

A DESCRIPTIVE STUDY OF INTERPERSONAL CONFLICT IN HIGH SCHOOL
ATHLETIC TRAINING

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University of Missouri

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Doctor of Education

by
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A DESCRIPTIVE STUDY OF INTERPERSONAL CONFLICT IN HIGH SCHOOL
ATHLETIC TRAINING

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DEDICATION

To Verdel, the English teacher who proofed my first paper of the program. Without your approval, this final paper is not complete. You are dearly missed, but not forgotten.

To my girls: Brooke, Kennedy, and Monroe. Your love, support, and sacrifices made this possible. I love you.

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A DESCRIPTIVE STUDY OF INTERPERSONAL CONFLICT IN HIGH SCHOOL ATHLETIC TRAINING

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ABSTRACT

The purpose of this study was to describe the prevalence and sources of interpersonal conflict (IC) as well as the challenges to managing IC, strategies for managing IC, and the confidence of athletic trainers in managing IC in high school athletic training. The Athletic Trainer Interpersonal Conflict Inventory was sent to 211 athletic trainers with a 36.5% return rate. Average age of the respondents was 39 years (sd = 10). Gender consisted of 51.9% males and 48.1% females with a mean of 14 years (sd = 8) of experience.

Prevalence of IC was reported by 96.1% of the respondents with nearly 25% of the respondents reporting to be “slightly confident” to “completely unconfident” in managing IC. Common causes of IC were workload, direct contact with others, disrespect for the role of an athletic trainer, and interference from athletes and coaches. Common challenges to managing IC were a lack of time, a lack of resources, lack of collaboration, the emotions of others and themselves, and their impatience. Common strategies to managing IC were utilizing organizational resources, using policies and procedures, collaboration, compromise, open communication, and attentive listening.

The results of this study begin to describe the nature of interpersonal conflict within high school athletic training. However, more research is needed to gain a better understanding of interpersonal conflict in athletic training.

CHAPTER ONE

INTRODUCTION TO THE STUDY

Background

Conflict is inevitable (Callanan, Benzing, & Perri, 2006). It is a constant variable within one's personal life and professional life (Corcoran & Mallinckrodt, 2000; Holton, 2003). Most people first experienced conflict when another child took a favorite toy. Consequently, the resulting management of such conflict was not likely to satisfy both children. Similar to the conflict situations certainly experienced as a child, conflicts within adult lives typically involve interaction with other people. As people mature, the interactions with other people and the conflicts encountered are concerned with more important issues. Likewise, ineffective management of such conflict may have more profound effects such as damaged relationships, diminished teamwork, and unproductive organizations. Often, the differences among people and their changing environment are key components contributing to conflict.

Diversity is one of the key components of conflict. Organizations are comprised of individuals with a multitude of interests, beliefs, personalities, cultures, and values (Bolman & Deal, 2003; Morgan, 2006; Shafritz & Ott, 2001). Barki and Hartwick (2004) asserted the differences in values, needs, interests, opinions, and goals among individuals were components of interpersonal conflict. As a group increases in size and diversity, the amount of conflict typically increases as well (Bolman & Deal). Similar to the diverse nature of organizations and their stakeholders, the environment in which they live is a component of conflict. Today's society is continually evolving and thereby requiring organizations and individuals to change how they function in order to adapt to the

environment. The action or inaction taken by organizations in this changing society often results in conflict (Morgan, 2006). While discussing this ever-changing society, Morgan explained the concept of requisite variety in his chapter on the organismic lens. The concept of requisite variety recognizes a “system” must be as diverse as the environment in which it resides. Otherwise, the system is at risk of failing to grow and survive.

The profession of athletic training encompasses diversity among individuals as well as a rapidly changing environment. Capel (1990) noted athletic training was characterized by a significant amount of interaction between athletic trainers and others. In addition, she asserted this interaction was often with individuals (coaches, athletes) who may have values and goals which are in competition with those of athletic trainers. Gardner-Huber (1995) claimed the rapid changes within the healthcare industry was a contributing factor to conflict for healthcare professionals. Similarly, Capel noted the emotionally charged environment in which athletic trainers work was a contributing aspect of conflict.

