic trainer and the level of importance they assign to each of the competencies.

Hypothesis Four.

H₁4: There was a statistically significant relationship between the number of years the participants have served as a college and university head athletic trainer and the level of importance they assign to each of the competencies.

H₀4: There was no statistically significant relationship between the number of years the participants have served as a college and university head athletic trainer and the level of importance they assign to each of the competencies.

Hypothesis Five.

H₁5: There was a statistically significant relationship between the size of the athletic training staff supervised by the participants and the level of importance assigned to each of the competencies.

H₀5: There was no statistically significant relationship between the size of the athletic training staff supervised by the participants and the level of importance assigned to each of the competencies.

Hypothesis Six.

H₁6: There was a statistically significant relationship between the number of athletic training duties assigned to the participants and the level of importance they assign to each of the competencies.

H₀6: There was no statistically significant relationship between the number of athletic training duties assigned to the participants and the level of importance they assign to each of the competencies.

Hypothesis Seven.

H₁7: There was a statistically significant relationship between the duties assigned to the participants and the level of importance they assign to each of the competencies.

H₀7: There was no statistically significant relationship between the duties assigned to the participants and the level of importance they assign to each of the competencies.

Hypothesis Eight.

H₁8: There was a statistically significant relationship between the gender of the participants and the level of importance they assign to each of the competencies.

H₀8: There was no statistically significant relationship between the gender of the participants and the level of importance they assign to each of the competencies.

Hypothesis Nine.

H₁9: There was a statistically significant relationship between whether or not respondents have held leadership positions and the level of importance assigned to each of the competencies.

H₀9: There was no statistically significant relationship between whether or not respondents have held leadership positions and the level of importance assigned to each of the competencies.

Hypothesis Ten.

H₁10: There was a statistically significant relationship between the NATA District in which participants' institutions are located and the level of importance they assign to each of the competencies.

H₀10: There was no statistically significant relationship between the NATA District in which participants' institutions are located and the level of importance they assign to each of the competencies.

Research Question #3. What relationships exist between the categories into which the competencies are grouped (Leadership, Management, or Personal Characteristic) and the perceived level of importance placed upon the competency?

Hypothesis Eleven.

H₁11: There was a statistically significant difference between the level of importance assigned to competencies in the Leadership category and the level of importance assigned to competencies in the Management category.

H₀11: There was no statistically significant difference between the level of importance assigned to competencies in the Leadership category and the level of importance assigned to competencies in the Management category.

Hypothesis Twelve.

H₁12: There was a statistically significant difference between the level of importance assigned to competencies in the Leadership category and the level of importance assigned to competencies in the Personal Characteristics category.

H₀12: There was no statistically significant difference between the level of importance assigned to competencies in the Leadership category and the level of importance assigned to competencies in the Personal Characteristics category.

Hypothesis Thirteen.

H₁13: There was a statistically significant difference between the level of importance assigned to competencies in the management category and the level of importance assigned to competencies in the Personal Characteristics category.

H₀13: There was no statistically significant difference between the level of importance assigned to competencies in the Management category and the level of importance assigned to competencies in the Personal Characteristics category.

Assumptions. This study involved perceived importance of leadership competencies in the field of athletic training for which an *a priori* alpha level for statistical significance was set. Using the $\leq .05$ alpha level provides a balance between Type I and Type II errors. At the .05

alpha level there is a 5% chance of rejecting a null hypothesis when the null hypothesis is true (Salkind, 1991), which according to Neuman (2000) is an acceptable standard for social research.

The perceived level of importance for each competency was collected using a four-point Likert scale, resulting in ordinal level data (Neuman, 2000). Ordinal measurement is possible when differing degrees of an attribute, such as importance, are possible (Glass & Stanley, 1970). The use of ordinal level data allowed for a ranking of the level of importance for each characteristic (Neuman, 2000). Five of the demographic items on the questionnaire were used to collect data at the ordinal level of measurement (a) *Athletic Competition Division*, (b) *Age*, (c) *Years as an Athletic Trainer*, (d) *Years as Head Athletic Trainer*, (e) *Size of Staff Supervised*, and (d) *Number of Duties Assigned*.

Correlational coefficients are used to determine how two variables are related to each other (Urdan, 2005). For this study the Spearman rho or spearman coefficient of correlation were used to determine relationships between data collected at the ordinal level of measurement. Pallant (2010) reported that the use of the Spearman rho is appropriate for use with ordinal data in the health sciences. Cohen (1988) described correlation coefficients (r) of .1 as small, .3 as medium, and .5 as large. Cohen noted that in fields such as behavioral sciences r values of .3 are common and perceptible to observers. In educational psychology r values cluster around .5 (Cohen, 1988). The correlations between variables were described using Salkind's (2012) five categories of correlational coefficient (r) strength: (a) very weak, r between .0 and .2, (b) weak, r between .2 and .4, (c) moderate, r between .4 and .6, (d) strong, r between .6 and .8, and (e) very strong, r between .8 and 1.0. The threshold for statistical importance in this study was set at $r \geq .10$ ($r^2 \geq .01$) with an alpha level $p \geq .05$ to determine statistical significance

Four of the demographic questions were structured to collect data at the nominal level of measurement, (a) *Duties Assigned*, (b) *Gender*, (c) *Leadership Position*, and (d) *NATA District*. Through the use of a Likert-scale the level of importance assigned to each competency was ordinal level data. To determine if a relationship exists between a variable of ordinal level data and a variable of nominal level data the chi-square test of independence must be used to determine if the responses fall into categories in proportions equal to what one would expect by chance or if there is a relationship between the variables (Urdu, 2005). For relationships identified as statistically significant at the $p \leq .05$ level, Cramer's v Coefficient was used to determine the strength of association between the variables. A value between 0 and .09 is characterized as having little if any association, .1 to .29 indicates a low association, .3 to .5 moderate association, and a value greater than .5 describes a high association (AcaStat, 2012). The threshold for statistical importance in this research was set at $v \geq .10$.

In correlational studies it is essential that the data used is in related pairs (Pallant, 2010). According to Pallant (2010) the variables compared must be related to the same participant, therefore a correlation cannot be determined if one of the variables is missing in the data set for the participant. The administration of the web-based questionnaire to each participant supported the assumption of independence of observations. Independent observations occur when the measurement is free from the influence of any other observation or measurement (Pallant, 2010).

The third research question in this study examined the difference between the level of importance assigned to competencies within three groups: (a) Leadership, (b) Management, and (c) Personal Characteristic. The level of importance was determined using a four-choice Likert scale producing data measured at the ordinal level. This data was used to determine a median importance score for competencies within each category. Friedman test and post hoc procedures

were used to compare the median score of each category to determine if differences existed between the level of importance assigned to each category.

The assumption of normality was met in this study by having a sufficient randomly selected sample size. The 1001 invitations extended accounted for 73% of the population of college and university head athletic trainers. The target sample size of 300 represented 22% of the population and greatly exceeded the requirements of normality based on the Central Limit Theorem (Urdan, 2005). The Central Limit Theorem requires a random sample of 30 or large from the population (Salkind, 1991).

Data Collection

This study used a survey design with a multiform, web-based questionnaire to collect quantitative data for this study. The instrument was a self-administered questionnaire with multiple pages, consisting of closed questions with responses presented using a four-point Likert scale. The benefits of the using a multiform layout included the ability of the participant to begin the survey with the option to save the information and return to finish it at a later time, minimal need for scrolling, the ability to program the software to provide immediate feedback for missing data, and the use of feedback to motivate the respondent (Couper, 2008). Using closed questions on the self-administered questionnaire allows for a decreased time of completion, resulting in increased response rates (Fowler, 1988). Finally, findings from previous research involving head athletic trainers as participants suggested that web-based questionnaires are the preferred instrument for use with this group due to ease of use and the ability to maintain anonymity (Laurent & Bradney, 2007).

Data Collection Process. The NCAA and NAIA websites were initially used to identify the member institutions of each competition division, these divisions represent the strata used in the stratified random sampling method. The institutions within each stratum were numbered and the Raosoft random number generator was used to select the appropriate institutions from each strata. For each institution selected through random sampling, the head athletic trainer was identified and his or her email added to the participant list for the study. Contact information for the head athletic trainer at selected institutions was obtained from the universities' websites. Recruitment information to participate in the study was delivered to the email address of each possible participant with the link to participate in the questionnaire.

Based upon the recommendations of Glesne and Peshkin (1992), recruitment information was delivered by email to inform participants regarding the purpose of the study, importance of a high response rate, and benefits of participation. The potential participants were invited to participate in the study by following a link to the web-based questionnaire.

Following the recommendation of Nardi (2006), a follow up reminder was sent to participants to encourage completion of the survey and acknowledge those who have already submitted responses. The follow up email was sent one week after the original invitation was extended. Nardi also recommended a second and final reminder be sent to potential participants one week to 10 days after the follow up email. All emails were sent from the researcher's university account based on Keusch's (2011) suggestion that most respondents view only the email address and subject line in the three seconds before deciding whether or not to delete an email without opening it. Keusch also found that response rates in male-dominated fields, such as head athletic trainers, increased when the contact email was sent from a female researcher's account.

Variables. This correlational study sought to identify relationships between the independent and dependent variables from data collected using a questionnaire employed within a survey design. The dependent variables in this study were the perceived level of importance head athletic trainers place on their staff athletic trainers demonstrating specific leadership competencies.

The first grouping of independent variables was the identification of the 69 competency descriptors derived from Kutz's (199) 49 leadership competencies as Leadership, Management, or Personal Characteristic. This identification was made by the researcher using the Competency Coding Matrix developed by the research from the operational definitions of leadership, management, and personal characteristics. See Figure 1 for the Competency Coding Matrix and Appendix B for the competency assignment matrices.

The remaining nine independent variables in this study were the demographic factors collected via the questionnaire. These independent variables are composed of responses to demographic questions regarding the following: (a) *Athletic Competition Division* of the institution at which the head athletic trainer is employed, (b) *Age*, (c) *Years As An Athletic Trainer*, (d) *Years as a Head Athletic Trainer*, (e) *Size of Athletic Training Staff Supervised* by the participant, (f) *Number Of Duties Assigned* to the participant, (g) *Specific Duties Assigned* to the participant, (h) *Gender*, (i) whether or not the participant has been elected or appointed to any *Leadership Position* at the local, state, district, or national level, and (j) the *NATA District* in which the respondent works. Responses to the demographic items were collected as ordinal level data for (a) *Athletic Competition Division*, (b) *Age*, (c) *Years as an Athletic Trainer*, (d) *Years As Head Athletic Trainer*, (e) *Size Of Staff Supervised*, and (d) *Number of Duties Assigned*. Nominal level data was collected for the demographic variables (g) *Duties Assigned*, (h) *Gender*,

(i) service in a *Leadership Position*, and (j) *NATA District*. The demographics included as independent variables were selected based on their use in recent studies of leadership in the field of athletic training to create an opportunity for the comparison of analyzed data (Laurent & Bradney, 2007; Platt, 2002).

Instrument. The instrument (see Appendix C) was a self-administered, web-based questionnaire developed by the researcher using Survey Monkey (2013) delivered to the stratified random sample of college/university head athletic trainers. The web-based design was selected due to its advantages over questionnaires delivered via mail or fax in cost of administration and response rate with athletic trainers and similarly educated populations (Barrios, Villarroya, Borrego, & Olle, 2011; Cobanglu, Warde, & Moreo, 2000; Laurent & Bradney, 2007).

The introductory page of the questionnaire included an explanation of the study, benefits of participation, and confidentiality safeguards. Informed consent material was included in the introductory information to clarify that participation in the research is voluntary and may be discontinued at any time. Participants were informed that by choosing to proceed to the questionnaire they indicated their consent to participate in the study. The questionnaire included a total of 78 closed-choice items. Items 1 through 9 collected the demographic information used as independent variables in this study. The remaining items were composed of a brief description of a competency and Likert scale responses recording the level of importance participants place on their staff displaying the competency described. The competencies used in this study were derived from Kutz's (2006) work on leadership competencies for practicing athletic trainers. Kutz's study identified 49 competencies that were important for inclusion in athletic training education programs and the practice of athletic training. Kutz described each

competency with a description containing one to three sentences. In the questionnaire for this study the competencies were not named, only described with single-sentence descriptors developed by the researcher from Kutz's work. Creating single-sentence descriptors for each competency resulted in 69 descriptors. Participants indicated the importance of each competency by selecting from the response choices: (a) *very unimportant*, (b) *unimportant*, (c) *important*, and (d) *very important*.

Internal validity. According to Salkind (2012) the internal validity is contingent upon designing the study in a way the results collected are due to manipulation of the variables rather than alternative explanations. There are a number of threats to internal validity that must be addressed by the researcher; Neuman (2000) identified seven threats to internal validity: (a) selection bias, (b) history, (c) maturation, (d) testing effect, (e) statistical regression, (f) mortality, and (g) instrumentation. Salkind (2012) added confounding to the list of threats to internal validity. The use of a stratified random sampling strategy was designed to decrease the possibility of selection bias. The target sample size was selected to decrease the influence of sampling error on the results of the study. At a given confidence level, the larger the sample size, the smaller the confidence interval (Raosoft, 2004). Based on a .30 expected return rate, the adjusted sample size of 1001 helped to ensure an adequate final sample size to obtain the confidence interval of 95%.

The design of this study as a cross-sectional measurement without a pre-test and a short duration of time during which the participant may complete the instrument eliminated the threats of history, maturation, testing effect, and statistical regression (Newman, 2000). The threat of mortality was also limited by the design of the study as a single measurement; the results of

participants who begin but do not complete the instrument within the designated time frame were not be included in the analysis.

The use of a single self-administered, web-based instrument eliminated the threat of changes in instrumentation during the study. The construct used in this study was the list of leadership competencies Kutz (2006) determined to be important for athletic training education programs and practicing athletic trainers. The single-sentence descriptors used in the instrument were modified from Kutz's original descriptors of each competency only as necessary to maintain parallel construction of questionnaire items. To avoid the risk of competency names influencing participants, the descriptors appeared without titles. No indications were made on the questionnaire to indicate that the competency descriptors were assigned by the researcher to the categories of Leadership, Management, or Personal Characteristic. The internal consistency of the instrument was assessed by calculating Cronbach's alpha for each category of competencies.

The instrument was pilot tested using a purposely selected sample of athletic trainers within the college and university setting who were not eligible to participate in the study based on the delimitations of the sampling strategy. Members of the pilot group completed the web-based instrument to establish and estimated time to completion and to provide feedback on clarity of the instrument, and challenges encountered during completion of the instrument. The average time to completion for the instrument was less than 10 minutes, leading to the indication on recruitment materials that participation was expected to require 10-15 minutes.

Summary

This quantitative study was designed to build upon the existing athletic training leadership research, with a focus on the leadership competencies Kutz (2006) identified as important for the practice of athletic training. The college and university setting was the focus of this study as it includes the second highest population of athletic trainers, including many who are not assigned to formal leadership positions. Through a survey instrument, head athletic trainers indicated the level of importance they place upon their staff athletic trainers possessing and demonstrating each of Kutz's leadership competencies. A stratified random sampling technique was used to ensure the sample is representative of the population of college and university athletic trainers. In combination with descriptive statistics regarding level of importance, the identification of each competency as Leadership, Management or Personal Characteristic, and a comparison of the median level of importance for competencies assigned to each category allowed the results of this research to be applied broadly to leadership development within the profession.

Chapter Four: Data Analysis

The initial analysis of the responses submitted for the web-based questionnaire included a comparison of the response percentages for each strata of the sample. Following this initial evaluation an examination of incomplete responses and missing data was conducted. The subsequent data analysis process included three stages, each of which related to a research question guiding the study. In the first stage, descriptive statistics were used to define the characteristics of participants in the study and to determine the level of importance participants assigned to each of the competency descriptors. The second stage of analysis determined correlation values between participant demographic variables and the level of importance assigned to the competency descriptors. The final stage of analysis used a Friedman test and post-hoc procedures to determine if a statistically significant difference existed between the mean importance scores of competencies assigned to the categories of Leadership, Management, and Personal Characteristic. A stratified random sample strategy, based on division of athletic competition was employed to identify participants for this research. Analysis of responses for this demographic variable were used to determine how well the sample represented the population of college and university athletic trainers before proceeding to further data analysis.

Response Evaluation

The sample for this research was identified using a stratified random sample strategy. The first stage in data analysis was an examination of the respondents based on their response to Item 1 on the questionnaire which asked for the athletic competition division of the respondent's institution. Table 4 displays the distribution of respondents based on level of competition and a comparison to the sample stratification displayed in Table 3. The total number of responses was

326 resulting in a 96% confidence interval (Raosoft, 2004). Additionally, the percentage of responses from each strata were comparable to the sample stratification designed to obtain a sample representative of head athletic trainers at four-year colleges and universities throughout the United States. Therefore, no additional sampling was conducted within the responses.

Table 4

Participant Invitations and Responses

Division	% of Population	Invitations ^a	Responses	% of Participants
NCAA I	25.7	256	80	24.5
NCAA II	23.0	229	73	22.4
NCAA III	32.7	327	103	31.6
NAIA	18.7	189	66	20.2
Total	100.0	1001	326 ^b	98.7

Note. ^aA head athletic trainer was not identified for 16 of the sampled institutions (1.6%) and 21 invitations were undeliverable at all three mailings due to unresolvable email errors creating a total of 37 undelivered invitations.

^bA division of participation was not selected by 4 respondents.

Data cleaning. According to Osborne (2013) missing data in survey results must be carefully examined to determine if patterns of non-response are present before discarding incomplete responses. Evaluation of each case was conducted to determine if missing data occurred randomly or if patterns could be identified. Of the 341 submitted responses 15 were found to contain no information beyond the demographic section (Items 1-9). Evaluation of the demographic information for these incomplete responses determined that they were comparable to the distribution of the remaining 326 cases for each of the demographic variables, indicating that the data were missing at random rather than based on an identifiable condition. Because these responses contained no data for the dependent variables in the study, they could contribute no information to the research questions and misleadingly inflated response numbers. These data

sets were eliminated before the calculation of response rate and evaluation of the stratified sample occurred, and were not used in any data analysis procedures.

Missing data patterns. Using the response information an evaluation of missing data was conducted. Through the course of the questionnaire a steady increase in the number of missing responses was found. This was a concern for the research design based on the length of the 78 item questionnaire. Following the demographics section, each page of the questionnaire contained five competency descriptors (Items 10-78). An increase in nonresponse rate for items was noted after each page of the questionnaire, suggesting partial nonresponse of up to 43 participants from whom data sets were collected. Item nonresponse occurred for 37 of the 78 questionnaire items seeking a level of importance for competency descriptors. Item nonresponse may occur at random due to accidental omission of a response or a lack of understanding leading to a respondent omitting an answer (de Leeuw, Hox, & Huisman, 2003). Nonresponse may also be the result of refusal to provide an answer the respondent judges as socially unacceptable, or may be related to partial nonresponse based on the content of the questionnaire (de Leeuw et al., 2003). Data missing at random may not introduce bias into the results, but data missing due to refusal or nonresponse based on content may create bias (de Leeuw et al., 2003).

Without an exit interview, or other means of determining the cause of missing data, it cannot be determine whether or not the missing data is problematic. Despite these missing responses, all 326 responses that included information on any of the independent variables were retained for data analysis as the statistical procedures conducted using SPSS Grad Pack 22 excluded cases with missing data in the field necessary for each analysis step. This capability allowed for all responses to contribute to the findings of the study while resulting in a different n

for each analysis procedure. The frequency reporting includes the number of responses for each item from which the item nonresponse can be determined.

Descriptive Statistical Analysis

The demographic information collected from respondents for Items 1 – 9 resulted in both nominal and ordinal level data used to describe the participants and for analysis of relationships between demographics and the level of importance assigned to the leadership competencies. Table 4 displayed information regarding the level of competition for the institution at which participants work. The remaining demographic variables are displayed in frequency tables in Appendix D. Research Question #1 addressed the level of importance college and university head athletic trainers place on their staff athletic trainers demonstrating each of the identified athletic training leadership competencies and was evaluated through the use of descriptive statistics.

Competencies. The independent variables in this study were the level of importance head athletic trainers at the college and university level assigned to each of 69 single-sentence competency descriptors developed from Kutz's (2006) leadership competencies. The competency titles were not included with the descriptors on the questionnaire in an attempt to limit the introduction of bias based on wording relating to the category of competency. Respondents selected an option from a four-choice Likert scale to indicate whether it was (a) *very unimportant*, (b) *unimportant*, (c) *important*, or (d) *very important* for their staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities in the competency descriptor.

Response frequencies for competencies. A total of 20,589 level of importance responses were collected for the 69 competencies. The responses were highly concentrated in the *important* and *very important* response categories which composed 92.95% of all responses.

Table 5 summarizes the response frequencies for each of the four-choice options presented in the Likert scale presented to respondents for each of the competencies.

Table 5

Four-choice Response Frequencies

Choice	Responses	% of Responses
<i>Very Unimportant</i>	70	0.34
<i>Unimportant</i>	1,383	6.71
<i>Important</i>	11,628	56.48
<i>Very Important</i>	7,508	36.47
Total	20,589	100

The response category *very unimportant* was used less frequently than any other response category and 39 competency descriptors received no *very unimportant* responses. The total number of *very unimportant* responses was only 70 of 20,589 total responses. The *unimportant* response category included the second fewest selections with 1,383 total responses, five competency descriptors received no unimportant responses. The response choice *important* was most frequently selected by participants. *Important* accounted for 56% of the 20,589 total responses indicating the level of importance head athletic trainers place on their staff possessing and displaying the knowledge, skills, and abilities included in the competency descriptors. The final response category *very important*, received the second highest number of responses. Table

D1 contained in Appendix D displays the response frequencies of the four response choices for each single-sentence competency descriptor. The table is arranged alphabetically by the title of each competency descriptor developed by Kutz (2006).

Pooled response category frequencies for competencies. Table 6 displays responses in two categories; Unimportant, created by pooling *very unimportant* and *unimportant* responses, and Important, a pooling of *important* and *very important* responses. Table 6 displays the competencies in descending order based on the relative frequency of responses in the pooled *important* and *very important* categories. The competency title and descriptor developed by Kutz (2006) is included in the table and competency titles with multiple descriptors are noted with key words for identification purposes.

Table 6

Response Frequency for Pooled Response Categories

Item	Competency	Descriptor	Pooled Unimportance		Pooled Importance	
			<i>n</i>	%	<i>n</i>	%
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.	0	0.0	325	100.0
20	Ethical (treatment)	Treats people equitably and fairly.	0	0.0	316	100.0
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.	0	0.0	297	100.0

(Table 6 continues)

(Table 6 continued)

Item	Competency	Descriptor	Pooled Unimportance		Pooled Importance	
			<u>n</u>	%	<u>n</u>	%
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.	0	0.0	291	100.0
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.	0	0.0	290	100.0
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limit or correct problems in a reasonable amount of time (via problem solving and dialogue).	1	0.3	318	99.7
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.	1	0.3	318	99.7
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.	1	0.3	290	99.7
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.	2	0.6	312	99.4
22	Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	2	0.6	312	99.4

(Table 6 continues)

(Table 6 continued)

Item	Competency	Descriptor	Pooled Unimportance		Pooled Importance	
			<i>n</i>	%	<i>n</i>	%
37	Responsible for Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.	2	0.7	298	99.3
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.	2	0.7	288	99.3
74	Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.	2	0.7	285	99.3
12	Change Agent (proactive)	Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).	3	0.9	321	99.1
13	Contextual Intelligence	Know how to appropriately interpret and react to changing and volatile surroundings.	3	0.9	232	99.1
29	Thrives on Responsibility	Has a strong sense of duty and dependability in a variety of situations and roles.	3	1.0	305	99.0
26	Resilience	Display the ability to recover from, or adjust easily to, misfortune or change.	3	1.0	303	99.0

(Table 6 continues)

(Table 6 continued)

Item	Competency	Descriptor	Pooled Unimportance		Pooled Importance	
			<u>n</u>	%	<u>n</u>	%
34	Empathetic (exhibit empathy)	Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.	3	1.0	302	99.0
42	Emotionally Stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.	3	1.0	293	99.0
49	Protector	Provide a secure environment, tend to others carefully, prevent indiscretions, and preserve [others].	4	1.4	290	98.6
39	Assertive	Be proactive about new ideas, innovations, and change initiatives while maintaining respect for personal boundaries and rights of others.	5	1.7	293	98.3
77	Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.	5	1.8	276	98.2
16	Crisis Management (conflict resolution)	Deal with conflict by providing effective strategies for conflict resolution.	6	1.9	313	98.1
17	Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.	6	1.9	310	98.1

(Table 6 continues)

(Table 6 continued)

Item	Competency	Descriptor	Pooled Unimportance		Pooled Importance	
			<i>n</i>	%	<i>n</i>	%
41	Emotionally Stable (manage stress)	Handle and manage stress associated with leadership roles.	6	2.0	292	98.0
24	Intentional Leadership (improvement)	Take intentional action toward continuous improvement of leadership ability.	8	2.5	306	97.5
72	Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	7	2.5	274	97.5
48	Open-Mindedness	Be willing to discard old ways of doing things when evidence fails to support them.	8	2.7	287	97.3
73	Controls Risk (strategies)	Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after patient care error occurs) to continuously improve care.	8	2.8	275	97.2
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	9	3.1	282	96.9
53	Creative/ Innovative Leadership	Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.	9	3.1	282	96.9

(Table 6 continues)

(Table 6 continued)

Item	Competency	Descriptor	Pooled Unimportance		Pooled Importance	
			<i>n</i>	%	<i>n</i>	%
63	Future-Minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.	9	3.1	281	96.9
11	Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	11	3.4	314	96.6
45	Improves Morale	Facilitate and encourage a positive attitude in peers, subordinates, and supervisors toward their work and life.	10	3.4	284	96.6
23	Intentional Leadership (assess)	Assess and evaluate their own leadership performance and are aware of strengths and weaknesses.	11	3.5	305	96.5
38	Ambitious	Use available resources (intrinsic and extrinsic) and other effective strategies to promote professional and personal development.	11	3.7	286	96.3
44	Willing to Take Appropriate Risk	Be willing to accept a degree of uncertainty for the sake of implementing an idea, needed value, or to see a goal accomplished.	12	4.0	286	96.0
61	Organizationally Savvy (observe)	Carefully observe the environment and people.	12	4.2	276	95.8
78	Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	12	4.2	271	95.8

(Table 6 continues)

(Table 6 continued)

Item	Competency	Descriptor	Pooled Unimportance		Pooled Importance	
			<i>n</i>	%	<i>n</i>	%
30	Utilizes Appropriate Leadership Styles (transition)	Identify when it is appropriate to transition between leadership styles with subordinates and peers.	13	4.3	291	95.7
66	Collaborator (promote health)	Facilitate the collaboration as a leader and participant with colleagues and other health care professionals to promote the health and welfare of diverse individuals and groups.	13	4.5	275	95.5
31	Excellent Written Communication Skills	Write thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	15	4.9	290	95.1
32	Uses Body-Language	Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.	15	4.9	289	95.1
10	Advocate	Take responsibility for actions of others, defends actions of others, and act when appropriate as an advocate for others.	18	5.6	306	94.4

(Table 6 continues)

(Table 6 continued)

Item	Competency	Descriptor	Pooled Unimportance		Pooled Importance	
			<i>n</i>	%	<i>n</i>	%
67	Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	16	5.6	272	94.4
68	Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.	17	6.0	266	94.0
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	20	6.6	285	93.4
47	Courageous Leadership	Have strong convictions and holds to convictions when faced with challenges.	21	7.2	272	92.8
75	Time management	Make use of processes and tools that increase efficiency and set parameters for availability to subordinates and peers.	21	7.5	259	92.5
70	Cultural Sensitivity (interaction)	Provide opportunities for diverse members to interact in a non-discriminatory manner.	22	7.8	260	92.2
65	Collaborator (achieve goals)	Effectively collaborate with other professionals within the local community in achieving goals.	23	8.0	265	92.0
52	Leads Quietly (do right)	Do what is “right” for the organization.	25	8.6	266	91.4

(Table 6 continues)

(Table 6 continued)

Item	Competency	Descriptor	Pooled Unimportance		Pooled Importance	
			<i>n</i>	%	<i>n</i>	%
57	Ensures an Awareness Of Mission	Understand and communicate how individual performance of others influences subordinates', peers', and supervisors' perceptions of how the mission is being accomplished.	26	9.2	257	90.8
55	Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others.	28	9.7	262	90.3
69	Cultural sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	28	9.9	255	90.1
76	Multicultural Leadership	Influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.	28	10.1	249	89.9
62	Utilizes Appropriate Leadership Styles (variety)	Demonstrate the ability to implement and transition between a variety of leadership styles as appropriate, and when different situations dictate a diversity of leadership styles.	30	10.5	256	89.5
36	Applies Known and Attained Knowledge	Use clinical evidence, research, and best-practices in the promotion of the profession by professional communications (abstracts, poster-presentations, lectures, etc.), original investigations, and literature reviews.	39	13.1	259	86.9

(Table 6 continues)

(Table 6 continued)

Item	Competency	Descriptor	Pooled Unimportance		Pooled Importance	
			<i>n</i>	%	<i>n</i>	%
60	Identifies Leaders	Identify leadership attributes in emerging leaders, and take initiative to facilitate development.	44	15.2	245	84.8
71	Effective and Constructive Use of Influence (affect behavior)	Use interpersonal skills, personal power, and influence to constructively and effectively affect the behavior and decisions of others.	46	16.5	233	83.5
25	Leadership planner	Have an action guide and delineated goals for achieving personal best.	53	17.2	255	82.8
27	Socially responsible (concern)	Express concern about social trends and issues (encourages legislation and policy when appropriate).	58	18.8	250	81.2
50	Leads Quietly (patiently)	Move patiently, carefully and incrementally.	56	19.5	231	80.5
46	Utilizes Appropriate Leadership Styles (recognize)	Recognize when superiors and other professionals are transitioning between leadership styles.	68	23.1	226	76.9
56	Empowerment (ensure)	Ensure transformation and development of others.	67	23.3	220	76.7
19	Effective and Constructive Use of Influence (powerful image)	Demonstrate the effective use of different types of power in developing a powerful image.	96	30.5	219	69.5
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	109	35.5	198	64.5

(Table 6 continues)

(Table 6 continued)

Item	Competency	Descriptor	Pooled Unimportance		Pooled Importance	
			<i>n</i>	%	<i>n</i>	%
40	Scholarship	Contribute to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.	108	36.5	188	63.5
35	Empathetic (risks)	Takes risks on behalf of team members.	130	43.8	167	56.2

As demonstrated in Table 6, for each of the competencies the frequencies of responses in the Pooled Importance category were higher than those in the Pooled Unimportance category. Only seven competencies received less than 80% of responses in the pooled category *important* and *very important*, and just one competency received less than 60% of responses in the pooled category *important* and *very important*.

Measures of Relationship between Variables

The questionnaire used in this study was constructed of 9 demographic items which collected data at either the nominal or ordinal level of measurement to inform the independent variables; and 69 competency descriptors for which the dependent variable, level of importance for each competency, was collected at the ordinal level of measurement. Research Question #2, sought demographic factors having a statistically significant relationship to the perceived importance placed upon each of the competencies. Statistical analysis of the data was conducted to identify relationships between the independent demographic variables and the pooled

importance of items collected at the nominal level, or the four-choice level of importance assigned to each items resulting in ordinal level data.

Demographic variable data collected at the ordinal level of measurement. Of the nine demographic variables included on the instrument, five collected data at the ordinal level of measurement: (a) *Athletic Competition Division*, (b) *Age*, (c) *Years of Work as an Athletic Trainer*, (d) *Years of Work as a Head Athletic Trainer*, (e) *Size of Athletic Training Staff Supervised*, and (f) *Number of Assigned Duties*. In response to an additional demographic item participants chose assigned duties from a list of possibilities, these data was converted to the number of duties selected and used as an additional ordinal level variable for which a correlation could be conducted. Because both the independent and dependent variables were measured at the ordinal level, Spearman rho analysis was performed to identify relationships between responses to each of the five demographic items on the questionnaire and the level of importance assigned to each of the 69 competency descriptors. The strength of relationship between two variables was described by Salkind (2012) using five categories based on the absolute size of the correlation coefficient (r). Salkind's five descriptions of correlational strength are: (a) very weak, r between .0 and .2, (b) weak, r between .2 and .4, (c) moderate, r between .4 and .6, (d) strong, r between .6 and .8, and (e) very strong, r between .8 and 1.0. The coefficient of determination (r^2) can be determined by squaring the correlational coefficient, resulting in a description of the amount of variation shared by the variables. The threshold for statistical importance in this study was set at $r \geq .10$ ($r^2 \geq .01$) with an alpha level $p \geq .05$ to determine statistical significance.

A total of 45 statistically significant relationships were identified through the analysis of the demographic variables collected at the nominal level of measurement. Tables D19, D20, and

D21 in Appendix D display the complete results of the Spearman rho calculations. The following sections include descriptive statistics used to interpret the findings for each demographic and the statistically significant relationships identified between the demographic variables and the level of importance and level of pooled importance assigned by participants.

Athletic Competition Division. Responses to the demographic variable *Athletic Competition Division* indicated the level at which the head athletic trainer’s institution competes. Data were collected at the ordinal level, increasing in size from the smallest level of competition, National Intercollegiate Athletic Association (NAIA), to the highest level, National Collegiate Athletic Association Division I – Bowl Championship Series (NCAA-BCS) institutions. Table 7 displays the response data by *Athletic Competition Division*.

Table 7

Respondents by Athletic Competition Division

Division	Frequency	
	Absolute	Relative
NCAA I - FBS	80	8.0
NCAA I - FCS	54	16.6
NCAA II	73	22.4
NCAA III	103	31.6
NAIA	66	20.2
Not Indicated	4	1.2
Total	326	100.0

A high level of importance was noted for competencies receiving 100% Pooled Importance frequencies in at least 4 of the 5 *Athletic Competition Division* categories. Table 8 displays the competencies with a high level of importance by *Athletic Competition Division*.

Table 8

Competencies with 100% Pooled Importance Frequencies in At Least 4 of 5 Athletic Competition Division Categories

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.
20	Ethical (treatment)	Treats people equitably and fairly.
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

In addition to the competencies for which a high level of Pooled Importance was assigned across the *Athletic Competition Division* categories, a number of competencies received high importance frequencies from participants of each group. Table 9 displays the number of

competencies receiving a 100% Pooled Importance rating within each division of competition.

Table 9

Number of 100% Pooled Importance Competencies by Athletic Competition Division

Athletic Competition Division	Number of Competencies Receiving 100% Pooled Important Responses
NAIA	18
NCAA III	8
NCAA II	17
NCAA I – FCS	17
NCAA I – FBS	36

Hypothesis testing for Athletic Competition Division. Analysis of responses to the demographic variable *Athletic Competition Division* on the questionnaire was used to inform the following null hypothesis:

H₀1: There was no statistically significant relationship between the athletic competition division of the institution for which the head athletic trainer works and the level of importance they assign to each of the competencies.

Using Spearman rho analysis three statistically significant relationships were identified between the athletic competition division of the respondents' institutions and level of importance assigned to the competency descriptors. The three competencies for which relationships were identified are displayed in Table 10. Though each of these relationships was statistically significant, the relationships are characterized as very weak using Salkind's (2012) model of correlation strength. The coefficients of determination for the relationships indicated that only 1.2 to 1.4% of the variation in level of importance assigned to the three competencies and

Athletic Competition Division responses are shared. Based on these findings the researcher failed to reject H_0 for 66 competencies but rejected the null for 3 competencies.

Table 10

Statistically Significant Relationships between Athletic Competition Division and Level of Importance

Item	Competency	Descriptor	<u>n</u>	<i>p</i>	<i>r</i>	<i>r</i> ²
11	Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	321	.05	.11*	.01
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	301	.03	.12*	0.1
67	Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	284	.05	.12*	0.1

* $p \leq .05$

Age. Participants indicated their age by selecting from ranges increasing in 10 year increments from 20-29 to 70 or above. Table 11 displays the responses to the demographic item *Age*.

Table 11

Age of Respondents

Response	Frequency	
	Absolute	Relative
20-29	35	10.7
30-39	106	32.5
40-49	109	33.4
50-59	66	20.2
60-69	9	2.8
70 or above	1	0.3
Total	326	100.0

A high level of importance based on respondents within the categories for the demographic variable *Age* was identified for nine competencies which received 100% Pooled Important frequencies in at least 5 of the 6 *Age* groups. Table 12 displays the competencies receiving 100% Pooled Important responses within 5 of the 6 the categories for *Age*.

Table 12

Competencies with 100% Pooled Importance Frequencies in At Least 5 of 6 Age Categories

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.
20	Ethical (treatment)	Treats people equitably and fairly.
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

Variation in the number of competencies receiving high level of importance ratings between the *Age* categories. Table 13 displays the number of competencies receiving a 100% Pooled Importance rating for each group of the demographic variable *Age*.

Table 13

Number of Competencies with 100% Pooled Importance Frequencies by Age

Athletic Competition Division	Number of Competencies Receiving 100% Pooled Important Responses
20-29	18
30-39	15
40-49	7
50-59	20
60-69	57
70 or more	66

Hypothesis testing for Age. Spearman rho correlation analysis was performed to test the following null hypothesis:

H₀2: There was no statistically significant relationship between the age of the participants and the level of importance they assign to each of the competencies.

Correlation testing revealed 10 competencies for which there was a statistically significant correlation with age of participants. Table 14 displays these competencies and the results of the Spearman rho testing. The strength of correlation between *Age* and level of importance was weak for two competencies and very weak for the remaining eight. The coefficients of determination revealed that the shared variability between the *age* and level of importance was between 1.2 and 5.8%. As a result of this testing the researcher failed to reject the null for 58 of the competencies while rejecting null hypothesis H₀2 for 10 competencies.

Table 14

Statistically Significant Relationships between Age and Level of Importance

Item	Competency	Descriptor	<u>n</u>	<i>p</i>	<i>r</i>	<i>r</i> ²
11	Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	325	.04	.12*	.01
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	307	.03	.12*	.01
29	Thrives on Responsibility	Have a strong sense of duty and dependability in a variety of situations and roles.	308	.02	.13*	.01
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	305	.00	.24*	.06
35	Empathetic (risks)	Takes risks on behalf of team members.	297	.02	.14*	.02
46	Utilizes Appropriate Leadership Styles (recognize)	Recognize when superiors and other professionals are transitioning between leadership styles.	294	.04	.12*	.01
47	Courageous Leadership	Have strong convictions and holds to convictions when faced with challenges.	293	.05	.11*	.01
50	Leads Quietly (patiently)	Move patiently, carefully and incrementally.	287	.02	.14*	.02
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	288	.00	.21*	.04
72	Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	281	.03	.13*	.02

* $p \leq 0.5$

Years as an Athletic Trainer. Participants indicated the number of years they had worked as an athletic trainer using a range of years in five year increments beginning with 0-5

years and increasing to 41 or more years. Table 15 displays the responses to the demographic item *Years as an Athletic Trainer*.

Table 15

Years as an Athletic Trainer

Response	Frequency	
	Absolute	Relative
0-5 years	22	6.7
6-10 years	59	18.1
11-15 years	56	17.2
16-20 years	53	16.3
21-25 years	64	19.6
26-30 years	33	10.1
31-35 years	25	7.7
36-40 years	12	3.7
41 or more years	2	0.6
Total	326	100.0

A high level of importance, defined as having 100% Pooled Importance in at least 8 of the 9 categories for the demographic variable *Years as an Athletic Trainer*, was found for nine competencies. These competencies are displayed in Table 16.

Table 16

Competencies with 100% Pooled Importance in At Least 8 of 9 Categories for Years as an Athletic Trainer

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).

(Table 16 continues)

(Table 16 continued)

Item	Competency	Descriptor
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.
20	Ethical (treatment)	Treats people equitably and fairly.
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

In addition to the competencies for which a high level of Pooled Importance was assigned across the *Years as an Athletic Trainer* categories, a number of competencies received high importance frequencies from participants of each group. Table 17 displays the number of competencies receiving a 100% Pooled Importance rating within each category of *Years as an Athletic Trainer*.

Table 17

Number of Competencies with 100% Pooled Important Frequencies by Years as an Athletic Trainer

Years as an Athletic Trainer	Number of 100% Pooled Important Competencies
0-5	21
6-10	13
11-15	23
16-20	24
21-25	10
26-30	35
31-35	32
36-40	22
41 or more	64

Hypothesis testing for Years as an Athletic Trainer. To test the following null hypothesis correlations were calculated between *Years as an Athletic Trainer* and the level of importance assigned to each of the competency descriptors:

H₀₃: There was no statistically significant relationship between the participants' years of work as an athletic trainer and the level of importance they assign to each of the competencies.

Statistically significant relationships were identified between *Years as an Athletic Trainer* and the level of importance assigned to nine competencies, displayed in Table 18. The strength of eight of the statistically significant correlations was described as very weak using Salkind's (2012) model while a weak relationship was found for the ninth competency. The correlation

testing lead to the researcher failing to reject the null for 60 competencies, while null hypothesis H₀₃ was rejected for 9 competencies based on the statistically significant relationships detected.