While discussing the positive effects of conflict, Robbins (1978) noted the link among conflict, change, adaptation, and survival of an organization. Although he acknowledged certain types of conflict are destructive to an organization, other types of conflict should be promoted within a certain range in order to help the organization survive. As a result of a changing environment, Robbins suggested conflict ensues and provides the driving force for organizational change. This change leads to the organization adapting within its environment and thus, enabling it to survive. In summary, Robbins asserted a changing environment leads to conflict, conflict leads to change, change leads to adaptation, and adaptation leads to survival.

While little can be done to prevent the environment from changing and the inevitable nature of conflict, much can be done on how people react to conflict and how an organization adapts. Individuals working together cooperatively is a key component as an organization responds to a changing environment and the ensuing conflict. In his book on the dysfunctions of a team, Lencioni (2002) noted all great relationships require productive conflict in order to grow. His book focuses on a company trying to survive within a rapidly changing industry and the company's employees interacting as a team (dysfunctional and functional). Similar to other authors, he indicated some conflict (ideological) is good while some conflict (interpersonal politics) is destructive. Conflict which is personality focused (personal attacks) should be eliminated, while conflict centered around ideologies should be encouraged. Lencioni's concept of a functional team is based upon developing trust, embracing conflict, creating commitment, developing accountability, and focusing on results.

The role of an athletic trainer can be compared to the characters in Lencioni's (2002) story of a diverse company trying to survive a rapidly changing technology field. Just as Lencioni described the members of a technology company as a team, athletic trainers are considered part of a team. Perhaps in the sense of an athletic team comprised of athletic trainers, coaches, athletes, and athletic department staff. Or in the sense of a sports medicine team comprised of athletic trainers, physicians, nurses, surgeons, psychologists, and nutritionists. Similar to the rapid changes within the technology field, the healthcare environment and athletic environment quickly change and can be unpredictable. Athletes can suddenly become ill or injured, athletic schedules can quickly be modified, or weather conditions can suddenly become hazardous. Despite the

differences in values or goals among individuals as well as the changing environment, it is essential for athletic trainers to interact with others as an effective team. Otherwise, the quality of healthcare provided to their patients can be compromised.

The development of a functional team assists an organization with effectively managing conflict, negotiating change, and subsequently adapting to the environment (Lencioni, 2002; Robbins, 1978). Lencioni's (2002) story of a company learning to develop into a functional team highlights the organizational learning which is vital for an organization to survive in a diverse environment. Two key ingredients to organizational learning are collaboration and communication (Bruffee, 1999; Mezirow & Associates, 2000; Nonaka, 1994, 2007; Yukl, 2006).

Collaboration and sharing of knowledge among organizational members leads to organizational learning (Bruffee, 1999; Nonaka, 1994, 2007; Yukl, 2006). The combined knowledge and experiences of the leader and followers lead to a better quality decision as compared to those originating from one person. This concept of group learning (*social learning*) was supported by various authors (Brandt, 1998; Bruffee; Nonaka). Brandt (1998) identified learning as inherently social and involving interaction among individuals. In his concept of a knowledge-creating company, Nonaka reinforced the concept of social learning. He emphasized the importance of combining the knowledge of all organizational members in order to solve problems and promote growth. He added the combined knowledge of organizational members is greater than the sum of individual member knowledge.

Nonaka (1994, 2007) indicated the creation of knowledge or an idea is a continuous process and begins with the individual. Although an idea originates with an

individual, it is the “interaction between individuals [which] typically plays a critical role in developing these ideas” (1994, p. 15). He referred to this interaction as a *community of interaction* which is what transforms the information into knowledge. Bruffee (1999), Eraut (2004), and Mezirow (2000) supported the idea of learning as a community activity or social activity. They stated the critical component to organizational learning lies not only in the collaboration among organizational members, but effective communication among the members as well.

Communication is the other key ingredient to organizational learning (Bruffee, 1999; Mezirow, 2000; Nonaka, 1994, 2007). Bruffee supported this contention as he discussed collaborative learning. He explained collaborative learning occurs when members of an organization have open conversations thereby allowing individual members to transform their preconceived ideas once they fully understand the perspectives of others. The sharing of individual knowledge through effective discussion leads to the development of new knowledge.

Patterson, Grenny, McMillan, and Switzler (2002) defined dialogue as “the free flow of meaning between two or more people” (p. 20). A key part of the definition is “free flow.” Often, the free flow is disrupted due to communication that is emotional, one-sided, competitive, or argumentative. Effective communication is characterized by a focus on the issue of concern, rather than a focus on personal attacks (Fisher, Ury, & Patton, 1991; Wakeman, 2006). Effective communication also involves effective listening skills.

In addition to collaboration and communication, organizational learning is facilitated as a result of effective implementation of change decisions (Yukl, 2006). It is

natural for people to resist change for reasons such as a lack of trust for leaders, fear of failure, loss of power, threat to culture, and a belief change is not necessary. Leithwood and Duke (1999) provided a literature review of 121 articles related to leadership. In this review, they identified the benefit of participatory leadership toward enhancing organizational effectiveness and implementing change. Yukl stated individuals who participate in decision making have a greater satisfaction for the overall change process. First, they have a better understanding of the decisions made and subsequent changes. Second, they are more accepting of the decisions and are more likely to implement those decisions as the organization progresses through change.

Conceptual Underpinnings for the Study

The construct of interpersonal conflict and conflict management styles serve as the conceptual underpinnings for this study. Conflict is a popular research theme within numerous disciplines such as business, management, psychology, and healthcare. Perhaps the most consistent characteristic of conflict within the literature is its prevalence. Conflict has been described as ever-present, inevitable, a part of everyday life, and pervasive (Barki & Hartwick, 2001; Callanan et al., 2006; Corcoran & Mallinckrodt, 2000; Forté, 1997). An extensive review of literature found no studies or articles noting the absence of conflict within an individual's personal or professional life. Interpersonal conflict occurs between two or more individuals and consists of three variables: disagreement, negative emotion, and interference (Barki & Hartwick, 2004). While some authors include other variables in their construct of interpersonal conflict, most definitions are comprised of the previous three variables. In addition, some constructs of interpersonal conflict allow for the presence of only one variable or the combination of

two variables. The construct of interpersonal conflict offered by Barki and Hartwick called for the simultaneous presence of all three variables: disagreement, negative emotion, and interference.

Considering conflict is ever-present and part of daily life, the issue of how to manage conflict becomes a concern. Therefore, conflict management styles are presented as the second conceptual underpinning for this study. At first, one may consider managing conflict as an “either/or” option. For example, either conflict is managed or conflict is avoided. According to early literature by Follett (1942), Blake and Mouton (1964), and Thomas (1976), there are five common styles of handling conflict with avoidance as one of those styles. Blake and Mouton’s “Managerial Grid” presented five managerial styles based on the two dimensions of “concern for people” and “concern for production.” Each of the styles presented by Blake and Mouton consisted of various managerial aspects including conflict management.

Thomas reinterpreted Blake and Mouton’s managerial grid from a conflict management focus, rather than the superior-subordinate focus of management in general. Various reinterpretations of Blake and Mouton’s managerial grid and Thomas’ conflict handling model have been proposed by authors with modifications of the dimensions comprising the grid as well as different names for the five styles. The conceptual presentation for the five styles which served as an underpinning for this study was Thomas’ original model with adaptations offered by Callanan and Perri (2006). See Figure 1. Their reinterpretation of Thomas’ model included the five original styles of conflict management, however, Callanan and Perri’s model included additional contextual factors rated on a scale of low to high. The contextual factors included in their