Table 18

Statistically Significant Relationships between Years as an Athletic Trainer and Level of Importance

Item	Competency	Descriptor	<u>n</u>	<i>p</i>	<i>r</i>	<i>r</i> ²
11	Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	325	.02	.13*	.02
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	307	.01	.15*	.02
29	Thrives on Responsibility	Have a strong sense of duty and dependability in a variety of situations and roles.	308	.04	.12*	.01
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	305	.00	.26*	.07
41	Emotionally Stable (manage stress)	Handle and manage stress associated with leadership roles.	298	.05	-.11*	.01
52	Leads Quietly (do right)	Do what is “right” for the organization.	291	.03	.13*	.02
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	288	.00	.20*	.04
69	Cultural Sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	283	.04	.12*	.01
72	Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	281	.04	.12*	.01

**p* ≤ .05

Years as a Head Athletic Trainer. The fourth demographic variable used ranges of five years to determine the number of years participants had worked as a head athletic trainer. The ranges began with 0-5 years and progressed to 41 or more years. Table 19 displays the response frequencies for the demographic variable *Years as a Head Athletic Trainer*.

Table 19

Years as a Head Athletic Trainer

Response	Frequency	
	Absolute	Relative
0-5 years	108	33.1
6-10 years	71	21.8
11-15 years	41	12.6
16-20 years	42	12.9
21-25 years	33	10.1
26-30 years	21	6.4
31-35 years	5	1.5
36-40 years	2	0.6
41 or more years	2	0.6
Missing	1	0.3
Total	326	100.0

A high level of importance, identified by 100% Pooled Important frequencies in at least 8 of the 9 *Years as a Head Athletic Trainer* categories were identified for seven competencies.

These competencies are displayed in Table 20.

Table 20

Competencies with 100% Pooled Importance Frequencies in At Least 8 of 9 Years as a Head Athletic Trainer Groups

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.
20	Ethical (treatment)	Treats people equitably and fairly.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

Variation in the number of competencies receiving high level of importance ratings between the *Years as a Head Athletic Trainer* categories. Table 21 displays the number of competencies receiving a 100% Pooled Importance rating for each group of the demographic variable *Years as a Head Athletic Trainer*.

Table 21

Number of 100% Pooled Important Competencies by Years as a Head Athletic Trainer

Years as a Head Athletic Trainer	Number of Competencies Receiving 100% Pooled Important Responses
0-5	9
6-10	18
11-15	20
16-20	28
21-25	28
26-30	34
31-35	61
36-40	66
41 or more	64

Responses to the demographic *Years as a Head Athletic Trainer* were correlated with the level of importance assigned to the competency descriptors to evaluate the following null hypothesis:

H₀4: There was no statistically significant relationship between the number of years the participants have served as a college and university head athletic trainer and the level of importance they assign to each of the competencies.

Hypothesis testing for years as a Head Athletic Trainer. Statistically significant relationships were discovered for 10 competency descriptors using Spearman rho correlation testing between *Years as a Head Athletic Trainer* and level of importance placed on the competencies. The competency descriptors demonstrating statistically significant relationships with *Years as a Head Athletic Trainer* are contained in Table 22. The strength of seven of

statistically significant correlations fall into the very weak category while three of the calculations resulted in a weak correlation between the variables. The researcher failed to reject null hypothesis H_0 for 59 competency descriptors and rejected the null for 10.

Table 22

Statistically Significant Relationships between Years as Head Athletic Trainer and Level of Importance

Item	Competency	Descriptor	n	p	r	r^2
16	Crisis Management (conflict resolution)	Deal with conflict by providing effective strategies for conflict resolution.	318	.03	.12*	.01
27	Socially Responsible (concern)	Express concern about social trends and issues (encourages legislation and policy when appropriate).	307	.02	.14*	.02
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	306	.03	.12*	.01
29	Thrives on Responsibility	Have a strong sense of duty and dependability in a variety of situations and roles.	307	.00	.20*	.04
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	304	.00	.25*	.06
35	Empathetic (risks)	Takes risks on behalf of team members.	297	.04	.12*	.01
46	Utilizes Appropriate Leadership Styles (recognize)	Recognize when superiors and other professionals are transitioning between leadership styles.	293	.04	.12*	.01
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	287	.00	.22*	.05

(Table 22 continues)

(Table 22 continued)

Item	Competency	Descriptor	<u>n</u>	<i>p</i>	<i>r</i>	<i>r</i> ²
69	Cultural Sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	282	.05	.12*	.01
72	Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	281	.03	.13*	.02

* $p \leq .05$

Size of Athletic Training Staff Supervised. Participants indicated the size of the athletic training staff for which they were responsible by selecting the number staff athletic trainers at their institution from five options ranging from 1-2 athletic trainers to 10 or more. Of the nine demographic items on the questionnaire, the size of staff was missing for 9 participants, more than for any other demographic variable. It is unknown if the missing responses indicate a refusal to complete the question, and accidental omission, or that the respondent supervises no staff athletic trainers, as 0 was not included in the response options because the purpose of the research was to obtain the level of importance head athletic trainers place on their staff athletic trainers demonstrating the leadership competencies. Table 23 displays the response frequencies for the demographic item *Size of Athletic Training Staff Supervised*.

Table 23

Number of Athletic Trainers Supervised

Response	Frequency	
	Absolute	Relative
1-2	130	39.9
3-4	99	30.4
5-6	39	12.0
7-9	29	8.9
10 or more	20	6.1
Missing	9	2.8
Total	326	100.0

A high level of importance, indicated by receiving 100% Pooled Importance frequencies in at least 4 of the 5 *Size of Athletic Training Staff Supervised* categories was identified for nine competencies. These competencies are displayed in Table 24.

Table 24

Competencies with 100% Pooled Importance Frequencies in At Least 4 of 5 Size of Athletic Training Staff Supervised Categories

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.
20	Ethical (treatment)	Treats people equitably and fairly.
42	Emotionally Stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.

(Table 24 continues)

(Table 24 continued)

Item	Competency	Descriptor
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

In addition to the competencies for which a high level of Pooled Importance was assigned across the *Size of Athletic Training Staff Supervised* categories, a number of competencies received high importance frequencies from participants of each group. Table 25 displays the number of competencies receiving a 100% Pooled Importance rating within each division of competition.

Table 25

Number of Competencies with 100% Pooled Importance Frequencies by Size of Athletic Training Staff Supervised

Size of Athletic Training Staff Supervised	Number of Competencies Receiving 100% Pooled Important Responses
1 to 2	11
3 to 4	13
5 to 6	27
7 to 9	24
10 or more	39

Hypothesis testing for Size of Athletic Training Staff. The following null hypothesis relating to the demographic variable *Size of Athletic Training Staff Supervised* was evaluated using a Spearman rho correlation coefficient calculation:

H₀₅: There was no statistically significant relationship between the size of the athletic training staff supervised by the participants and the level of importance assigned to each of the competencies.

The threshold for statistical significance was not met for 59 of the 69 competency descriptors. The 10 competencies for which a statistically significant relationship was found with *Size of Athletic Training Staff* are displayed in Table 26. Of the statistically significant relationships identified, one could be described using Salkind's (2012) category of weak, while the remaining nine correlation coefficients can be described as very weak. The researcher failed to reject null hypothesis H₀₅ for 59 competencies and rejected the null for 10 competencies.

Table 26

Statistically Significant Relationships between Size of Athletic Training Staff and Level of Importance

Item	Competency	Descriptor	<u>n</u>	<i>p</i>	<i>r</i>	<i>r</i> ²
10	Advocate	Take responsibility for actions of others, defends actions of others, and act when appropriate as an advocate for others.	316	.04	.11*	.01
11	Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	316	.01	.14*	.02

(Table 26 continues)

(Table 26 continued)

Item	Competency	Descriptor	<u>n</u>	<i>p</i>	<i>r</i>	<i>r</i> ²
17	Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.	307	.02	.13*	.02
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	296	.00	.17*	.03
52	Leads Quietly (do right)	Do what is “right” for the organization.	282	.00	.21*	.04
55	Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others.	282	.05	.12*	.01
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	280	.03	.13*	.02
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization’s mission, values, and goals.	282	.01	.15*	.02
67	Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	280	.04	.13*	.02
71	Effective and Constructive Use of Influence (affect behavior)	Use interpersonal skills, personal power, and influence to constructively and effectively affect the behavior and decisions of others.	271	.05	.12*	.01

* $p \leq .05$

Number of assigned duties. The final demographic item completed by respondents by selecting from a list of assigned duties those that applied to their position. From these selections a total number of assigned duties for each participant was established. Table 27 displays the frequencies for the number of duties assigned to participants.

Table 27

Number of Assigned Duties

Response	Frequency	
	Absolute	Relative
1	4	1.2
2	14	4.3
3	41	12.6
4	96	29.4
5	117	35.9
6	54	16.6
Total	326	100.0

Ten competencies were identified as having a high level of importance by receiving 100% Pooled Importance frequencies in at least 5 of the 6 *Number of Duties Assigned* categories. These competencies are displayed in Table 28.

Table 28

Competencies with 100% Pooled Importance Frequencies in At Least 5 of 6 Number of Assigned Duties Categories

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).

(Table 28 continues)

(Table 28 continued)

Item	Competency	Descriptor
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.
20	Ethical (treatment)	Treats people equitably and fairly.
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.
22	Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

In addition to the competencies for which a high level of Pooled Importance was assigned across the *Number of Assigned Duties* categories, a number of competencies received high importance frequencies from participants of each group. Table 29 displays the number of competencies receiving a 100% Pooled Importance rating within each *Number of Assigned Duties* category.

Table 29

Number of Competencies with 100% Pooled Importance Frequencies by Number of Assigned Duties

Number of Assigned Duties	Number of Competencies Receiving 100% Pooled Important Responses
1	59
2	34
3	22
4	16
5	13
6	19

Hypothesis testing for Number of Assigned Duties. The number of duties selected by participants ranged from 1 to 6 and the data were used in correlation calculations to test the following null hypothesis:

H₀₆: There was no statistically significant relationship between the number of athletic training duties assigned to the participants and the level of importance they assign to each of the competencies.

Statistically significant relationships were identified between the level of importance assigned to two competency descriptors and the number of assigned duties selected. The competency descriptors for which statistically significant and important relationships with the total number of duties assigned are included in Table 30. Each of these relationships demonstrates a weak level of association. The researcher failed to reject the null hypothesis for 67 items while null H₀₆ was rejected based on 2 statistically significant relationships.

Table 30

Statistically Significant Relationships between Number of Assigned Duties and Level of Importance

Item	Competency	Descriptor	n	p	r	r^2
47	Courageous Leadership	Have strong convictions and holds to convictions when faced with challenges.	293	.03	-.13*	.02
67	Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	288	.02	.14*	.02

* $p \leq .05$

Demographic variable data collected at the nominal level of measurement. The remaining four demographic items on the questionnaire collected nominal level data for analysis. Identification of relationships between nominal and ordinal level data required the use of the chi-square test of independence (Urdan, 2005). The chi-square test of independence allows the researcher to determine whether cases in a sample fall into categories in proportions equal to what would be expected by chance (Urdan, 2005). When the observed count in a category varies significantly from the expected count the strength of association between the variables in a chi-square relationship can be described based on the calculation of Cramer's V Coefficient. According to AcaStat (2012) values of .1 to .29 describe a low association, while values of .3 to .49 indicate a moderate association, and values greater than .5 characterize high association.

An assumption of the chi-square procedure is an expected count of no less than 2 in each area of the matrix (Glass & Hopkins, 1996). Review of the four category level of importance response data in this study revealed that 64 of the 276 total response cells violated the minimum

expected count assumption. This represented 23.2% of the response cells. To decrease the number of cases which violated the minimum expected response assumption the response data were grouped into two pooled competency categories. The pooled category *very unimportant* and *unimportant*, labeled Unimportant in the tables, and the pooled category *important* and *very important*, labeled Important. The use of the pooled response categories reduced the number of cells violating the minimum count assumption to 8, representing only 2.90% of the total cells. The chi-square procedures were then used to identify relationships, significant at the $p \leq .05$ level and statistically important at $v \geq .01$, between each of the demographic variables and the level of importance assigned to the pooled response categories.

Assigned duties. In response to Item 9 on the questionnaire participants selected from six duties to indicate which of the following responsibilities were assigned to them: (a) *Daily Patient Care*, (b) *Travel with Athletic Teams*, (c) *Athletic Training/Healthcare Administration*, (d) *Clinical Preceptor*, (e) *Course Instructor*, and (f) *Departmental or Institutional Committee Assignments*.

Daily Patient Care duty. The duty *Daily Patient Care* was not selected by 13 participants, 4.0% of respondents. A 100% Pooled Importance frequency was assigned to 38 of the 69 competencies by the participants not assigned daily patient care (see Table D9 for full display of frequencies). Of the 326 participants in the study, 313, 96.0% of respondents, indicated that they were assigned the duty *Daily Patient Care*. For respondents involved with daily patient care, five competencies received a frequency of 100% Pooled Importance. Table 31 displays the five competencies receiving 100% Pooled Importance frequencies from participants with *Daily Patient Care* duties.

Table 31

Competencies with 100% Pooled Importance Frequency by Respondents Assigned Daily Patient Care Duties

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
20	Ethical (treatment)	Treats people equitably and fairly.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

Using chi-square testing and the pooled category responses, statistically significant relationships were identified between *Daily Patient Care* and the three competency descriptors displayed in Table 32. The results indicated that although each relationship was statistically significant, the strength of association was low.

Table 32

Statistically Significant Relationships between Daily Patient Care and Pooled Importance

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>	<i>v</i>
34	Empathetic (exhibit empathy)	Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.	305	6.28*	1	.01	.14
42	Emotionally Stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.	296	6.68*	1	.01	.15
49	Protector	Provide a secure environment, tend to others carefully, prevent indiscretions, and preserves [others].	294	4.53*	1	.03	.12

* $p \leq .05$

Travel with Athletic Teams duty. A total of six competencies received a 100% Pooled Importance level from participants assigned the duty *Travel with Athletic Teams*. Table 33 displays the competencies receiving high importance levels from participants traveling with athletic teams, while Table 34 displays the 14 competencies receiving 100% Pooled Importance frequencies from participants not assigned the duty of *Travel with Athletic Teams*.

Table 33

Competencies with 100% Pooled Importance Frequency for Respondents Assigned the Duty Travel with Athletic Teams

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
20	Ethical (treatment)	Treats people equitably and fairly.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

Table 34

Competencies with 100% Pooled Importance Frequency for Respondents Not Assigned the Duty Committee Assignments

Item	Competency	Descriptor
13	Contextual intelligence	Know how to appropriately interpret and react to changing and volatile surroundings.
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).

(Table 34 continues)

(Table 34 continued)

Item	Competency	Descriptor
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.
20	Ethical (treatment)	Treats people equitably and fairly.
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.
22	Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.
37	Responsible For Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.
74	Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.
77	Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.

Chi-square testing of the level of importance assigned to the competencies with the job duty *Travel with Athletic Teams* revealed six statistically significant relationships. The results of the testing between these variables are displayed in Table 35. Though each of the relationships met the criteria for importance, $v \geq .01$, the strength of association between the variables is low.

Table 35

Statistically Significant Relationships between Travel with Athletic Teams and Pooled Importance

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>	<i>v</i>
16	Crisis Management (conflict resolution)	Deal with conflict by providing effective strategies for conflict resolution.	319	4.92*	1	.03	.12
17	Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.	316	5.01*	1	.03	.13
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.	291	4.72*	1	.03	.13
52	Leads Quietly (do right)	Do what is “right” for the organization.	291	3.96*	1	.05	.18
73	Controls Risk (strategies)	Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after patient care error occurs) to continuously improve care.	283	5.92*	1	.02	.15
78	Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	283	5.19*	1	.02	.14

* $p \leq .05$

Athletic Training/Healthcare Administration duty. Only six participants did not select *Athletic Training/Healthcare Administration* as one of their assigned duties. This small group assigned a 100% Pooled Importance frequency to 51 of the 69 competencies, as demonstrated on Table D13. Six competencies received a 100% Pooled Importance level from participants assigned the duty *Athletic Training/Healthcare Administration*. Table 36 displays the competencies receiving high importance levels from participants providing daily patient care.

Table 36

Competencies with 100% Pooled Importance Frequency for Respondents Assigned the Duty Athletic Training/Healthcare Administration

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
20	Ethical (treatment)	Treats people equitably and fairly.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
53	Creative/ Innovative Leadership	Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

Chi-square testing of this variable found a statistically significant relationship between *Athletic Training/Healthcare Administration* and the competency Leadership Planner, $\chi^2 (1, n = 308) = 14.07, p = .00, v = .21$.

Clinical Preceptor duty. Participants assigned the duty *Clinical Preceptor* assigned a 100% Pooled Importance frequency to six competencies. Table 37 displays the competencies receiving high importance levels from participants providing daily patient care, while Table 38 displays the 10 competencies receiving 100% Pooled Importance frequencies from participants not assigned the duty of *Clinical Preceptor*.

Table 37

Competencies with 100% Pooled Importance Frequency for Respondents Assigned the Duty Clinical Preceptor

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
20	Ethical (treatment)	Treats people equitably and fairly.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

Table 38

Competencies with 100% Pooled Importance Frequency for Respondents Not Assigned the Duty Clinical Preceptor

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.
20	Ethical (treatment)	Treats people equitably and fairly.
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.
22	Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.
74	Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.

Athletic trainers serving as clinical preceptors provide clinical supervision of athletic training students enrolled in accredited professional programs at either their own or a nearby institution. Table 39 displays the five statistically significant relationships identified by chi-square testing between the job duty *Clinical Preceptor* and the level of importance assigned to the competency descriptor.

Table 39

Statistically Significant Relationships between Clinical Preceptor and Pooled Importance

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>	<i>v</i>
25	Leadership Planner	Have an action guide and delineated goals for achieving personal best.	308	4.55*	1	.03	.12
52	Leads Quietly (do right)	Do what is “right” for the organization.	291	4.97*	1	.03	.13
67	Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	288	5.25*	1	.02	.14
70	Cultural Sensitivity (interaction)	Provide opportunities for diverse members to interact in a non-discriminatory manner.	282	4.09*	1	.04	.12
78	Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	283	3.84*	1	.05	.12

* $p \leq .05$

Course Instructor duty. Head athletic trainers may serve as course instructors within a professional athletic training program or in another area of expertise. Participants serving as a

Course Instructor assigned 100% Pooled Importance frequencies to 6 competencies. Table 40 displays the competencies receiving high importance levels from participants providing daily patient care, while Table 41 displays the eight competencies receiving 100% Pooled Importance frequencies from participants not assigned the duty of *Course Instructor*.

Table 40

Competencies with 100% Pooled Importance Frequency for Respondents Assigned the Duty Course Instructor

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
20	Ethical (treatment)	Treats people equitably and fairly.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.
77	Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.

Table 41

Competencies with 100% Pooled Importance Frequency for Respondents Not Assigned the Duty Course Instructor

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).
20	Ethical (treatment)	Treats people equitably and fairly.
26	Resilience	Display the ability to recover from, or adjust easily to, misfortune or change.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

Only one statistically significant relationship between the job duty *Course Instructor* and the level of importance placed on the competencies was identified using a chi-square test. Participants assigned the duty of *Course Instructor* placed a higher level of importance on their staff displaying Resilience, described by Kutz (2006) as the ability to recover from, or adjust

easily to misfortune or change. Based on the chi-square calculations, $\chi^2 (1, N = 306) = 4.57, p = .03, v = .12$, the relationship between the variables can be described as a low association.

Departmental or Institutional Committee Assignments duty. The final job duty included on the questionnaire was *Committee Assignments* within the athletic or healthcare department or across the institution. Six competencies received a 100% Pooled Importance level from participants assigned the duty *Committee Assignments*. Table 42 displays the competencies receiving high importance levels from participants assigned committee duties, while Table 43 displays the 13 competencies receiving 100% Pooled Importance frequencies from participants who did not select the duty of *Committee Assignments*.

Table 42

Competencies with 100% Pooled Importance Frequency for Respondents Assigned to Departmental or Institutional Committees

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
20	Ethical (treatment)	Treats people equitably and fairly.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

Table 43

Competencies with 100% Pooled Importance Frequency for Respondents Not Assigned to Departmental or Institutional Committees

Item	Competency	Descriptor
12	Change Agent (proactive)	Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.
20	Ethical (treatment)	Treats people equitably and fairly.
22	Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.
26	Resilience	Display the ability to recover from, or adjust easily to, misfortune or change.
29	Thrives On Responsibility	Have a strong sense of duty and dependability in a variety of situations and roles.
37	Responsible For Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.

(Table 43 continues)

(Table 43 continued)

Item	Competency	Descriptor
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

Departmental or Institutional Committee Assignments was found to have a statistically significant relationship with three competency descriptors as described in Table 44. For each competency descriptor the strength of association in the relationship with *Committee Assignments* can be described as low.

Table 44

Relationships between Committee Assignments and Pooled Importance

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>	<i>v</i>
24	Intentional Leadership (improvement)	Take intentional action toward continuous improvement of leadership ability.	314	4.84*	1	.03	.12
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.	290	4.94*	1	.03	.13
78	Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	283	5.42*	1	.02	.14

* $p \leq .05$

Hypothesis testing for assigned duties. Statistical analysis using chi-square procedures of the data for each of the six possible assigned duties and the level of importance placed on the competencies informed the following null hypothesis:

H₀₇: There was no statistically significant relationship between the duties assigned to the participants and the level of importance they assign to each of the competencies.

A total of 19 statistically significant relationships were identified between the 6 assigned duties and the pooled importance placed on the competences. Therefore the researcher rejected null hypothesis H₀₇ for the 19 of competencies described in Tables 32, 35, 39, and 44 as well as the statistically significant relationship found for *Athletic Training/Healthcare Administration* and *Course Instructor*. The remaining 395 possible associations did not achieve statistical significance, resulting in a failure to reject null hypothesis H₀₇ for these competencies.

Gender. Gender of respondents was indicated as male or female. Response data indicated that 35.5% of participants were female, while 64.5% were male, with 2 missing responses. Female respondents assigned a frequency of 100% Pooled Importance to 11 competencies, which are displayed in Table 45. Male respondents assigned a 100% Pooled Importance frequency to seven competencies as displayed in Table 46.

Table 45
Competencies Assigned 100% Pooled Importance by Female Respondents

Item	Competency	Descriptor
12	Change agent (proactive)	Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).
13	Contextual Intelligence	Know how to appropriately interpret and react to changing and volatile surroundings.
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.
20	Ethical (treatment)	Treats people equitably and fairly.
37	Responsible For Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.
74	Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.

Table 46

Competencies Assigned 100% Pooled Importance by Male Respondents

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
20	Ethical (treatment)	Treats people equitably and fairly.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
51	Organizationally savvy (interact)	Interact effectively with people in and outside the organization.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
59	Nurtures professional relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

Hypothesis testing for Gender. Responses to the demographic item *Gender* were used in chi-square testing to identify relationships between gender of the respondent and the pooled importance assigned to the competencies, based on the pooled category responses, and test the following null hypothesis:

H₀8: There was no statistically significant relationship between the gender of the participants and the level of importance they assign to each of the competencies.

Through chi-square testing, statistically significant relationships were identified between *Gender* and the level of importance assigned to five competencies as described in Table 47.

Each of these relationships represents a weak association. For these 5 competencies the null hypothesis is rejected but the researcher failed to reject null hypothesis H_0 for 64 competencies.

Table 47

Statistically Significant Relationships between Gender and Pooled Importance

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>	<i>v</i>
25	Leadership Planner	Have an action guide and delineated goals for achieving personal best.	307	3.75*	1	.05	.11
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	306	8.21*	1	.00	.16
52	Leads Quietly (do right)	Do what is “right” for the organization.	291	4.78*	1	.03	.13
55	Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others.	289	5.59*	1	.02	.14
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	287	7.05*	1	.01	.16

* $p \leq .05$

In addition to the statistically significant difference between level of Pooled Importance for the five competencies displayed in Table 41, differences of more than 5% between level of importance assigned by females and males were evident for three additional competencies. Table 48 displays the competencies for which these differences were noted.

Table 48

Competencies Assigned Levels of Pooled Importance Varying by 5% or More by Gender

Item	Competency		Gender		Difference
			Female % (<u>n</u>)	Male % (<u>n</u>)	
19	Effective And Constructive Use of Influence (powerful image)	Demonstrate the effective use of different types of power in developing a powerful image.	74.1 (83)	67.2 (135)	6.9
25	Leadership Planner	Have an action guide and delineated goals for achieving personal best.	88.3 (98)	79.6 (156)	8.7
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	74.8 (83)	58.5 (114)	16.3
33	Demonstrate Concern for the Personal and Professional Lives of Co-Workers and Peers.	Demonstrate concern for the personal and professional lives of co-workers and peers.	90.0 (99)	95.4 (185)	5.4
52	Leads Quietly (do right)	Do what is “right” for the organization.	96.2 (101)	88.7 (165)	7.5
55	Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others.	84.9 (90)	93.4 (171)	8.5
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	73.6 (78)	86.2 (156)	12.6
71	Effective and Constructive Use of Influence (affect behavior)	Use interpersonal skills, personal power, and influence to constructively and effectively affect the behavior and decisions of others.	87.1 (88)	81.4 (144)	5.7

Leadership positions. Respondents selected yes or no to answer questionnaire Item 3 indicating whether or not they had been elected or appointed to a leadership position at the local, state, district, or national level. Responses were gathered from 325 of the 326 participants indicating that 30.4% had served in a leadership position, while 69.3% had not.

Respondents with a history of being elected or appointed to a leadership position assigned a frequency of 100% Pooled Importance to 14 competencies. The competencies for which respondents with leadership roles assigned the 100% Pooled Importance are displayed in Table 49.

Table 49

Competencies Assigned 100% Pooled Importance by Participants in Leadership Roles

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
17	Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.
20	Ethical (treatment)	Treats people equitably and fairly.
34	Empathetic (exhibit empathy)	Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.
41	Emotionally stable (manage stress)	Handle and manage stress associated with leadership roles.
42	Emotionally stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.

(Table 49 continues)

(Table 49 continued)

Item	Competency	Descriptor
51	Organizationally savvy (interact)	Interact effectively with people in and outside the organization.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.
68	Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.
77	Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.

Respondents indicating that they had not been elected or appointed to a leadership position assigned a 100% Pooled Importance frequency to seven competencies, as displayed in Table 50.

Table 50

Competencies Assigned 100% Pooled Importance by Participants Not in Leadership Roles

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
15	Crisis management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.
20	Ethical (treatment)	Treats people equitably and fairly.

(Table 50 continues)

(Table 50 continued)

Item	Competency	Descriptor
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

Data collected regarding participants' leadership roles were used to test the following null hypothesis:

H₀₉: There was no statistically significant relationship between whether or not respondents have held leadership positions and the level of importance assigned to each of the competencies.

Hypothesis testing for leadership position. Chi-square tests found no relationship between the level of importance assigned to the competencies and whether or not the respondent had held a leadership position for 62 of the competencies. Table 51 displays the statistically significant associations identified between leadership position and level of importance assigned to seven of the competencies. Each of these relationships is characterized by a low strength of association. Based on these results H₀₉ was rejected for 7 competencies while the researcher failed to reject this null hypothesis for 62 competencies.

Table 51

Statistically Significant Relationships between Leadership Position and Pooled Importance

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>	<i>v</i>
32	Uses Body-Language	Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.	303	4.19*	1	.04	.12
35	Empathetic (risks)	Takes risks on behalf of team members.	296	4.71*	1	.03	.13
40	Scholarship	Contribute to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.	295	6.90*	1	.01	.15
48	Open-Mindedness	Be willing to discard old ways of doing things when evidence fails to support them.	294	4.05*	1	.04	.12
63	Future-Minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.	289	6.37*	1	.01	.15
68	Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.	282	7.55*	1	.01	.16
69	Cultural Sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	282	4.93*	1	.03	.13

* $p \leq .05$

In addition to the statistically significant difference between level of Pooled Importance for the seven competencies displayed in Table 44, differences of more than 5% between level of importance assigned by participants having held a leadership position and participants who have not held a leadership position were evident for seven additional competencies. Table 52 displays the competencies for which these differences were noted.

Table 52

Competencies Assigned Levels of Pooled Importance Varying by 5% or More by Leadership Position

Item	Competency	Descriptor	Leadership Position		Difference
			Yes % (<u>n</u>)	No % (<u>n</u>)	
19	Effective and constructive use of influence (powerful image)	Demonstrate the effective use of different types of power in developing a powerful image.	75.8 (72)	66.7 (146)	9.1
28	Socially responsible (volunteer)	Volunteer in social and community activities.	68.8 (64)	62.9 (134)	5.9
32	Uses body-language	Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.	98.9 (91)	93.4 (197)	5.5
35	Empathetic (risks)	Takes risks on behalf of team members.	65.6 (59)	51.9 (107)	13.7

(Table 52 continues)

(Table 52 continued)

Item	Competency	Descriptor	Leadership Position		Difference
			Yes % (<u>n</u>)	No % (<u>n</u>)	
40	Scholarship	Contribute to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.	75.0 (66)	58.9 (122)	16.1
50	Leads quietly (patiently)	Move patiently, carefully and incrementally.	85.9 (73)	78.1 (157)	7.8
55	Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others	94.0 (79)	88.8 (182)	5.2
56	Empowerment (ensure)	Ensure transformation and development of others.	80.7 (67)	75.4 (153)	5.3
58	Leads quietly (modesty)	Use modesty and restraint to accomplish goals.	85.7 (72)	79.8 (162)	5.9
63	Future-Minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.	92.9 (78)	98.5 (202)	5.6
68	Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.	100 (83)	91.5 (182)	8.5

(Table 52 continues)

(Table 52 continued)

Item	Competency	Descriptor	Leadership Position		Difference
			<u>Yes</u> % (<u>n</u>)	<u>No</u> % (<u>n</u>)	
69	Cultural sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	96.3 (78)	87.6 (176)	11.7
70	Cultural sensitivity (interaction)	Provide opportunities for diverse members to interact in a non-discriminatory manner.	96.3 (79)	91.0 (181)	5.3
76	Multicultural leadership	Influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.	93.9 (77)	88.2 (172)	5.7

NATA District. Nationally, NATA is composed of 10 districts of between 2 and 7 states each. Item 2 on the questionnaire allowed respondents to indicate the NATA District in which their institution is located. The number of the NATA District does not designate a specific characteristic, therefore the NATA District data is collected at the nominal level. Table 53 displays the number of competencies receiving 100% Pooled Importance frequencies for each NATA District.

Table 53

Number of Competencies Receiving 100% Pooled Importance by NATA District

NATA District	Number of Competencies Receiving 100% Pooled Important Responses
1	17
2	23
3	13
4	23
5	23
6	51
7	44
8	36
9	23
10	37

Hypothesis testing for NATA District. Responses collected from 322 participants were evaluated using the Spearman rho calculation to test the following null hypothesis:

H₀10: There was no statistically significant relationship between the NATA District in which participants' institutions are located and the level of importance they assign to each of the competencies.

One competency was found to have a statistically significant, low association strength relationship with the NATA District of the respondents. The competency Ambitious, described as using available resources and other effective strategies to promote professional and personal development, met the significance threshold $\chi^2(9, N = 295) = 18.83, p = .03, v = .253$. This competency received 100% Pooled Importance frequencies by respondents in Districts 6, 7, and

8 while receiving low frequencies in the remaining seven districts. Based on these findings the researcher failed to reject null hypothesis H_{010} for 68 of the 69 competencies.

Competencies with 100% Pooled Importance across All Variables. Table 54 displays the five competencies which received 100% of responses in the Pooled Importance category. Across all demographic distinctions these competencies received a 100% Pooled Importance response frequency and represent the most highly valued competencies.

Table 54

Competencies with 100% Pooled Importance Frequencies Across all Demographic Variables

Item	Competency	Descriptor
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.
20	Ethical (treatment)	Treats people equitably and fairly.
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

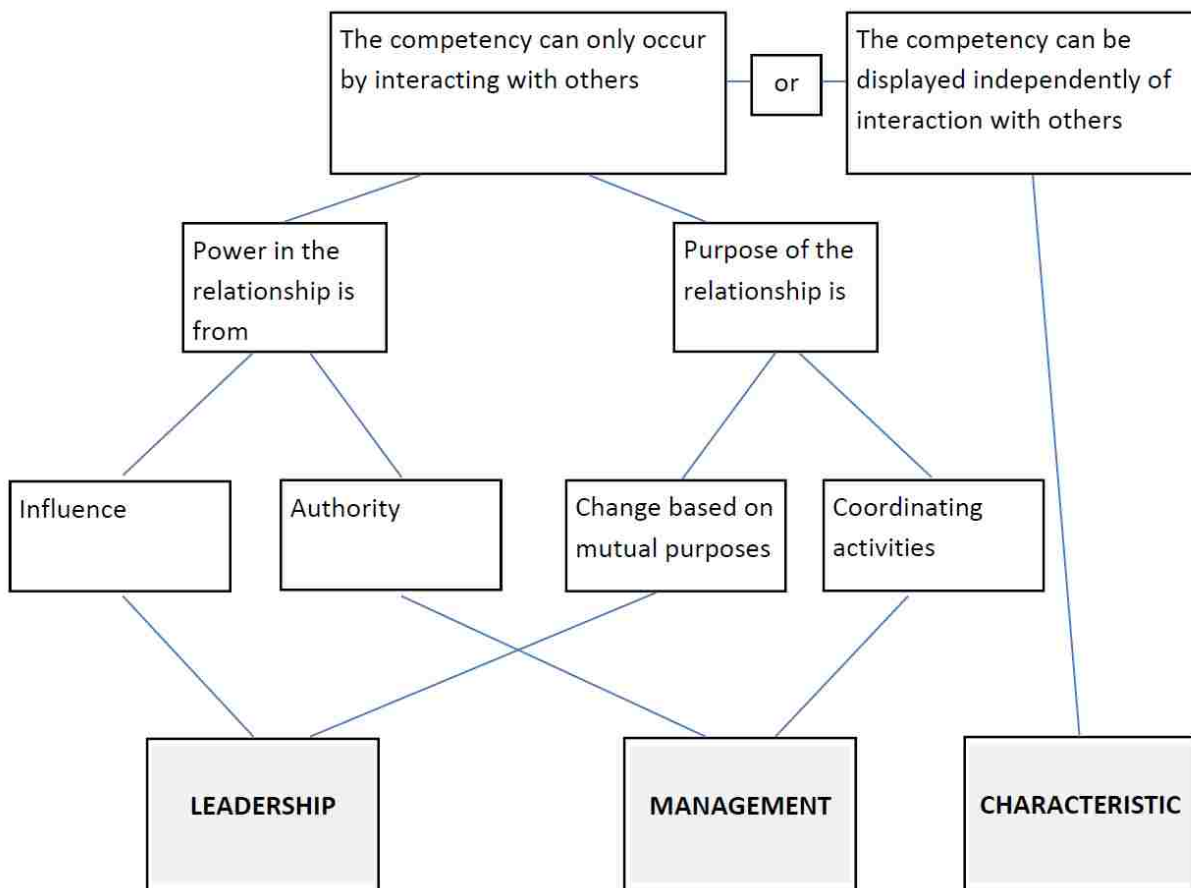
The five 100% Pooled Importance competencies displayed in Table 54 were assigned to only two competency categories. The competency Knowledgeable was assigned to the Personal Characteristic competency category. The remaining four competencies, (a) Credible, (b) Ethical (treatment), (c) Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress, and (d)

Ethical (promote) were coded as Leadership competencies. None of the 100% Pooled Importance competencies were assigned to the Management category.

Comparison of Level of Importance by Competency Category

The 49 competencies and 69 competency descriptors used in this research were developed by Kutz (2006) and identified as important for inclusion in athletic training educational programs as well as important for the practice of athletic training. Based on Rost's (1991) definitions of leadership and management the Competency Coding Matrix displayed in Figure 1 was developed to sort the 69 competency descriptors into the categories of Leadership, Management, and Personal Characteristic. The invitations delivered to participants and the questionnaire used the term leadership competencies to describe the content and no indication was made that the competencies would be categorized to avoid introducing bias.

Figure 1

Competency Coding Matrix

Using the Competency Coding Matrix, 45 competency descriptors were assigned to the Leadership category. The Management category was created from 4 competency descriptors, and the remaining 20 competency descriptors were assigned to the Personal Characteristic category. The competency categories are detailed in Appendix B.

In the third stage of data analysis a median importance score for variables in each of the three categories was calculated to allow for a comparison of the level of importance assigned to each category. Mean scores for responses to each competency were calculated based on

assigned values of 1 (*very unimportant*), 2 (*unimportant*), 3 (*important*), and 4 (*very important*). Using the Friedman test, the mean rank for the 45 competencies in the Leadership category was determined to be 1.77. A mean rank of 2.37 was found for the 4 competencies assigned to the Management category. The remaining 20 competencies were assigned to the category of Personal Characteristic. These competencies had a mean rank of 1.85. There was a statistically significant difference in the level of importance assigned to each category $\chi^2(2) = 177.60, p \leq .05$. Post hoc analysis with Wilcoxon signed-ranks tests was conducted with a Bonferroni correction applied, resulting in a significance level set at $p \leq 0.017$. A statistically significant difference was found between the categories of Leadership and Management ($Z = -9.73, p = .00$) and Leadership and Personal Characteristic ($Z = -2.57, p = .00$). Statistically significant differences were also noted between Personal Characteristic and Management ($Z = -9.21, p = .00$). Based on these findings it was determined that there was a significant difference between the level of importance assigned to each competency category.

Internal consistency testing of Competency Coding Matrix. Internal consistency of the competency categories on the instrument was conducted using Cronbach's alpha testing. The Leadership subscale consisted of 45 items ($\alpha = .94$) and the Personal Characteristic subscale consisted of 20 items ($\alpha = .87$). The instrument was found to be highly reliable for the Leadership and Personal Characteristic subscales using Tavakol and Dennick's (2011) discussion of acceptable alpha values (.70 to .95). The Management subscale only included 4 items and resulted in the lowest alpha value at $\alpha = .56$. Tavakol and Dennick suggested that low alpha values may be the result of a low number of questions and may not necessarily impact the value of the subscale.

Content validity of the Competency Coding Matrix. The Competency Coding Matrix was developed by the researcher to provide an objective method for categorizing the competencies included in this study. The distinctions between the categories of leadership and management were made using Rost's (1991) definitions of leadership and management relationships. To categorize competencies including knowledge, skills, and abilities that could be practiced independently of relationships the category of Personal Characteristics was created. Once the Competency Coding Matrix was developed it was reviewed by a small panel of faculty members from the education and business schools at the researcher's university to ensure it properly represented Rost's definitions of leadership and management and provided an appropriate category for competencies which did not represent either leadership or management.

Hypothesis testing for competency category comparisons. The results of the comparison of medians for the three competency categories was used to test three null hypotheses in this study. The first null hypothesis involved the competency categories of Leadership and Management.

H₀11: There was no statistically significant difference between the level of importance assigned to competencies in the Leadership category and the level of importance assigned to competencies in the Management category.

The difference between the competency categories of Leadership and Management was statistically significant at the $p \leq .05$ level. Therefore null hypothesis H₀11 was rejected.

H₀12: There was no statistically significant difference between the level of importance assigned to competencies in the Leadership category and the level of importance assigned to competencies in the Personal Characteristics category.

The difference between the level of importance assigned to the competency categories of Leadership and Personal Characteristic was statistically significant at the $p \leq .05$ level.

Therefore null hypothesis H_0 12 was rejected.

H_0 13: There was no statistically significant difference between the level of importance assigned to competencies in the Management category and the level of importance assigned to competencies in the Personal Characteristics category.

The difference between the competency categories of Management and Personal Characteristic was statistically significant at the $p \leq .05$ level. Therefore null hypothesis H_0 13 was rejected.

Summary

This quantitative study identified the level of importance college and university head athletic trainers assigned to their staff athletic trainers possessing and demonstrating identified competencies in leadership, management, and personal characteristics. The data were collected through the use of an online survey tool (SurveyMonkey) using a 78 item questionnaire designed by the researcher. The first 9 items of the questionnaire collected demographic information. A level of importance was assigned by participants to 69 competencies in the remaining questionnaire items. After downloading responses into SPSS Grad Pack 22 and examining all responses, 15 cases with partial nonresponse that included no data for the dependent variables were eliminated from the data set. Data analysis then proceeded in three stages.

The first stage of data analysis used descriptive statistics to describe responses for all 78 questionnaire items. Frequencies were calculated for responses to the demographic items, which were the independent variables in this research. Frequencies were also used to describe the level

of importance assigned to the competencies using both the four-choice response options for each competency as well as for the responses in the pooled category of *very unimportant* and *unimportant* and the pooled category *important* and *very important*.

In the second stage of analysis, the data were used to determine the existence of statistically significant relationships between the independent variables (demographics) and dependent variables (level of importance or pooled importance). A Spearman rho correlational coefficient was calculated when both variables collected data at the ordinal level of measurement. For the demographic variables resulting in nominal level of measurement data, a chi-square test of independence was used to identify relationships. Using the results from the Spearman rho and chi-square tests the first 10 null hypotheses in this study were tested.

The final stage of data analysis compared the medians of the competencies as grouped into the categories Leadership, Management, and Personal Characteristic. For this analysis a Friedman test with post-hoc procedures and a Bonferroni correction were used. The comparison of level of importance for each competency category was used to test the final three null hypothesis of this study.

The responses gathered from the questionnaire were used to describe characteristics of participants as well as the level of importance they assigned to the competencies in response to the first research question of the study. Additionally, statistical analysis was performed on the data to test 13 null hypotheses relating to the second and third research questions posed by the researcher. It is from these results that the findings, discussion, and implications in Chapter Five are derived. In addition, recommendations for future research are presented.

Chapter Five: Findings, Implications, and Conclusions

Chapter Four contained displays of the descriptive and inferential statistical analysis performed on data collected from respondents via a 78 item web-based questionnaire developed by the research for this quantitative descriptive study. The purpose of the study was to describe the level of importance head athletic trainers place on their staff athletic trainers possessing and demonstrating previously identified leadership competencies specific to athletic training. The initial 9 items were used to gather demographic information from the respondents generating data for 10 independent variables. The remaining 69 items sought a level of importance for a competency descriptor which comprised the dependent variables used in statistical analysis.

From the displays of analysis a number of themes were identified. Chapter Five presents findings of the hypotheses tested to inform the study's three research questions. Implications gathered from the data analysis are presented based on the analysis of demographic characteristics and level of importance as well as the importance assigned to competencies as they were sorted into three categories using the Competency Coding Matrix. Finally, directions for further research on these athletic training competencies were suggested.

Findings

The questionnaire developed for this research contained 69 competency descriptors for which a level of importance was obtained from respondents. The respondents were asked to assign the level of importance for their staff athletic trainers to possess and display each competency descriptor. These data were outlined using descriptive statistics to address Research Question 1. The demographic information obtained using the web-based questionnaire was used for two purposes. First, the data were compared with that of existing research on head athletic trainers in the college and university setting. This process examined the characteristics of

participants in comparison with known parameters for the population. The demographic information was then used to identify relationships between these independent variable responses and the dependent variable, level of importance assigned to each competency. These analyses were performed to evaluate Research Question 2. Finally, Research Question 3 was addressed using the competency coding matrix designed for this research to sort competencies into the categories leadership, management, and personal characteristic so a comparison of the mean level of importance for each category could be performed.

Research Question 1. The first research question sought to determine the level of importance college and university head athletic trainers place on their staff athletic trainers demonstrating each of the identified athletic training leadership competencies. The competencies and competency descriptors used in this research were developed by Kutz (2006), whose research sought to identify if leadership competencies were considered by experts and practitioners to be important in athletic training education and practice. Kutz used a modified Delphi technique and survey to identify 49 competencies as important for inclusion in both athletic training education programs and in the practice of athletic training. For use in this research, Kutz's descriptors for the 49 competencies were modified to create the 69 single-sentence descriptors presented on the questionnaire. Participants assigned a level of importance to each of the competency descriptors using a four-choice Likert scale (a) *very unimportant*, (b) *unimportant*, (c) *important*, and (d) *very important*. The four-choice importance ratings were converted into Pooled Unimportance, a combination of *very unimportant* and *unimportant*, and Pooled Importance, *important* and *very important* responses, for use in descriptive and some inferential statistical analysis.

Level of importance for competencies. The assigned level of importance for the competencies included in this research validated the findings of Kutz's (2006) work which identified the competencies as important for both athletic training education and the practice of athletic training. Each of the 69 competency descriptors evaluated in this research received more than 63% of responses in the Pooled Importance category, a combination of the four-choice *important* and *very important* responses, indicating that in the college and university setting, Kutz's competencies are indeed valued. Five competencies received a 100% Pooled Importance frequency by all participants. These five competencies (a) Credible, (b) Ethical (treatment), (c) Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress, (d) Knowledgeable, and (e) Ethical (promote) were highly valued by members of every demographic category and represent the knowledge, skills, and abilities of staff athletic trainers that were most important to respondents.

Evaluating the level of importance assigned to competencies within the categories of Leadership, Management, and Personal Characteristic allows some distinctions between levels of importance to be made, and further articulates important competencies for athletic trainers. The 45 competencies designated as Leadership using the Competency Coding Matrix received a wider range of level of importance responses than competencies in either the Management or Personal Characteristic categories. Of the five competencies recording 100% Pooled importance four were assigned to the Leadership category: (a) Credible, (b) Ethical (treatment), (c) Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress, and (d) Ethical (promote). In total, 13 Leadership competencies displayed absolute frequencies of 90.0% or above in Pooled Importance. The remaining 32 competencies in the Leadership category (71.1% of the total) were evaluated as *important* or *very important* by less than 90.0% of respondents, but only 2

competencies received fewer than 70% of responses in the Pooled Important category. Each of the competencies identified as Leadership were evaluated as *important* or *very important* by more than half of respondents, validating the importance of each staff athletic trainers in the college and university setting. Despite the results indicating that each of the competencies in the Leadership category was important, and that four of the top five rated competencies being assigned to the category, the mean level of importance level for Leadership competencies, evaluated using the four-choice importance categories, was not as high as the level for Management and Personal Characteristic competencies. These results indicate that while head athletic trainers place a high level of importance on some of the 45 Leadership competencies, others were viewed as less important than those in the smaller competency categories of Management and Personal Characteristics. This finding is consistent with the current educational competencies for athletic training which include leadership abilities as part of the foundational behaviors for professional practice expected to be embedded throughout the curricula rather than as a content area competency for which evaluation of students at an entry-level proficient status is required for graduation (NATA, 2011). This unspecified treatment of leadership competencies means that the development of knowledge, skills, and abilities rated as *important* or *very important* by a majority of college and university head athletic trainers may not be a curricular focus in all educational programs, resulting in a disparity of leadership competencies between athletic trainers.

The Management category of competencies, identified through the use of the Competency Coding Matrix, included 4 of the 69 competency descriptors. The competencies classified as management consistently received high level of importance scores, each receiving Pooled Importance frequencies of between 97.5% and 99.7%. The mean level of importance

assigned to the Management competencies was significantly higher than that assigned to competencies in either the Personal Characteristic or Leadership categories, though there is some concern that this finding may be skewed due to the small number of competencies identified as management in this research. This concern is validated by the finding that none of the Management competencies received a 100% Pooled Importance rating, though one of the competency receiving a 99.7% Pooled Importance rating was the Management competency Crisis Management (problem solving). These findings validated the importance of the management content currently included in athletic training program courses and evaluation tools used to assess competency development for athletic training students (NATA, 2011).

The Personal Characteristic category of competencies included 20 competency descriptors. Of these competencies Knowledgeable received a 100% Pooled Importance frequency. The second most highly rated competency was Dedicated, which received a 99.7% Pooled Importance frequency. Only two Personal Characteristic competencies tallied less than 90.0% response frequencies in the Pooled Importance category. It is evident from these results that it is important for staff athletic trainers in the college and university setting to possess and demonstrate personal characteristic competencies.

Competency item non-response. Item non-response increased as the length of the questionnaire increased. For competencies on the first page, Items 10-14, item non-response was no greater than 2 participants or 0.06% of respondents. By the final page of competencies, Items 75-78, non-response averaged 45.75 per item, 14.03% of respondents. An evaluation of individual item non-response found lower item non-response rates for competencies in the management category than either leadership or personal characteristic. This appears to have occurred because 3 of the 4 management competencies were among the first 11 competencies on

the questionnaire, resulting in lower non-response due to discontinuation of the questionnaire, which greatly impacted response rates for items near the end of the questionnaire. A comparison of item non-response rates for competencies on each page found only three instances in which the non-response rate varied by more than 1.0% between items. In two instances a personal characteristic competency demonstrated increased item non-response compared to other items on the questionnaire page, and in a third a leadership characteristic experienced greater item non-response.

Research Question 1 sought to determine the level of importance placed upon each of the leadership competencies Kutz (2004) described as important in the field of athletic training. This research validated Kutz's findings regarding the importance of each competency as it applies to staff athletic trainers working in the college and university setting. While each competency was assigned a Pooled Importance rating by over half of the participants, the level of importance assigned to each competency and the mean importance level for competencies within the categories of Leadership, Management, and Personal Characteristic varied. Further investigation of the relationships between the level of importance assigned to the competencies, the demographic variables of participants, and the categories into which the competencies were assigned was conducted to determine what factors accounted for the differences.

Demographic information. The web-based questionnaire contained 9 items designed to gather demographic information of participants. Data were gathered for (a) *Athletic Competition Division* of the institution at which the head athletic trainer is employed, (b) *Age*, (c) *Years Of Work As An Athletic Trainer*, (d) *Years Of Employment As A Head Athletic Trainer*, (e) *Size Of Athletic Training Staff Supervised* by the participant, (f) *Number Of Duties Assigned* to participant, (g) specific *Duties Assigned* to the participant, (h) whether or not the participant has

been elected or appointed to any *Leadership Position* at the local, state, district, or national level, and (i) *NATA District* in which the participant's institution is located. Discussion of the findings for each demographic variable, including appropriate comparisons to the population follows.

Athletic Competition Division. The sample selection for this research employed a stratified random sample design using the athletic competition division of the institution for each head athletic trainer. Plans for resampling were established in the event that responses exceeded the desired sample size resulting in an overrepresentation of any strata. The anticipated response rate of 30% was surpassed by an actual response rate of 32.6%, but the number of responses across the levels of competition were closely aligned with the desired distribution, therefore no additional sampling was required. Based on the institution's level of competition, this sample is representative of college and university head athletic trainers throughout the United States.

Age. The age of respondents was collected using ranges with 10 year increments beginning with 20-29 years and ending at 70 or above. The NATA does gather information from athletic trainers regarding age and job setting, but do not have statistics specific to job title within a setting, making comparisons of this data to the population more challenging. Approximately 90% of respondents to this questionnaire were age 30 or above, which mirrors the findings of Laurent and Bradney's (2007) research on head athletic trainers and program directors. The largest age group indicated by respondents was 40-49 years, followed by 30-39 years, and 50-59 years. Together these three groups comprised 86.1% of responses.

Years as an Athletic Trainer. Ranges of 5 year increments were used to collect information regarding respondents' years of work as an athletic trainer. The largest response choice was 21-25 years of experience as an athletic trainer. The 5 response choice categories indicating 6-30 years of work as an athletic trainer accounted for 81.3% of responses. Only

24.8% of respondents had worked as an athletic trainer for 10 or fewer years. This finding indicates that while respondents included individuals at all stages in their athletic training career, most respondents were able to rely on more than a decade of experience when evaluating the importance of each competency to the practice of athletic training.

Years as a Head Athletic Trainer. The length of time participants had served as a head athletic trainer were also recorded using ranges of 5 years. The largest response category was 0-5 years of experience as a head athletic trainer and the category with the second highest number of responses was 6-10 years. Only 9.1% of respondents had served as head athletic trainers for more than 25 years. These results indicate that most respondents spent a number of years working in other positions before becoming a college or university head athletic trainer, possibly as staff athletic trainers in this setting, providing respondents with a variety of experiences that informed their assignment of a level of importance to each competency.

Number of Staff Athletic Trainers Supervised. The purpose of this research was to determine how important head athletic trainers felt it was for their staff athletic trainers to possess and display leadership competencies. Questionnaire Item 8 identified the number of staff athletic trainers supervised by the respondent. The majority of respondents (70.3%) supervise between 1 and 4 staff athletic trainers. Of the remaining respondents, 27.0% supervise 5 or more staff athletic trainers, but 2.8% of participants did not respond to this questionnaire item. This item non-response is of concern because it could indicate that 9 respondents do not actually supervise staff athletic trainers. This issue could impact the generalizability of the level of importance these respondents assigned to the competencies as they may not have staff athletic trainers needing to poses or demonstrate the knowledge, skills, and abilities examined in this study.

Assigned Duties. Respondents were asked to select from six possible job duties to indicate which responsibilities they were assigned. More respondents, 35.9%, indicated that they were assigned five of the presented duties than any other number of duties. The highest response rate, 98.2% was for the duty *Athletic Training/Healthcare Administration* which was expected as the respondents were all head athletic trainers. The second most commonly assigned duty was *Daily Patient Care* which 96.0% of respondents selected as an assigned duty. The duty *Travel with Athletic Teams* was selected by 83.7% of respondents and 72.4% of participants indicated that they serve on departmental or institutional committees

More than half, 53.1%, of respondents indicated that they serve as *Clinical Preceptors*, meaning that they oversee athletic training students and evaluate their progress toward the educational competencies required for graduation. Additionally 39.6% of respondents indicated that they serve as a *Course Instructor*. Head athletic trainers serving as preceptors and instructors may be directly involved in teaching and evaluating leadership and management content and professional behaviors for students in addition to evaluating these abilities in their staff athletic trainers.

Gender. According to Acosta & Carpenter (2012), 70% of college and university head athletic trainers are male. Respondents in this study were found to be 64.5% male and 35.5% female. Two respondents did not select an answer for gender when completing the survey. The gender distribution in this survey is comparable to that of the population of college and university head athletic trainers, thereby enhancing the generalizability of this study's results. The greater proportion of respondents who were male also aligns with the ages reported by respondents, as many more males than females work in the college and university setting after the age of 34 (D. Eason, personal communication, January 28, 2014).

Leadership Position. Respondents to questionnaire Item 3 indicated whether or not they had been elected or appointed to a leadership position at the local, state, district, or national level. Of the 325 participants responding to this item, 30.5% indicated that they had served in a leadership position while 69.5% indicated that they had not. National Athletic Trainers' Association (NATA) data indicated that 2.6% of certified members of the association were involved in volunteer activities or official leadership positions at the national level during the year 2013 (R. Riggan, personal communication, October 28, 2014). In addition to those serving in leadership roles at the national level, respondents may participate in the leadership of both state and district professional organizations. The structure of the district and state branches of the NATA mirror those of the national association so it is estimated that 7 to 8% of the membership is involved in a leadership role during any given year and membership surveys suggest approximately 10% of members indicated an interest in continuing or assuming leadership positions each year (R. Richardson, personal communication, October 29, 2014). This data suggests that this research sample contains a higher percentage of individuals involved in leadership than expected from the population of athletic trainers, however statistics to allow a comparison specifically to the population of college and university head athletic trainers are lacking.

NATA District. Participants were distributed across all 10 NATA Districts. The highest number of participants represented District 4 composed of athletic trainers from Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. According to the NATA (NATA, 2014), District 4 also boasts the largest membership in the NATA. The fewest responses were from District 3 which includes athletic trainers in the District of Columbia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. The NATA reports that District 3 has the fourth highest

number of certified athletic trainers. The smallest portion of the NATA's membership resides in District 10, composed of Alaska, Idaho, Montana, Oregon, and Washington. Of the 326 participants, 16 were from District 10, a number equal to participants from District 7 (Arizona, Colorado, New Mexico, Utah, and Wyoming) the second smallest district. The distribution of responses by NATA District is representative of the population of NATA members, despite the geographical region not being considered in the stratified random sampling technique used in this research. This finding further indicates that the sample participating in this research is representative of the population of college and university head athletic trainers.

Demographic item non-response. Item non-response in the demographic items of the questionnaire generally occurred at a very low rate, ranging from 0 to 2.8%. The largest rate of non-response, 2.8% was for the item seeking staff size information, resulting in some concern that not all respondents supervise staff athletic trainers as previously noted. The items with the second highest non-response rate 1.2% were the level of competition in which the head athletic trainer's institution competes, and the NATA District in which the institution is located. It is possible that there was some reluctance to answer these items because the combination of responses could be used to identify respondents. The low level of demographic item non-response does not compromise the generalizability of the results.

Research Question 2. The second research question used to guide this study sought to identify demographic factors having statistically significant relationships with the level of importance assigned to each of the competencies. To address this question Spearman rho correlation and chi-square tests were used to identify relationships between the independent and dependent variables in this study. A total of 77 statistically significant relationships were

identified between the demographic variables and the level of importance assigned to a competency descriptor.

An alpha level of $p \leq .05$ was established *a priori* and used to determine statistical significance for each statistical test. The strength of statistically significant relationships was evaluated using the correlational coefficient (r) value for Spearman rho tests, and Cramer's v coefficient (v) for chi-square tests. The presence of 64 cells within the four-choice level of importance chi-square matrix in violation of the minimum expected count assumption for each competency descriptor led to the use of the pooled category *very unimportant* and *unimportant* and pooled category *important* and *very important* for chi-square testing. This adjustment reduced the number of cells violating the minimum size to 8 cells for each analysis of the 69 competency descriptors. Of these cases that violated the minimum expected cell size, five contained no responses in the Pooled Unimportant category, therefore the results of the chi-square test were not available as the variable was not binomial.

Findings for Athletic Competition Division. Findings for relationships between the athletic division of competition and the level of importance placed on the competencies revealed associations with three competencies to the competency category Leadership. As size of the division of competition increased, respondents were more likely to place a higher level of importance on their staff possessing and displaying the competency Change Agent (bravery). Head athletic trainers working in higher divisions also more highly valued the competencies of Empathy (co-workers) and Consensus Builder. Though each relationship was sufficient to result in a rejection of the null hypothesis for these three competencies, the strength of correlation was very weak meaning that there were only small differences between the level of importance assigned by head athletic trainers across the divisions of competition.

Participants from the largest division of competition, NCAA I – FBS, assigned a 100% Pooled Importance frequency to 36 of the 64 competency descriptors, the highest total of any division. NAIA participants, the smallest competition division, assigned a 100% Pooled Importance frequency to the second highest number of competencies, 18. NCAA III respondents rated the fewest competencies, 8, as 100% Pooled Importance, while the remaining two divisions each identified 17 competencies with 100% Pooled Importance. Correlational analysis of *Athletic Competition Division* with the four-choice level of importance found three statistically significant relationships, though each had a very weak strength of association, indicating that the level of importance assigned to the competencies is not influenced by the *Athletic Competition Division*.

Findings for Age. Respondents indicated their age on a range using 10 year increments beginning with 20-29 years and a final category of 70 years or above, when these data were compared with the participants' gender responses it was found that the proportion of respondents who were male increased as age increased. A comparison of the number of competencies receiving 100% Pooled Importance from participants in each age group revealed that the three youngest age groups viewed fewer competencies as universally important, while an increase in the number of 100% Pooled Importance competencies occurred at each of the three highest age groups. Only one participant reported an age of 70 years or older and this individual assigned a Pooled Importance rating to all but three competencies. This outlier effect may have influenced the finding that 10 competencies demonstrated statistically significant relationships between an increasing level of importance and increasing age. Weak or very weak strengths of association were noted for 10 competencies as evaluated against *Age*, the descriptive statistics indicate that

while older head athletic trainers place a higher frequency of Pooled Importance on a greater number of competencies, the relationship between *Age* and level of importance is not linear.

Six Leadership competencies were found to have a statistically significant correlation with age. As the age of the athletic trainer increased the following competencies were considered more important (a) Change Agent (bravery), (b) Socially Responsible (volunteer), (c) Empathetic (co-workers), (d) Empathetic (risks), (e) Utilizes Appropriate Leadership Styles (recognize), and (f) Influencer. One Management competency was found to have a positive correlation with age of respondents. Older head athletic trainers were more likely assign a higher level of importance to the competency Delegates Effectively than were younger respondents. The level of importance for three Personal Characteristic competencies were correlated with increased age. With increased age head athletic trainers were more likely to consider it important for their staff athletic trainers display the following competencies: (a) Thrives on Responsibility, (b) Leads Quietly (patiently), and (c) Leads Quietly (modesty).

Findings for Years as an Athletic Trainer. Participants indicated their years of work as an athletic trainer using ranges of five years beginning with 0-5 years and progressing to 41 or more years. Nine competencies were identified as having a statistically significant, positive correlation between *Years as an Athletic Trainer* and level of importance. The descriptive statistical analysis casts some doubt on these findings as the highest category, 41 years or more as an athletic trainer, contained only two respondents, one of whom assigned a Pooled Importance rating to 66 competencies. The total number of 100% Pooled Importance competencies for this category was 64, twice or more the number identified by all but one other group. The level of importance assigned to four leadership competencies was higher as the years of work as an athletic trainer increased. The relationships included the Leadership competencies

of (a) Change agent (bravery), (b) Socially responsible (volunteer) (c) Empathetic (co-workers), and (d) Cultural Sensitivity (promoting diversity). Those working as an athletic trainer for a longer period of time assigned a higher level of importance to the Management competency Delegate Effectively. The last four competencies with relationships to the years of work as an athletic trainer were identified as Personal Characteristics. These competencies were the competencies (a) Thrives on Responsibility, (b) Emotionally Stable (manage stress), (c) Leads Quietly (do right), and (d) Leads quietly (modesty).

Findings for Years as a Head Athletic Trainer. Analysis of the competencies and *Years as a Head Athletic Trainer* identified 10 statistically significant, though weakly associated, positive correlations. The descriptive statistics confirm that a nearly linear relationship exists between increasing years as a head athletic trainer and in increased number of competencies rated as important. Additionally, as years of experience as a head athletic trainer increased a higher level of importance was placed on the Leadership competencies of (a) Socially Responsible (concern), (b) Socially responsible (volunteer), (c) Empathetic (co-workers), (d) Empathetic (risks), (e) Utilizes Appropriate Leadership Styles (recognize) and (d) Cultural Sensitivity (promote diversity). The level of importance assigned to the Management competencies of using Crisis Management (conflict resolution) and Delegates Effectively were positively correlated to years as a head athletic trainer. The two personal characteristic competencies rated as more important by head athletic trainers with increasing years of experience were Thrives on Responsibility and Leads Quietly (modesty).

Findings for Number of Staff Athletic Trainers Supervised. A statistically significant positive correlation was identified between *Number of Staff Athletic Trainers Supervised* and the level of importance assigned to 10 competencies. The descriptive statistics support the finding

that as the number of staff supervised increases, head athletic trainers view more competencies as important. Those supervising a larger staff felt it was more important for their staff athletic trainers demonstrate the Leadership competencies: (a) Advocate, (b) Change agent (bravery), (c) Empathetic (co-workers), (d) Nurtures Professional Relationships, (e) Consensus Builder, (f) Effective and Constructive Use of Influence (affect behavior) (g) Empowerment (encourage). No statistically significant relationships were found between the Management competencies and the number of staff athletic trainers supervised by the respondent. This lack of correlation between age and the level of importance assigned to the management competencies suggests that all respondents, regardless of age, placed a high level of importance on these competencies. As the size of staff supervised by the respondents increased so did the level of importance placed on the Personal Characteristic competencies of (a) Critical Thinker, (b) Leads Quietly (do right), and (c) Leads Quietly (modesty). These competencies may be more highly valued by the supervisors of large staffs as the staff athletic trainers must be relied upon to work more independently. Each of these Personal Characteristics competencies would enable staff athletic trainers to be effective in a work environment with limited supervision.

Findings for Duties Assigned. Respondents recorded the duties assigned to their position by selecting all that applied from a list of six duties. The first phase of analysis used Spearman rho correlation testing to determine if the total number of duties assigned to the respondent related to the level of importance assigned to the competencies. The number of duties assigned to respondents was also evaluated. The mean number of job duties selected was 4.4 with a range of 1 to 6. Spearman rho analysis found that two competencies demonstrated low strength associations with the number of duties assigned to respondents. Descriptive statistics indicate a slight trend toward a higher agreement about the Pooled Importance of

competencies as the number of duties assigned increases. Two statistically significant relationships were found. As the number of duties increased the level of importance assigned to the personal characteristic of Courageous leadership was rated as less important. The leadership competency of Consensus Builder was more likely to be assigned a Pooled Importance rating as the number of duties assigned to the respondent increased.

The second analysis of the assigned duties was chi-square testing of the individual duties and the level of importance assigned to the competencies using the Pooled Importance categories. A statistically significant association, with a very weak strength of association, was found between the job duty *Course Instructor* and the Management competency Resilience. *Course Instructor* is the lone duty for which descriptive statistics identified a difference between the assignments of 100% Pooled Importance between the respondent groups for this variable. While a smaller number of participants held this duty than did not, respondents with the duty assigned the 100% Pooled Importance frequency to only six competencies. The larger group of respondents assigned a 100% Pooled Importance frequency to eight competencies. Response frequencies for only one competency demonstrated a statistically significant difference from the expected frequency.

Participants with administration duties assigned 100% Pooled Importance frequencies to six competencies, while the small number of participants without this duty recorded a 100% Pooled Importance for 51 competencies. Chi-square testing revealed that the frequencies for only one competency, the Personal Characteristic competency Leadership Planner, violated the goodness of fit criteria for the duty *Athletic Training/Healthcare Administration* indicating that level of importance assigned to the competencies is not impacted by this duty.

Only 13 respondents did not select the duty *Daily Patient Care*, these participants assigned a 100% Pooled Importance level to 38 competencies. Analysis of the 313 respondents selecting this duty resulted in a 100% Pooled Importance frequency for only the five competencies with an overall 100% Pooled Importance level. Despite this large difference between the response categories only three competencies violated the goodness of fit analysis and the strength of association of each was low. Three statistically significant associations were found between the level of importance placed on the competencies and the job duty of *Daily Patient Care*. The Leadership competencies (a) Protector, (b) Emotionally Stable (calm) and (c) Empathetic (exhibit empathy) were more likely to be rated as important by respondents participating in patient care daily than those without the duty.

Similarly the duty *Committee Assignments* resulted in six low strength of association statistically significant findings through chi-square testing. As with the other duties, the number of competencies with 100% Pooled Importance frequencies was smaller among participants with *Committee Assignments* than those without. The assigned duty of *Department or Institutional Committee Assignments* was also found to have three statistically significant associations with the level of importance assigned to the competencies. Respondents assigned to committee work were more likely to rate the Leadership competencies of (a) Intentional Leadership (improve), (b) Nurtures Professional Relationships, and (c) Organizationally Savvy (participating) as Pooled Important than respondents without this duty.

A greater number of associations were identified for the remaining job duties. More than twice as many competencies received 100% Pooled Importance frequencies from individuals not assigned the duty *Travel with Athletic Teams* compared to the 100% Pooled Importance competencies identified by respondents who do have travel responsibilities. Six statistically

significant chi-square results were identified between the Pooled Importance assigned to competencies and the duty *Travel with Athletic Teams*. For *Travel with Athletic Teams* six statistically significant associations were identified, though the level of association for each relationship was very weak. The leadership competencies Organizationally Savvy (participate) and Organizationally Savvy (interact) displayed statistically significant association with the duty *Travel with Athletic Teams*. These respondents were also more likely to assign a pooled important rating to the Management competency of Crisis Management (conflict resolution). Respondents with *Travel* duties were more likely to assign the pooled category of important to the Personal Characteristic competencies of (a) Critical Thinker, (b) Leads Quietly, (do right), and (c) Controls Risk (strategies).

Clinical preceptors are responsible for providing opportunities for students to develop and demonstrate the clinical proficiencies required for successful completion of a professional athletic training curriculum. Findings for level of Pooled Importance and *Clinical Preceptor* mirror those for other assigned duties. The smaller category, those without this duty assigned 100% Pooled Importance to more competencies than those with the duty. Five statistically significant relationships were identified, though each was characterized by a low strength of association. Respondents serving as a *Clinical Preceptor* assigned three Leadership competencies to the Pooled Importance category for their staff more often than those without preceptor duties. These Leadership competencies were: (a) Consensus Builder, (b) Cultural Sensitivity (interact), and (c) Organizationally Savvy (participate). Two Personal Characteristic competencies also demonstrated low-level associations with the job duty of *Clinical Preceptor*. Those serving as preceptors were more likely to assign the competencies of Leadership Planner and Leads Quietly (do right) the Pooled Importance category than respondents without the duty.

Findings for Gender. Female respondents assigned a 100% Pooled Importance frequency to four more competencies than did male respondents. The expected count for five competency pooled unimportance and pooled importance differed significantly from the expected frequency. An additional three competencies were identified for which the level of Pooled Importance differed by more than 5% between the genders. These results indicate that the demographic variable *Gender* does account for a portion of the variability in importance assigned to the competencies.

Female respondents were more likely to consider it important that staff athletic trainers do what is right for the organization, the Personal Characteristic competency Leads Quietly (do right), and that they demonstrate the Leadership competencies of Socially Responsible (volunteer) and Leadership Planner. Male head athletic trainers completing the questionnaire were more likely to place importance on the leadership competency of Empowerment (encourage) and the Personal Characteristic of Leads Quietly (modesty).

Findings for Leadership Position. Differences in expected frequency counts were noted for seven competencies when evaluated against *Leadership Position* status. A difference of greater than 5% Pooled Importance was also noted for seven additional competencies, indicating that there is a notable difference in the level of importance assigned to 14 competencies between the two groups. Participants indicating that they have served in leadership roles assigned a 100% Pooled Importance frequency to 14 competencies while only 7 received 100% Pooled Importance frequencies from those without leadership position experience. These findings indicate that there is some difference in the level of importance assigned to the competencies between the two groups.

Respondents who have served in leadership positions at the local, state, district, or national level were found to place a higher level of importance on five competencies in the Leadership category and two Personal Characteristic competencies than those without leadership position experience. The leadership competencies rated more important by those with leadership position experience related to (a) Uses Body-Language, (b) Influencer, (c) Empathetic (risks), (d) Cultural Sensitivity (promote diversity), and (e) Scholarship. Those participants who have served in leadership positions at the local, state, district, or national level also rated the personal characteristics of Open-Minded and Future-Minded as more important than participants without a history of holding leadership positions.

Findings for NATA District. Demographic information on the NATA District in which the respondent's institution is located was gathered for a comparison of respondents to the population of athletic trainers with membership in the NATA. Testing of this demographic variable compared to the Pooled Importance frequency for one Personal Characteristic competency, Ambitious, varied significantly from the expected frequencies. Though this weak association is statistically significant, its meaning is difficult to interpret as the district numbers are not tied to population factors other than geography. Statistical analysis of responses by NATA District revealed little difference in the Pooled Importance frequencies assigned to the competencies. As with other variables the smaller demographic groups resulted in a higher number of competencies with 100% Pooled Importance frequencies, but no other important relationships were identified.

Summary of Findings for Research Question 2. The total of 77 statistically significant findings represented 7.4% of the possible relationships between the demographic variables and level of importance assigned to the competency descriptors. All relationships were characterized

by weak, very weak, or low association strength. Each demographic factor was involved in at least one statistically significant relationship. There was little variability in the percentage of relationships identified for competency descriptors assigned to the three categories. These findings indicated that the level of importance assigned to the competency descriptors was only minimally related to the independent variables. Therefore, the level of importance assigned to the competencies appeared to be consistent across the population of head athletic trainers within the college and university setting.

Research Question 3. The third research question used to guide this research sought to identify statistically significant relationships existing between the categories into which the competencies are assigned and the perceived level of importance placed upon the competency. To sort the 49 competencies developed by Kutz (2004), into categories the competency coding matrix in Appendix B was developed. The matrix was based on the definitions and key characteristics of the terms leadership and management developed by Rost (1991). As the descriptors for many of Kutz's competencies contained multiple sentences, the researcher split each competency into single sentences, resulting in the 69 descriptors used on the questionnaire in this study. The only changes made to Kutz's competency descriptors were for grammatical purposes and clarity in an attempt to use the competencies as they were intended in Kutz's work.

Competency Coding Matrix. Three categories were created for the sorting of the competency descriptors through the use of the Competency Coding Matrix (see Figure 1) developed for this research. Rost's (1991) definitions of the terms leadership and management, both of which require a relational component, were used to create the matrix components that separated competency descriptors into Leadership and Management categories. The category of Personal Characteristics was developed for competency descriptors with abilities that could be

displayed independent of a relationship with others. The competency coding matrix was designed independently of the content for this research ensuring that previous labeling of the competencies would not influence the categories into which they were placed. As a result, the matrix can be used for sorting competencies related to any area of study.

Initial use of the competency coding matrix with the 49 competency descriptors developed by Kutz (2004) led to the decision to separate each, as necessary, into single sentences to sort each component of the descriptor separately. This led to descriptors for two competencies being sorted into two separate categories. Through the competency coding process 45 of the 69 competency descriptors developed by Kutz (2004) were assigned to the Leadership category based on Rost's (1991) definition of leadership. These competency descriptors, 65.2% of the total descriptors, represented 31 of Kutz's competencies. The Management category created through the use of the Competency Coding Matrix included 4 competency descriptors, 5.8% of the total, which were linked to 3 of Kutz's competencies. The remaining 20 competency descriptors, 28.0% of the total, were assigned the Personal Characteristic category and were derived from 17 competencies, describing knowledge, skills, and abilities exhibited without engaging in a relationship with others. While the results of Kutz's work and this research validated the importance of each competency, to describe them all as leadership is misleading. Furthermore, the competencies categorized as Leadership were less highly valued than Management or Personal Characteristic competencies, as determined by a comparison of means.

Comparison of competency category level of importance. Using a Friedman test for repeated measures, a significant difference at the $p \leq .05$ level was noted between the mean ranks of each category of competencies. The level of importance assigned to the Management competencies was higher than that of both the Leadership and Personal Characteristic category

competencies. The Personal Characteristic category competencies were assigned a higher level of importance than competencies in the Leadership category.

The head athletic trainers participating in this research valued Management related knowledge, skills, and abilities above both Personal Characteristics and Leadership abilities. The second highest level of importance was assigned to the Personal Characteristic category, which contains competency descriptors possessed and practiced by individuals independent of their interactions with others. The mean rank score for the 45 Leadership competency descriptors was the lowest of the three categories, indicating that for staff athletic trainers at the college and university level leadership skills are less highly valued by their supervisors than Personal Characteristics or Management competencies.

Implications

This section outlines the implications of findings from this research. The three areas to which the implications are addressed are (a) NATA Executive Committee for Education, (b) athletic training education program directors, and (c) college and university athletic trainers.

NATA Executive Committee for Education. Professional athletic training educational programs are designed to develop competencies identified by the NATA Executive Committee for Education (ECE) to prepare graduates to provide quality healthcare services in a wide variety of settings. In addition to clinical skills it is important that certain personal characteristics, as well as leadership and management skills are developed in students. The ECE revises the required competencies periodically, releasing new editions the document.

As the college and university setting employs the largest segment of the population of athletic trainers, the level of importance assigned to the competencies by college and university head athletic trainers in this study justifies their inclusion in every professional education

program. Providing educational experiences designed to develop these competencies in all students will ensure that all athletic trainers are able to demonstrate the competencies upon entry to the profession. The high level of importance placed upon the Management competencies should be noted by the NATA Executive Committee for Education to ensure that a full range of management skills are included in the next edition of the *Athletic Training Education Competencies*, with assessment strategies equivalent to those in the eight identified content areas and the foundational behaviors of professional practice (NATA, 2011).

The high level of importance assigned to each of the Personal Characteristic competencies indicates that it is important that athletic training programs continue to develop and evaluate student dispositions. The most highly valued personal characteristic competency, Knowledge of athletic training clinical skills, is the focus of professional and post professional education programming. The other personal characteristic competencies may be evaluated in professional education programs, but are not formally addressed in any other arena. The level of importance placed on this category of competencies justifies further development of the knowledge, skills, and abilities described by the personal characteristic competencies for all athletic training student and practicing athletic trainers.

The development of specialty certifications within the field of athletic training is a task recently undertaken by the NATA Executive Committee for Education. These educational programs will define advanced skills for athletic trainers in a number of traditional and emerging athletic training practice settings. Alongside the clinical proficiencies identified for successful practice in the specialty areas, identification of the specific personal characteristics, leadership, and management competencies necessary for success in the specialty fields should be undertaken.

Athletic training education program directors. In addition to addressing the required educational competencies used to develop professional athletic training curricula, program directors design supplemental educational experiences. This research on personal characteristics, leadership, and management competencies justifies their inclusion in all educational offerings for all athletic trainers. Until these competencies are included in future editions of the educational competencies, program directors should ensure their inclusion in individual professional education programs.

College and university athletic trainers. The identification of the level of importance of the competencies in this study should increase the awareness of their value within the college and university setting. Athletic trainers working in the college and university setting should evaluate their skills in each competency area and seek continuing education offerings designed to improve upon areas in which they can grow in order to enhance their workplace contributions. Athletic trainers seeking employment in the college and university setting may be able to strengthen their ability to demonstrate the knowledge, skills, and abilities described in the competencies to appeal to potential employers.

Recommendations for Future Research

This research explored the importance of Kutz's (2004) competencies in the college and university athletic training setting. While the results advance the knowledge of competencies important in the field of athletic training, it does not provide comprehensive coverage of the topic. Further research into these and similar competencies should be undertaken to enhance the understanding of the knowledge, skills, and abilities valuable in the field of athletic training.

Occupational settings. This study examined the importance of leadership, management, and personal characteristics competencies specific to staff athletic trainers within the college and

university setting. Research to establish the leadership, management, and personal characteristic competencies most valued within each athletic training practice setting could allow employers to better screen candidates and enable athletic trainers to pursue positions for which they are best suited. This knowledge will also support the inclusion of personal characteristic, leadership, and management competencies in the developing specialty certifications for athletic trainers. As work has begun on certifications in manual therapy and orthopedics continuing research could begin with supervisors of athletic trainers working as orthopedic physician extenders and in manual therapy focused clinics.

Additional management competencies. Management abilities are included in the current professional competencies and were highly valued by participants in this study, but of the 49 competencies developed by Kutz (2004) and used in this study only three were assigned to the management category. It is possible that the small number of management competencies resulted in inflated mean importance levels compared to the other competency categories. Further research should seek to identify additional management competencies important for inclusion in professional and continuing education opportunities for athletic trainers.

Development of personal characteristics in professional education. The 5th edition of the *Athletic Training Educational Competencies* included an outline of the foundational behaviors of professional practice for athletic training. Some foundational behaviors parallel leadership competencies and personal characteristics examined in this study, validating the importance of these items. Additional study into the best practices for developing these skills in professional athletic training programs would benefit program directors as they refine curricula and assess the development of required competencies in students.

Conclusion

By using a national sample representative of the population, this study validated the importance of Kutz's (2004) leadership competencies within college and university athletic training. The Competency Coding Matrix designed for this study was used to determine whether each competency represented leadership, management, or personal characteristic. While each of the competencies was viewed as important by college and university head athletic trainers, a greater level of importance was placed on the Management and Personal Characteristic categories than the Leadership competencies. This work provides distinction between the categories and demonstrates the value of management competencies and personal characteristics as distinct skills for athletic trainers. This knowledge should demonstrate that each category of competencies is valuable for athletic trainers and discourage the tendency of scholars to mislabel all non-clinical skills as leadership in an attempt to elevate their status.

While identifying distinctions between the competency categories is valuable, leaders must be also develop and demonstrate personal characteristics and management skills as necessary to build relationships with others and provide direction to reach shared goals. Within every setting it is important that individuals tasked with management duties carry out the processes necessary to deliver the goods and services required of the profession. While these managers are essential, it is not necessary that they operate as leaders to achieve their tasks. Conversely, leaders must understand the essential functions of managers and use management skills to develop a clear understanding of the purpose of their organization and establish rapport with others necessary to participate in leadership relationships.

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Appendix A: Competencies

The 49 competencies used in this survey research were developed by Kutz (2006) and used to conduct research on leadership competencies important for inclusion in educational programs and the practice of athletic training. Permission to use the leadership competencies in this research was received from the author (M. Kutz, personal communication, October 26, 2010). In Table A1 each of the 49 competencies is presented alphabetically. Also included in Table A1 are the descriptors for each competency used in Kutz' work.

Table A1

Kutz's (2004) Leadership Competencies Important for Athletic Training

Competency Title	Brief Descriptor
Advocate	Takes responsibility for actions of others and defends actions of others, acts when appropriate as an advocate for others.
Ambitious	Uses available resources (intrinsic and extrinsic) and other effective strategies to promote professional and personal development.
Applies Known and Attained Knowledge	Uses clinical evidence, research, and best-practices in the promotion of the profession by professional communications (abstracts, poster-presentations, lectures, etc.), original investigations, and literature reviews.
Assertive	Proactive about new ideas, innovations, and change initiatives while maintaining respect for personal boundaries and rights of others.
Change Agent	Has the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo. Proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).
Collaborator	Effectively collaborates with other professionals within the local community in achieving goals. Facilitates the collaboration as a leader and participant with colleagues, and other health care professionals to promote the health and welfare of diverse individuals and groups.

(Table A1 continues)

(Table A1 continued)

Competency Title	Brief Descriptor
Consensus Builder	Exhibits interpersonal skill and convinces other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.
Contextual Intelligence	Knows how to appropriately interpret and react to changing and volatile surroundings.
Controls Risk	Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after a patient care error occurs) to continuously improve care. Strive to improve quality while simultaneously decreasing risks.
Courageous Leadership	Has strong convictions and holds to convictions when faced with challenges.
Creative/Innovative Leadership	Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.
Credible	Believable: honest, trustworthy and ethical in dealings with subordinates, peers, and supervisors.
Crisis Management	Effectively handles unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue); and, deals with conflict by providing effective strategies for conflict resolution.
Critical Thinker	Cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.
Cultural Sensitivity	Promotes diversity in multiple contexts and aligns diverse individuals by creating and facilitating diversity. Provides opportunities for diverse members to interact in a non-discriminatory manner.
Dedicated	Has the desire and energy and the discipline to achieve stated goals.
Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.
Disciplined	Is consistent and steady in performing unpleasant or mundane tasks that provide long term team benefits.

(Table A1 continues)

(Table A1 continued)

Competency Title	Brief Descriptor
Effective and Constructive Use of Influence	Use interpersonal skills, personal power and influence, to constructively and effectively, affect the behavior and decisions of others. Demonstrate the effective use of different types of power in developing a powerful image.
Emotionally Stable	Handles and manages stress associated with leadership roles. Exhibits a cool, calm, and relaxed leadership style even in the face of crisis or adversity.
Empathetic	Demonstrates concern for the personal and professional lives of co-workers and peers. Exhibits empathy by: giving full attention, listening, expressing concern, advocating, assisting, understand different cultures, beliefs, and perspectives. Takes risks on behalf of team members.
Empowerment	Uses influence, and interpersonal ability to promote and encourage personal growth of others. Ensures transformation and development of others.
Ensures an Awareness of Mission	Understand and communicate how individual performance of others influences subordinates', peers', and supervisors' perceptions of how the mission is being accomplished.
Ethical	Promotes team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives. Reports incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures. Treats people equitably and fairly.
Excellent Verbal Communication Skills	Verbally articulates thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.
Excellent Written Communication Skills	Writes thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.
Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.
Future-minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.
Identifies Leaders	Identifies leadership attributes in emerging leaders, and takes the initiative to facilitate their development.

(Table A1 continues)

(Table A1 continued)

Competency Title	Brief Descriptor
Improves Morale	Facilitate and encourage a positive attitude in peers, subordinates, and supervisors toward their work and life.
Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.
Intentional Leadership	Assess and evaluates own leadership performance and is aware of strengths and weaknesses. Takes intentional action toward continuous improvement of leadership ability.
Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.
Leadership Planner	Has an action guide and delineated goals for achieving personal best.
Leads Quietly	Move patiently, carefully and incrementally. Doing what is “right” for the organization while using modesty and restraint to accomplish goals.
Multicultural Leadership	Can influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.
Nurtures Professional Relationships	Builds relationships with other members of the healthcare community that are advantageous to the organization’s mission, values, and goals.
Open-mindedness	Willingness to discard old ways of doing things when evidence fails to support them.
Organizationally Savvy	Carefully observes the environment and people, participates in fulfilling the needs of the organization and industry and interacts effectively with people in and outside the organization.
Protector	Provides a secure environment, tending to others carefully, prevents indiscretions, and preserves.
Resilience	Ability to recover from or adjust easily to misfortune or change.
Responsible for Actions	Handles scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.
Scholarship	Contributes to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews or writing articles.

(Table A1 continues)

(Table A1 continued)

Competency Title	Brief Descriptor
Socially Responsible	Expresses concern about social trends and issues (encourages legislation and policy when appropriate) and volunteers in social and community activities.
Thrives on Responsibility	Has a strong sense of duty and dependability in a variety of situations and roles.
Time Management	Makes use of processes and tools that increase an efficiency and sets parameters for availability to subordinates and peers.
Uses Body-language	Uses non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.
Utilizes Appropriate Leadership Styles	Demonstrates the ability to implement and transition between varieties of leadership styles when appropriate and when different situations dictate a diversity of leadership styles. Can identify when it is appropriate to transition between leadership styles with subordinates and peers and recognizes when superiors and other professionals are transitioning between leadership styles.
Willing to Take Appropriate Risk	Be willing to accept a degree of uncertainty for the sake of implementing an idea, needed value, or to see a goal accomplished.

Appendix B: Competency Coding Matrix and Competency Category Assignments

After creating single-sentence descriptors from the leadership competency definitions developed by Kutz (2006) each descriptor was categorized as leadership, management, or personal characteristic based on the operational definitions of this study.

Leadership Competencies

Kutz's (2006) work generated leadership competencies important for athletic training education and the practice of athletic training. For the purposes of this study the competencies were examined to determine if they represented leadership, management, or personal characteristics. The 45 descriptors included in Table B1 derived from 31 of Kutz's competencies and were categorized as leadership defined as "influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (Rost, 1991). These descriptors were modified from Kutz's work for to create single-sentence descriptors, resulting in 45 descriptors for the 31 competencies. Modifications were also made when necessary to maintain parallel construction of the descriptors. For each descriptor the rationale developed during the competency coding process is also included.

Table B1

Leadership Competencies

Competency	Descriptor	Rationale
Advocate	Take responsibility for actions of others, defends actions of others, and act when appropriate as an advocate for others.	Influence relationship, building trust enabling mutual purposes.
Applies Known and Attained knowledge	Use clinical evidence, research, and best-practices in the promotion of the profession by professional communications (abstracts, poster-presentations, lectures, etc.), original investigations, and literature reviews.	This communication requires relationships, influence rather than authority, focused on change in the profession.

(Table B1 continues)

(Table B1 continued)

Competency	Descriptor	Rationale
Assertive	Be proactive about new ideas, innovations, and change initiatives while maintaining respect for personal boundaries and rights of others.	Working with others in an influence relationship toward change.
Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	Creating conditions for change within an influence relationship.
Change Agent (proactive)	Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).	Changed focused relationships.
Collaborator (achieve goals)	Effectively collaborate with other professionals within the local community in achieving goals.	Working toward shared goals within an influence relationship.
Collaborator (promote health)	Facilitate the collaboration as a leader and participant with colleagues and other health care professionals to promote the health and welfare of diverse individuals and groups.	Promoting health and welfare requires change, relationship is influence based.
Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	Influence relationship with the goal of aligning people to shared purpose or organization.
Creative/Innovative Leadership	Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.	Relationship of influence rather than authority with suggestions leading to change.
Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.	Influence relationship, builds relationships with others, may result in mutual purposes.

(Table B1 continues)

(Table B1 continued)

Competency	Descriptor	Rationale
Cultural Sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	Influence relationship with intent aligning participants and introduce change.
Cultural Sensitivity (interaction)	Provide opportunities for diverse members to interact in a non-discriminatory manner.	Providing safe environment in which individuals can contribute to change through influence relationships
Effective and Constructive Use of Influence (affect behavior)	Use interpersonal skills, personal power, and influence to constructively and effectively affect the behavior and decisions of others.	Changing the behaviors of others through an influence relationship platform.
Effective and Constructive Use of Influence (powerful image)	Demonstrate the effective use of different types of power in developing a powerful image.	Power is exercised in a relationship, power could be used toward intended change.
Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	Within an influence relationship create opportunity for mutual purpose development.
Empathetic (exhibit empathy)	Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.	Through influence build relationships which can lead to mutual purposes and change.
Empathetic (risks)	Takes risks on behalf of team members.	Demonstrating commitment to the mutual purposes of others from within an influence relationship.
Empowerment	Use influence, and interpersonal ability to promote and encourage personal growth of others.	Influence relationship leading to change in others and organization.
	Ensure transformation and development of others.	Using an influence relationship to promote change.
Emotionally Stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.	Through an influence relationship enable continued work toward shared goals.
Ensures an Awareness of Mission	Understand and communicate how individual performance of others influences subordinates', peers', and supervisors' perceptions of how the mission is being accomplished.	Guiding work toward common goals from within an influence relationship.

(Table B1 continues)

(Table B1 continued)

Competency	Descriptor	Rationale
Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.	From an influence relationship encourage continued work toward mutual purposes.
Ethical (treatment)	Treats people equitably and fairly.	Building relationships.
Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	Must have a relationship for communication to occur, this one is from a position of influence and relates to shared purposes.
Excellent Written Communication Skills	Write thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	Within an influence relationship the communication is necessary to work toward mutual goals.
Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.	The change occurs within relationships with others, individual has influence rather than authority.
Identifies Leaders	Identify leadership attributes in emerging leaders, and take initiative to facilitate development.	Creating change in others through an influence relationship.
Intentional Leadership (assess)	Assess and evaluate their own leadership performance and are aware of strengths and weaknesses.	Relationship with others required for leadership evaluation.
Intentional Leadership (improvement)	Take intentional action toward continuous improvement of leadership ability.	Relationship required to participate in leadership.
Improves Morale	Facilitate and encourage a positive attitude in peers, subordinates, and supervisors toward their work and life.	Influence relationship used to better work environment to create and work toward mutual purposes.
Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.	Using influence to create change.

(Table B1 continues)

(Table B1 continued)

Competency	Descriptor	Rationale
Multicultural Leadership	Influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.	Using influence to create change by creating relationships with a more diverse population.
Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.	Creating opportunities to develop and advance the shared purposes of the organization through influence relationships.
Organizationally Savvy (observe)	Carefully observe the environment and people.	Using influence relationships to advance the mutual purposes of the organization.
Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	Relationship based activity to support common goals.
Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.	Skill used to build influence relationships.
Protector	Provide a secure environment, tend to others carefully, prevent indiscretions, and preserve [others].	Through an influence relationship create a safe climate for working toward change.
Responsible for Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.	While involved in influence relationships, act appropriately to preserve mutual purposes and enable change.
Scholarship	Contribute to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.	Create influence relationships from which change in the profession can occur.
Socially Responsible (concern)	Express concern about social trends and issues (encourages legislation and policy when appropriate).	Use influence relationships to promote changes in culture.
Socially Responsible (volunteer)	Volunteer in social and community activities.	Opportunity to build relationships.

(Table B1 continues)

(Table B1 continued)

Competency	Descriptor	Rationale
Uses Body-Language	Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.	Communication requires relationship.
Utilizes Appropriate Leadership Styles (variety)	Demonstrate the ability to implement and transition between a variety of leadership styles as appropriate, and when different situations dictate a diversity of leadership styles.	Influence others by creating effective relationships using appropriate interactions.
Utilizes Appropriate Leadership Styles (transition)	Identify when it is appropriate to transition between leadership styles with subordinates and peers.	Within an influence relationship be aware of interaction styles and the intended goals.
Utilizes Appropriate Leadership Styles (recognize)	Recognize when superiors and other professionals are transitioning between leadership styles.	Awareness of actions of others intended to promote common purposes.

Management Competencies

Four descriptors created from three Kutz (2006) competencies were identified as management based on Rost's (1991) definition of management as an "authority relationship between at least one manager and one subordinate who coordinate their activities to produce and sell particular goods and/or services." The descriptors developed by Kutz were modified to maintain parallel construction and create only single-sentence descriptors. The descriptors identified as management, the competency title, and coding rationale for each are listed in Table B2.

Table B2

Management Competency Descriptors

Competency	Descriptor	Rationale
Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).	Use authority to preserve the organizational outcomes through interaction with others.
Crisis Management (conflict resolution)	Deal with conflict by providing effective strategies for conflict resolution.	Use authority to resolve barriers to organizational outcomes.
Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	Share authority with others to create efficiency.
Ethical	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.	Relationship required to observe the practice of others, responsibility to protect the profession.

Personal Characteristics

The 20 descriptors in Table B3 were identified as attributes that can be displayed independent of a leadership or management relationship. For the purpose of this research, personal characteristics include skills, traits, and dispositions possessed by an individual and applied to the practice of athletic training. After modification to create parallel construction of elements and single-sentence descriptors, the 20 descriptors were developed from 17 of Kutz's (2006) competencies. The coding rationale for each personal characteristic descriptor is also included in Table B3.

Table B3

Personal Characteristic Competency Descriptors

Competency	Descriptor	Rationale
Ambitious	Use available resources (intrinsic and extrinsic) and other effective strategies to promote professional and personal development.	Not relationship dependent.
Contextual Intelligence	Know how to appropriately interpret and react to changing and volatile surroundings.	Not relationship dependent.
Controls Risk (strategies)	Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after patient care error occurs) to continuously improve care.	Not relationship dependent.
Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.	Not relationship dependent.
Courageous Leadership	Have strong convictions and holds to convictions when faced with challenges.	Not relationship dependent.
Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.	Not relationship dependent.
Dedicated	Display the desire, energy and discipline to achieve stated goals.	Not relationship dependent.
Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.	Not relationship dependent.
Emotionally Stable (manage stress)	Handle and manage stress associated with leadership roles.	Not relationship dependent.
Future-Minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.	Not relationship dependent.
Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.	Not relationship dependent.

(Table B3 continues)

(Table B3 continued)

Competency	Descriptor	Rationale
Leadership planner	Have an action guide and delineated goals for achieving personal best.	Not relationship dependent.
Leads Quietly (patiently)	Move patiently, carefully and incrementally.	Not relationship dependent.
Leads Quietly (do right)	Do what is “right” for the organization.	Not relationship dependent.
Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	Not relationship dependent.
Open-Mindedness	Be willing to discard old ways of doing things when evidence fails to support them.	Not relationship dependent.
Resilience	Display the ability to recover from, or adjust easily to, misfortune or change.	Not relationship dependent.
Thrives on Responsibility	Have a strong sense of duty and dependability in a variety of situations and roles.	Not relationship dependent.
Time Management	Make use of processes and tools that increase efficiency and set parameters for availability to subordinates and peers.	Not relationship dependent.
Willing to Take Appropriate Risk	Be willing to accept a degree of uncertainty for the sake of implementing an idea, needed value, or to see a goal accomplished.	Not relationship dependent.

Appendix C: Survey Instrument

Thank you for your interest in this survey regarding Leadership Competencies in Athletic Training. This survey has been designed by an Athletic Trainer completing a Doctorate in Educational Leadership to gather information regarding the importance head athletic trainers place on their staff displaying leadership competencies.

Responses will be collected anonymously and you may choose to discontinue the survey at anytime.

The first eight questions request demographic information that will be used in data analysis.

The remaining questions include a leadership competency descriptor and an opportunity for you to select the level of importance you assign to the competency. For each of these items you may select only one response.

I appreciate your willingness to contribute to this research process. Please contact me if I can provide you with further information or answer any questions.

Janelle Handlos
janelle.handlos@umwestern.edu

Please select your institution's level of competition.

- NAIA
- NCAA-III
- NCAA-II
- NCAA-I FCS
- NCAA-I BCS

In which NATA District is your institution located?

- | | |
|----------------------------------|-----------------------------------|
| <input type="radio"/> District 1 | <input type="radio"/> District 6 |
| <input type="radio"/> District 2 | <input type="radio"/> District 7 |
| <input type="radio"/> District 3 | <input type="radio"/> District 8 |
| <input type="radio"/> District 4 | <input type="radio"/> District 9 |
| <input type="radio"/> District 5 | <input type="radio"/> District 10 |

What is your gender?

- Female
- Male

What is your age?

- 20-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70 or above

How many years have you worked as an athletic trainer?

- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21-25 years
- 26-30 years
- 31-35 years
- 36-40 years
- 41 or more years

How many years have you served as a head athletic trainer?

- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21-25 years
- 26-30 years
- 31-35 years
- 36-40 years
- 41 or more years

How many staff athletic trainers do you supervise?

- 1-2
- 3-4
- 5-6
- 7-9
- 10 or more

Which of the following roles are part of your assigned duties? Please select all applicable roles.

- Daily patient care
- Travel with athletic teams
- Clinical preceptor
- Course instructor
- Athletic training/healthcare administration
- Departmental or institutional committee assignments

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Take responsibility for actions of others and defends actions of others, act when appropriate as an advocate for others.

unimportant of little importance important very important

Treat people equitably and fairly.

unimportant of little importance important very important

Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.

unimportant of little importance important very important

Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.

unimportant of little importance important very important

Assess and evaluate their own leadership performance and are aware of strengths and weaknesses.

unimportant of little importance important very important

Take intentional action toward continuous improvement of leadership ability.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Have an action guide and delineated goals for achieving personal best.

unimportant of little importance important very important

Display the ability to recover from, or adjust easily to, misfortune or change.

unimportant of little importance important very important

Express concern about social trends and issues (encourage legislation and policy when appropriate).

unimportant of little importance important very important

Volunteer in social and community activities.

unimportant of little importance important very important

Have a strong sense of duty and dependability in a variety of situations and roles.

unimportant of little importance important very important

Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.

unimportant of little importance important very important

Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).

unimportant of little importance important very important

Know how to appropriately interpret and react to changing and volatile surroundings.

unimportant of little importance important very important

Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Effectively handle unforeseen crises and limit or correct problems in a reasonable amount of time (via problem solving and dialogue).

unimportant of little importance important very important

Deal with conflict by providing effective strategies for conflict resolution.

unimportant of little importance important very important

Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.

unimportant of little importance important very important

Display the desire, energy, and the discipline to achieve stated goals.

unimportant of little importance important very important

Demonstrate the effective use of different types of power in developing a powerful image.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Identify when it is appropriate to transition between leadership styles with subordinates and peers.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Write thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.

unimportant of little importance important very important

Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.

unimportant of little importance important very important

Demonstrate concern for the personal and professional lives of co-workers and peers.

unimportant of little importance important very important

Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.

unimportant of little importance important very important

Takes risks on behalf of team members.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Use clinical evidence, research, and best-practices in the promotion of the profession by professional communications (abstracts, poster-presentations, lectures, etc.), original investigations, and literature reviews.

unimportant of little importance important very important

Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.

unimportant of little importance important very important

Use available resources (intrinsic and extrinsic) and other effective strategies to promote professional and personal development.

unimportant of little importance important very important

Be proactive about new ideas, innovations, and change initiatives while maintaining respect for personal boundaries and rights of others.

unimportant of little importance important very important

Contribute to professional advancement by promoting and participating in scholarly activity including conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Handle and manage stress associated with leadership roles.

unimportant of little importance important very important

Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.

unimportant of little importance important very important

Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.

unimportant of little importance important very important

Be willing to accept a degree of uncertainty for the sake of implementing an idea, needed value, or to see a goal accomplished.

unimportant of little importance important very important

Facilitate and encourage a positive attitude in peers, subordinates, and supervisors toward their work and life.

unimportant of little importance important very important

Recognize when superiors and other professionals are transitioning between leadership styles.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and

demonstrate the knowledge, skills, or abilities described.

Have strong convictions and hold to convictions when faced with challenges.

unimportant of little importance important very important

Be willing to discard old ways of doing things when evidence fails to support them.

unimportant of little importance important very important

Provide a secure environment, tend to others carefully, prevent indiscretions, and preserves.

unimportant of little importance important very important

Move patiently, carefully, and incrementally.

unimportant of little importance important very important

Interact effectively with people in and outside the organization.

unimportant of little importance important very important

Do what is "right" for the organization while using modesty and restraint to accomplish goals.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.

unimportant of little importance important very important

Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.

unimportant of little importance important very important

Use influence and interpersonal ability to promote and encourage personal growth of others.

unimportant of little importance important very important

Ensure transformation and development of others.

unimportant of little importance important very important

Understand and communicate how individual performance of others influence subordinates', peers', and supervisors' perceptions of how the mission is being accomplished.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.

unimportant of little importance important very important

Identify leadership attributes in emerging leaders, and take the initiative to facilitate development.

unimportant of little importance important very important

Carefully observe the environment and people.

unimportant of little importance important very important

Demonstrate the ability to implement and transition between a variety of leadership styles as appropriate and when different situations dictate a diversity of leadership styles.

unimportant of little importance important very important

Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.

unimportant of little importance important very important

Effectively collaborate with other professionals within the local community in achieving goals.

unimportant of little importance important very important

Facilitate collaboration, as a leader and participant, with colleagues and other health care professionals to promote the health and welfare of diverse individuals and groups.

unimportant of little importance important very important

Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.

unimportant of little importance important very important

Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.

unimportant of little importance important very important

Provide opportunities for diverse members to interact in a non-discriminatory manner.

unimportant of little importance important very important

Use interpersonal skills, personal power, and influence to constructively, and effectively, affect the behavior and decisions of others.

unimportant of little importance important very important

Appropriately give responsibility and authority to others in accomplishing desired tasks.

unimportant of little importance important very important

Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after a patient care error occurs) to continuously improve care.

unimportant of little importance important very important

For each of the following items please indicate how important you feel it is for your staff athletic trainers to possess and demonstrate the knowledge, skills, or abilities described.

Strive to improve quality while simultaneously decreasing risks.

unimportant of little importance important very important

Make use of processes and tools that increase efficiency and set parameters for availability to subordinates and peers.

unimportant of little importance important very important

Influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.

unimportant of little importance important very important

Be consistent and steady in performing unpleasant or mundane tasks that provide long-term benefits.

unimportant of little importance important very important

Participate in fulfilling the needs of the organization and industry.

unimportant of little importance important very important

Thank you for taking the time to participate in this research, your response is greatly appreciated. Please click the Done button below to submit your survey.

Appendix D: Participant Responses

Participants in this research submitted responses to 78 items on a web-based questionnaire. Respondents completed 69 items that contained a competency descriptor which applied to the knowledge, skills, and abilities of the participants' staff athletic trainers. An additional 9 items collected demographic information from respondents. Appendix D contains the response frequencies for each questionnaire item. The demographic item responses are displayed along with a reporting of the percent of Pooled Importance for each competency based on the demographic responses. The final tables in the appendix display the Spearman rho and chi-square test results used to identify relationships between the independent variables (demographics) and the dependent variables (level of importance or pooled importance).

Competency Response Frequencies

For each of the 69 competency descriptors participants were asked to indicate how important they felt it was for their staff athletic trainers to possess and display the knowledge, skills, and abilities described. In the reporting of results in Chapter Four the response categories *very unimportant* and *unimportant* were combined as were the categories *important* and *very important* as displayed in Table 6 to enable reporting of Pooled Importance and for use in the chi-square testing. The term Pooled Importance used in these tables refers to the pooled responses *important* and *very important*. Responses were made using a four-choice Likert scale and Table D1 displays the complete responses for each competency descriptor. The competencies are displayed in alphabetical order in Table D1.

Table D1

Four Category Response Frequencies

Competency	Descriptor	N	Very Unimportant		Unimportant		Important		Very Important	
			<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Advocate	Take responsibility for actions of others, defends actions of others, and act when appropriate as an advocate for others.	324	3	0.9	15	4.6	158	48.8	148	45.7
Ambitious	Use available resources (intrinsic and extrinsic) and other effective strategies to promote professional and personal development.	297	0	0.0	11	3.7	189	63.6	97	32.7
Applies Known and Attained Knowledge	Use clinical evidence, research, and best-practices in the promotion of the profession by professional communications (abstracts, poster-presentations, lectures, etc.), original investigations, and literature reviews.	298	1	0.3	38	12.8	171	57.4	88	29.5
Assertive	Be proactive about new ideas, innovations, and change initiatives while maintaining respect for personal boundaries and rights of others.	298	0	0.0	5	1.7	181	60.7	112	37.6
Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	325	0	0.0	11	3.4	186	57.2	128	39.4

(Table D1 continues)

(Table D1 continued)

Competency	Descriptor	N	Very Unimportant		Unimportant		Important		Very Important	
			<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Change Agent (proactive)	Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).	324	0	0.0	3	0.9	125	38.6	196	60.1
Collaborator (achieve goals)	Effectively collaborate with other professionals within the local community in achieving goals.	288	1	0.3	22	7.6	179	62.2	86	29.9
Collaborator (promote health)	Facilitate the collaboration as a leader and participant with colleagues and other health care professionals to promote the health and welfare of diverse individuals and groups.	288	0	0.0	13	4.5	192	66.7	83	28.8
Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	288	1	0.3	15	5.2	182	63.2	90	31.3
Contextual Intelligence	Know how to appropriately interpret and react to changing and volatile surroundings.	326	1	0.3	2	0.6	125	39.9	198	60.7

(Table D1 Continues)

(Table D1 Continued)

Competency	Descriptor	N	Very Unimportant		Unimportant		Important		Very Important	
			<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Controls Risk (strategies)	Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after patient care error occurs) to continuously improve care.	283	1	0.4	7	2.5	167	59.0	108	38.2
Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.	287	0	0.0	2	0.7	150	52.3	135	47.0
Courageous Leadership	Have strong convictions and holds to convictions when faced with challenges.	293	3	1.0	18	6.1	188	64.2	84	28.7
Creative/ Innovative Leadership	Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.	291	1	0.3	8	2.7	201	69.1	81	27.8
Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.	325	0	0.0	0	0.0	23	7.1	302	92.9

(Table D1 continues)

(Table D1 continued)

Competency	Descriptor	N	Very Unimportant		Unimportant		Important		Very Important	
			<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Crisis Management (problem solving)	Effectively handle unforeseen crises and limit or correct problems in a reasonable amount of time (via problem solving and dialogue).	319	0	0	1	0.3	113	35.4	205	64.3
Crisis Management (conflict resolution)	Deal with conflict by providing effective strategies for conflict resolution.	319	0	0	6	1.9	153	48.0	160	49.1
Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.	316	1	0.3	5	1.6	166	52.5	144	45.6
Cultural Sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	283	3	1.1	25	8.8	193	68.2	62	21.9
Cultural Sensitivity (interaction)	Provide opportunities for diverse members to interact in a non-discriminatory manner.	282	0	0.0	22	7.8	162	57.4	98	34.8
Dedicated	Display the desire, energy and discipline to achieve stated goals.	319	0	0.0	1	0.3	143	44.8	175	54.9
Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	281	1	0.4	6	2.1%	195	69.4	79	28.1
Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.	281	0	0.0	5	1.8	186	66.2	90	32.0

(Table D1 continues)

(Table D1 continued)

Competency	Descriptor	N	Very Unimportant		Unimportant		Important		Very Important	
			<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Effective and Constructive Use of Influence (powerful image)	Demonstrate the effective use of different types of power in developing a powerful image.	315	1	0.3	95	30.2	174	55.2	45	14.3
Effective and Constructive Use of Influence (affect behavior)	Use interpersonal skills, personal power, and influence to constructively and effectively affect the behavior and decisions of others.	279	1	0.4	45	16.1	188	67.4	45	16.1
Emotionally Stable (manage stress)	Handle and manage stress associated with leadership roles.	298	0	0.0	6	2.0	176	59.1	116	38.9
Emotionally Stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.	296	0	0.0	3	1.0	135	45.6	158	53.4
Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	305	1	0.3	19	6.2	175	57.4	110	36.1
Empathetic (exhibit empathy)	Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.	305	0	0	3	1.0	124	40.7	178	58.4
Empathetic (risks)	Takes risks on behalf of team members.	297	14	4.7	116	39.1	152	51.2	15	5.1

(Table D1 continues)

(Table D1 continued)

Competency	Descriptor	N	Very Unimportant		Unimportant		Important		Very Important	
			<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others.	290	1	0.3	27	9.3	214	73.8	48	16.6
Empowerment (ensure)	Ensure transformation and development of others.	287	3	1.0	64	22.3	180	62.7	40	13.9
Ensures an Awareness of Mission	Understand and communicate how individual performance of others influences subordinates', peers', and supervisors' perceptions of how the mission is being accomplished.	283	0	0.0	26	9.2	204	72.1	53	18.7
Ethical (treatment)	Treats people equitably and fairly.	316	0	0.0	0	0.0	40	12.7	276	87.3
Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.	314	0	0	2	0.6	87	27.7	225	71.7
Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.	290	0	0.0	0	0.0	132	45.5	158	54.5
Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	314	0	0.0	2	0.6	87	27.7	225	71.7

(Table D1 continues)

(Table D1 continued)

Competency	Descriptor	N	Very Unimportant		Unimportant		Important		Very Important	
			<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Excellent Written Communication Skills	Write thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	305	1	0.3	14	4.6	203	66.6	87	28.5
Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.	297	0	0.0	0	0.0	151	50.8	146	49.2
Future-Minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.	290	0	0.0	9	3.1	189	65.2	92	31.7
Identifies Leaders	Identify leadership attributes in emerging leaders, and take initiative to facilitate development.	289	2	0.7	42	14.5	198	68.5	47	16.3
Improves Morale	Facilitate and encourage a positive attitude in peers, subordinates, and supervisors toward their work and life.	294	0	0.0	10	3.4	159	54.1	125	42.5
Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.	283	0	0.0	17	6.0	192	67.8	74	26.1

(Table D1 continues)

(Table D1 continued)

Competency	Descriptor	N	Very Unimportant		Unimportant		Important		Very Important	
			<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Intentional Leadership (assess)	Assess and evaluate their own leadership performance and are aware of strengths and weaknesses.	316	0	0.0	11	3.5	178	56.3	127	40.2
Intentional Leadership (improvement)	Take intentional action toward continuous improvement of leadership ability.	314	0	0.0	8	2.5	191	60.8	115	36.6
Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.	291	0	0.0	0	0.0	144	49.5	147	50.5
Leadership Planner	Have an action guide and delineated goals for achieving personal best.	308	1	0.3	52	16.9	191	62.0	64	20.8
Leads Quietly (patiently)	Move patiently, carefully and incrementally.	287	3	1.0	53	18.5	195	67.9	36	12.5
Leads Quietly (do right)	Do what is "right" for the organization.	291	3	1.0	22	7.6	139	47.8	127	43.6
Leads Quietly (modesty)	Use modesty, and restraint to accomplish goals.	291	1	0.3	8	2.7	201	69.1	81	27.8
Multicultural Leadership	Influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.	277	2	0.7	26	9.4	200	72.2	49	17.7
Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.	290	0	0.0	2	0.7	134	46.2	154	53.1

(Table D1 continues)

(Table D1 continued)

Competency	Descriptor	N	Very Unimportant		Unimportant		Important		Very Important	
			<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Open-Mindedness	Be willing to discard old ways of doing things when evidence fails to support them.	295	0	0.0	8	2.7	172	58.3	115	39.0
Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.	291	0	0.0	1	0.3	168	57.7	122	41.9
Organizationally Savvy (observe)	Carefully observe the environment and people.	288	0	0.0	12	4.2	211	73.3	65	22.6
Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	283	0	0.0	12	4.2	178	62.9	93	32.9
Protector	Provide a secure environment, tend to others carefully, prevent indiscretions, and preserve [others].	294	0	0.0	4	1.4	145	49.3	145	49.3
Resilience	Display the ability to recover from, or adjust easily to, misfortune or change.	306	0	0.0	3	1.0	177	57.8	126	41.2
Responsible for Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.	300	0	0.0	2	0.7	166	55.3	132	44.0

(Table D1 continues)

(Table D1 continued)

Competency	Descriptor	N	Very Unimportant		Unimportant		Important		Very Important	
			<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Scholarship	Contribute to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.	296	5	1.7	103	34.8	161	54.4	27	9.1
Socially Responsible (concern)	Express concern about social trends and issues (encourages legislation and policy when appropriate).	308	3	1.0	55	17.9	214	69.5	36	11.7
Socially Responsible (volunteer)	Volunteer in social and community activities.	307	8	2.6	101	32.9	176	57.3	22	7.2
Thrives on Responsibility	Has a strong sense of duty and dependability in a variety of situations and roles.	308	0	0.0	3	1.0	163	52.9	142	46.1
Time Management	Make use of processes and tools that increase efficiency and set parameters for availability to subordinates and peers.	280	0	0.0	21	7.5%	211	75.4	48	17.1
Uses Body-Language	Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.	304	0	0.0	15	4.9	196	60.1	93	28.5

(Table D1 continues)

(Table D1 continued)

Competency	Descriptor	N	Very Unimportant		Unimportant		Important		Very Important	
			<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Utilizes Appropriate Leadership Styles (transition)	Identify when it is appropriate to transition between leadership styles with subordinates and peers.	304	1	0.3	12	3.9	216	71.1	75	24.7
Utilizes Appropriate Leadership Styles (recognize)	Recognize when superiors and other professionals are transitioning between leadership styles.	294	2	0.7	66	22.4	191	65.0	35	11.9
Utilizes Appropriate Leadership Styles (variety)	Demonstrate the ability to implement and transition between a variety of leadership styles as appropriate, and when different situations dictate a diversity of leadership styles.	286	0	0.0	30	10.5	201	70.3	55	19.2
Willing to Take Appropriate Risk	Be willing to accept a degree of uncertainty for the sake of implementing an idea, needed value, or to see a goal accomplished.	298	0	0.0	12	4.0	221	74.2	65	21.8

Descriptive Statistical Analysis

The first demographic variable gathered from participants was the division of athletic competition at which their institution participates. In addition to their use for hypothesis testing, the data collected regarding athletic competition division were used to compare respondents to the population of college and university head athletic trainers. Table D2 displays the percent of responses in the Pooled Important category by division of competition.

Table D2

Percent of Pooled Importance by Athletic Competition Division

Item	Division of Athletic Competition				
	<u>NAIA</u> % (n)	<u>NCAA III</u> % (n)	<u>NCAA II</u> % (n)	<u>NCAA I FCS</u> % (n)	<u>NCAA I BCS</u> % (n)
10	92.4 (61)	94.1 (96)	95.8 (69)	92.6 (50)	100.0 (26)
11	95.5 (63)	97.1 (100)	95.8 (53)	98.1 (53)	96.2 (25)
12	100.0 (66)	97.1 (100)	100.0 (71)	100.0 (54)	100.0 (26)
13	98.5 (65)	98.1 (101)	100.0 (73)	100.0 (54)	100.0 (26)
14	100.0 (66)	100.0 (103)	100.0 (72)	100.0 (54)	100.0 (26)
15	100.0 (65)	100.0 (100)	100.0 (73)	98.1 (51)	100.0 (25)
16	96.9 (63)	99.0 (99)	98.6 (72)	96.2 (50)	100.0 (25)
17	98.5 (64)	94.9 (93)	100.0 (73)	100.0 (51)	100.0 (25)
18	100.0 (65)	100.0 (100)	100.0 (73)	98.1 (51)	100.0 (25)
19	63.1 (41)	67.3 (66)	75.3 (55)	68.0 (34)	80.0 (20)
20	100.0 (65)	100.0 (99)	100.0 (71)	100.0 (51)	100.0 (26)
21	100.0 (65)	99.0 (97)	98.6 (69)	100.0 (51)	100.0 (26)
22	100.0 (65)	99.0 (98)	100.0 (70)	98.0 (50)	100.0 (25)
23	93.8 (61)	96.0 (95)	97.2 (69)	98.0 (50)	100.0 (26)
24	98.5 (64)	97.9 (95)	95.8 (68)	98.0 (50)	96.2 (25)
25	84.4 (54)	79.0 (79)	82.6 (57)	82.6 (38)	92.0 (23)
26	100.0 (63)	98.0 (97)	100.0 (68)	97.9 (46)	100.0 (25)
27	81.0 (51)	78.0 (78)	87.0 (60)	78.7 (37)	84.0 (21)
28	58.7 (37)	63.0 (63)	72.1 (49)	66.0 (31)	60.0 (15)
29	100.0 (63)	98.0 (98)	100.0 (69)	97.9 (46)	100.0 (25)
30	93.7 (59)	93.9 (92)	98.5 (66)	97.8 (45)	96.2 (25)
31	95.2 (60)	95.9 (94)	97.0 (65)	93.6 (44)	92.3 (24)
32	95.2 (59)	91.8 (90)	97.0 (65)	97.9 (46)	100.0 (26)
33	95.2 (60)	89.8 (88)	92.5 (62)	95.7 (45)	100.0 (26)
34	100.0 (63)	98.0 (96)	98.5 (67)	100.0 (47)	100.0 (26)

(Table D2 continues)

(Table D2 continued)

Item	Division of Athletic Competition				
	<u>NAIA</u> % (n)	<u>NCAA III</u> % (n)	<u>NCAA II</u> % (n)	<u>NCAA I FCS</u> % (n)	<u>NCAA I BCS</u> % (n)
35	56.5 (35)	57.4 (54)	61.2 (41)	50.0 (23)	50.0 (12)
36	77.4 (48)	92.6 (88)	88.2 (60)	84.4 (38)	91.7 (22)
37	98.4 (62)	100.0 (95)	100.0 (68)	97.8 (44)	100.0 (25)
38	93.5 (58)	95.7 (90)	97.0 (65)	97.8 (45)	100.0 (24)
39	98.4 (61)	97.8 (91)	98.5 (67)	97.8 (45)	100.0 (25)
40	62.3 (38)	64.1 (59)	58.8 (40)	62.2 (28)	76.9 (20)
41	96.8 (60)	98.9 (91)	97.1 (66)	100.0 (46)	96.2 (25)
42	100.0 (62)	96.7 (89)	100.0 (68)	100.0 (45)	100.0 (25)
43	100.0 (62)	100.0 (93)	100.0 (68)	100.0 (44)	100.0 (26)
44	95.2 (59)	95.7 (89)	97.1 (66)	97.8 (44)	92.3 (24)
45	96.8 (61)	96.7 (89)	97.0 (64)	95.6 (43)	100.0 (25)
46	74.6 (47)	71.4 (65)	80.3 (53)	86.7 (39)	76.0 (19)
47	90.5 (57)	96.6 (86)	95.5 (63)	84.4 (38)	96.2 (25)
48	95.2 (59)	96.7 (88)	97.0 (64)	100.0 (46)	100.0 (26)
49	100.0 (62)	97.8 (89)	98.5 (65)	97.8 (45)	100.0 (25)
50	80.0 (48)	78.9 (71)	84.4 (54)	79.1 (34)	76.9 (20)
51	100.0 (62)	98.9 (90)	100.0 (64)	100.0 (45)	100.0 (26)
52	95.2 (60)	87.9 (80)	90.5 (57)	91.1 (41)	96.2 (25)
53	96.8 (61)	98.9 (88)	93.8 (60)	97.8 (44)	96.2 (25)
54	100.0 (62)	100.0 (92)	100.0 (63)	100.0 (45)	100.0 (25)
55	90.3 (56)	91.2 (83)	89.1 (57)	88.6 (39)	92.0 (23)
56	73.8 (45)	68.1 (62)	88.9 (56)	84.1 (37)	72.0 (18)
57	96.8 (60)	86.7 (78)	93.4 (57)	90.9 (40)	81.8 (18)
58	79.0 (49)	81.3 (74)	81.0 (51)	86.4 (38)	83.3 (20)
59	100.0 (62)	98.9 (91)	98.4 (63)	100.0 (43)	100.0 (25)
60	85.2 (52)	84.4 (76)	79.7 (51)	86.7 (39)	92.0 (23)

(Table D2 continues)

(Table D2 continued)

Item	Division of Athletic Competition				
	<u>NAIA</u> % (n)	<u>NCAA III</u> % (n)	<u>NCAA II</u> % (n)	<u>NCAA I FCS</u> % (n)	<u>NCAA I BCS</u> % (n)
61	93.5 (58)	95.6 (86)	96.8 (60)	97.8 (44)	96.0 (24)
62	87.1 (54)	91.2 (83)	91.9 (57)	88.4 (38)	84.0 (21)
63	98.4 (61)	97.8 (89)	93.7 (59)	95.6 (43)	100.0 (25)
64	100.0 (62)	100.0 (90)	100.0 (64)	100.0 (45)	100.0 (25)
65	91.9 (57)	92.1 (82)	93.8 (60)	90.9 (40)	92.0 (23)
66	98.4 (61)	95.6 (86)	92.1 (58)	95.6 (43)	96.0 (24)
67	95.2 (59)	93.3 (84)	92.1 (58)	95.6 (43)	100.0 (24)
68	91.8 (56)	92.0 (80)	96.8 (60)	95.6 (43)	95.8 (23)
69	95.0 (570)	85.2 (75)	92.1 (58)	90.9 (40)	88.0 (22)
70	88.3 (53)	92.0 (80)	93.5 (58)	91.1 (41)	100.0 (24)
71	80.0 (48)	75.3 (64)	90.5 (57)	95.5 (42)	82.6 (19)
72	95.1 (58)	97.7 (85)	98.4 (62)	97.7 (43)	100.0 (22)
73	91.8 (56)	98.9 (86)	98.4 (63)	100.0 (45)	95.5 (21)
74	100.0 (61)	98.9 (88)	100.0 (64)	97.8 (44)	100.0 (24)
75	94.8 (55)	87.5 (77)	95.2 (59)	95.5 (42)	91.7 (22)
76	86.2 (50)	88.1 (74)	93.7 (59)	93.2 (41)	87.5 (21)
77	96.6 (56)	97.7 (86)	98.4 (62)	100.0 (45)	100.0 (23)
78	94.8 (55)	96.6 (85)	95.3 (61)	93.3 (42)	100.0 (24)

Item 5 on the questionnaire used in this research gathered responses about the age of respondents. The response options presented were ranges presenting ages in 10 year increments as suggested by SurveyMonkey (2014). Table D3 includes the responses for Pooled Importance of each of the 69 competency descriptors by age.

Table D3

Percent of Pooled Importance by Age

Item	Age					
	<u>20-29</u> % (n)	<u>30-39</u> % (n)	<u>40-49</u> % (n)	<u>50-59</u> % (n)	<u>60-69</u> % (n)	<u>70</u> % (n)
10	91.2 (31)	94.3 (99)	96.3 (105)	92.4 (61)	100.0 (9)	100.0 (1)
11	97.1 (34)	97.2 (103)	95.4 (103)	97.0 (64)	100.0 (9)	100.0 (1)
12	97.1 (34)	99.1 (105)	99.1 (106)	100.0 (66)	100.0 (9)	100.0 (1)
13	97.1 (34)	100.0 (106)	98.2 (107)	100.0 (66)	100.0 (9)	100.0 (1)
14	100.0 (35)	100.0 (106)	100.0 (109)	100.0 (65)	100.0 (9)	100.0 (1)
15	100.0 (35)	100.0 (102)	99.1 (106)	100.0 (65)	100.0 (9)	100.0 (1)
16	91.4 (32)	99.0 (101)	99.1 (106)	98.5 (64)	100.0 (9)	100.0 (1)
17	97.1 (34)	98.0 (100.0)	98.1 (103)	98.4 (63)	100.0 (9)	100.0 (1)
18	100.0 (35)	100.0 (102)	99.1 (106)	100.0 (65)	100.0 (9)	100.0 (1)
19	60.0 (21)	68.3 (69)	72.4 (76)	71.9 (46)	66.7 (6)	100.0 (1)
20	100.0 (35)	100.0 (102)	100.0 (106)	100.0 (63)	100.0 (9)	100.0 (1)
21	100.0 (35)	100.0 (101)	98.1 (103)	100.0 (63)	100.0 (9)	100.0 (1)
22	100.0 (35)	99.0 (101)	99.0 (103)	100.0 (63)	100.0 (9)	100.0 (1)
23	94.3 (33)	95.1 (97)	96.2 (102)	100.0 (63)	100.0 (9)	100.0 (1)
24	94.3 (33)	98.0 (100.0)	97.1 (101)	98.4 (62)	100.0 (9)	100.0 (1)
25	70.6 (24)	80.8 (80)	85.4 (88)	85.5 (53)	100.0 (9)	100.0 (1)
26	100.0 (34)	98.0 (96)	99.0 (101)	100.0 (62)	100.0 (9)	100.0 (1)
27	70.6 (24)	80.6 (79)	83.7 (87)	82.3 (51)	88.9 (8)	100.0 (1)
28	50.0 (17)	62.2 (61)	70.2 (73)	65.6 (40)	66.7 (6)	100.0 (1)
29	100.0 (34)	99.0 (97)	98.1 (102)	100.0 (62)	100.0 (9)	100.0 (1)
30	94.1 (32)	96.8 (92)	95.2 (99)	95.1 (58)	100.0 (9)	100.0 (1)
31	94.1 (32)	96.8 (92)	94.2 (98)	93.5 (58)	100.0 (9)	100.0 (1)
32	88.2 (30)	96.8 (92)	95.1 (98)	98.4 (61)	77.8 (7)	100.0 (1)
33	88.2 (30)	89.5 (85)	96.2 (100)	96.8 (60)	100.0 (9)	100.0 (1)

(Table D3 continues)

(Table D3 continued)

Item	Age					
	<u>20-29</u> % (n)	<u>30-39</u> % (n)	<u>40-49</u> % (n)	<u>50-59</u> % (n)	<u>60-69</u> % (n)	<u>70</u> % (n)
34	100.0 (34)	98.9 (94)	99.0 (103)	98.4 (61)	100.0 (9)	100.0 (1)
35	44.1 (15)	55.3 (52)	53.5 (53)	67.2 (41)	66.7 (6)	-
36	91.2 (31)	87.2 (82)	87.1 (88)	81.7 (49)	100.0 (9)	-
37	100.0 (34)	100.0 (95)	99.0 (99)	98.4 (60)	100.0 (9)	100.0 (1)
38	96.9 (31)	96.8 (92)	95.0 (95)	96.7 (59)	100.0 (9)	-
39	88.2 (30)	100.0 (95)	100.0 (98)	100.0 (61)	88.9 (9)	100.0 (1)
40	66.7 (22)	62.8 (59)	64.0 (64)	62.7 (37)	55.6 (5)	100.0 (1)
41	93.8 (30)	97.9 (93)	99.0 (100)	98.3 (59)	100.0 (9)	100.0 (1)
42	100.0 (33)	98.9 (94)	99.0 (97)	98.3 (59)	100.0 (9)	100.0 (1)
43	100.0 (33)	100.0 (95)	100.0 (100)	100.0 (59)	100.0 (9)	100.0 (1)
44	93.9 (31)	96.8 (92)	95.0 (95)	98.3 (59)	88.9 (8)	100.0 (1)
45	94.1 (32)	97.9 (92)	94.9 (93)	98.3 (58)	100.0 (8)	100.0 (1)
46	58.8 (20)	78.7 (74)	75.3 (73)	84.7 (50)	88.9 (8)	100.0 (1)
47	82.4 (28)	95.7 (89)	90.7 (88)	96.7 (58)	100.0 (8)	100.0 (1)
48	100.0 (33)	97.8 (91)	96.0 (95)	98.3 (59)	88.9 (8)	100.0 (1)
49	97.1 (33)	98.9 (93)	99.0 (97)	98.3 (57)	100.0 (9)	100.0 (1)
50	75.8 (25)	74.7 (68)	83.3 (80)	84.5 (49)	100.0 (8)	100.0 (1)
51	100.0 (34)	100.0 (94)	99.0 (95)	100.0 (58)	100.0 (8)	100.0 (1)
52	88.2 (30)	89.2 (83)	94.8 (91)	89.8 (53)	100.0 (8)	100.0 (1)
53	97.1 (33)	97.8 (90)	94.8 (92)	98.3 (58)	100.0 (8)	100.0 (1)
54	100.0 (34)	100.0 (94)	100.0 (96)	100.0 (58)	100.0 (8)	100.0 (1)
55	82.4 (28)	91.2 (83)	91.8 (89)	89.8 (53)	100.0 (8)	100.0 (1)
56	66.7 (22)	83.3 (75)	74.2 (72)	72.4 (42)	100.0 (8)	100.0 (1)
57	91.2 (31)	94.5 (86)	89.2 (83)	85.7 (48)	100.0 (8)	100.0 (1)
58	67.6 (230)	78.0 (71)	82.1 (78)	91.5 (54)	100.0 (8)	100.0 (1)
59	97.1 (33)	100.0 (92)	99.0 (95)	100.0 (59)	100.0 (8)	100.0 (1)

(Table D3 continues)

(Table D3 continued)

Item	Age					
	<u>20-29</u> % (n)	<u>30-39</u> % (n)	<u>40-49</u> % (n)	<u>50-59</u> % (n)	<u>60-69</u> % (n)	<u>70</u> % (n)
60	79.4 (27)	87.0 (80)	83.3 (80)	84.5 (49)	100.0 (8)	100.0 (1)
61	97.1 (33)	92.2 (83)	96.9 (93)	98.3 (58)	100.0 (8)	100.0 (1)
62	88.2 (30)	92.3 (84)	85.3 (81)	91.2 (52)	100.0 (8)	100.0 (1)
63	100.0 (34)	100.0 (92)	91.8 (89)	98.3 (57)	100.0 (8)	100.0 (1)
64	100.0 (34)	100.0 (92)	100.0 (96)	100.0 (59)	100.0 (8)	100.0 (1)
65	91.2 (31)	93.4 (85)	90.7 (88)	91.4 (53)	100.0 (7)	100.0 (1)
66	91.2 (31)	97.8 (89)	93.8 (90)	96.6 (56)	100.0 (8)	100.0 (1)
67	88.2 (30)	96.7 (88)	93.8 (90)	94.8 (55)	100.0 (8)	100.0 (1)
68	87.9 (29)	88.8 (79)	98.9 (94)	96.5 (55)	100.0 (8)	100.0 (1)
69	84.8 (28)	87.8 (79)	93.6 (88)	89.5 (51)	100.0 (8)	100.0 (1)
70	79.4 (27)	92.1 (82)	97.8 (90)	91.4 (53)	87.5 (7)	100.0 (1)
71	85.3 (29)	77.8 (70)	87.0 (80)	85.5 (47)	85.7 (6)	100.0 (1)
72	94.1 (32)	97.8 (87)	96.7 (89)	100.0 (57)	100.0 (8)	100.0 (1)
73	94.1 (32)	98.9 (91)	94.5 (86)	100.0 (57)	100.0 (8)	100.0 (1)
74	100.0 (34)	100.0 (91)	98.9 (94)	98.3 (57)	100.0 (8)	100.0 (1)
75	97.0 (32)	94.4 (84)	88.3 (83)	92.7 (51)	100.0 (8)	100.0 (1)
76	87.9 (29)	88.2 (75)	92.6 (87)	87.5 (49)	100.0 (8)	100.0 (1)
77	93.9 (31)	97.8 (88)	100.0 (93)	98.2 (55)	100.0 (8)	100.0 (1)
78	90.9 (30)	98.9 (90)	94.6 (88)	94.7 (54)	100.0 (8)	100.0 (1)

Questionnaire Item 6 sought the number of years respondents had worked as athletic trainers, with response options again provided in ranges. Table D4 displays the Pooled Importance frequencies by years of work as an athletic trainer.

Table D4

Pooled Importance Frequency by Years as an Athletic Trainer

Item	Years as an Athletic Trainer								
	<u>0-5</u> % (n)	<u>6-10</u> % (n)	<u>11-15</u> % (n)	<u>16-20</u> % (n)	<u>21-25</u> % (n)	<u>26-30</u> % (n)	<u>31-35</u> % (n)	<u>36-40</u> % (n)	<u>41 or more</u> % (n)
10	90.9 (20)	94.7 (54)	91.1 (51)	98.1 (52)	95.3 (61)	93.9 (31)	92.0 (23)	100.0 (12)	100.0 (2)
11	95.5 (21)	96.6 (57)	98.2 (55)	98.1 (52)	95.2 (60)	93.9 (31)	96.0 (24)	100.0 (12)	100.0 (2)
12	95.5 (21)	98.3 (58)	100.0 (56)	100.0 (53)	98.4 (61)	100.0 (33)	100.0 (25)	100.0 (12)	100.0 (2)
13	100.0 (22)	98.3 (58)	100.0 (56)	98.1 (52)	98.4 (63)	100.0 (33)	100.0 (25)	100.0 (12)	100.0 (2)
14	100.0 (22)	100.0 (59)	100.0 (56)	100.0 (53)	100.0 (64)	100.0 (32)	100.0 (25)	100.0 (12)	100.0 (2)
15	100.0 (22)	100.0 (58)	100.0 (54)	100.0 (51)	98.4 (62)	100.0 (32)	100.0 (25)	100.0 (12)	100.0 (2)
16	90.9 (20)	96.6 (56)	98.1 (53)	100.0 (51)	98.4 (62)	100.0 (32)	100.0 (25)	100.0 (12)	100.0 (2)
17	95.5 (21)	98.3 (57)	96.3 (52)	98.0 (49)	98.4 (61)	100.0 (32)	100.0 (24)	100.0 (12)	100.0 (2)
18	100.0 (22)	100.0 (58)	100.0 (54)	100.0 (51)	98.4 (62)	100.0 (32)	100.0 (25)	100.0 (12)	100.0 (2)
19	54.5 (12)	61.4 (35)	74.1 (40)	81.6 (40)	65.1 (41)	75.0 (24)	75.0 (18)	58.3 (7)	100.0 (2)
20	100.0 (22)	100.0 (58)	100.0 (54)	100.0 (50)	100.0 (62)	100.0 (32)	100.0 (25)	100.0 (11)	100.0 (2)
21	100.0 (22)	100.0 (58)	100.0 (52)	98.0 (49)	98.4 (61)	100.0 (32)	100.0 (25)	100.0 (11)	100.0 (2)
22	100.0 (22)	98.3 (57)	100.0 (53)	100.0 (50)	98.4 (60)	100.0 (32)	100.0 (25)	100.0 (11)	100.0 (2)
23	95.5 (21)	94.8 (55)	94.4 (510)	98.0 (49)	95.2 (59)	100.0 (32)	100.0 (25)	100.0 (11)	100.0 (2)
24	95.5 (21)	96.6 (56)	98.1 (53)	100.0 (50)	96.7 (58)	96.9 (31)	96.0 (24)	100.0 (11)	100.0 (2)
25	77.3 (17)	75.0 (42)	86.8 (46)	83.0 (39)	85.2 (52)	87.5 (28)	83.3 (20)	81.8 (9)	100.0 (2)
26	95.5 (21)	98.2 (55)	100.0 (52)	100.0 (47)	98.3 (59)	100.0 (32)	100.0 (24)	100.0 (11)	100.0 (2)
27	68.2 (15)	75.0 (42)	82.7 (43)	85.4 (41)	83.6 (51)	93.8 (30)	79.2 (19)	72.7 (8)	50.0 (1)

(Table D4 continues)

(Table D4 continued)

Item	Years as an Athletic Trainer								
	<u>0-5</u>	<u>6-10</u>	<u>11-15</u>	<u>16-20</u>	<u>21-25</u>	<u>26-30</u>	<u>31-35</u>	<u>36-40</u>	<u>41 or more</u>
	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
28	45.5 (10)	58.9 (33)	59.6 (31)	66.7 (32)	73.8 (45)	78.1 (25)	62.5 (15)	60.0 (6)	50.0 (1)
29	100.0 (22)	100.0 (56)	98.1 (51)	97.9 (47)	98.4 (60)	100.0 (32)	100.0 (24)	100.0 (11)	100.0 (2)
30	95.5 (21)	94.5 (52)	96.0 (48)	97.9 (47)	93.4 (57)	100.0 (31)	91.7 (22)	100.0 (11)	100.0 (2)
31	90.9 (20)	96.4 (53)	98.0 (49)	97.9 (47)	91.8 (56)	100.0 (31)	88.0 (22)	90.9 (10)	100.0 (2)
32	95.5 (21)	92.7 (51)	94.0 (47)	95.7 (45)	93.4 (57)	100.0 (31)	100.0 (25)	100.0 (11)	50.0 (1)
33	81.8 (18)	87.3 (48)	96.0 (48)	95.8 (46)	96.7 (59)	93.5 (29)	100.0 (25)	90.9 (10)	100.0 (2)
34	100.0 (22)	98.2 (54)	96.0 (48)	100.0 (48)	100.0 (61)	100.0 (32)	100.0 (24)	100.0 (11)	100.0 (2)
35	45.5 (10)	52.7 (29)	59.2 (29)	56.5 (26)	56.1 (32)	54.8 (17)	60.0 (15)	72.7 (8)	100.0 (1)
36	90.9 (20)	89.1 (49)	85.7 (42)	89.6 (43)	82.5 (47)	90.3 (28)	79.2 (19)	90.9 (10)	100.0 (1)
37	100.0 (22)	100.0 (55)	100.0 (50)	97.9 (46)	100.0 (57)	100.0 (31)	100.0 (25)	90.9 (10)	100.0 (2)
38	95.2 (20)	98.1 (53)	96.0 (48)	95.7 (45)	96.5 (55)	93.5 (29)	96.0 (24)	100.0 (11)	100.0 (1)
39	95.5 (21)	94.5 (52)	100.0 (50)	100.0 (47)	98.2 (54)	100.0 (31)	100.0 (25)	100.0 (11)	100.0 (2)
40	76.2 (16)	60.0 (33)	62.0 (31)	61.7 (29)	67.9 (38)	64.5 (20)	60.9 (14)	54.5 (6)	50.0 (1)
41	90.0 (18)	96.4 (53)	100.0 (50)	100.0 (49)	100.0 (56)	96.8 (30)	95.8 (23)	100.0 (11)	100.0 (2)
42	100.0 (21)	98.2 (54)	98.0 (49)	100.0 (47)	98.2 (54)	100.0 (31)	100.0 (24)	100.0 (11)	100.0 (2)
43	100.0 (21)	100.0 (55)	100.0 (50)	100.0 (49)	100.0 (55)	100.0 (31)	100.0 (23)	100.0 (11)	100.0 (2)
44	95.2 (20)	96.4 (53)	98.0 (49)	93.8 (45)	94.6 (53)	93.5 (29)	100.0 (24)	100.0 (110)	100.0 (2)
45	90.9 (20)	96.3 (52)	100.0 (49)	100.0 (48)	92.7 (51)	96.8 (30)	100.0 (23)	90.0 (9)	100.0 (2)
46	63.6 (14)	70.4 (38)	79.6 (39)	83.0 (39)	72.7 (40)	74.2 (23)	91.3 (21)	90.9 (10)	100.0 (2)

(Table D4 continues)

(Table D4 continued)

Item	Years as an Athletic Trainer								
	<u>0-5</u> % (n)	<u>6-10</u> % (n)	<u>11-15</u> % (n)	<u>16-20</u> % (n)	<u>21-25</u> % (n)	<u>26-30</u> % (n)	<u>31-35</u> % (n)	<u>36-40</u> % (n)	<u>41 or more</u> % (n)
47	90.9 (20)	92.6 (50)	93.8 (45)	93.5 (43)	89.3 (50)	93.5 (29)	95.8 (23)	100.0 (10)	100.0 (2)
48	100.0 (21)	98.1 (53)	100.0 (48)	93.8 (45)	94.6 (53)	100.0 (31)	95.8 (23)	100.0 (11)	100.0 (2)
49	95.5 (21)	98.1 (53)	98.0 (48)	100.0 (48)	98.2 (54)	100.0 (30)	100.0 (24)	100.0 (10)	100.0 (2)
50	81.0 (17)	69.8 (37)	80.9 (38)	84.8 (39)	77.8 (42)	90.3 (28)	82.6 (19)	90.0 (9)	100.0 (2)
51	100.0 (22)	100.0 (54)	100.0 (49)	97.9 (46)	100.0 (53)	100.0 (31)	100.0 (23)	100.0 (10)	100.0 (2)
52	90.9 (20)	83.3 (45)	91.7 (44)	97.9 (46)	88.7 (47)	100.0 (31)	91.7 (22)	90.0 (9)	100.0 (2)
53	100.0 (22)	94.3 (50)	100.0 (48)	100.0 (47)	90.7 (49)	100.0 (31)	95.8 (23)	100.0 (10)	100.0 (2)
54	100.0 (22)	100.0 (54)	100.0 (49)	100.0 (47)	100.0 (53)	100.0 (30)	100.0 (24)	100.0 (10)	100.0 (2)
55	72.7 (16)	94.3 (50)	89.6 (43)	97.8 (45)	88.9 (48)	87.1 (27)	87.5 (21)	100.0 (10)	100.0 (2)
56	61.9 (13)	79.2 (42)	83.0 (39)	82.6 (38)	74.1 (40)	64.5 (20)	73.9 (17)	90.0 (9)	100.0 (2)
57	90.9 (20)	90.7 (79)	95.7 (45)	95.5 (42)	90.6 (48)	79.3 (23)	86.4 (19)	90.0 (9)	100.0 (2)
58	68.2 (15)	74.1 (40)	74.5 (35)	86.7 (39)	83.0 (44)	93.5 (29)	87.5 (21)	100.0 (10)	100.0 (2)
59	100.0 (22)	98.1 (53)	100.0 (48)	100.0 (45)	98.1 (53)	100.0 (31)	100.0 (24)	100.0 (10)	100.0 (2)
60	77.3 (17)	87.0 (47)	85.1 (40)	91.3 (42)	83.3 (45)	80.6 (25)	75.0 (18)	100.0 (9)	100.0 (2)
61	95.5 (21)	94.4 (51)	88.6 (39)	100.0 (47)	96.3 (52)	100.0 (31)	95.8 (23)	100.0 (10)	100.0 (2)
62	95.5 (21)	88.9 (48)	89.1 (41)	91.5 (43)	84.6 (44)	90.3 (28)	90.9 (20)	90.0 (9)	100.0 (2)
63	100.0 (22)	100.0 (54)	100.0 (47)	93.6 (44)	94.3 (50)	90.3 (28)	100.0 (24)	100.0 (10)	100.0 (2)
64	100.0 (22)	100.0 (54)	100.0 (47)	100.0 (47)	100.0 (53)	100.0 (31)	100.0 (24)	100.0 (10)	100.0 (2)
65	86.4 (19)	90.7 (49)	95.7 (44)	95.7 (45)	92.6 (50)	90.3 (28)	87.0 (20)	88.9 (8)	100.0 (2)

(Table D4 continues)

(Table D4 continued)

Item	Years as an Athletic Trainer								
	<u>0-5</u>	<u>6-10</u>	<u>11-15</u>	<u>16-20</u>	<u>21-25</u>	<u>26-30</u>	<u>31-35</u>	<u>36-40</u>	<u>41 or more</u>
	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
66	90.9 (20)	96.3 (52)	93.5 (43)	97.9 (46)	94.3 (50)	93.5 (29)	100.0 (23)	100.0 (10)	100.0 (2)
67	86.4 (19)	94.4 (51)	95.7 (44)	100.0 (47)	90.6 (48)	96.8 (30)	95.7 (22)	90.0 (9)	100.0 (2)
68	95.2 (20)	90.4 (47)	84.8 (39)	95.7 (44)	98.1 (52)	100.0 (30)	95.7 (22)	100.0 (10)	100.0 (2)
69	85.7 (18)	84.9 (45)	84.8 (39)	93.5 (43)	96.2 (50)	90.0 (27)	95.7 (22)	90.0 (9)	100.0 (2)
70	77.3 (17)	88.7 (47)	91.1 (41)	97.7 (43)	96.2 (50)	100.0 (31)	91.3 (21)	90.0 (9)	50 (1)
71	90.9 (20)	74.1 (40)	80.0 (36)	88.6 (39)	86.3 (44)	87.1 (27)	77.3 (17)	100.0 (8)	100.0 (2)
72	95.5 (21)	96.2 (51)	97.8 (44)	100.0 (46)	96.0 (48)	96.7 (29)	100.0 (23)	100.0 (10)	100.0 (2)
73	90.9 (20)	98.1 (53)	100.0 (47)	97.8 (45)	95.9 (47)	93.3 (28)	100.0 (23)	100.0 (10)	100.0 (2)
74	100.0 (22)	100.0 (54)	100.0 (46)	100.0 (47)	98.1 (51)	100.0 (31)	95.7 (22)	100.0 (10)	100.0 (2)
75	95.2 (20)	92.5 (49)	97.8 (44)	93.3 (42)	88.2 (45)	90.3 (28)	86.4 (19)	100.0 (10)	100.0 (2)
76	85.7 (18)	88.2 (45)	86.0 (37)	95.6 (43)	90.4 (47)	93.5 (29)	81.8 (18)	100.0 (10)	100.0 (2)
77	100.0 (21)	96.2 (50)	97.9 (46)	97.9 (46)	100.0 (50)	100.0 (30)	95.7 (22)	100.0 (9)	100.0 (2)
78	85.7 (18)	98.1 (52)	95.7 (45)	93.6 (44)	98.0 (49)	100.0 (30)	95.7 (22)	90.0 (9)	100.0 (2)

The length of time respondents had worked as head athletic trainers was collected using five year increment ranges. Table D5 displays the Pooled Importance frequencies by years as a head athletic trainer.

Table D5

Percent of Pooled Importance by Years as a Head Athletic Trainer

Item	Years as a Head Athletic Trainer								
	<u>0-5</u>	<u>6-10 y</u>	<u>11-15 y</u>	<u>16-20</u>	<u>21-25</u>	<u>26-30</u>	<u>31-35</u>	<u>36-40</u>	<u>41 or more</u>
	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
10	93.4 (99)	97.2 (69)	95.1 (39)	95.2 (40)	84.8 (28)	100.0 (21)	100.0 (5)	100.0 (2)	100.0 (2)
11	96.3 (104)	98.6 (70)	97.5 (39)	95.2 (40)	93.9 (31)	95.2 (20)	100.0 (5)	100.0 (2)	100.0 (2)
12	98.1 (105)	100.0 (71)	97.6 (40)	100.0 (42)	100.0 (32)	100.0 (21)	100.0 (5)	100.0 (2)	100.0 (2)
13	99.1 (107)	100.0 (71)	97.6 (40)	97.6 (41)	100.0 (33)	100.0 (21)	100.0 (5)	100.0 (2)	100.0 (2)
14	100.0 (108)	100.0 (71)	100.0 (41)	100.0 (42)	100.0 (33)	100.0 (20)	100.0 (5)	100.0 (2)	100.0 (2)
15	99.1 (105)	100.0 (70)	100.0 (40)	100.0 (40)	100.0 (32)	100.0 (21)	100.0 (5)	100.0 (2)	100.0 (2)
16	95.3 (101)	98.6 (69)	100.0 (40)	100.0 (40)	100.0 (32)	100.0 (21)	100.0 (5)	100.0 (2)	100.0 (2)
17	97.2 (103)	98.6 (68)	100.0 (40)	97.4 (37)	96.9 (31)	100.0 (21)	100.0 (5)	100.0 (2)	100.0 (2)
18	99.1 (105)	100.0 (70)	100.0 (40)	100.0 (40)	100.0 (32)	100.0 (21)	100.0 (5)	100.0 (2)	100.0 (2)
19	61.9 (65)	75.0 (51)	72.5 (29)	79.5 (31)	68.8 (22)	66.7 (14)	80.0 (4)	0.0 (0)	100.0 (2)
20	100.0 (105)	100.0 (70)	100.0 (40)	100.0 (39)	100.0 (33)	100.0 (20)	100.0 (4)	100.0 (2)	100.0 (2)
21	100.0 (105)	100.0 (68)	97.5 (39)	97.4 (38)	100.0 (33)	100.0 (20)	100.0 (4)	100.0 (2)	100.0 (2)
22	99.0 (104)	98.6 (68)	100.0 (40)	100.0 (39)	100.0 (32)	100.0 (20)	100.0 (4)	100.0 (2)	100.0 (2)
23	96.2 (101)	97.1 (68)	92.5 (37)	94.9 (37)	100.0 (33)	100.0 (20)	100.0 (4)	100.0 (2)	100.0 (2)
24	97.1 (102)	100.0 (70)	92.3 (36)	97.4 (37)	100.0 (33)	95.0 (19)	100.0 (4)	100.0 (2)	100.0 (2)
25	82.2 (83)	78.8 (52)	77.5 (31)	84.6 (33)	90.6 (29)	85.7 (18)	100.0 (4)	100.0 (2)	100.0 (2)
26	98.0 (99)	98.5 (65)	100.0 (39)	100.0 (39)	100.0 (31)	100.0 (21)	100.0 (4)	100.0 (2)	100.0 (2)

(Table D5 continues)

(Table D5 continued)

Item	Years as a Head Athletic Trainer								
	<u>0-5</u> % (n)	<u>6-10 y</u> % (n)	<u>11-15 y</u> % (n)	<u>16-20</u> % (n)	<u>21-25</u> % (n)	<u>26-30</u> % (n)	<u>31-35</u> % (n)	<u>36-40</u> % (n)	<u>41 or more</u> % (n)
27	74.3 (75)	78.8 (52)	90.0 (36)	89.7 (35)	81.3 (26)	90.5 (19)	75.0 (3)	100.0 (2)	50.0 (1)
28	60.4 (61)	57.6 (38)	82.1 (32)	56.4 (22)	75.0 (24)	66.7 (14)	75.0 (3)	100.0 (2)	50.0 (1)
29	99.0 (100.0)	98.5 (65)	97.5 (39)	100.0 (39)	100.0 (32)	100.0 (21)	100.0 (4)	100.0 (2)	100.0 (2)
30	94.9 (94)	95.5 (64)	97.4 (37)	100.0 (37)	90.9 (30)	95.2 (20)	100.0 (4)	100.0 (2)	100.0 (2)
31	94.9 (94)	95.5 (64)	94.7 (36)	100.0 (38)	93.3 (31)	90.5 (19)	75.0 (3)	100.0 (2)	100.0 (2)
32	93.9 (93)	95.5 (64)	100.0 (37)	94.7 (36)	90.9 (30)	100.0 (21)	100.0 (4)	100.0 (2)	50 (1)
33	87.9 (87)	94.0 (63)	97.4 (37)	97.4 (37)	100.0 (33)	90.5 (19)	100.0 (4)	100.0 (2)	100.0 (2)
34	100.0 (99)	97.0 (65)	97.4 (37)	100.0 (39)	100.0 (33)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
35	50.5 (50)	53.8 (35)	66.7 (24)	56.8 (21)	53.1 (17)	66.7 (14)	100.0 (4)	50 (1)	100.0 (1)
36	89.8 (88)	87.7 (57)	78.4 (29)	86.5 (32)	87.5 (18)	85.7 (18)	100.0 (4)	100.0 (2)	100.0 (1)
37	100.0 (99)	100.0 (65)	100.0 (36)	97.4 (37)	100.0 (32)	95.2 (20)	100.0 (4)	100.0 (2)	100.0 (2)
38	97.9 (95)	95.4 (62)	100.0 (36)	92.1 (35)	96.9 (31)	95.2 (20)	100.0 (4)	100.0 (2)	100.0 (1)
39	96.0 (95)	100.0 (64)	100.0 (37)	100.0 (36)	96.9 (31)	100.0 (21)	100.0 (4)	100.0 (2)	100.0 (2)
40	64.9 (63)	65.2 (43)	64.9 (24)	58.3 (21)	67.7 (21)	66.7 (14)	0.0 (0)	50 (1)	50 (1)
41	95.9 (93)	100.0 (66)	97.3 (36)	100.0 (38)	100.0 (31)	95.2 (20)	100.0 (3)	100.0 (2)	100.0 (2)
42	97.9 (95)	98.4 (63)	100.0 (37)	100.0 (38)	100.0 (31)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
43	100.0 (98)	100.0 (65)	100.0 (37)	100.0 (37)	100.0 (31)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
44	94.9 (93)	95.5 (63)	97.2 (35)	97.4 (37)	93.5 (29)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)

(Table D5 continues)

(Table D5 continued)

Item	Years as a Head Athletic Trainer								
	<u>0-5</u> % (n)	<u>6-10 y</u> % (n)	<u>11-15 y</u> % (n)	<u>16-20</u> % (n)	<u>21-25</u> % (n)	<u>26-30</u> % (n)	<u>31-35</u> % (n)	<u>36-40</u> % (n)	<u>41 or more</u> % (n)
45	95.9 (93)	100.0 (65)	91.9 (34)	97.3 (36)	96.7 (29)	95.2 (20)	100.0 (2)	100.0 (2)	100.0 (2)
46	70.1 (68)	83.1 (54)	73.0 (27)	75.0 (27)	80.0 (24)	90.5 (19)	100.0 (3)	100.0 (2)	100.0 (2)
47	90.7 (88)	93.8 (60)	88.9 (32)	94.6 (35)	93.5 (29)	100.0 (21)	100.0 (2)	100.0 (2)	100.0 (2)
48	97.9 (94)	96.9 (63)	97.2 (35)	100.0 (38)	93.5 (29)	95.2 (20)	100.0 (3)	100.0 (2)	100.0 (2)
49	97.9 (950)	98.5 (64)	97.2 (35)	100.0 (37)	100.0 (30)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
50	72.0 (67)	82.8 (53)	91.7 (933)	88.9 (32)	73.3 (22)	81.0 (17)	100.0 (3)	100.0 (2)	100.0 (2)
51	100.0 (97)	98.4 (63)	100.0 (36)	100.0 (37)	100.0 (29)	100.0 (21)	100.0 (2)	100.0 (2)	100.0 (2)
52	89.7 (87)	92.1 (58)	86.1 (31)	97.2 (35)	93.3 (28)	90.5 (19)	100.0 (3)	100.0 (2)	100.0 (2)
53	94.8 (91)	100.0 (62)	94.4 (34)	100.0 (38)	93.3 (28)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
54	100.0 (96)	100.0 (64)	100.0 (36)	100.0 (36)	100.0 (30)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
55	90.6 (87)	87.1 (54)	91.4 (36)	94.7 (36)	90.0 (27)	85.7 (18)	100.0 (3)	100.0 (2)	100.0 (2)
56	73.7 (70)	78.7 (48)	80.0 (28)	73.7 (28)	75.9 (22)	76.2 (16)	100.0 (3)	100.0 (2)	100.0 (2)
57	87.2 (82)	93.4 (57)	94.1 (32)	94.4 (34)	89.7 (26)	85.7 (18)	100.0 (3)	100.0 (2)	100.0 (2)
58	72.9 (70)	85.5 (53)	82.9 (29)	83.8 (31)	82.8 (31)	95.2 (20)	100.0 (3)	100.0 (2)	100.0 (2)
59	99.0 (95)	100.0 (62)	97.1 (34)	100.0 (38)	100.0 (30)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
60	81.3 (78)	87.1 (54)	88.9 (32)	86.5 (32)	86.7 (26)	80.0 (16)	66.7 (2)	100.0 (2)	100.0 (2)
61	95.8 (92)	90.0 (54)	100.0 (35)	100.0 (38)	93.3 (28)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
62	87.4 (83)	88.5 (54)	88.9 (32)	94.4 (34)	86.2 (25)	95.2 (20)	100.0 (3)	100.0 (2)	100.0 (2)

(Table D5 continues)

(Table D5 continued)

Item	Years as a Head Athletic Trainer								
	<u>0-5</u>	<u>6-10 y</u>	<u>11-15 y</u>	<u>16-20</u>	<u>21-25</u>	<u>26-30</u>	<u>31-35</u>	<u>36-40</u>	<u>41 or more</u>
	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
63	99.0 (95)	98.4 (60)	91.7 (33)	92.1 (35)	96.7 (29)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
64	100.0 (96)	100.0 (62)	100.0 (35)	100.0 (38)	100.0 (30)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
65	89.6 (86)	98.4 (61)	91.4 (32)	89.5 (34)	93.1 (27)	90.5 (19)	50.0 (1)	100.0 (2)	100.0 (2)
66	93.8 (90)	96.7 (59)	94.4 (34)	97.3 (36)	93.1 (27)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
67	91.7 (88)	98.4 (60)	94.4 (34)	97.4 (37)	92.9 (26)	90.5 (19)	100.0 (3)	100.0 (2)	100.0 (2)
68	93.6 (88)	88.1 (52)	97.2 (35)	94.6 (35)	100.0 (28)	95.2 (20)	100.0 (3)	100.0 (2)	100.0 (2)
69	89.5 (85)	84.5 (49)	91.4 (32)	94.6 (35)	93.1 (27)	90.5 (19)	100.0 (3)	100.0 (2)	100.0 (2)
70	87.4 (83)	91.5 (54)	97.2 (35)	100.0 (34)	93.1 (27)	95.2 (20)	100.0 (3)	100.0 (2)	50.0 (1)
71	87.5 (84)	76.7 (46)	85.3 (29)	85.3 (29)	78.6 (22)	90.0 (18)	50.0 (1)	100.0 (2)	100.0 (2)
72	95.7 (90)	98.4 (61)	100.0 (34)	97.2 (35)	96.3 (26)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
73	96.8 (92)	100.0 (62)	97.1 (33)	91.4 (32)	96.4 (27)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
74	99.0 (95)	98.4 (61)	100.0 (35)	100.0 (36)	100.0 (29)	100.0 (21)	100.0 (3)	100.0 (2)	100.0 (2)
75	93.6 (88)	93.3 (56)	86.1 (31)	97.0 (32)	93.1 (27)	85.7 (18)	100.0 (3)	100.0 (2)	100.0 (2)
76	91.4 (85)	81.0 (47)	94.3 (33)	100.0 (34)	86.2 (25)	85.7 (18)	100.0 (3)	100.0 (2)	100.0 (2)
77	96.8 (91)	98.4 (60)	97.1 (34)	100.0 (36)	100.0 (28)	100.0 (19)	100.0 (3)	100.0 (2)	100.0 (2)
78	94.7 (89)	96.8 (60)	94.1 (32)	97.1 (34)	100.0 (29)	90.5 (19)	100.0 (3)	100.0 (2)	100.0 (2)

The size of staff supervised by respondents was determined using Item 8 on the questionnaire used in this research. Response options did not include 0 athletic trainers

supervised as the focus of this research was on how important head athletic trainers felt it was for their staff athletic trainers to possess and display each of the competencies. Item non-response for 9 participants may indicated that some participants in this study do not actually supervise staff athletic trainers. Table D6 displays the percent Pooled Important responses for athletic training staff size.

Table D6

Percent Pooled Importance by Size of Athletic Training Staff

Item	Number of Athletic Trainers Supervised				
	<u>1 to 2</u> % (n)	<u>3 to 4</u> % (n)	<u>5 to 6</u> % (n)	<u>7 to 9</u> % (n)	<u>10 or +</u> % (n)
10	93.8 (122)	94.9 (93)	97.4 (38)	96.6 (28)	90.0 (18)
11	95.4 (124)	98.0 (96)	97.4 (38)	100.0 (29)	90.0 (18)
12	100.0 (130)	98.0 (96)	97.4 (37)	100.0 (29)	100.0 (20)
13	99.2 (129)	98.0 (97)	100.0 (39)	100.0 (29)	100.0 (20)
14	100.0 (130)	100.0 (98)	100.0 (39)	100.0 (29)	100.0 (20)
15	100.0 (128)	100.0 (96)	100.0 (38)	96.6 (28)	100.0 (19)
16	99.2 (127)	97.9 (94)	100.0 (38)	96.6 (28)	100.0 (19)
17	97.7 (125)	100.0 (94)	97.4 (37)	96.6 (28)	100.0 (18)
18	100.0 (128)	100.0 (96)	100.0 (38)	96.6 (28)	100.0 (19)
19	70.1 (89)	67.4 (64)	64.9 (24)	69.0 (20)	88.9 (16)
20	100.0 (127)	100.0 (94)	100.0 (37)	100.0 (29)	100.0 (20)
21	99.2 (126)	98.9 (92)	100.0 (36)	100.0 (29)	100.0 (20)
22	99.2 (126)	100.0 (94)	100.0 (36)	96.6 (28)	100.0 (19)
23	93.7 (119)	97.9 (92)	100.0 (37)	96.6 (28)	100.0 (20)
24	98.4 (123)	95.7 (90)	100.0 (37)	100.0 (29)	95.0 (19)
25	80.6 (100)	81.3 (74)	83.8 (31)	92.9 (26)	89.5 (17)
26	98.4 (120)	100.0 (90)	100.0 (38)	96.4 (27)	100.0 (19)
27	83.7 (103)	80.2 (73)	71.1 (27)	78.6 (22)	94.7 (18)
28	62.3 (76)	62.6 (57)	71.1 (27)	71.4 (20)	63.2 (12)
29	99.2 (122)	98.9 (90)	97.4 (37)	100.0 (28)	100.0 (19)

(Table D6 continues)

(Table D6 continued)

Item	Number of Athletic Trainers Supervised				
	<u>1 to 2</u> % (n)	<u>3 to 4</u> % (n)	<u>5 to 6</u> % (n)	<u>7 to 9</u> % (n)	<u>10 or +</u> % (n)
30	95.0 (115)	95.6 (87)	100.0 (36)	96.6 (28)	94.4 (17)
31	94.2 (114)	98.9 (90)	94.4 (34)	89.7 (26)	89.5 (17)
32	95.0 (115)	94.5 (86)	97.1 (34)	96.6 (28)	100.0 (19)
33	90.1 (109)	93.4 (85)	97.2 (35)	96.6 (28)	100.0 (19)
34	98.3 (119)	100.0 (91)	100.0 (36)	100.0 (29)	100.0 (19)
35	53.0 (62)	57.3 (51)	65.8 (28)	48.1 (13)	61.1 (11)
36	88.1 (104)	82.0 (73)	89.5 (34)	96.3 (26)	88.2 (15)
37	99.2 (118)	100.0 (89)	97.3 (36)	100.0 (27)	100.0 (19)
38	96.6 (114)	95.5 (84)	97.4 (37)	96.3 (26)	100.0 (18)
39	99.1 (116)	96.6 (85)	100.0 (38)	100.0 (27)	100.0 (19)
40	60.3 (70)	65.5 (57)	63.2 (24)	75.0 (21)	66.7 (12)
41	97.5 (115)	97.7 (84)	100.0 (38)	100.0 (28)	94.7 (18)
42	100.0 (118)	100.0 (86)	94.4 (34)	100.0 (28)	100.0 (19)
43	100.0 (118)	100.0 (87)	100.0 (38)	100.0 (27)	100.0 (18)
44	96.6 (114)	95.4 (83)	97.3 (36)	89.3 (25)	100.0 (19)
45	98.3 (116)	95.3 (81)	94.6 (35)	96.3 (26)	100.0 (18)
46	80.3 (94)	75.6 (65)	70.3 (26)	81.5 (22)	77.8 (14)
47	93.1 (108)	91.8 (78)	94.6 (35)	85.2 (23)	100.0 (19)
48	95.7 (111)	98.8 (85)	94.6 (35)	100.0 (28)	100.0 (19)
49	99.1 (115)	97.7 (84)	100.0 (37)	100.0 (27)	100.0 (19)
50	83.2 (94)	83.5 (71)	77.1 (27)	67.9 (19)	77.8 (14)
51	100.0 (115)	98.8 (84)	100.0 (35)	100.0 (28)	100.0 (19)
52	88.7 (102)	92.9 (79)	97.1 (34)	92.9 (26)	94.7 (18)
53	96.6 (112)	96.4 (80)	97.2 (35)	100.0 (28)	94.7 (18)
54	100.0 (116)	100.0 (83)	100.0 (36)	100.0 (28)	100.0 (19)
55	87.1 (101)	91.8 (78)	94.3 (33)	92.6 (25)	89.5 (17)
56	73.7 (84)	82.1 (69)	74.3 (26)	74.1 (20)	78.9 (15)

(Table D6 continues)

(Table D6 continued)

Item	Number of Athletic Trainers Supervised				
	<u>1 to 2</u> % (n)	<u>3 to 4</u> % (n)	<u>5 to 6</u> % (n)	<u>7 to 9</u> % (n)	<u>10 or +</u> % (n)
57	93.0 (106)	91.7 (77)	85.3 (29)	88.9 (24)	87.5 (14)
58	77.4 (89)	84.7 (72)	88.6 (31)	80.8 (21)	84.2 (16)
59	99.1 (116)	98.8 (84)	100.0 (35)	100.0 (26)	100.0 (19)
60	84.3 (97)	83.3 (70)	88.6 (31)	78.6 (22)	94.7 (18)
61	94.8 (109)	96.4 (80)	100.0 (35)	92.9 (26)	94.7 (18)
62	91.4 (106)	88.1 (74)	84.8 (28)	92.6 (25)	88.9 (16)
63	96.6 (112)	96.4 (81)	94.3 (33)	100.0 (28)	100.0 (19)
64	100.0 (116)	100.0 (84)	100.0 (35)	100.0 (28)	100.0 (19)
65	92.2 (107)	96.4 (80)	85.7 (30)	81.5 (22)	94.7 (18)
66	98.3 (114)	95.2 (79)	88.2 (30)	92.9 (26)	100.0 (19)
67	93.1 (108)	95.2 (79)	97.1 (34)	96.3 (26)	100.0 (19)
68	94.6 (106)	90.2 (74)	100.0 (35)	96.3 (26)	94.2 (18)
69	90.3 (102)	90.1 (73)	88.6 (31)	92.9 (26)	88.9 (16)
70	89.4 (101)	93.8 (76)	94.1 (32)	92.9 (26)	100.0 (18)
71	79.3 (88)	85.2 (69)	94.3 (33)	80.8 (21)	88.9 (16)
72	97.4 (112)	96.3 (79)	100.0 (34)	100.0 (26)	100.0 (17)
73	94.8 (110)	98.8 (80)	100.0 (34)	96.3 (26)	100.0 (17)
74	100.0 (117)	98.8 (81)	100.0 (35)	96.4 (27)	100.0 (17)
75	93.8 (105)	91.4 (74)	88.6 (31)	92.9 (26)	94.1 (16)
76	90.9 (100.0)	87.7 (71)	91.2 (31)	92.9 (26)	88.2 (15)
77	98.2 (110)	96.3 (78)	100.0 (35)	100.0 (28)	100.0 (17)
78	97.4 (111)	95.1 (77)	94.1 (32)	96.4 (27)	100.0 (18)

The demographic information regarding assigned duties of participants was used in two different analysis processes. Six duties were provided as response options for the item, and participants were instructed to select all appropriate responses. The identification of specific assigned duties resulted in nominal level data which were used in chi-square tests to identify relationships between variables. Additionally the number of duties assigned to the respondents was calculated from responses to use in Spearman rho calculations. Respondents selected between 1 and 6 duties with a mean response of 4.4. Table D7 displays the number of respondents indicating that they were assigned each of the possible duties. Table D8 displays the percent of responses in the Pooled Important category for number of assigned duties.

Table D7

Assigned Duties

Response	Frequency	
	Absolute	Relative
Daily Patient Care	313	96.0
Travel with Athletic Teams	273	83.7
Athletic Training/ Healthcare Administration	320	98.2
Clinical Preceptor	173	53.1
Course Instructor	129	39.6
Department/Institutional Committee Assignments	236	72.4

Table D8

Percent Pooled Importance by Number of Assigned Duties

Item	Number of Assigned Duties					
	<u>1</u> % (n)	<u>2</u> % (n)	<u>3</u> % (n)	<u>4</u> % (n)	<u>5</u> % (n)	<u>6</u> % (n)
10	100.0 (4)	92.9 (13)	90.2 (37)	96.8 (92)	92.2 (107)	98.1 (53)
11	100.0 (4)	100.0 (14)	95.1 (39)	95.8 (92)	97.4 (113)	96.3 (52)
12	100.0 (4)	100.0 (14)	97.6 (40)	99.0 (95)	100.0 (116)	98.1 (52)
13	100.0 (4)	100.0 (14)	100.0 (41)	100.0 (96)	98.3 (115)	98.1 (53)
14	100.0 (4)	100.0 (14)	100.0 (41)	100.0 (96)	100.0 (117)	100.0 (53)
15	100.0 (4)	100.0 (14)	100.0 (40)	100.0 (95)	100.0 (112)	98.1 (53)
16	100.0 (4)	85.7 (120)	100.0 (40)	98.9 (94)	99.1 (111)	96.3 (52)
17	100.0 (4)	92.9 (13)	97.4 (38)	98.9 (93)	99.1 (110)	96.3 (52)
18	100.0 (4)	100.0 (14)	100.0 (40)	100.0 (95)	100.0 (112)	98.1 (53)
19	75.0 (3)	71.4 (10)	71.8 (28)	63.8 (60)	73.9 (82)	67.9 (36)
20	100.0 (4)	100.0 (14)	100.0 (39)	100.0 (95)	100.0 (111)	100.0 (53)
21	100.0 (4)	100.0 (14)	100.0 (39)	100.0 (94)	98.2 (109)	100.0 (52)
22	100.0 (4)	100.0 (14)	100.0 (39)	100.0 (94)	100.0 (110)	96.2 (51)
23	100.0 (4)	100.0 (14)	100.0 (39)	93.7 (89)	97.3 (108)	96.2 (51)
24	100.0 (4)	92.9 (13)	97.4 (38)	96.8 (90)	97.3 (108)	100.0 (53)
25	75.0 (3)	100.0 (14)	73.0 (27)	76.6 (72)	88.7 (94)	84.9 (45)
26	100.0 (4)	100.0 (14)	100.0 (37)	98.9 (93)	100.0 (106)	96.1 (49)
27	75.0 (3)	78.6 (11)	75.7 (28)	84.0 (79)	82.1 (87)	79.2 (42)
28	75.0 (3)	71.4 (10)	51.4 (19)	59.6 (56)	65.7 (69)	77.4 (41)
29	100.0 (4)	100.0 (14)	100.0 (37)	98.9 (93)	99.1 (105)	98.1 (52)
30	100.0 (4)	92.9 (13)	100.0 (38)	93.3 (84)	95.2 (100)	98.1 (52)
31	100.0 (4)	100.0 (14)	97.4 (37)	93.4 (85)	95.2 (100)	94.3 (50)
32	100.0 (4)	85.7 (12)	94.7 (36)	95.6 (86)	95.2 (100)	96.2 (51)
33	100.0 (4)	100.0 (14)	92.1 (35)	91.2 (83)	96.2 (101)	90.6 (48)

(Table D8 continues)

(Table D8 continued)

Item	Number of Assigned Duties					
	<u>1</u> % (n)	<u>2</u> % (n)	<u>3</u> % (n)	<u>4</u> % (n)	<u>5</u> % (n)	<u>6</u> % (n)
34	100.0 (4)	92.9 (13)	97.4 (37)	100.0 (92)	100.0 (104)	98.1 (52)
35	66.7 (2)	69.2 (9)	42.9 (15)	58.4 (52)	54.8 (57)	60.4 (32)
36	100.0 (3)	69.2 (9)	88.9 (32)	91.1 (82)	85.4 (88)	84.9 (45)
37	100.0 (4)	100.0 (13)	100.0 (36)	98.9 (90)	100.0 (103)	98.1 (52)
38	100.0 (3)	100.0 (12)	91.4 (32)	97.8 (89)	98.1 (102)	92.3 (48)
39	100.0 (4)	92.3 (12)	100.0 (36)	98.9 (88)	98.1 (101)	98.1 (52)
40	75.0 (3)	69.2 (9)	63.9 (23)	65.2 (58)	64.1 (66)	56.9 (29)
41	100.0 (4)	100.0 (13)	97.3 (36)	96.7 (87)	99.0 (102)	98.0 (50)
42	100.0 (4)	92.3 (12)	100.0 (37)	100.0 (90)	98.0 (99)	100.0 (51)
43	100.0 (4)	100.0 (13)	100.0 (37)	100.0 (90)	100.0 (102)	100.0 (51)
44	100.0 (4)	100.0 (13)	89.2 (33)	95.6 (87)	96.1 (98)	100.0 (51)
45	100.0 (4)	92.3 (12)	97.2 (35)	94.4 (84)	97.0 (98)	100.0 (51)
46	100.0 (4)	76.9 (10)	78.4 (29)	77.3 (68)	73.3 (74)	80.4 (41)
47	100.0 (4)	92.3 (12)	97.2 (35)	89.9 (80)	95.0 (95)	90.2 (46)
48	100.0 (4)	100.0 (13)	88.9 (32)	100.0 (89)	97.1 (99)	98.0 (50)
49	100.0 (4)	92.3 (12)	100.0 (37)	98.9 (87)	98.0 (100)	100.0 (50)
50	75.0 (3)	92.3 (12)	83.3 (30)	75.0 (66)	78.1 (75)	90.0 (45)
51	100.0 (4)	100.0 (13)	97.3 (36)	100.0 (90)	100.0 (97)	100.0 (50)
52	75.0 (3)	84.6 (11)	91.9 (34)	88.6 (78)	92.0 (92)	98.0 (48)
53	100.0 (4)	100.0 (13)	100.0 (36)	96.6 (86)	95.0 (95)	98.0 (48)
54	100.0 (4)	100.0 (13)	100.0 (36)	100.0 (89)	100.0 (99)	100.0 (50)
55	100.0 (4)	92.3 (12)	94.6 (35)	87.8 (79)	89.8 (88)	91.7 (44)
56	100.0 (4)	69.2 (9)	69.4 (25)	75.3 (67)	77.6 (76)	83.0 (39)
57	100.0 (4)	84.6 (11)	91.7 (33)	90.9 (80)	89.5 (85)	93.6 (44)
58	100.0 (4)	76.9 (10)	81.1 (30)	79.8 (71)	81.4 (79)	85.4 (41)
59	100.0 (4)	100.0 (13)	100.0 (37)	98.9 (88)	99.0 (97)	100.0 (49)

(Table D8 continues)

(Table D8 continued)

Item	Number of Assigned Duties					
	<u>1</u> % (n)	<u>2</u> % (n)	<u>3</u> % (n)	<u>4</u> % (n)	<u>5</u> % (n)	<u>6</u> % (n)
60	100.0 (4)	92.3 (12)	75.0 (27)	83.1 (74)	83.5 (81)	94.0 (47)
61	100.0 (4)	100.0 (13)	94.6 (35)	94.3 (83)	94.8 (92)	100.0 (49)
62	100.0 (4)	84.6 (11)	86.5 (32)	92.0 (81)	86.3 (82)	93.9 (46)
63	100.0 (4)	100.0 (13)	94.4 (34)	96.7 (87)	95.9 (93)	100.0 (50)
64	100.0 (4)	100.0 (13)	100.0 (37)	100.0 (89)	100.0 (97)	100.0 (50)
65	100.0 (4)	100.0 (13)	86.5 (32)	93.3 (83)	89.6 (86)	95.9 (47)
66	100.0 (4)	92.3 (12)	91.9 (34)	94.4 (84)	97.9 (95)	95.8 (46)
67	100.0 (4)	84.6 (11)	91.9 (34)	91.0 (81)	96.9 (94)	100.0 (48)
68	100.0 (4)	92.3 (12)	94.3 (33)	97.7 (85)	90.7 (88)	93.6 (44)
69	100.0 (4)	92.3 (12)	94.3 (33)	88.6 (78)	91.8 (89)	84.8 (39)
70	100.0 (4)	92.3 (12)	88.6 (31)	88.8 (79)	96.8 (90)	91.7 (44)
71	50.0 (2)	92.3 (12)	80.6 (29)	80.2 (69)	83.9 (78)	91.5 (43)
72	100.0 (4)	100.0 (13)	91.7 (33)	97.7 (84)	98.9 (93)	97.9 (47)
73	100.0 (4)	100.0 (13)	97.2 (35)	95.5 (85)	96.8 (90)	100.0 (48)
74	100.0 (4)	100.0 (13)	100.0 (36)	100.0 (90)	98.9 (94)	98.0 (48)
75	100.0 (4)	100.0 (13)	82.4 (28)	94.3 (82)	90.4 (85)	97.9 (47)
76	75.0 (3)	92.3 (12)	88.6 (31)	89.4 (76)	90.3 (84)	91.5 (43)
77	100.0 (4)	100.0 (13)	94.1 (32)	100.0 (87)	96.8 (92)	100.0 (48)
78	100.0 (4)	84.6 (11)	91.4 (32)	95.5 (85)	96.8 (92)	100.0 (47)

Table D9 displays the percent Pooled Importance for each competency by *Daily Patient Care* duty status of respondents.

Table D9

Percent Pooled Importance by Daily Patient Care

Item	Daily Patient Care	
	<u>Yes</u> % (n)	<u>No</u> % (n)
10	94.2 (293)	100.0 (13)
11	96.5 (301)	100.0 (13)
12	99.0 (308)	100.0 (13)
13	99.0 (310)	100.0 (13)
14	100.0 (312)	100.0 (13)
15	99.7 (305)	100.0 (13)
16	98.4 (301)	92.3 (12)
17	98.3 (298)	92.3 (12)
18	99.7 (305)	100.0 (13)
19	69.2 (209)	76.9 (10)
20	100.0 (303)	100.0 (13)
21	99.3 (299)	100.0 (13)
22	99.3 (299)	100.0 (13)
23	96.4 (292)	100.0 (13)
24	97.3 (293)	100.0 (13)
25	82.0 (242)	100.0 (13)
26	99.0 (290)	100.0 (13)
27	81.0 (239)	84.6 (11)
28	63.6 (187)	84.6 (11)
29	99.0 (292)	100 (13)
30	95.9 (279)	92.3 (12)
31	95.2 (278)	92.3 (12)
32	95.2 (277)	92.3 (12)

(Table D9 continues)

(Table D9 continued)

Item	Daily Patient Care	
	<u>Yes</u> % (n)	<u>No</u> % (n)
33	93.2 (272)	100 (13)
34	99.3 (290)	92.3 (12)
35	56.4 (162)	50.0 (5)
36	87.5 (251)	72.7 (8)
37	99.3 (286)	100.0 (12)
38	96.5 (276)	90.9 (10)
39	98.3 (281)	100.0 (12)
40	63.0 (179)	75.0 (9)
41	97.9 (280)	100.0 (12)
42	99.3 (282)	91.7 (11)
43	100.0 (285)	100.0 (12)
44	95.8 (274)	100.0 (12)
45	96.5 (272)	100.0 (12)
46	77.0 (217)	75.0 (9)
47	92.9 (261)	91.7 (11)
48	97.2 (275)	100.0 (12)
49	98.9 (279)	91.7 (11)
50	80.1 (221)	90.9 (10)
51	99.6 (278)	100.0 (12)
52	91.4 (255)	91.7 (11)
53	96.8 (270)	100.0 (12)
54	100.0 (279)	100.0 (12)
55	90.3 (251)	91.7 (11)
56	76.7 (211)	75.0 (9)
57	90.8 (246)	91.7 (11)
58	81.2 (224)	91.7 (11)
59	99.3 (276)	100.0 (12)

(Table D9 continues)

(Table D9 continued)

Item	Daily Patient Care	
	<u>Yes</u> % (n)	<u>No</u> % (n)
60	84.1 (233)	100.0 (12)
61	95.7 (264)	100.0 (12)
62	89.8 (246)	83.3 (10)
63	96.8 (269)	100.0 (12)
64	100.0 (278)	100.0 (12)
65	91.7 (253)	100.0 (12)
66	95.3 (263)	100.0 (12)
67	94.6 (261)	91.7 (11)
68	94.1 (256)	90.9 (10)
69	90.0 (244)	91.7 (11)
70	92.2 (249)	91.7 (11)
71	83.9 (224)	75.0 (9)
72	97.4 (263)	100.0 (11)
73	97.0 (263)	100.0 (12)
74	99.3 (273)	100.0 (12)
75	92.2 (248)	100.0 (11)
76	89.8 (239)	90.9 (10)
77	98.1 (264)	100.0 (12)
78	95.9 (260)	91.7 (11)

The second possible assigned duty from which participants selected was *Travel with Athletic Teams*. Table D10 displays the percent Pooled Importance responses for each competency by participants with and without the duty *Travel with Athletic Teams*.

Table D10

Percent Pooled Importance by Travel with Athletic Teams

Item	Travel with Athletic Teams	
	<u>Yes</u> % (<u>n</u>)	<u>No</u> % (<u>n</u>)
10	94.5 (256)	94.3 (50)
11	96.7 (263)	96.2 (51)
12	99.3 (269)	98.1 (52)
13	98.9 (270)	100.0 (53)
14	100.0 (272)	100.0 (53)
15	99.6 (265)	100.0 (53)
16	98.9 (263)	94.3 (50)
17	98.9 (261)	94.2 (49)
18	99.6 (265)	100.0 (53)
19	71.5 (188)	59.6 (31)
20	100.0 (263)	100.0 (53)
21	99.2 (259)	100.0 (53)
22	99.2 (259)	100.0 (53)
23	96.6 (254)	96.2 (51)
24	97.3 (254)	98.1 (52)
25	82.4 (210)	84.9 (45)
26	99.2 (251)	98.1 (52)
27	81.6 (208)	79.2 (42)
28	64.6 (164)	64.2 (34)
29	99.2 (253)	98.1 (520)
30	95.6 (240)	96.2 (51)
31	95.6 (241)	92.5 (49)
32	96.0 (240)	90.6 (48)
33	93.7 (2360)	92.5 (49)
34	99.2 (250)	98.1 (52)

(Table D10 continues)

(Table D10 continued)

Item	Travel with Athletic Teams	
	<u>Yes</u> % (<u>n</u>)	<u>No</u> % (<u>n</u>)
35	57.1 (141)	52.0 (26)
36	87.9 (217)	82.4 (42)
37	99.2 (246)	100.0 (52)
38	96.4 (238)	96.0 (48)
39	98.4 (242)	98.1 (51)
40	63.1 (154)	65.4 (34)
41	98.4 (2420)	96.2 (50)
42	99.2 (242)	98.1 (51)
43	100.0 (245)	100.0 (52)
44	96.3 (237)	94.2 (49)
45	97.1 (237)	94.0 (47)
46	93.4 (228)	89.8 (44)
47	93.4 (228)	89.8 (44)
48	97.1 (238)	98.0 (49)
49	99.2 (242)	96.0 (48)
50	81.4 (193)	76.0 (38)
51	100.0 (240)	98.0 (50)
52	92.9 (223)	84.3 (43)
53	96.7 (223)	98.0 (49)
54	100.0 (240)	100.0 (51)
55	90.0 (215)	92.2 (47)
56	77.1 (182)	74.5 (38)
57	90.6 (211)	92.0 (46)
58	82.7 (1960)	76.5 (39)
59	99.2 (237)	100.0 (51)
60	85.4 (204)	82.0 (41)
61	96.2 (229)	94.0 (47)

(Table D10 continues)

(Table D10 continued)

Item	Travel with Athletic Teams	
	<u>Yes</u>	<u>No</u>
	% (<u>n</u>)	% (<u>n</u>)
62	89.8 (211)	88.2 (45)
63	96.7 (232)	98.0 (49)
64	100.0 (239)	100.0 (51)
65	92.0 (219)	92.0 (46)
66	94.9 (225)	98.0 (50)
67	95.4 (226)	90.2 (46)
68	94.0 (220)	93.9 (46)
69	89.7 (209)	92.0 (46)
70	91.9 (2150)	93.8 (45)
71	84.8 (196)	77.1 (37)
72	97.8 (227)	95.9 (47)
73	98.3 (229)	92.0 (46)
74	99.2 (2360)	100.0 (49)
75	92.7 (216)	91.5 (43)
76	89.2 (206)	93.5 (43)
77	97.9 (228)	100.0 (48)
78	97.0 (227)	89.8 (44)

Table D11 displays the percent Pooled Importance frequencies for the third possible assigned duty *Clinical Preceptor*.

Table D11

Percent Pooled Importance by Clinical Preceptor

Item	Clinical Preceptor	
	<u>Yes</u>	<u>No</u>
	% (<u>n</u>)	% (<u>n</u>)
10	95.9 (165)	92.8 (141)
11	97.1 (167)	96.1 (147)
12	98.8 (169)	99.3 (152)
13	98.8 (171)	99.3 (152)

(Table D11 continues)

(Table D11 continued)

Item	Clinical Preceptor	
	<u>Yes</u> % (<u>n</u>)	<u>No</u> % (<u>n</u>)
14	100.0 (172)	100.0 (153)
15	99.4 (168)	100.0 (150)
16	97.6 (165)	98.7 (148)
17	97.6 (164)	98.6 (146)
18	99.4 (168)	100.0 (150)
19	73.1 (122)	65.5 (97)
20	100.0 (167)	100.0 (149)
21	98.8 (163)	100.0 (149)
22	98.8 (164)	100.0 (148)
23	96.4 (161)	96.6 (1440)
24	98.2 (1640)	96.6 (142)
25	87.1 (142)	77.9 (113)
26	98.8 (159)	99.3 (144)
27	79.8 (130)	82.8 (120)
28	67.9 (110)	60.7 (88)
29	98.8 (161)	99.3 (144)
30	96.3 (155)	95.1 (136)
31	95.0 (153)	95.1 (137)
32	95.7 (154)	94.4 (135)
33	92.5 (149)	94.4 (136)
34	99.4 (160)	98.6 (142)
35	57.1 (92)	55.1 (75)
36	85.1 (137)	89.1 (122)
37	99.4 (160)	99.3 (138)
38	95.7 (154)	97.1 (132)
39	98.1 (158)	98.5 (1350)
40	59.4 (95)	68.4 (93)
41	98.1 (157)	97.8 (135)
42	98.7 (156)	99.3 (137)
43	100.0 (160)	100.0 (137)
44	96.9 (154)	95.0 (132)
45	98.1 (155)	94.9 (129)
46	74.7 (118)	79.4 (108)
47	92.9 (145)	92.7 (127)
48	97.5 (154)	97.1 (133)
49	98.7 (155)	98.5 (135)

(Table D11 continues)

(Table D11 continued)

Item	Clinical Preceptor	
	<u>Yes</u> % (<u>n</u>)	<u>No</u> % (<u>n</u>)
50	83.4 (126)	77.2 (105)
51	100.0 (154)	99.3 (136)
52	94.8 (147)	87.5 (119)
53	96.8 (149)	97.1 (133)
54	100.0 (155)	100.0 (136)
55	90.2 (138)	90.5 (124)
56	78.3 (119)	74.8 (101)
57	91.9 (136)	89.6 (121)
58	84.9 (129)	77.9 (106)
59	99.4 (153)	99.3 (135)
60	86.4 (133)	83.0 (112)
61	96.7 (146)	94.9 (1300)
62	89.4 (135)	89.6 (121)
63	97.4 (149)	96.4 (1320)
64	100.0 (154)	100.0 (136)
65	91.4 (138)	92.7 (127)
66	96.1 (146)	94.9 (129)
67	97.4 (148)	91.2 (124)
68	92.1 (139)	96.2 (127)
69	90.0 (135)	90.2 (120)
70	95.3 (141)	88.8 (119)
71	87.6 (127)	79.1 (106)
72	98.6 (146)	96.2 (128)
73	96.6 (143)	97.8 (132)
74	98.7 (149)	100.0 (136)
75	93.2 (138)	91.7 (121)
76	91.0 (132)	88.6 (117)
77	98.0 (147)	98.5 (129)
78	98.0 (146)	93.3 (125)

Table D12 displays the response frequencies for each competency by the duty *Course Instructor*.

Table D12

Pooled Importance Frequencies by Course Instructor

Item	Course Instructor	
	<u>Yes</u> % (n)	<u>No</u> % (n)
10	94.6 (122)	94.4 (184)
11	95.3 (122)	97.5 (192)
12	99.2 (127)	99.0 (194)
13	98.4 (127)	99.5 (196)
14	100.0 (128)	100.0 (197)
15	99.2 (127)	100.0 (191)
16	96.9 (124)	99.0 (189)
17	96.9 (124)	98.9 (186)
18	99.2 (127)	100.0 (191)
19	64.6 (82)	72.9 (137)
20	100.0 (126)	100.0 (190)
21	99.2 (124)	99.5 (188)
22	98.4 (124)	100.0 (188)
23	94.4 (119)	97.9 (186)
24	97.6 (123)	97.3 (183)
25	82.3 (102)	83.2 (1530)
26	97.5 (119)	100.0 (184)
27	80.6 (100)	81.5 (150)
28	69.4 (86)	61.2 (112)
29	98.4 (122)	99.5 (183)
30	94.3 (1160)	96.7 (175)
31	92.7 (114)	96.7 (176)
32	94.3 (116)	95.6 (173)
33	92.7 (114)	94.0 (171)

(Table D12 continues)

(Table D12 continued)

Item	Course Instructor	
	<u>Yes</u> % (<u>n</u>)	<u>No</u> % (<u>n</u>)
34	98.4 (121)	99.5 (181)
35	59.5 (72)	54.0 (95)
36	83.6 (102)	89.2 (157)
37	99.2 (121)	99.4 (177)
38	94.2 (114)	97.7 (172)
39	98.4 (120)	98.3 (173)
40	63.0 (75)	63.8 (113)
41	97.5 (116)	98.3 (176)
42	99.2 (118)	98.9 (175)
43	100.0 (118)	100.0 (179)
44	96.6 (115)	95.5 (171)
45	98.3 (116)	95.5 (168)
46	72.9 (86)	79.5 (140)
47	91.5 (108)	93.7 (164)
48	98.3 (116)	96.6 (171)
49	97.4 (114)	99.4 (176)
50	79.3 (92)	81.3 (139)
51	100.0 (116)	99.4 (174)
52	90.5 (105)	92.0 (161)
53	95.7 (111)	97.7 (171)
54	100.0 (117)	100.0 (174)
55	90.4 (103)	90.3 (159)
56	82.3 (93)	73.0 (127)
57	91.2 (103)	90.6 (154)
58	77.2 (88)	84.5 (147)

(Table D12 continues)

(Table D12 continued)

Item	Course Instructor	
	<u>Yes</u> % (<u>n</u>)	<u>No</u> % (<u>n</u>)
59	98.3 (113)	100.0 (175)
60	89.7 (104)	81.5 (141)
61	96.5 (111)	95.4 (165)
62	90.4 (104)	88.9 (1520)
63	98.3 (114)	96.0 (167)
64	100.0 (116)	100.0 (174)
65	94.8 (109)	90.2 (156)
66	98.2 (112)	93.7 (163)
67	94.7 (108)	94.3 (164)
68	92.8 (103)	94.8 (163)
69	87.5 (98)	91.8 (157)
70	92.0 (103)	92.4 (157)
71	84.1 (95)	83.1 (138)
72	97.3 (110)	97.6 (164)
73	97.3 (110)	97.1 (165)
74	99.1 (113)	99.4 (172)
75	95.5 (106)	90.5 (153)
76	89.0 (97)	90.5 (152)
77	100.0 (111)	97.1 (165)
78	94.6 (105)	96.5 (166)

The fourth assigned duty from which respondents could select was *Athletic Training/Health Care Administration*. Table D13 displays the Pooled Importance frequencies for the competencies by *Athletic Training/Health Care Administration*.

Table D13

Pooled Importance Frequency by Athletic Training/Health Care Administration
Administration Duties

Item	<u>Yes</u>	<u>No</u>
	% (n)	% (n)
10	94.3 (300)	100.0 (6)
11	96.6 (308)	100.0 (6)
12	99.1 (315)	100.0 (6)
13	99.1 (317)	100.0 (6)
14	100.0 (319)	100.0 (6)
15	99.7 (312)	100.0 (6)
16	98.1 (307)	100.0 (6)
17	98.1 (304)	100.0 (6)
18	99.7 (312)	100.0 (6)
19	69.3 (214)	83.3 (5)
20	100.0 (311)	100.0 (5)
21	99.4 (307)	100.0 (5)
22	99.4 (307)	100.0 (5)
23	96.5 (300)	100.0 (5)
24	97.4 (301)	100.0 (5)
25	83.8 (254)	20.0 (1)
26	99.0 (298)	100.0 (5)
27	81.5 (247)	60.0 (3)
28	64.9 (196)	40.0 (2)
29	99.0 (300)	100.0 (5)
30	96.0 (287)	80.0 (4)
31	95.0 (285)	100.0 (5)
32	95.0 (284)	100.0 (5)
33	93.7 (281)	80.0 (4)

(Table D13 continues)

(Table D13 continued)

Item	Administration Duties	
	<u>Yes</u> % (n)	<u>No</u> % (n)
34	99.0 (297)	100.0 (5)
35	56.0 (164)	75.0 (3)
36	87.4 (256)	60.0 (3)
37	99.3 (293)	100.0 (5)
38	96.2 (281)	100.0 (5)
39	98.3 (288)	100.0 (5)
40	63.9 (186)	40.0 (2)
41	98.0 (287)	100.0 (5)
42	99.0 (288)	100.0 (5)
43	100.0 (292)	100.0 (5)
44	95.9 (281)	100.0 (5)
45	96.5 (279)	100.0 (5)
46	76.8 (222)	80.0 (4)
47	92.7 (267)	100.0 (5)
48	97.2 (282)	100.0 (5)
49	98.6 (285)	100.0 (5)
50	80.5 (227)	80.0 (4)
51	99.7 (285)	100.0 (5)
52	91.6 (262)	80.0 (4)
53	100.0 (287)	100.0 (4)
54	100.0 (286)	100.0 (5)
55	90.2 (257)	100.0 (5)
56	76.6 (2160)	80.0 (4)
57	91.0 (253)	80.0 (4)
58	81.6 (231)	80.0 (4)
59	99.3 (283)	100.0 (5)

(Table D13 continues)

(Table D13 continued)

Item	Administration Duties	
	<u>Yes</u> % (<u>n</u>)	<u>No</u> % (<u>n</u>)
60	84.5 (240)	100.0 (5)
61	95.8 (271)	100.0 (5)
62	89.7 (252)	80.0 (4)
63	96.8 (276)	100.0 (5)
64	100.0 (285)	100.0 (5)
65	91.9 (260)	100.0 (5)
66	95.4 (270)	100.0 (5)
67	94.3 (267)	100.0 (5)
68	93.9 (261)	100.0 (5)
69	89.9 (250)	100.0 (5)
70	92.1 (255)	100.0 (5)
71	83.6 (229)	80.0 (4)
72	97.5 (269)	100.0 (5)
73	97.1 (270)	100.0 (5)
74	99.3 (280)	100.0 (5)
75	92.4 (254)	100.0 (5)
76	90.1 (245)	80.0 (4)
77	98.2 (271)	100.0 (5)
78	95.7 (266)	100.0 (5)

The final assigned duty option was *Departmental or Institutional Committee Assignments* for which the percent Pooled Importance frequencies are displayed in Table D14.

Table D14

Percent Pooled Importance by Departmental or Institutional Committee Assignments

Item	Committee Assignments	
	<u>Yes</u> % (<u>n</u>)	<u>No</u> % (<u>n</u>)
10	94.9 (222)	93.3 (84)
11	97.0 (229)	95.5 (85)
12	99.1 (232)	98.9 (89)
13	98.7 (233)	100.0 (90)
14	100.0 (235)	100.0 (90)
15	99.6 (229)	100.0 (89)
16	98.7 (227)	96.6 (86)
17	98.2 (223)	97.8 (87)
18	99.6 (229)	100.0 (89)
19	68.1 (154)	73.0 (65)
20	100.0 (228)	100.0 (88)
21	99.6 (226)	98.9 (86)
22	99.1 (224)	100.0 (88)
23	96.9 (221)	95.5 (84)
24	98.7 (223)	94.3 (83)
25	83.4 (186)	81.2 (69)
26	98.6 (218)	100.0 (85)
27	82.5 (184)	77.6 (66)
28	67.1 (149)	57.6 (49)
29	98.7 (220)	100.0 (85)
30	95.9 (211)	95.2 (80)
31	94.1 (208)	97.6 (82)
32	96.4 (212)	91.7 (77)
33	93.2 (206)	94.0 (79)
34	99.5 (219)	97.6 (83)

(Table D14 continues)

(Table D14 continued)

Item	Committee Assignments	
	<u>Yes</u> % (<u>n</u>)	<u>No</u> % (<u>n</u>)
35	54.0 (116)	62.2 (51)
36	87.0 (188)	86.6 (71)
37	99.1 (215)	100.0 (83)
38	96.8 (210)	95.0 (76)
39	98.6 (212)	97.6 (81)
40	62.0 (132)	67.5 (56)
41	98.1 (210)	97.6 (82)
42	99.1 (210)	98.8 (83)
43	100.0 (213)	100.0 (84)
44	96.7 (207)	94.0 (79)
45	96.2 (202)	97.6 (82)
46	77.1 (1620)	76.2 (64)
47	91.4 (191)	96.4 (81)
48	97.6 (207)	96.4 (80)
49	99.0 (208)	97.6 (82)
50	80.9 (165)	79.5 (66)
51	99.5 (206)	100.0 (84)
52	92.3 (191)	89.3 (75)
53	96.6 (200)	97.6 (82)
54	100.0 (208)	100.0 (83)
55	89.8 (185)	91.7 (77)
56	76.5 (156)	77.1 (64)
57	90.5 (181)	91.6 (76)
58	83.3 (170)	77.4 (650)
59	100.0 (206)	97.6 (82)
60	84.4 (173)	85.7 (72)
61	95.6 (196)	96.4 (80)

(Table D14 continues)

(Table D14 continued)

Item	Committee Assignments	
	<u>Yes</u> % (<u>n</u>)	<u>No</u> % (<u>n</u>)
62	89.1 (180)	90.5 (76)
63	96.6 (200)	97.6 (81)
64	100.0 (206)	100.0 (84)
65	91.7 (187)	92.9 (78)
66	96.1 (196)	94.0 (79)
67	96.1 (196)	90.5 (76)
68	94.0 (188)	94.0 (78)
69	89.0 (178)	92.8 (77)
70	92.5 (184)	91.6 (76)
71	82.6 (161)	85.7 (72)
72	98.0 (193)	96.4 (81)
73	97.0 (194)	97.6 (81)
74	99.0 (201)	100.0 (84)
75	92.0 (183)	93.8 (76)
76	91.8 (180)	85.2 (69)
77	98.5 (198)	97.5 (78)
78	97.5 (197)	91.4 (74)

Respondents were asked to indicate their gender for Questionnaire Item 3. A gender was not selected by 2 respondents but the remaining 324 respondents were 35.3% female and 64.1% male. Table D15 displays the percent Pooled Importance responses by gender.

Table D15

Percent Pooled Importance by Gender

Item	Competency	Gender	
		Female % (n)	Male % (n)
10	Advocate	95.7 (110)	94.2 (195)
11	Change Agent (bravery)	96.5 (110)	96.7 (202)
12	Change Agent (proactive)	100 (115)	98.6 (204)
13	Contextual Intelligence	100 (115)	98.6 (206)
14	Credible	100 (115)	100 (208)
15	Crisis Management (problem solving)	100 (114)	99.5 (202)
16	Crisis Management (conflict resolution)	98.2 (112)	98.0 (199)
17	Critical Thinker	99.1 (111)	97.5 (197)
18	Dedicated	100 (114)	99.5 (202)
19	Effective and Constructive Use of Influence (powerful image)	74.1 (83)	67.2 (135)
20	Ethical (treatment)	100 (114)	100 (201)
21	Ethical (report)	99.1 (113)	99.5 (198)
22	Excellent Verbal Communication Skills	99.1 (112)	99.5 (199)
23	Intentional Leadership (assess)	97.4 (111)	96.0 (193)
24	Intentional Leadership (improvement)	98.2 (111)	97.0 (194)
25	Leadership Planner	88.3 (98)	79.6 (156)
26	Resilience	99.1 (110)	99.0 (192)
27	Socially Responsible (concern)	83.8 (93)	79.6 (156)

(Table D15 continues)

(Table D15 continued)

Item	Competency	Gender	
		Female	Male
		% (n)	% (n)
28	Socially Responsible (volunteer)	74.8 (83)	58.5 (114)
29	Thrives on Responsibility	99.1 (110)	99.0 (194)
30	Utilizes Appropriate Leadership Styles (transition)	96.4 (106)	95.3 (184)
31	Excellent Written Communication Skills	96.4 (106)	94.3 (183)
32	Uses Body-Language	95.5 (105)	95.3 (184)
33	Empathetic (co-workers)	90.0 (99)	95.4 (185)
34	Empathetic (exhibit empathy)	99.1 (108)	99.0 (193)
35	Empathetic (risks)	55.2 (58)	57.1 (109)
36	Applies Known and Attained Knowledge	87.7 (93)	86.4 (165)
37	Responsible for Actions	100 (106)	99.0 (191)
38	Ambitious	94.3 (100)	97.4 (185)
39	Assertive	97.2 (104)	98.9 (188)
40	Scholarship	61.9 (65)	64.2 (122)
41	Emotionally Stable (manage stress)	99.1 (106)	97.4 (185)
42	Emotionally Stable (calm)	98.1 (105)	99.5 (187)
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	100 (107)	100 (189)
44	Willing to Take Appropriate Risk	96.2 (102)	95.8 (183)
45	Improves Morale	98.1 (104)	96.3 (180)

(Table D15 continues)

(Table D15 continued)

Item	Competency	Gender	
		Female	Male
		% (n)	% (n)
46	Utilizes Appropriate Leadership Styles (recognize)	75.7 (81)	78.0 (145)
47	Courageous Leadership	93.3 (98)	93.0 (174)
48	Open-Mindedness	97.1 (102)	97.4 (184)
49	Protector	98.1 (105)	98.9 (184)
50	Leads Quietly (patiently)	81.7 (85)	79.7 (145)
51	Organizationally Savvy (interact)	99.1 (105)	100 (184)
52	Leads Quietly (do right)	96.2 (101)	88.7 (165)
53	Creative/ Innovative Leadership	96.2 (100)	97.3 (181)
54	Knowledgeable	100 (106)	100 (184)
55	Empowerment (encourage)	84.9 (90)	93.4 (171)
56	Empowerment (ensure)	75.0 (78)	78.0 (142)
57	Ensures an Awareness of Mission	90.3 (93)	91.1 (163)
58	Leads Quietly (modesty)	73.6 (78)	86.2 (156)
59	Nurtures Professional Relationships	98.1 (105)	100 (182)
60	Identifies Leaders	85.8 (91)	84.1 (153)
61	Organizationally Savvy (observe)	95.2 (100)	96.2 (175)
62	Utilizes Appropriate Leadership Styles (variety)	91.5 (97)	88.3 (159)
63	Future-Minded	96.2 (102)	97.3 (178)
64	Ethical (promote)	100 (107)	100 (182)

(Table D15 continues)

(Table D15 continued)

Item	Competency	Gender	
		Female	Male
		% (n)	% (n)
65	Collaborator (achieve goals)	92.5 (98)	91.7 (1660)
66	Collaborator (promote health)	98.1 (104)	94.0 (171)
67	Consensus Builder	97.2 (103)	92.8 (168)
68	Influencer	94.1 (96)	93.9 (169)
69	Cultural Sensitivity (promote diversity)	91.3 (94)	89.4 (160)
70	Cultural Sensitivity (interaction)	92.1 (93)	92.2 (166)
71	Effective and Constructive Use of Influence (affect behavior)	87.1 (88)	81.4 (144)
72	Delegates Effectively	97.1 (100)	97.7 (173)
73	Controls Risk (strategies)	97.1 (101)	97.2 (173)
74	Controls Risk (improve quality)	100 (105)	98.9 (179)
75	Time Management	92.2 (94)	92.7 (164)
76	Multicultural Leadership	92.9 (92)	88.1 (156)
77	Disciplined	98.0 (99)	98.3 (176)
78	Organizationally Savvy (participate)	96.2 (100)	95.5 (170)

Respondents were asked if they had been elected or appointed to a leadership position at the local, state, district, or national level. Of the 325 respondents completing the item, 30.4% indicated that they had served in a leadership position while 69.5% answered that they had not. Table D16 displays the percent Pooled Importance for the competencies based on whether or not the respondents had served in a leadership position.

Table D16

Percent Pooled Importance by Leadership Position

Item	Competency	Leadership Position	
		Yes	No
		% (n)	% (n)
10	Advocate	92.9 (91)	95.1 (214)
11	Change Agent (bravery)	95.9 (94)	96.9 (219)
12	Change Agent (proactive)	99.0 (97)	99.1 (223)
13	Contextual Intelligence	99.0 (98)	99.1 (224)
14	Credible	100 (98)	100 (226)
15	Crisis Management (problem solving)	99.0 (96)	100 (221)
16	Crisis Management (conflict resolution)	97.9 (95)	98.2 (217)
17	Critical Thinker	100 (96)	97.3 (213)
18	Dedicated	99.0 (96)	100 (221)
19	Effective and Constructive Use of Influence (powerful image)	75.8 (72)	66.7 (146)
20	Ethical (treatment)	100 (97)	100 (218)
21	Ethical (report)	99.0 (95)	99.5 (216)
22	Excellent Verbal Communication Skills	99.0 (96)	99.5 (215)
23	Intentional Leadership (assess)	96.9 (94)	96.3 (210)
24	Intentional Leadership (improvement)	96.9 (94)	97.7 (211)
25	Leadership Planner	83.9 (78)	82.2 (176)
26	Resilience	98.9 (91)	99.1 (211)
27	Socially Responsible (concern)	83.0 (78)	80.3 (171)

(Table D16 continues)

(Table D16 continued)

Item	Competency Title	Leadership Position	
		Yes	No
		% (n)	% (n)
28	Socially Responsible (volunteer)	68.8 (64)	62.9 (134)
29	Thrives on Responsibility	97.9 (92)	99.5 (212)
30	Utilizes Appropriate Leadership Styles (transition)	95.6 (87)	95.8 (203)
31	Excellent Written Communication Skills	95.7 (88)	94.8 (201)
32	Uses Body-Language	98.9 (91)	93.4 (197)
33	Empathetic (co-workers)	96.7 (89)	92.0 (195)
34	Empathetic (exhibit empathy)	100 (92)	98.6 (209)
35	Empathetic (risks)	65.6 (59)	51.9 (107)
36	Applies Known and Attained Knowledge	87.6 (78)	87.0 (181)
37	Responsible for Actions	98.9 (90)	99.5 (207)
38	Ambitious	95.5 (85)	96.6 (200)
39	Assertive	98.9 (90)	98.1 (202)
40	Scholarship	75.0 (66)	58.9 (122)
41	Emotionally Stable (manage stress)	100 (89)	97.1 (202)
42	Emotionally Stable (calm)	100 (88)	98.6 (204)
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	100 (87)	100 (209)
44	Willing to Take Appropriate Risk	94.4 (84)	96.6 (201)
45	Improves Morale	97.7 (85)	96.1 (198)
46	Utilizes Appropriate Leadership Styles (recognize)	77.3 (68)	76.6 (157)
47	Courageous Leadership	90.9 (80)	93.6 (191)

(Table D16 continues)

(Table D16 continued)

Item	Competency Title	Leadership Position	
		Yes	No
		% (n)	% (n)
48	Open-Mindedness	94.4 (84)	98.5 (202)
49	Protector	97.7 (86)	99.0 (203)
50	Leads Quietly (patiently)	85.9 (73)	78.1 (157)
51	Organizationally Savvy (interact)	100 (86)	99.5 (203)
52	Leads Quietly (do right)	92.0 (80)	91.1 (185)
53	Creative/ Innovative Leadership	94.3 (82)	98.0 (199)
54	Knowledgeable	100 (85)	100 (205)
55	Empowerment (encourage)	94.0 (79)	88.8 (182)
56	Empowerment (ensure)	80.7 (67)	75.4 (153)
57	Ensures an Awareness of Mission	90.0 (72)	91.1 (184)
58	Leads Quietly (modesty)	85.7 (72)	79.8 (162)
59	Nurtures Professional Relationships	98.8 (83)	99.5 (204)
60	Identifies Leaders	85.7 (72)	84.3 (172)
61	Organizationally Savvy (observe)	98.8 (83)	94.6 (192)
62	Utilizes Appropriate Leadership Styles (variety)	89.2 (74)	89.6 (181)
63	Future-Minded	92.9 (78)	98.5 (202)
64	Ethical (promote)	100 (84)	100 (205)
65	Collaborator (achieve goals)	92.7 (76)	91.7 (188)
66	Collaborator (promote health)	95.2 (79)	95.6 (195)

(Table D16 continues)

(Table D16 continued)

Item	Competency Title	Leadership Position	
		Yes	No
		% (n)	% (n)
67	Consensus Builder	96.4 (80)	93.6 (191)
68	Influencer	100 (83)	91.5 (182)
69	Cultural Sensitivity (promote diversity)	96.3 (78)	87.6 (176)
70	Cultural Sensitivity (interaction)	96.3 (79)	91.0 (181)
71	Effective and Constructive Use of Influence (affect behavior)	85.2 (69)	82.8 (164)
72	Delegates Effectively	97.6 (80)	97.5 (193)
73	Controls Risk (strategies)	96.3 (79)	97.5 (195)
74	Controls Risk (improve quality)	98.8 (82)	99.5 (202)
75	Time Management	93.8 (76)	92.0 (183)
76	Multicultural Leadership	93.9 (77)	88.2 (172)
77	Disciplined	100 (82)	97.5 (193)
78	Organizationally Savvy (participate)	96.4 (80)	95.5 (190)

Respondents were asked to indicate the National Athletic Trainers' Association (NATA) District in which their institution was located. This information was used as a comparison point with the population of athletic trainers as well as for hypothesis testing. Table D17 displays the respondents by District. Table D18 includes the percent Pooled Importance by NATA district.

Table D17

Respondents by NATA District

Response	Frequency	
	Absolute	Relative
District 1	24	7.4
District 2	40	12.3
District 3	48	14.7
District 4	55	16.9
District 5	36	11.0
District 6	12	3.7
District 7	16	4.9
District 8	25	7.7
District 9	50	15.3
District 10	16	4.9
Missing	4	1.2
Total	326	100.0

Table D18

Percent of Pooled Importance by NATA District

Item	NATA District									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
10	91.7 (22)	95.0 (38)	95.8 (46)	90.9 (50)	100.0 (36)	91.7 (11)	87.5 (14)	96.0 (24)	95.9 (47)	93.3 (14)
11	91.7 (22)	95.0 (38)	100.0 (48)	96.4 (34)	97.1 (34)	100.0 (12)	93.8 (15)	96.0 (24)	96.0 (48)	100.0 (16)
12	95.8 (23)	100.0 (40)	97.9 (46)	100.0 (54)	97.2 (35)	100.0 (12)	100.0 (16)	100.0 (25)	100.0 (50)	100.0 (16)
13	100.0 (24)	100.0 (40)	97.9 (47)	98.2 (54)	100.0 (36)	100.0 (12)	100.0 (16)	100.0 (25)	100.0 (50)	93.8 (15)
14	100.0 (24)	100.0 (40)	100.0 (48)	100.0 (55)	100.0 (36)	100.0 (11)	100.0 (16)	100.0 (25)	100.0 (50)	100.0 (16)

(Table D18 continues)

(Table D18 continued)

Item	NATA District									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
15	95.8 (23)	100.0 (39)	100.0 (47)	100.0 (53)	100.0 (36)	100.0 (12)	100.0 (16)	100.0 (24)	100.0 (49)	100.0 (16)
16	95.8 (23)	100.0 (39)	97.9 (46)	98.1 (52)	97.2 (35)	100.0 (12)	93.8 (15)	100.0 (24)	98.0 (48)	100.0 (16)
17	100.0 (22)	92.3 (36)	97.9 (46)	100.0 (53)	97.1 (34)	100.0 (12)	100.0 (16)	100.0 (24)	98.0 (48)	100.0 (16)
18	95.8 (23)	100.0 (39)	100.0 (47)	100.0 (53)	100.0 (36)	100.0 (12)	100.0 (16)	100.0 (24)	100.0 (49)	100.0 (16)
19	63.6 (14)	79.5 (31)	71.7 (33)	75.5 (40)	61.1 (22)	83.3 (10)	68.8 (11)	66.7 (16)	61.2 (30)	73.3 (11)
20	100.0 (24)	100.0 (40)	100.0 (47)	100.0 (52)	100.0 (35)	100.0 (12)	100.0 (16)	100.0 (24)	100.0 (49)	100.0 (15)
21	100.0 (24)	97.4 (38)	100.0 (47)	100.0 (52)	97.1 (34)	100.0 (12)	100.0 (16)	100.0 (24)	100.0 (48)	100.0 (15)
22	95.8 (23)	100.0 (40)	100.0 (47)	100.0 (51)	100.0 (35)	100.0 (12)	100.0 (16)	100.0 (24)	97.9 (47)	100.0 (15)
23	95.8 (23)	97.5 (39)	97.9 (46)	98.1 (51)	85.7 (30)	100.0 (12)	100.0 (16)	100.0 (24)	95.9 (47)	100.0 (15)
24	95.7 (22)	100.0 (39)	95.7 (45)	94.2 (49)	94.3 (33)	100.0 (12)	100.0 (16)	100.0 (24)	100.0 (49)	100.0 (15)
25	66.7 (16)	82.5 (33)	83.0 (39)	79.2 (42)	82.4 (28)	100.0 (12)	93.3 (14)	100.0 (23)	84.1 (37)	71.4 (10)
26	95.8 (23)	97.4 (38)	100.0 (47)	100.0 (52)	100.0 (34)	100.0 (12)	100.0 (15)	100.0 (23)	97.7 (42)	100.0 (15)
27	79.2 (19)	85.0 (34)	76.6 (36)	86.8 (46)	76.5 (26)	75.0 (9)	80.0 (12)	95.7 (22)	79.1 (34)	66.7 (10)
28	62.5 (15)	66.7 (26)	70.2 (33)	69.8 (37)	64.7 (22)	75.0 (9)	80.0 (12)	65.2 (15)	51.2 (22)	40.0 (6)
29	100.0 (24)	97.5 (39)	97.9 (46)	98.1 (52)	100.0 (34)	100.0 (12)	100.0 (15)	100.0 (23)	100.0 (43)	100.0 (15)
30	91.3 (21)	97.5 (39)	95.7 (44)	100.0 (52)	93.8 (30)	100.0 (12)	100.0 (15)	95.7 (22)	93.2 (41)	93.3 (14)
31	91.7 (22)	95.0 (38)	95.7 (44)	94.2 (49)	93.8 (30)	100.0 (12)	100.0 (15)	91.3 (21)	97.7 (43)	100.0 (15)
32	83.3 (20)	95.0 (38)	93.5 (43)	96.1 (49)	96.9 (31)	100.0 (12)	100.0 (15)	95.7 (22)	100.0 (44)	93.3 (14)
33	79.2 (19)	92.5 (37)	95.7 (44)	96.2 (50)	93.8 (30)	100.0 (12)	100.0 (15)	91.3 (21)	90.9 (40)	100.0 (15)

(Table D18 continues)

(Table D18 continued)

Item	NATA District									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
34	100.0 (24)	100.0 (40)	97.8 (45)	100.0 (53)	100.0 (32)	100.0 (12)	100.0 (15)	100.0 (22)	97.7 (43)	93.3 (14)
35	39.1 (9)	50.0 (18)	59.6 (28)	60.8 (31)	67.7 (21)	75.0 (9)	66.7 (10)	50.0 (11)	53.5 (23)	46.7 (7)
36	90.9 (20)	89.2 (33)	91.5 (43)	94.2 (49)	78.1 (25)	83.3 (10)	73.3 (11)	86.4 (19)	83.3 (35)	80.0 (12)
37	100.0 (23)	100.0 (37)	97.8 (45)	100.0 (52)	100.0 (32)	100.0 (12)	100.0 (15)	100.0 (22)	100.0 (44)	93.3 (14)
38	82.6 (19)	97.2 (35)	97.8 (45)	98.0 (50)	96.9 (31)	100.0 (12)	100.0 (15)	100.0 (22)	97.7 (42)	86.7 (13)
39	91.3 (21)	100.0 (35)	95.7 (45)	98.1 (51)	100.0 (31)	100.0 (12)	100.0 (15)	100.0 (22)	100.0 (44)	100.0 (15)
40	54.5 (12)	62.9 (22)	73.9 (34)	62.7 (32)	62.5 (20)	58.3 (7)	73.3 (11)	65.2 (15)	58.1 (25)	53.3 (8)
41	100.0 (23)	97.2 (35)	97.8 (45)	98.0 (50)	96.9 (31)	100.0 (12)	100.0 (15)	100.0 (23)	95.3 (41)	100.0 (15)
42	100.0 (23)	100.0 (35)	97.8 (44)	96.1 (49)	100.0 (32)	100.0 (12)	100.0 (15)	100.0 (23)	100.0 (44)	100.0 (14)
43	100.0 (22)	100.0 (36)	100.0 (46)	100.0 (51)	100.0 (32)	100.0 (11)	100.0 (15)	100.0 (23)	100.0 (44)	100.0 (15)
44	82.6 (19)	94.4 (34)	97.8 (44)	98.0 (50)	100.0 (32)	100.0 (12)	93.3 (14)	95.7 (22)	95.5 (42)	100.0 (15)
45	95.7 (22)	94.4 (34)	93.5 (43)	97.9 (47)	93.5 (29)	100.0 (12)	100.0 (15)	100.0 (23)	100.0 (43)	100.0 (15)
46	63.6 (14)	77.1 (27)	80.4 (37)	77.6 (38)	64.5 (20)	75.0 (9)	93.3 (14)	82.6 (19)	84.1 (37)	66.7 (10)
47	86.4 (19)	100.0 (34)	93.6 (44)	98.0 (48)	96.8 (30)	91.7 (11)	86.7 (13)	91.3 (21)	88.4 (38)	86.7 (13)
48	95.7 (22)	94.3 (33)	95.7 (45)	100.0 (49)	100.0 (31)	100.0 (12)	93.3 (14)	100.0 (23)	95.3 (41)	100.0 (15)
49	100.0 (22)	97.2 (35)	97.8 (45)	100.0 (49)	96.8 (30)	100.0 (12)	93.3 (14)	100.0 (23)	100.0 (44)	100.0 (14)
50	81.0 (17)	75.8 (25)	76.1 (35)	81.6 (40)	70.0 (21)	91.7 (11)	100.0 (15)	87.0 (20)	81.0 (34)	78.6 (11)
51	95.5 (21)	100.0 (33)	100.0 (47)	100.0 (49)	100.0 (31)	100.0 (12)	100.0 (15)	100.0 (21)	100.0 (44)	100.0 (15)
52	90.9 (20)	93.9 (31)	87.2 (41)	93.9 (46)	86.7 (26)	83.3 (10)	100.0 (15)	100.0 (23)	93.2 (41)	86.7 (13)

(Table D18 continues)

(Table D18 continued)

Item	NATA District									
	<u>1</u> % (n)	<u>2</u> % (n)	<u>3</u> % (n)	<u>4</u> % (n)	<u>5</u> % (n)	<u>6</u> % (n)	<u>7</u> % (n)	<u>8</u> % (n)	<u>9</u> % (n)	<u>10</u> % (n)
53	100.0 (21)	100.0 (34)	91.5 (43)	97.9 (47)	96.8 (30)	100.0 (12)	100.0 (15)	95.7 (22)	97.7 (42)	100.0 (15)
54	100.0 (22)	100.0 (32)	100.0 (47)	100.0 (49)	100.0 (30)	100.0 (12)	100.0 (15)	100.0 (23)	100.0 (44)	100.0 (15)
55	90.9 (20)	84.8 (28)	95.7 (44)	85.4 (41)	87.1 (27)	91.7 (11)	100.0 (15)	91.3 (21)	88.4 (38)	100.0 (15)
56	54.5 912)	75.8 (25)	86.7 (39)	64.4 (31)	83.3 (25)	83.3 (10)	80.0 (12)	87.0 (20)	81.0 (34)	73.3 (11)
57	85.7 (18)	87.1 (27)	91.1 (41)	87.2 (41)	96.7 (29)	90.9 (10)	93.3 (14)	91.3 (21)	97.7 (42)	86.7 (13)
58	90.9 (20)	78.1 (25)	73.9 (34)	89.6 (43)	80.0 (24)	100.0 (12)	86.7 (13)	87.0 (20)	72.1 (31)	80.0 (12)
59	95.5 (21)	100.0 (33)	100.0 (47)	100.0 (47)	96.8 (30)	100.0 (12)	100.0 (12)	100.0 (23)	100.0 (43)	100.0 (15)
60	76.2 (16)	78.8 (26)	85.1 (40)	87.5 9420	83.9 (26)	83.3 (10)	86.7 (13)	90.9 (20)	86.0 (37)	86.7 (13)
61	100.0 (21)	90.9 (30)	93.6 (44)	97.9 (47)	96.7 (29)	100.0 (12)	100.0 (15)	95.7 (22)	92.9 (39)	100.0 (15)
62	80.0 (16)	94.1 (32)	89.1 (41)	89.4 (42)	86.7 (26)	83.3 (10)	86.7 (13)	95.7 (22)	95.3 (41)	86.7 (13)
63	90.5 (19)	97.1 (33)	97.8 (45)	97.9 (47)	96.8 (30)	100.0 (12)	93.3 (14)	100.0 (23)	100.0 (43)	86.7 (13)
64	100.0 (20)	100.0 (34)	100.0 (47)	100.0 (48)	100.0 (31)	100.0 (12)	100.0 (15)	100.0 (23)	100.0 (43)	100.0 (15)
65	85.0 (17)	90.9 (30)	93.6 (44)	89.6 (43)	90.3 (28)	100.0 (12)	100.0 (15)	87.0 (20)	95.2 (40)	93.3 (14)
66	100.0 (20)	91.2 (31)	89.4 (42)	95.8 (46)	96.7 (29)	100.0 (12)	93.3 (14)	100.0 (23)	100.0 (43)	93.3 (14)
67	90.0 (18)	88.2 (30)	91.3 (42)	95.8 (46)	96.7 (29)	100.0 (12)	100.0 (15)	95.7 (22)	95.3 (41)	100.0 (15)
68	85.0 (17)	93.3 (31)	88.9 (40)	97.9 (47)	90.0 (27)	100.0 (12)	100.0 (14)	95.5 (21)	97.6 (41)	93.3 (14)
69	88.9 (16)	88.2 (30)	82.2 (37)	93.8 (45)	89.7 (26)	100.0 (12)	100.0 (15)	95.7 (22)	90.5 (38)	80.0 (12)
70	89.5 (17)	93.9 (31)	87.2 (41)	93.6 (44)	89.7 (26)	100.0 (12)	93.3 (14)	95.7 (22)	90.2 (37)	100.0 (14)
71	60.0 (12)	80.0 (24)	89.1 (41)	85.1 (40)	82.8 (24)	83.3 (10)	85.7 (12)	87.0 (20)	88.1 (37)	85.7 (12)

(Table 18 continues)

(Table 18 continued)

Item	NATA District									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
74	95.0 (19)	100.0 (34)	97.9 (46)	100.0 (47)	100.0 (30)	100.0 (11)	100.0 (15)	100.0 (23)	100.0 (43)	100.0 (15)
75	78.9 (15)	87.9 (29)	93.6 (44)	93.6 (44)	92.6 (25)	90.9 (10)	92.9 (13)	100.0 (22)	97.7 (42)	86.7 (13)
76	89.5 (17)	81.3 (26)	86.7 (39)	95.7 (45)	85.2 (23)	100.0 (12)	100.0 (14)	85.7 (18)	88.4 (38)	100.0 (15)
77	95.0 (19)	100.0 (34)	95.7 (44)	100.0 (47)	100.0 (28)	100.0 (12)	100.0 (15)	95.0 (19)	97.6 (41)	100.0 (15)
78	94.7 (18)	97.1 (33)	93.6 (44)	97.9 (46)	89.3 (25)	100.0 (12)	100.0 (15)	100.0 (22)	97.6 (41)	86.7 (13)

Inferential Statistical Analysis

Spearman rho correlation calculations were conducted to determine the presence of relationships between the four-choice level of importance assigned to the competencies and the demographic information collected at the ordinal level of measurement. Tables D19 display the results of this analysis.

Table D19

Spearman Rho for Level of Importance by Athletic Competition Division and Age

Item	Competency	Descriptor	Athletic Competition Division			Age		
			<u>n</u>	<i>p</i>	<i>r</i>	<u>n</u>	<i>p</i>	<i>r</i>
10	Advocate	Take responsibility for actions of others, defends actions of others, and act when appropriate as an advocate for others.	320	.31	.06	324	.77	-.02
11	Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	321	.05	.11*	325	.04	.12*

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
12	Change Agent (proactive)	Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).	320	.99	.00	324	.94	.00
13	Contextual Intelligence	Know how to appropriately interpret and react to changing and volatile surroundings.	322	.53	.04	326	.78	.02
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.	321	.90	-.01	325	.81	-.01
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).	315	.72	-.02	319	.40	.05
16	Crisis Management (conflict resolution)	Deal with conflict by providing effective strategies for conflict resolution.	315	.45	.04	319	.23	.07
17	Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.	312	.06	.11	316	.30	.06

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.	315	.28	.06	319	.47	.04
19	Effective and Constructive Use of Influence (powerful image)	Demonstrate the effective use of different types of power in developing a powerful image.	311	.19	.08	315	.54	.04
20	Ethical (treatment)	Treats people equitably and fairly.	312	.80	.01	316	.69	.02
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.	310	.50	.04	314	.43	-.05
22	Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	310	.49	-.04	314	.24	-.07
23	Intentional Leadership (assess)	Assess and evaluate their own leadership performance and are aware of strengths and weaknesses.	312	.87	-.01	316	.79	-.02
24	Intentional Leadership (improvement)	Take intentional action toward continuous improvement of leadership ability.	310	.09	-.10	314	.56	-.03

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
25	Leadership Planner	Have an action guide and delineated goals for achieving personal best.	304	.74	-.02	308	.18	.08
26	Resilience	Display the ability to recover from, or adjust easily to, misfortune or change.	302	.77	.02	306	.68	-.02
27	Socially Responsible (concern)	Express concern about social trends and issues (encourages legislation and policy when appropriate).	304	.46	.04	308	.21	.07
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	303	.36	.05	307	.03	.12*
29	Thrives on Responsibility	Have a strong sense of duty and dependability in a variety of situations and roles.	304	.18	.08	308	.02	.13*
30	Utilizes Appropriate Leadership Styles (transition)	Identify when it is appropriate to transition between leadership styles with subordinates and peers.	300	.63	.03	304	.73	-.02
31	Excellent Written Communication Skills	Write thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	301	.92	.01	305	.64	-.03

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
32	Uses Body-Language	Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.	300	.42	.05	304	.56	-.03
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	301	.03	.12*	305	.00	.24*
34	Empathetic (exhibit empathy)	Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.	302	.17	-.08	305	.39	.05
35	Empathetic (risks)	Takes risks on behalf of team members.	293	.81	.01	297	.02	.14*
36	Applies Known and Attained Knowledge	Use clinical evidence, research, and best-practices in the promotion of the profession by professional communications (abstracts, poster-presentations, lectures, etc.), original investigations, and literature reviews.	294	.90	-.01	298	.09	-.10

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
37	Responsible for Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.	296	.75	.02	300	.07	-.11
38	Ambitious	Use available resources (intrinsic and extrinsic) and other effective strategies to promote professional and personal development.	293	.74	.02	297	.13	-.09
39	Assertive	Be proactive about new ideas, innovations, and change initiatives while maintaining respect for personal boundaries and rights of others.	294	.37	-.05	298	.96	-.00
40	Scholarship	Contribute to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.	292	.77	.02	296	.75	-.02
41	Emotionally Stable (manage stress)	Handle and manage stress associated with leadership roles.	294	.54	.04	298	.08	-.10

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
42	Emotionally Stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.	292	.25	.07	296	.46	.04
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.	297	.78	.02	297	.75	-.02
44	Willing to Take Appropriate Risk	Be willing to accept a degree of uncertainty for the sake of implementing an idea, needed value, or to see a goal accomplished.	294	.36	.05	298	.19	-.08
45	Improves Morale	Facilitate and encourage a positive attitude in peers, subordinates, and supervisors toward their work and life.	291	.48	-.04	294	.59	.03
46	Utilizes Appropriate Leadership Styles (recognize)	Recognize when superiors and other professionals are transitioning between leadership styles.	290	.23	.07	294	.04	.12*
47	Courageous Leadership	Have strong convictions and holds to convictions when faced with challenges.	289	.39	.05	293	.05	.11*
48	Open-Mindedness	Be willing to discard old ways of doing things when evidence fails to support them.	291	.89	.01	295	.79	-.02

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
49	Protector	Provide a secure environment, tend to others carefully, prevent indiscretions, and preserves [others].	290	.60	.03	294	.27	.07
50	Leads Quietly (patiently)	Move patiently, carefully and incrementally.	283	.45	.05	287	.02	.14*
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.	288	.09	.10	291	.94	.01
52	Leads Quietly (do right)	Do what is “right” for the organization.	288	.07	.11	291	.07	.11
53	Creative/ Innovative Leadership	Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.	287	.51	-.04	291	.74	.02
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.	287	.69	-.02	291	.98	.00

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
55	Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others.	286	.64	.03	290	.45	.04
56	Empowerment (ensure)	Ensure transformation and development of others.	284	.11	.10	287	.82	.01
57	Ensures an Awareness of Mission	Understand and communicate how individual performance of others influences subordinates', peers', and supervisors' perceptions of how the mission is being accomplished.	279	.90	.01	283	.75	.02
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	284	.42	.05	288	.00	.21*
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.	286	.10	.10	290	.17	.08
60	Identifies Leaders	Identify leadership attributes in emerging leaders, and take initiative to facilitate development.	285	.17	.08	289	.30	.06
61	Organizationally Savvy (observe)	Carefully observe the environment and people.	284	.78	.02	288	.32	.06

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
62	Utilizes Appropriate Leadership Styles (variety)	Demonstrate the ability to implement and transition between a variety of leadership styles as appropriate, and when different situations dictate a diversity of leadership styles.	283	.50	-.04	286	.86	.01
63	Future-Minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.	286	.58	.03	290	.37	-.05
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.	286	.64	.03	290	.272	.07
65	Collaborator (achieve goals)	Effectively collaborate with other professionals within the local community in achieving goals.	284	.43	.05	288	.36	.05
66	Collaborator (promote health)	Facilitate the collaboration as a leader and participant with colleagues and other health care professionals to promote the health and welfare of diverse individuals and groups.	285	.88	.01	288	.27	.07

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
67	Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	284	.05	.12*	288	.66	.03
68	Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.	279	.22	.07	283	.05	.12*
69	Cultural Sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	280	.66	-.03	283	.08	.11
70	Cultural Sensitivity (interaction)	Provide opportunities for diverse members to interact in a non-discriminatory manner.	278	.47	.04	282	.34	.06
71	Effective and Constructive Use of Influence (affect behavior)	Use interpersonal skills, personal power, and influence to constructively and effectively affect the behavior and decisions of others.	275	.18	.08	279	.44	.05

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
72	Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	277	.52	.04	281	.03	.13*
73	Controls Risk (strategies)	Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after patient care error occurs) to continuously improve care.	279	.51	.04	283	.50	.04
74	Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.	283	.27	-.07	287	.66	-.03
75	Time Management	Make use of processes and tools that increase efficiency and set parameters for availability to subordinates and peers.	276	.97	-.00	280	.66	.03
76	Multicultural Leadership	Influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.	273	.36	.06	277	.35	.06

(Table D19 continues)

(Table D19 continued)

Item	Competency	Descriptor	<i>Athletic Competition Division</i>			<i>Age</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
77	Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.	277	.67	.03	281	.30	.06
78	Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	279	.90	.01	283	.76	-.02

Respondents indicated the number of years they had worked as an athletic trainer and the number of years they had served as a head athletic trainer using ranges composed of 5 year increments. Table D20 displays the results of Spearman rho testing between the years as an athletic trainer and years as a head athletic trainer and the level of importance placed upon the competencies.

Table D20

Spearman Rho for Level of Importance by Years as an Athletic Trainer and Years as a Head Athletic Trainer

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
10	Advocate	Take responsibility for actions of others, defends actions of others, and act when appropriate as an advocate for others.	324	.75	.02	323	.72	.02
11	Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	325	.02	.13*	324	.17	.08
12	Change Agent (proactive)	Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).	324	.94	.00	323	.49	.04
13	Contextual Intelligence	Know how to appropriately interpret and react to changing and volatile surroundings.	326	.82	.01	325	.82	.01
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.	325	.97	-.00	324	.57	-.03

(Table D20 continues)

(Table D20 continued)

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).	319	.37	.05	318	.28	.06
16	Crisis Management (conflict resolution)	Deal with conflict by providing effective strategies for conflict resolution.	319	.16	.08	318	.03	.12*
17	Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.	316	.17	.08	315	.23	.07
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.	319	.35	.05	318	.32	.06
19	Effective and Constructive Use of Influence (powerful image)	Demonstrate the effective use of different types of power in developing a powerful image.	315	.57	.03	314	.25	.07
20	Ethical (treatment)	Treats people equitably and fairly.	316	.59	.03	315	.25	.07
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.	314	.89	-.01	313	.69	-.02

(Table D20 continues)

(Table D20 continued)

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
22	Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	314	.53	-.04	313	.34	-.05
23	Intentional Leadership (assess)	Assess and evaluate their own leadership performance and are aware of strengths and weaknesses.	316	.89	.01	315	.97	.00
24	Intentional Leadership (improvement)	Take intentional action toward continuous improvement of leadership ability.	314	.21	-.07	314	.46	-.04
25	Leadership Planner	Have an action guide and delineated goals for achieving personal best.	308	.31	.06	307	.43	.05
26	Resilience	Display the ability to recover from, or adjust easily to, misfortune or change.	306	.50	-.04	305	.84	-.01
27	Socially Responsible (concern)	Express concern about social trends and issues (encourages legislation and policy when appropriate).	308	.23	.07	307	.02	.14*
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	307	.01	.15*	306	.03	.12*
29	Thrives on Responsibility	Have a strong sense of duty and dependability in a variety of situations and roles.	308	.04	.12*	307	.00	.20*

(Table D20 continues)

(Table D20 continued)

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
30	Utilizes Appropriate Leadership Styles (transition)	Identify when it is appropriate to transition between leadership styles with subordinates and peers.	304	.65	-.03	303	.92	-.01
31	Excellent Written Communication Skills	Write thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	305	.58	-.03	304	.54	.04
32	Uses Body-Language	Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.	304	.61	-.03	303	.47	-.04
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	305	.000	.26*	304	.00	.25*
34	Empathetic (exhibit empathy)	Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.	305	.26	.07	304	.42	.05
35	Empathetic (risks)	Takes risks on behalf of team members.	297	.09	.10	297	.04	.12*

(Table D20 continues)

(Table D20 continued)

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
36	Applies Known and Attained Knowledge	Use clinical evidence, research, and best-practices in the promotion of the profession by professional communications (abstracts, poster-presentations, lectures, etc.), original investigations, and literature reviews.	298	.06	-.11	297	.43	-.05
37	Responsible for Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.	300	.11	-.09	299	.17	-.08
38	Ambitious	Use available resources (intrinsic and extrinsic) and other effective strategies to promote professional and personal development.	297	.12	-.09	297	.31	-.06
39	Assertive	Be proactive about new ideas, innovations, and change initiatives while maintaining respect for personal boundaries and rights of others.	298	.65	-.03	297	.99	.00

(Table D20 continues)

(Table D20 continued)

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
40	Scholarship	Contribute to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.	296	.70	-.02	295	.79	-.02
41	Emotionally Stable (manage stress)	Handle and manage stress associated with leadership roles.	298	.05	-.11*	297	.48	-.04
42	Emotionally Stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.	296	.37	.05	295	.22	.07
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.	297	.41	-.05	296	.58	-.03
44	Willing to Take Appropriate Risk	Be willing to accept a degree of uncertainty for the sake of implementing an idea, needed value, or to see a goal accomplished.	298	.52	-.04	297	.78	-.02
45	Improves Morale	Facilitate and encourage a positive attitude in peers, subordinates, and supervisors toward their work and life.	294	.79	.02	293	.33	.06

(Table D20 continues)

(Table D20 continued)

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
46	Utilizes Appropriate Leadership Styles (recognize)	Recognize when superiors and other professionals are transitioning between leadership styles.	294	.13	.09	293	.04	.12*
47	Courageous Leadership	Have strong convictions and holds to convictions when faced with challenges.	293	.19	.08	292	.06	.11
48	Open-Mindedness	Be willing to discard old ways of doing things when evidence fails to support them.	295	.40	-.05	294	.77	-.02
49	Protector	Provide a secure environment, tend to others carefully, prevent indiscretions, and preserves [others].	294	.26	.07	293	.23	.07
50	Leads Quietly (patiently)	Move patiently, carefully and incrementally.	287	.06	.11	287	.06	.11
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.	291	.93	.01	290	.16	-.08
52	Leads Quietly (do right)	Do what is “right” for the organization.	291	.03	.13*	290	.29	.06

(Table D20 continues)

(Table D20 continued)

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
53	Creative/ Innovative Leadership	Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.	291	.75	-.02	290	.24	.07
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.	291	.92	-.01	290	.95	.00
55	Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others.	290	.74	.02	289	.43	.05
56	Empowerment (ensure)	Ensure transformation and development of others.	287	.94	.01	286	.20	.08
57	Ensures an awareness of Mission	Understand and communicate how individual performance of others influences subordinates', peers', and supervisors' perceptions of how the mission is being accomplished.	283	.95	.00	282	.06	.11
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	288	.00	.20*	287	.00	.22*

(Table D20 continues)

(Table D20 continued)

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.	290	.31	.06	289	.14	.09
60	Identifies Leaders	Identify leadership attributes in emerging leaders, and take initiative to facilitate development.	289	.87	.01	288	.19	.08
61	Organizationally Savvy (observe)	Carefully observe the environment and people.	288	.38	.05	287	.10	.10
62	Utilizes Appropriate Leadership Styles (variety)	Demonstrate the ability to implement and transition between a variety of leadership styles as appropriate, and when different situations dictate a diversity of leadership styles.	286	.85	-.01	285	.11	.10
63	Future-Minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.	290	.41	-.05	289	.96	-.00
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.	290	.20	.08	289	.15	.09

(Table D20 continues)

(Table D20 continued)

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
65	Collaborator (achieve goals)	Effectively collaborate with other professionals within the local community in achieving goals.	288	.65	.03	287	.81	.01
66	Collaborator (promote health)	Facilitate the collaboration as a leader and participant with colleagues and other health care professionals to promote the health and welfare of diverse individuals and groups.	288	.42	.05	287	.19	.08
67	Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	288	.53	.04	287	.44	.05
68	Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.	283	.15	.09	282	.21	.08
69	Cultural Sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	283	.04	.12*	282	.05	.12*
70	Cultural Sensitivity (interaction)	Provide opportunities for diverse members to interact in a non-discriminatory manner.	282	.33	.06	281	.56	.04

(Table D20 continues)

(Table D20 continued)

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
71	Effective and Constructive Use of Influence (affect behavior)	Use interpersonal skills, personal power, and influence to constructively and effectively affect the behavior and decisions of others.	279	.40	.05	278	.92	.01
72	Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	281	.04	.12*	281	.03	.13*
73	Controls Risk (strategies)	Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after patient care error occurs) to continuously improve care.	283	.70	.02	282	.45	.05
74	Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.	287	.95	-.00	286	.70	.02
75	Time Management	Make use of processes and tools that increase efficiency and set parameters for availability to subordinates and peers.	280	.88	.01	280	.38	.05
76	Multicultural Leadership	Influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.	277	.34	.06	277	.31	.06

(Table D20 continues)

(Table D20 continued)

Item	Competency	Descriptor	<i>Years as athletic trainer</i>			<i>Years as head athletic trainer</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
77	Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.	281	.86	.01	280	.55	.04
78	Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	283	.96	.00	282	.98	.00

Participants indicated the size of the athletic training staff they supervise using ranges from 1-2 to 10 or more. The number of duties assigned to the participants were gathered from the respondents' selections for assigned duties. Table D21 displays the Spearman rho calculations for these variables.

Table D21

Spearman Rho for Level of Importance by Size of Staff and Number of Duties

Item	Competency	Descriptor	<i>Size of Staff</i>			<i>Number of Duties</i>		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
10	Advocate	Take responsibility for actions of others, defends actions of others, and act when appropriate as an advocate for others.	316	.04	.11*	324	.44	.04
11	Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	316	.01	.14*	325	.38	-.05

(Table D21 continues)

(Table D21 continued)

Item	Competency	Descriptor	Size of Staff			Number of Duties		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
12	Change Agent (proactive)	Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).	315	.32	.06	324	.37	.05
13	Contextual Intelligence	Know how to appropriately interpret and react to changing and volatile surroundings.	317	.33	.06	326	.82	-.01
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.	316	.64	.03	325	.47	.04
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).	310	.59	.03	319	.11	.09
16	Crisis Management (conflict resolution)	Deal with conflict by providing effective strategies for conflict resolution.	310	.26	.06	319	.36	.05
17	Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.	307	.02	.13*	316	.54	-.04
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.	310	.14	.08	319	.80	.01

(Table D21 continues)

(Table D21 continued)

Item	Competency	Descriptor	Size of Staff			Number of Duties		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
19	Effective and Constructive Use of Influence (powerful image)	Demonstrate the effective use of different types of power in developing a powerful image.	306	.63	.03	315	.84	-.01
20	Ethical (treatment)	Treats people equitably and fairly.	307	.11	.09	316	.16	.08
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.	305	.40	.05	314	.32	.06
22	Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	305	.46	-.04	314	.41	.05
23	Intentional Leadership (assess)	Assess and evaluate their own leadership performance and are aware of strengths and weaknesses.	307	.24	.07	316	.97	.00
24	Intentional Leadership (improvement)	Take intentional action toward continuous improvement of leadership ability.	305	.50	-.04	314	.86	-.01
25	Leadership Planner	Have an action guide and delineated goals for achieving personal best.	299	.16	.08	308	.62	.03
26	Resilience	Display the ability to recover from, or adjust easily to, misfortune or change.	297	.57	-.03	306	.21	-.07

(Table D21 continues)

(Table D21 continued)

Item	Competency	Descriptor	Size of Staff			Number of Duties		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
27	Socially Responsible (concern)	Express concern about social trends and issues (encourages legislation and policy when appropriate).	299	.75	-.02	308	.98	.00
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	298	.33	.06	307	.08	.10
29	Thrives on Responsibility	Have a strong sense of duty and dependability in a variety of situations and roles.	299	.10	.10	308	.98	.00
30	Utilizes Appropriate Leadership Styles (transition)	Identify when it is appropriate to transition between leadership styles with subordinates and peers.	295	.13	.09	304	.77	-.02
31	Excellent Written Communication Skills	Write thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	296	.48	-.04	305	.87	-.01
32	Uses Body-Language	Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.	295	.54	.04	304	.37	.05
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	296	.00	.17*	305	.48	.04

(Table D21 continues)

(Table D21 continued)

Item	Competency	Descriptor	Size of Staff			Number of Duties		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
34	Empathetic (exhibit empathy)	Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.	296	.69	-.02	305	.28	.06
35	Empathetic (risks)	Takes risks on behalf of team members.	289	.20	.08	297	.62	.03
36	Applies Known and Attained Knowledge	Use clinical evidence, research, and best-practices in the promotion of the profession by professional communications (abstracts, poster-presentations, lectures, etc.), original investigations, and literature reviews.	289	.51	.04	298	.39	-.05
37	Responsible for Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.	291	.55	.04	300	.45	.04
38	Ambitious	Use available resources (intrinsic and extrinsic) and other effective strategies to promote professional and personal development.	289	.64	-.03	297	.92	-.01
39	Assertive	Be proactive about new ideas, innovations, and change initiatives while maintaining respect for personal boundaries and rights of others.	289	.57	-.03	298	.66	-.03

(Table D21 continues)

(Table D21 continued)

Item	Competency	Descriptor	Size of Staff			Number of Duties		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
40	Scholarship	Contribute to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.	287	.34	.06	296	.13	-.09
41	Emotionally Stable (manage stress)	Handle and manage stress associated with leadership roles.	289	.59	.03	298	.53	.04
42	Emotionally Stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.	287	.41	.05	296	.44	.05
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.	288	.98	.00	297	.54	.04
44	Willing to Take Appropriate Risk	Be willing to accept a degree of uncertainty for the sake of implementing an idea, needed value, or to see a goal accomplished.	289	.32	.06	298	.30	.06
45	Improves Morale	Facilitate and encourage a positive attitude in peers, subordinates, and supervisors toward their work and life.	285	.76	.02	294	.26	.07

(Table D21 continues)

(Table D21 continued)

Item	Competency	Descriptor	Size of Staff			Number of Duties		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
46	Utilizes Appropriate Leadership Styles (recognize)	Recognize when superiors and other professionals are transitioning between leadership styles.	285	.74	-.02	294	.80	.02
47	Courageous Leadership	Have strong convictions and holds to convictions when faced with challenges.	284	.88	-.01	293	.03	-.13*
48	Open-Mindedness	Be willing to discard old ways of doing things when evidence fails to support them.	286	.22	.07	295	.94	.00
49	Protector	Provide a secure environment, tend to others carefully, prevent indiscretions, and preserves [others].	285	.42	.05	294	.57	.03
50	Leads Quietly (patiently)	Move patiently, carefully and incrementally.	279	.60	-.03	287	.27	.07
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.	282	.34	.06	291	.99	.00
52	Leads Quietly (do right)	Do what is "right" for the organization.	282	.00	.21*	291	.10	.10
53	Creative/ Innovative Leadership	Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.	282	.33	.06	291	.68	.02

(Table D21 continues)

(Table D21 continued)

Item	Competency	Descriptor	Size of Staff			Number of Duties		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.	282	.91	.01	291	.85	.01
55	Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others.	282	.05	.12*	290	.19	-.08
56	Empowerment (ensure)	Ensure transformation and development of others.	279	.49	.04	287	.59	.03
57	Ensures an awareness of Mission	Understand and communicate how individual performance of others influences subordinates', peers', and supervisors' perceptions of how the mission is being accomplished.	275	.83	.01	283	.70	.02
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	280	.03	.13*	288	.42	.05
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.	282	.01	.15*	290	.57	.03
60	Identifies Leaders	Identify leadership attributes in emerging leaders, and take initiative to facilitate development.	281	.49	.04	289	.78	.02
61	Organizationally Savvy (observe)	Carefully observe the environment and people.	280	.40	.05	288	.54	.04

(Table D21 continues)

(Table D21 continued)

Item	Competency	Descriptor	Size of Staff			Number of Duties		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
62	Utilizes Appropriate Leadership Styles (variety)	Demonstrate the ability to implement and transition between a variety of leadership styles as appropriate, and when different situations dictate a diversity of leadership styles.	278	.89	-.01	286	.99	.00
63	Future-Minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.	282	.46	.04	290	.31	-.06
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.	282	.67	.03	290	.88	.01
65	Collaborator (achieve goals)	Effectively collaborate with other professionals within the local community in achieving goals.	280	.72	.02	288	.31	-.06
66	Collaborator (promote health)	Facilitate the collaboration as a leader and participant with colleagues and other health care professionals to promote the health and welfare of diverse individuals and groups.	280	.51	-.04	288	.86	-.01

(Table D21 continues)

(Table D21 continued)

Item	Competency	Descriptor	Size of Staff			Number of Duties		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
67	Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	280	.04	.13*	288	.02	.14*
68	Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.	275	.38	.05	283	.48	-.04
69	Cultural Sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	275	.54	-.04	283	.62	-.03
70	Cultural Sensitivity (interaction)	Provide opportunities for diverse members to interact in a non-discriminatory manner.	274	.53	.04	282	.46	.05
71	Effective and Constructive Use of Influence (affect behavior)	Use interpersonal skills, personal power, and influence to constructively and effectively affect the behavior and decisions of others.	271	.05	.12*	279	.57	.03
72	Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	274	.33	.06	281	.84	.01

(Table D21 continues)

(Table D21 continued)

Item	Competency	Descriptor	Size of Staff			Number of Duties		
			<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>
73	Controls Risk (strategies)	Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after patient care error occurs) to continuously improve care.	275	.54	.04	283	.96	.00
74	Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.	279	.17	-.09	287	.26	-.07
75	Time Management	Make use of processes and tools that increase efficiency and set parameters for availability to subordinates and peers.	273	.68	.03	280	.77	.02
76	Multicultural Leadership	Influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.	270	.55	.04	277	.77	-.02
77	Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.	273	.87	-.01	281	.50	-.04
78	Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	275	.78	.02	283	.66	.03

The duties to which participants were assigned were evaluated in relation to the pooled importance categories for the competencies. Table D22 displays the chi-square results for the first three duties: (a) *Daily Patient Care*, (b) *Travel with Athletic Teams*, and (c) *Athletic Training/Healthcare Administration*.

Table D22

Chi-square Results Pooled Level of Importance by Daily Patient Care, Travel with Athletic Teams and Athletic Training/Healthcare Administration

Item	Competency	Daily Patient Care				Travel with Teams				Administration			
		<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>
10	Advocate	324	.80	1	.37	324	.00	1	.97	324	.36	1	.55
11	Change Agent (bravery)	325	.47	1	.49	325	.03	1	.86	325	.21	1	.64
12	Change Agent (proactive)	324	.13	1	.72	324	.64	1	.43	324	.06	1	.81
13	Contextual Intelligence	326	.13	1	.72	326	.59	1	.44	326	.06	1	.81
14	Credible	325	-. ^a	-	-	325	-. ^a	-	-	325	-. ^a	-	-
15	Crisis Management (problem solving)	319	.04	1	.84	319	.20	1	.66	319	.019	1	.89
16	Crisis Management (conflict resolution)	319	2.5	1	.12	319	4.92*	1	.03	319	.12	1	.73
17	Critical Thinker	316	2.4	1	.12	316	5.01*	1	.03	316	.12	1	.73
18	Dedicated	319	.04	1	.84	319	.20	1	.66	319	.02	1	.89

(Table D22 continues)

(Table D22 continued)

Item	Competency	Daily Patient Care				Travel with Teams				Administration			
		<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>
19	Effective and Constructive Use of Influence (powerful image)	315	.35	1	.55	315	2.89	1	.09	315	.55	1	.46
20	Ethical (treatment)	316	-. ^a	-	-	316	-. ^a	-	-	316	-. ^a	-	-
21	Ethical (report)	314	.09	1	.77	314	.41	1	.52	314	.03	1	.86
22	Excellent Verbal Communication Skills	314	.06	1	.77	314	.41	1	.52	314	.03	1	.86
23	Intentional Leadership (assess)	316	.49	1	.48	316	.02	1	.90	316	.18	1	.67
24	Intentional Leadership (improvement)	314	.36	1	.55	314	.11	1	.74	314	.13	1	.72
25	Leadership Planner	308	2.82	1	.09	308	.20	1	.65	308	14.01*	1	.00
26	Resilience	306	.13	1	.71	306	.54	1	.46	306	.05	1	.82
27	Socially Responsible (concern)	308	.11	1	.75	308	.16	1	.69	308	1.49	1	.22
28	Socially Responsible (volunteer)	307	2.40	1	.12	307	.00	1	.95	307	1.33	1	.25
29	Thrives on Responsibility	308	.13	1	.72	308	.55	1	.46	308	.05	1	.82
30	Utilizes Appropriate Leadership Styles (transition)	304	.39	1	.53	304	.04	1	.84	304	3.07	1	.08

(Table D22 continues)

(Table D22 continued)

Item	Competency	Daily Patient Care				Travel with Teams				Administration			
		<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>
31	Excellent Written Communication Skills	305	.22	1	.64	305	.95	1	.33	305	.26	1	.61
32	Uses Body-Language	304	.22	1	.64	304	2.77	1	.10	304	.26	1	.61
33	Empathetic (co-workers)	305	.95	1	.33	305	.10	1	.75	305	1.50	1	.22
34	Empathetic (exhibit empathy)	305	6.28*	1	.01	305	.54	1	.46	305	.05	1	.82
35	Empathetic (risks)	297	.16	1	.67	297	.44	1	.51	297	.58	1	.45
36	Applies Known and Attained Knowledge	298	2.02	1	.16	298	1.13	1	.29	298	3.24	1	.07
37	Responsible for Actions	300	.08	1	.77	300	.42	1	.52	300	.03	1	.85
38	Ambitious	297	.93	1	.34	297	.02	1	.90	297	.20	1	.66
39	Assertive	298	.21	1	.64	298	.02	1	.88	298	.09	1	.77
40	Scholarship	296	.71	1	.40	296	.10	1	.76	296	1.21	1	.27
41	Emotionally Stable (manage stress)	298	.26	1	.61	298	1.07	1	.30	298	.10	1	.75
42	Emotionally Stable (calm)	296	6.68*	1	.01	296	.52	1	.47	296	.05	1	.82
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	295	^a	-	-	297	^a	-	-	297	^a	-	-

(Table D22 continues)

(Table D22 continued)

Item	Competency	Daily Patient Care				Travel with Teams				Administration			
		<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>
44	Willing to Take Appropriate Risk	298	.53	1	.47	298	.50	1	.48	298	.21	1	.64
45	Improves Morale	294	.44	1	.51	294	1.24	1	.27	294	.18	1	.67
46	Utilizes Appropriate Leadership Styles (recognize)	294	.03	1	.88	294	1.31	1	.24	294	.03	1	.90
47	Courageous Leadership	293	.03	1	.87	293	.82	1	.37	293	.39	1	.53
48	Open-Mindedness	295	.35	1	.56	295	.12	1	.73	295	.14	1	.71
49	Protector	294	4.53*	1	.03	294	3.13	1	.08	294	.07	1	.79
50	Leads Quietly (patiently)	287	.79	1	.37	287	.78	1	.38	287	.00	1	.98
51	Organizationally Savvy (interact)	291	.04	1	.84	291	4.72*	1	.03	291	.02	1	.90
52	Leads Quietly (do right)	291	.00	1	.98	291	3.96*	1	.05	291	.84	1	.36
53	Creative/Innovative Leadership	291	.40	1	.53	291	.24	1	.62	291	.13	1	.72
54	Knowledgeable	291	-. ^a	-	-	291	-. ^a	-	-	291	-. ^a	-	-
55	Empowerment (encourage)	290	.03	1	.88	290	.23	1	.63	290	.54	1	.46
56	Empowerment (ensure)	287	.02	1	.89	287	.16	1	.69	287	.03	1	.86
57	Ensures an Awareness of Mission	283	.01	1	.92	283	.10	1	.75	283	.71	1	.40
58	Leads Quietly (modesty)	288	.85	1	.36	288	1.09	1	.30	288	.01	1	.93

(Table D22 continues)

(Table D22 continued)

Item	Competency	Daily Patient Care				Travel with Teams				Administration			
		n	χ^2	df	p	n	χ^2	df	p	n	χ^2	df	p
59	Nurtures Professional Relationships	290	.09	1	.77	290	.43	1	.51	290	.04	1	.85
60	Identifies Leaders	289	2.25	1	.13	289	.36	1	.55	289	.91	1	.34
61	Organizationally Savvy (observe)	288	.54	1	.46	288	.51	1	.48	288	.22	1	.64
62	Utilizes Appropriate Leadership Styles (variety)	286	.51	1	.48	286	.11	1	.74	286	.49	1	.48
63	Future-Minded	290	.41	1	.53	290	.25	1	.62	290	.16	1	.69
64	Ethical (promote)	290	-. ^a	-	-	290	-. ^a	-	-	290	-. ^a	-	-
65	Collaborator (achieve goals)	288	1.09	1	.30	288	.00	1	1.00	288	.44	1	.51
66	Collaborator (promote health)	288	.59	1	.44	288	.94	1	.33	288	.24	1	.62
67	Consensus Builder	288	.18	1	.67	288	2.13	1	.14	288	.30	1	.58
68	Influencer	283	.19	1	.66	283	.00	1	.97	283	.33	1	.57
69	Cultural Sensitivity (promote diversity)	283	.03	1	.85	283	.24	1	.62	283	.56	1	.46
70	Cultural Sensitivity (interaction)	282	.01	1	.94	282	.19	1	.66	282	.43	1	.51
71	Effective and Constructive Use of Influence (affect behavior)	279	.66	1	.42	279	1.74	1	.19	279	.05	1	.83

(Table D22 continues)

(Table D22 continued)

Item	Competency	Daily Patient Care				Travel with Teams				Administration			
		n	χ^2	df	p	n	χ^2	df	p	n	χ^2	df	p
72	Delegates Effectively	281	.29	1	.59	281	.62	1	.43	281	.13	1	.72
73	Controls Risk (strategies)	283	.37	1	.55	283	5.92*	1	.02	283	.15	1	.70
74	Controls Risk (improve quality)	287	.09	1	.77	287	.42	1	.52	287	.04	1	.85
75	Time Management	280	.93	1	.34	280	.08	1	.77	280	.41	1	.52
76	Multicultural Leadership	277	.01	1	.91	277	.78	1	.38	277	.55	1	.46
77	Disciplined	281	.23	1	.63	281	1.05	1	.31	281	.09	1	.76
78	Organizationally Savvy (participate)	283	.52	1	.47	283	5.19*	1	.02	283	.23	1	.64

Table D23 displays the chi-square analysis results for the final three assigned duties.

Table D23

Chi-square Results Pooled Level of Importance by Clinical Preceptor, Course Instructor, and Department or Institutional Committee Assignments

Item	Competency	Clinical Preceptor				Course Instructor				Committee Assignments			
		n	χ^2	df	p	n	χ^2	df	p	n	χ^2	df	p
10	Advocate	324	1.54	1	.21	324	.01	1	.93	324	.29	1	.59
11	Change Agent (bravery)	325	.26	1	.61	325	1.10	1	.30	325	.46	1	.50
12	Change Agent (proactive)	324	.23	1	.63	324	.05	1	.83	324	.05	1	.83
13	Contextual Intelligence	326	.26	1	.64	326	.93	1	.34	326	1.16	1	.28

(Table D23 continues)

(Table D23 continued)

Item	Competency	Clinical Preceptor				Course Instructor				Committee Assignments			
		<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>
14	Credible	325	-. ^a	-	-	325	-. ^a	-	-	325	-. ^a	-	-
15	Crisis Management (problem solving)	319	.89	1	.35	319	1.50	1	.22	319	.39	1	.53
16	Crisis Management (conflict resolution)	319	.46	1	.50	319	1.79	1	.18	319	1.49	1	.22
17	Critical Thinker	316	.45	1	.50	316	1.74	1	.19	316	.08	1	.78
18	Dedicated	319	.89	1	.35	319	1.50	1	.22	319	.39	1	.53
19	Effective and Constructive Use of Influence (powerful image)	315	2.09	1	.15	315	2.47	1	.12	315	.72	1	.40
20	Ethical (treatment)	316	-. ^a	-	-	316	-. ^a	-	-	316	-. ^a	-	-
21	Ethical (report)	314	1.82	1	.18	314	.09	1	.77	314	.50	1	.48
22	Excellent Verbal Communication Skills	314	1.80	1	.18	314	3.00	1	.08	314	.78	1	.38
23	Intentional Leadership (assess)	316	.01	1	.91	316	2.68	1	.10	316	.41	1	.52
24	Intentional leadership (improvement)	314	.81	1	.37	314	.02	1	.88	314	4.84*	1	.03
25	Leadership Planner	308	4.55*	1	.03	308	.04	1	.84	308	.22	1	.64
26	Resilience	306	.24	1	.62	306	4.57*	1	.03	306	1.17	1	.28
27	Socially Responsible (concern)	308	.45	1	.50	308	.04	1	.85	308	.95	1	.33

(Table D23 continues)

(Table D23 continued)

Item	Competency	Clinical Preceptor				Course Instructor				Committee Assignments			
		<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>
28	Socially Responsible (volunteer)	307	1.74	1	.19	307	2.15	1	.14	307	2.41	1	.12
29	Thrives on Responsibility	308	.23	1	.63	308	.88	1	.35	308	1.16	1	.28
30	Utilizes Appropriate Leadership Styles (transition)	304	.25	1	.62	304	1.01	1	.32	304	.07	1	.80
31	Excellent Written Communication skills	305	.00	1	.97	305	2.54	1	.11	305	1.60	1	.21
32	Uses Body-Language	304	.25	1	.62	304	.25	1	.62	304	2.86	1	.09
33	Empathetic (co-workers)	305	.45	1	.50	305	.19	1	.66	305	.07	1	.79
34	Empathetic (exhibit empathy)	305	.46	1	.50	305	.87	1	.35	305	2.27	1	.13
35	Empathetic (risks)	297	.12	1	.73	297	.89	1	.35	297	1.64	1	.20
36	Applies Known and Attained Knowledge	298	1.02	1	.31	298	1.99	1	.16	298	.01	1	.92
37	Responsible for Actions	300	.01	1	.92	300	.07	1	.79	300	.77	1	.38
38	Ambitious	297	.41	1	.52	297	2.48	1	.12	297	.52	1	.47
39	Assertive	298	.07	1	.79	298	.00	1	.97	298	.37	1	.54
40	Scholarship	296	2.57	1	.11	296	.02	1	.89	296	.78	1	.38
41	Emotionally Stable (manage stress)	298	.03	1	.86	298	.26	1	.61	298	.08	1	.78
42	Emotionally Stable (calm)	296	.22	1	.64	296	.06	1	.81	296	.04	1	.85

(Table D23 continues)

(Table D23 continued)

Item	Competency	Clinical Preceptor				Course Instructor				Committee Assignments			
		<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	297	-. ^a	-	-	297	-. ^a	-	-	297	-. ^a	-	-
44	Willing to Take Appropriate Risk	298	.69	1	.41	298	.23	1	.63	298	1.12	1	.29
45	Improves Morale	294	2.35	1	.13	294	1.75	1	.19	294	.37	1	.54
46	Utilizes Appropriate Leadership Styles (recognize)	294	.92	1	.34	294	1.76	1	.18	294	.03	1	.86
47	Courageous Leadership	293	.01	1	.94	293	.51	1	.48	293	2.29	1	.13
48	Open-Mindedness	295	.04	1	.84	295	.77	1	.38	295	.36	1	.55
49	Protector	294	.02	1	.89	294	2.10	1	.15	294	.91	1	.34
50	Leads Quietly (patiently)	287	1.77	1	.18	287	.17	1	.68	287	.07	1	.79
51	Organizationally Savvy (interact)	291	1.13	1	.29	291	.67	1	.42	291	.41	1	.52
52	Leads Quietly (do right)	291	4.97*	1	.03	291	.20	1	.66	291	.68	1	.41
53	Creative/ Innovative Leadership	291	.03	1	.87	291	.95	1	.33	291	.20	1	.66
54	Knowledgeable	291	-. ^a	-	-	291	-. ^a	-	-	291	-. ^a	-	-
55	Empowerment (encourage)	290	.01	1	.93	290	.00	1	1.0	290	.24	1	.63

(Table D23 continues)

(Table D23 continued)

Item	Competency	Clinical Preceptor				Course Instructor				Committee Assignments			
		<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>
56	Empowerment (ensure)	287	.48	1	.49	287	3.32	1	.07	287	.01	1	.91
57	Ensures an Awareness of Mission	283	.43	1	.51	283	.03	1	.87	283	.08	1	.78
58	Leads Quietly (modesty)	288	2.30	1	.13	288	2.44	1	.12	288	1.40	1	.24
59	Nurtures Professional Relationships	290	.01	1	.93	290	3.07	1	.08	290	4.94*	1	.03
60	Identifies Leaders	289	.65	1	.42	289	3.58	1	.06	289	.08	1	.78
61	Organizationally Savvy (observe)	288	.58	1	.45	288	.23	1	.63	288	.09	1	.77
62	Utilizes Appropriate Leadership Styles (variety)	286	.00	1	.95	286	.18	1	.68	286	.12	1	.73
63	Future-Minded	290	.26	1	.61	290	1.22	1	.27	290	.19	1	.67
64	Ethical (promote)	290	^a	-	-	290	^a	-	-	290	^a	-	-
65	Collaborator (achieve goals)	288	.17	1	.68	288	2.00	1	.16	288	.12	1	.74
66	Collaborator (promote health)	288	.24	1	.62	288	3.33	1	.07	288	.57	1	.45
67	Consensus Builder	288	5.25*	1	.02	288	.03	1	.86	288	3.56	1	.06
68	Influencer	283	2.16	1	.14	283	.47	1	.50	283	.00	1	.99

(Table D23 continues)

(Table D23 continued)

Item	Competency	Clinical Preceptor				Course Instructor				Committee Assignments			
		<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>	<u>n</u>	χ^2	df	<i>p</i>
69	Cultural Sensitivity (promote diversity)	283	.00	1	.95	283	1.41	1	.24	283	.94	1	.33
70	Cultural Sensitivity (interaction)	282	4.09*	1	.04	282	.01	1	.91	282	.07	1	.80
71	Effective and Constructive Use of Influence (affect behavior)	279	3.64	1	.06	279	.04	1	.84	279	.42	1	.52
72	Delegates Effectively	281	1.67	1	.20	281	.02	1	.89	281	.58	1	.45
73	Controls Risk (strategies)	283	.34	1	.56	283	.02	1	.89	283	.07	1	.79
74	Controls Risk (improve quality)	287	1.81	1	.18	287	.09	1	.77	287	.83	1	.36
75	Time Management	280	.25	1	.62	280	2.38	1	.12	280	.29	1	.59
76	Multicultural Leadership	277	.44	1	.51	277	.16	1	.69	277	2.79	1	.10
77	Disciplined	281	.09	1	.77	281	3.32	1	.07	281	.33	1	.56
78	Organizationally Savvy (participate)	283	3.84*	1	.05	283	.61	1	.44	283	5.42*	1	.02

Note. ^aChi-square not computed due to all responses falling into the Pooled Important category.

* $p \leq .05$

Table D24 displays the chi-square analysis results using the pooled importance categories and participant gender.

Table D24

Chi Square Results for Pooled Importance and Gender

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
10	Advocate	Take responsibility for actions of others, defends actions of others, and act when appropriate as an advocate for others.	322	.31	1	.56
11	Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	323	.01	1	.94
12	Change Agent (proactive)	Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).	322	1.68	1	.20
13	Contextual Intelligence	Know how to appropriately interpret and react to changing and volatile surroundings.	324	1.67	1	.20
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.	324	^a	-	-
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).	317	.56	1	.45
16	Crisis Management (conflict resolution)	Deal with conflict by providing effective strategies for conflict resolution.	317	.02	1	.89

(Table D24 continues)

(Table D24 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
17	Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.	314	.96	1	.33
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.	317	.56	1	.45
19	Effective and Constructive Use of Influence (powerful image)	Demonstrate the effective use of different types of power in developing a powerful image.	313	1.64	1	.20
20	Ethical (treatment)	Treats people equitably and fairly.	315	-. ^a	-	-
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.	313	.16	1	.69
22	Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	313	.17	1	.68
23	Intentional Leadership (assess)	Assess and evaluate their own leadership performance and are aware of strengths and weaknesses.	315	.39	1	.53
24	Intentional Leadership (improvement)	Take intentional action toward continuous improvement of leadership ability.	313	.44	1	.51
25	Leadership Planner	Have an action guide and delineated goals for achieving personal best.	307	3.75*	1	.05

(Table D24 continues)

(Table D24 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
26	Resilience	Display the ability to recover from, or adjust easily to, misfortune or change.	305	.01	1	.91
27	Socially Responsible (concern)	Express concern about social trends and issues (encourages legislation and policy when appropriate).	307	.81	1	.37
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	306	8.21*	1	.00
29	Thrives on Responsibility	Have a strong sense of duty and dependability in a variety of situations and roles.	307	.01	1	.92
30	Utilizes Appropriate Leadership Styles (transition)	Identify when it is appropriate to transition between leadership styles with subordinates and peers.	303	.18	1	.67
31	Excellent Written Communication Skills	Write thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	304	.62	1	.43
32	Uses Body-Language	Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.	303	.00	1	.96
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	304	3.28	1	.07

(Table D24 continues)

(Table D24 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
34	Empathetic (exhibit empathy)	Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.	304	.01	1	.93
35	Empathetic (risks)	Takes risks on behalf of team members.	296	.09	1	.76
36	Applies Known and Attained Knowledge	Use clinical evidence, research, and best-practices in the promotion of the profession by professional communications (abstracts, poster-presentations, lectures, etc.), original investigations, and literature reviews.	297	.11	1	.74
37	Responsible for Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.	297	1.11	1	.29
38	Ambitious	Use available resources (intrinsic and extrinsic) and other effective strategies to promote professional and personal development.	296	1.74	1	.19
39	Assertive	Be proactive about new ideas, innovations, and change initiatives while maintaining respect for personal boundaries and rights of others.	297	1.27	1	.26
40	Scholarship	Contribute to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.	295	.16	1	.70

(Table D24 continues)

(Table D24 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
41	Emotionally Stable (manage stress)	Handle and manage stress associated with leadership roles.	297	1.00	1	.32
42	Emotionally Stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.	295	1.21	1	.27
43	Flexible, Adaptable, and Resilient in times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.	296	- ^a	-	-
44	Willing to Take Appropriate Risk	Be willing to accept a degree of uncertainty for the sake of implementing an idea, needed value, or to see a goal accomplished.	297	.03	1	.86
45	Improves Morale	Facilitate and encourage a positive attitude in peers, subordinates, and supervisors toward their work and life.	293	.78	1	.38
46	Utilizes Appropriate Leadership Styles (recognize)	Recognize when superiors and other professionals are transitioning between leadership styles.	293	.20	1	.66
47	Courageous Leadership	Have strong convictions and holds to convictions when faced with challenges.	292	.01	1	.93
48	Open-Mindedness	Be willing to discard old ways of doing things when evidence fails to support them.	294	.01	1	.92
49	Protector	Provide a secure environment, tend to others carefully, prevent indiscretions, and preserves [others].	293	.32	1	.57

(Table D24 continues)

(Table D24 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
50	Leads Quietly (patiently)	Move patiently, carefully and incrementally.	286	.18	1	.67
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.	290	1.74	1	.19
52	Leads Quietly (do right)	Do what is “right” for the organization.	291	4.78*	1	.03
53	Creative/ Innovative Leadership	Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.	290	.28	1	.59
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.	290	^a	-	-
55	Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others.	289	5.59*	1	.02
56	Empowerment (ensure)	Ensure transformation and development of others.	286	.34	1	.56
57	Ensures an Awareness of Mission	Understand and communicate how individual performance of others influences subordinates’, peers’, and supervisors’ perceptions of how the mission is being accomplished.	286	.05	1	.83
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	287	7.05*	1	.01

(Table D24 continues)

(Table D24 continued)

Item	Competency	Descriptor	n	χ^2	df	p
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.	289	3.43	1	.06
60	Identifies Leaders	Identify leadership attributes in emerging leaders, and take initiative to facilitate development.	288	.17	1	.69
61	Organizationally Savvy (observe)	Carefully observe the environment and people.	287	.14	1	.71
62	Utilizes Appropriate Leadership Styles (variety)	Demonstrate the ability to implement and transition between a variety of leadership styles as appropriate, and when different situations dictate a diversity of leadership styles.	286	.72	1	.40
63	Future-Minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.	289	.24	1	.62
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.	289	-. ^a	-	-
65	Collaborator (achieve goals)	Effectively collaborate with other professionals within the local community in achieving goals.	287	.05	1	.82
66	Collaborator (promote health)	Facilitate the collaboration as a leader and participant with colleagues and other health care professionals to promote the health and welfare of diverse individuals and groups.	288	2.69	1	.10

(Table D24 continues)

(Table D24 continued)

Item	Competency	Descriptor	n	χ^2	df	p
67	Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	287	2.41	1	.12
68	Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.	282	.01	1	.94
69	Cultural Sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	282	.26	1	.61
70	Cultural Sensitivity (interaction)	Provide opportunities for diverse members to interact in a non-discriminatory manner.	281	.00	1	.97
71	Effective and Constructive Use of Influence (affect behavior)	Use interpersonal skills, personal power, and influence to constructively and effectively affect the behavior and decisions of others.	278	1.55	1	.21
72	Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	280	.11	1	.74
73	Controls Risk (strategies)	Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after patient care error occurs) to continuously improve care.	282	.00	1	.97
74	Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.	286	1.17	1	.28

(Table D24 continues)

(Table D24 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
75	Time Management	Make use of processes and tools that increase efficiency and set parameters for availability to subordinates and peers.	279	.02	1	.88
76	Multicultural Leadership	Influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.	276	1.60	1	.21
77	Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.	280	.03	1	.85
78	Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	282	.07	1	.80

Using participant responses for whether or not they had been elected or appointed to a local, state, district, or national leadership position the chi-square analysis displayed in Table D25 was performed.

Table D25

Chi Square Results for Pooled Importance and Leadership Position

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
10	Advocate	Take responsibility for actions of others, defends actions of others, and act when appropriate as an advocate for others.	323	.66	1	.42
11	Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	324	.20	1	.65

(Table D25 continues)

(Table D25 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
12	Change Agent (proactive)	Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).	323	.01	1	.91
13	Contextual Intelligence	Know how to appropriately interpret and react to changing and volatile surroundings.	325	.01	1	.91
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.	324	^a	-	-
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).	318	2.29	1	.13
16	Crisis Management (conflict resolution)	Deal with conflict by providing effective strategies for conflict resolution.	318	.02	1	.88
17	Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.	315	2.68	1	.10
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.	318	2.29	1	.13
19	Effective and Constructive Use of Influence (powerful image)	Demonstrate the effective use of different types of power in developing a powerful image.	314	2.60	1	.12
20	Ethical (treatment)	Treats people equitably and fairly.	315	^a	-	-

(Table D25 continues)

(Table D25 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.	313	.35	1	.55
22	Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	313	.34	1	.56
23	Intentional Leadership (assess)	Assess and evaluate their own leadership performance and are aware of strengths and weaknesses.	315	.07	1	.80
24	Intentional Leadership (improvement)	Take intentional action toward continuous improvement of leadership ability.	313	.16	1	.69
25	Leadership Planner	Have an action guide and delineated goals for achieving personal best.	307	.12	1	.73
26	Resilience	Display the ability to recover from, or adjust easily to, misfortune or change.	305	.01	1	.90
27	Socially Responsible (concern)	Express concern about social trends and issues (encourages legislation and policy when appropriate).	307	.31	1	.58
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	306	.99	1	.32
29	Thrives on Responsibility	Have a strong sense of duty and dependability in a variety of situations and roles.	307	1.85	1	.17

(Table D25 continues)

(Table D25 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
30	Utilizes Appropriate Leadership Styles (transition)	Identify when it is appropriate to transition between leadership styles with subordinates and peers.	303	.00	1	.95
31	Excellent Written Communication Skills	Write thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	304	.10	1	.76
32	Uses Body-Language	Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.	303	4.19*	1	.04
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	304	2.36	1	.12
34	Empathetic (exhibit empathy)	Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.	304	1.32	1	.25
35	Empathetic (risks)	Takes risks on behalf of team members.	296	4.71*	1	.03
36	Applies Known and Attained Knowledge	Use clinical evidence, research, and best-practices in the promotion of the profession by professional communications (abstracts, poster-presentations, lectures, etc.), original investigations, and literature reviews.	297	.02	1	.88

(Table D25 continues)

(Table D25 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
37	Responsible for Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.	299	.36	1	.55
38	Ambitious	Use available resources (intrinsic and extrinsic) and other effective strategies to promote professional and personal development.	296	.22	1	.64
39	Assertive	Be proactive about new ideas, innovations, and change initiatives while maintaining respect for personal boundaries and rights of others.	297	.27	1	.60
40	Scholarship	Contribute to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.	295	6.90*	1	.01
41	Emotionally Stable (manage stress)	Handle and manage stress associated with leadership roles.	297	2.62	1	.11
42	Emotionally Stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.	295	1.29	1	.26
43	Flexible, Adaptable, and Resilient in times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.	296	-. ^a	-	-
44	Willing to Take Appropriate Risk	Be willing to accept a degree of uncertainty for the sake of implementing an idea, needed value, or to see a goal accomplished.	297	.82	1	.37

(Table D25 continues)

(Table D25 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
45	Improves Morale	Facilitate and encourage a positive attitude in peers, subordinates, and supervisors toward their work and life.	293	.47	1	.50
46	Utilizes Appropriate Leadership Styles (recognize)	Recognize when superiors and other professionals are transitioning between leadership styles.	293	.02	1	.90
47	Courageous Leadership	Have strong convictions and holds to convictions when faced with challenges.	292	.68	1	.41
48	Open-Mindedness	Be willing to discard old ways of doing things when evidence fails to support them.	294	4.05*	1	.04
49	Protector	Provide a secure environment, tend to others carefully, prevent indiscretions, and preserves [others].	293	.77	1	.38
50	Leads Quietly (patiently)	Move patiently, carefully and incrementally.	286	2.29	1	.13
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.	290	.42	1	.52
52	Leads Quietly (do right)	Do what is “right” for the organization.	290	.05	1	.82
53	Creative/ Innovative Leadership	Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.	290	2.89	1	.09

(Table D25 continues)

(Table D25 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.	290	-. ^a	-	-
55	Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others.	289	1.89	1	.17
56	Empowerment (ensure)	Ensure transformation and development of others.	286	.95	1	.33
57	Ensures an Awareness of Mission	Understand and communicate how individual performance of others influences subordinates', peers', and supervisors' perceptions of how the mission is being accomplished.	282	.08	1	.78
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	287	1.38	1	.24
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.	289	.43	1	.51
60	Identifies Leaders	Identify leadership attributes in emerging leaders, and take initiative to facilitate development.	288	.09	1	.76
61	Organizationally Savvy (observe)	Carefully observe the environment and people.	287	2.65	1	.10
62	Utilizes Appropriate Leadership Styles (variety)	Demonstrate the ability to implement and transition between a variety of leadership styles as appropriate, and when different situations dictate a diversity of leadership styles.	285	.01	1	.91

(Table D25 continues)

(Table D25 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
63	Future-Minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.	289	6.37*	1	.01
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.	289	- ^a	-	-
65	Collaborator (achieve goals)	Effectively collaborate with other professionals within the local community in achieving goals.	287	.08	1	.78
66	Collaborator (promote health)	Facilitate the collaboration as a leader and participant with colleagues and other health care professionals to promote the health and welfare of diverse individuals and groups.	287	.02	1	.88
67	Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	287	.85	1	.36
68	Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.	282	7.55*	1	.01
69	Cultural Sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	282	4.93*	1	.03
70	Cultural Sensitivity (interaction)	Provide opportunities for diverse members to interact in a non-discriminatory manner.	281	2.44	1	.12

(Table D25 continues)

(Table D25 continued)

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
71	Effective and Constructive Use of Influence (affect behavior)	Use interpersonal skills, personal power, and influence to constructively and effectively affect the behavior and decisions of others.	279	.23	1	.63
72	Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	280	.00	1	.97
73	Controls Risk (strategies)	Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after patient care error occurs) to continuously improve care.	282	.28	1	.60
74	Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.	286	.43	1	.51
75	Time Management	Make use of processes and tools that increase efficiency and set parameters for availability to subordinates and peers.	280	.29	1	.59
76	Multicultural Leadership	Influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.	277	2.06	1	.15
77	Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.	280	2.11	1	.15
78	Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	282	.12	1	.73

Table D26 displays the chi-square analysis results for pooled importance and the NATA District in which the respondents' institution is located.

Table D26

Chi-Square Results Pooled Importance and NATA District

Item	Competency	Descriptor	<u>n</u>	χ^2	df	<i>p</i>
10	Advocate	Take responsibility for actions of others, defends actions of others, and act when appropriate as an advocate for others.	320	5.91	9	.75
11	Change Agent (bravery)	Have the bravery to raise difficult and challenging questions that others may perceive as a threat to the status quo.	321	5.24	9	.82
12	Change Agent (proactive)	Be proactive rather than reactive in rising to challenges, leading, participating in, or making change (i.e., assessing, initiating, researching, planning, constructing, and advocating).	320	6.74	9	.66
13	Contextual Intelligence	Know how to appropriately interpret and react to changing and volatile surroundings.	322	7.97	9	.54
14	Credible	Be believable, honest, trustworthy, and ethical in dealings with subordinates, peers, and supervisors.	321	- ^a	-	-
15	Crisis Management (problem solving)	Effectively handle unforeseen crises and limits or corrects problems in a reasonable amount of time (via problem solving and dialogue).	316	12.21	9	.20
16	Crisis Management (conflict resolution)	Deal with conflict by providing effective strategies for conflict resolution.	316	4.22	9	.90
17	Critical Thinker	Display the cognitive ability to make connections, integrate, and make practical application of different actions, opinions, and information.	313	9.89	9	.36
18	Dedicated	Display the desire, energy and discipline to achieve stated goals.	316	12.21	9	.20

(Table D26 continues)

(Table D26 continued)

Item	Competency	Descriptor	n	χ^2	df	p
19	Effective and Constructive Use of Influence (powerful image)	Demonstrate the effective use of different types of power in developing a powerful image.	312	7.28	9	.61
20	Ethical (treatment)	Treats people equitably and fairly.	314	- ^a	-	-
21	Ethical (report)	Report incompetent, unethical, and illegal practice objectively, factually, and according to current standards/procedures.	312	6.50	9	.69
22	Excellent Verbal Communication Skills	Verbally articulate thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	312	7.80	9	.55
23	Intentional Leadership (assess)	Assess and evaluate their own leadership performance and are aware of strengths and weaknesses.	314	15.32	9	.08
24	Intentional Leadership (improvement)	Take intentional action toward continuous improvement of leadership ability.	312	8.44	9	.49
25	Leadership Planner	Have an action guide and delineated goals for achieving personal best.	306	14.76	9	.10
26	Resilience	Display the ability to recover from, or adjust easily to, misfortune or change.	304	6.24	9	.72
27	Socially Responsible (concern)	Express concern about social trends and issues (encourages legislation and policy when appropriate).	306	8.29	9	.51
28	Socially Responsible (volunteer)	Volunteer in social and community activities.	305	10.89	9	.28
29	Thrives on Responsibility	Have a strong sense of duty and dependability in a variety of situations and roles.	306	3.68	9	.93

(Table D26 continues)

(Table D26 continued)

Item	Competency	Descriptor	n	χ^2	df	p
30	Utilizes Appropriate Leadership Styles (transition)	Identify when it is appropriate to transition between leadership styles with subordinates and peers.	302	6.52	9	.69
31	Excellent Written Communication Skills	Write thoughts and ideas accurately, effectively, and succinctly to subordinates, team members, supervisors, other professionals, and collaborative community partners.	303	4.57	9	.87
32	Uses Body-Language	Use non-verbal cues and body-language effectively and appropriately when communicating to subordinates, team members, supervisors, other professionals, and collaborative community partners.	302	12.06	9	.21
33	Empathetic (co-workers)	Demonstrate concern for the personal and professional lives of co-workers and peers.	303	12.53	9	.19
34	Empathetic (exhibit empathy)	Exhibit empathy by giving full attention, listening, expressing concern, advocating, assisting, and understanding different cultures, beliefs, and perspectives.	303	8.31	9	.50
35	Empathetic (risks)	Takes risks on behalf of team members.	295	9.03	9	.43
36	Applies Known and Attained Knowledge	Use clinical evidence, research, and best-practices in the promotion of the profession by professional communications (abstracts, poster-presentations, lectures, etc.), original investigations, and literature reviews.	296	9.58	9	.39
37	Responsible for Actions	Handle scrutiny and criticism professionally and with tact when offered by subordinates, peers, superiors, other professionals, and community partners for activities and initiatives.	298	11.25	9	.26
38	Ambitious	Use available resources (intrinsic and extrinsic) and other effective strategies to promote professional and personal development.	295	18.83*	9	.03

(Table D26 continues)

(Table D26 continued)

Item	Competency	Descriptor	n	χ^2	df	p
39	Assertive	Be proactive about new ideas, innovations, and change initiatives while maintaining respect for personal boundaries and rights of others.	296	11.67	9	.23
40	Scholarship	Contribute to professional advancement by promotion and participating in scholarly activity, such as, conducting research, giving/hosting professional presentations, participating in peer reviews, or writing articles.	294	4.92	9	.84
41	Emotionally Stable (manage stress)	Handle and manage stress associated with leadership roles.	296	36.61	9	.94
42	Emotionally Stable (calm)	Exhibit a cool, calm, and relaxed leadership style even in the face of crisis or adversity.	294	6.94	9	.64
43	Flexible, Adaptable, and Resilient in Times of Change, Crisis, or Stress	Adapt and cope well with unforeseen changes or volatile circumstances brought on by supervisors, peers, subordinates, or the environment.	295	^a	-	-
44	Willing to Take Appropriate Risk	Be willing to accept a degree of uncertainty for the sake of implementing an idea, needed value, or to see a goal accomplished.	296	14.48	9	.11
45	Improves Morale	Facilitate and encourage a positive attitude in peers, subordinates, and supervisors toward their work and life.	292	7.46	9	.59
46	Utilizes Appropriate Leadership Styles (recognize)	Recognize when superiors and other professionals are transitioning between leadership styles.	292	10.13	9	.34
47	Courageous Leadership	Have strong convictions and holds to convictions when faced with challenges.	291	10.17	9	.34
48	Open-Mindedness	Be willing to discard old ways of doing things when evidence fails to support them.	293	6.93	9	.64

(Table D26 continues)

(Table D26 continued)

Item	Competency	Descriptor	n	χ^2	df	p
49	Protector	Provide a secure environment, tend to others carefully, prevent indiscretions, and preserves [others].	292	6.93	9	.64
50	Leads Quietly (patiently)	Move patiently, carefully and incrementally.	285	8.38	9	.50
51	Organizationally Savvy (interact)	Interact effectively with people in and outside the organization.	289	12.18	9	.20
52	Leads Quietly (do right)	Do what is “right” for the organization.	290	7.96	9	.54
53	Creative/ Innovative Leadership	Produce plausible ideas when asked or needed related to management and leadership practices, organizational policies, AT practice, effectiveness of outcomes-based AT practice, community partnerships, policy development, and professional organizational activities.	289	8.87	9	.45
54	Knowledgeable	Know, understand, and be capable of performing the details and demands of tasks and roles specific to the profession.	289	- ^a	-	-
55	Empowerment (encourage)	Use influence, and interpersonal ability to promote and encourage personal growth of others.	288	7.74	9	.56
56	Empowerment (ensure)	Ensure transformation and development of others.	285	15.57	9	.08
57	Ensures an awareness of Mission	Understand and communicate how individual performance of others influences subordinates’, peers’, and supervisors’ perceptions of how the mission is being accomplished.	281	6.13	9	.73
58	Leads Quietly (modesty)	Use modesty and restraint to accomplish goals.	286	11.54	9	.24

(Table D26 continues)

(Table D26 continued)

Item	Competency	Descriptor	n	χ^2	df	p
59	Nurtures Professional Relationships	Build relationships with other members of the healthcare community that are advantageous to the organization's mission, values, and goals.	288	9.26	9	.41
60	Identifies Leaders	Identify leadership attributes in emerging leaders, and take initiative to facilitate development.	287	3.19	9	.96
61	Organizationally Savvy (observe)	Carefully observe the environment and people.	286	6.78	9	.66
62	Utilizes Appropriate Leadership Styles (variety)	Demonstrate the ability to implement and transition between a variety of leadership styles as appropriate, and when different situations dictate a diversity of leadership styles.	285	6.33	9	.71
63	Future-Minded	Have a forward-looking mentality and sense of direction and concern for where the organization should be in the future.	288	11.46	9	.25
64	Ethical (promote)	Promote team practices of ethical behavior in the treatment of patients and in the pursuit of organizational goals and objectives.	288	- ^a	-	-
65	Collaborator (achieve goals)	Effectively collaborate with other professionals within the local community in achieving goals.	286	5.80	9	.76
66	Collaborator (promote health)	Facilitate the collaboration as a leader and participant with colleagues and other health care professionals to promote the health and welfare of diverse individuals and groups	287	10.59	9	.31
67	Consensus Builder	Exhibit interpersonal skill and convince other people to see the common good or a different point of view for the sake of the organizational mission or values by using listening skills, managing conflict, and creating win-win situations.	286	7.13	9	.62

(Table D26 continues)

(Table D26 continued)

Item	Competency	Descriptor	n	χ^2	df	p
68	Influencer	Use interpersonal skills to ethically and non-coercively affect the actions and decisions of others.	281	9.77	9	.37
69	Cultural Sensitivity (promote diversity)	Promote diversity in multiple contexts and align diverse individuals by creating and facilitating diversity.	281	9.44	9	.40
70	Cultural Sensitivity (interaction)	Provide opportunities for diverse members to interact in a non-discriminatory manner.	280	5.13	9	.82
71	Effective and Constructive Use of Influence (affect behavior)	Use interpersonal skills, personal power, and influence to constructively and effectively affect the behavior and decisions of others.	277	10.50	9	.31
72	Delegates Effectively	Appropriately give responsibility and authority to others in accomplishing desired tasks.	279	5.60	9	.78
73	Controls Risk (strategies)	Implement quality management strategies (prevention of patient care problems) and risk management (analyze problems and minimize losses after patient care error occurs) to continuously improve care.	281	10.38	9	.32
74	Controls Risk (improve quality)	Strive to improve quality while simultaneously decreasing risks.	285	8.22	9	.51
75	Time Management	Make use of processes and tools that increase efficiency and set parameters for availability to subordinates and peers.	278	10.37	9	.32
76	Multicultural Leadership	Influence and affect the behaviors and attitudes of peers and subordinates in an ethnically diverse context.	275	10.63	9	.30
77	Disciplined	Be consistent and steady in performing unpleasant or mundane tasks that provide long term benefits.	279	6.88	9	.65
78	Organizationally Savvy (participate)	Participate in fulfilling the needs of the organization and industry.	281	9.64	9	.38