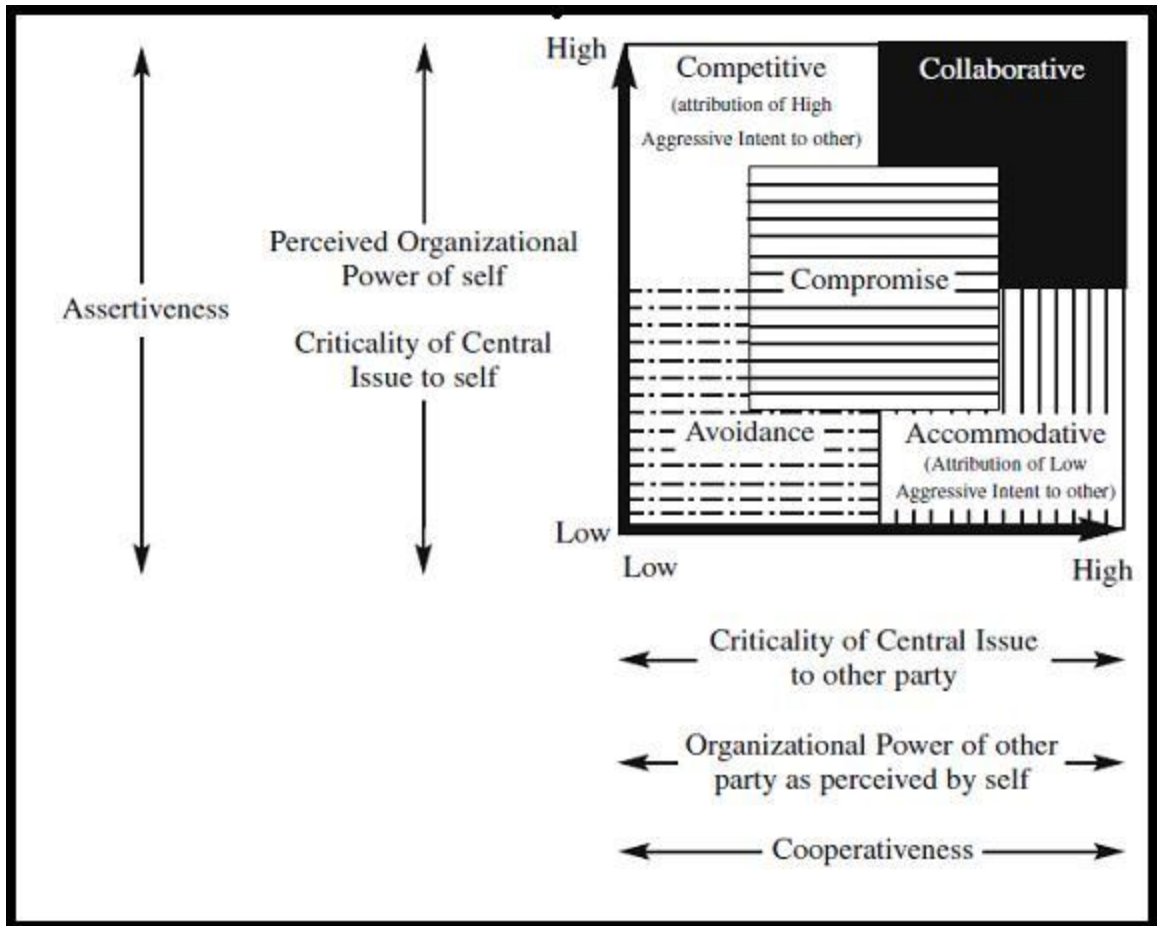


Figure 1. Five conflict handling modes presented by Thomas (1983) and adapted by Callanan & Perri (2006).

model were “Assertiveness/Cooperativeness,” “Perceived Organizational Power of Self/Perceived Organizational Power of Other,” and “Criticality of Central Issue to Self/Criticality of Central Issue to Other party.”

Statement of the Problem

The prevalence of conflict within an individual’s personal and professional life has been well documented (Callanan & Perri, 2006; Corcoran & Mallinckrodt, 2000; Palmer, 2001). As a result of the prevalence of conflict and its potential negative effects, many organizations provide professional development opportunities so employees can

learn to effectively manage conflict. In addition, organizations have conflict and dispute resolution centers as a resource for managing organizational conflict. Numerous programs are available for individuals to cope with conflict in their personal lives. There are even programs in K12 education aimed at teaching youth how to effectively manage conflict. Certain variables such as a competitive environment, diversity of involved parties, extensive interpersonal contact, and scarce resources may contribute to the development of conflict (Bolman & Deal, 2003; Morgan, 2006).

Likewise, conflict has been well documented within the athletic training literature (Brumels & Beach, 2008; Capel, 1990; Kania, Meyer, & Ebersole, 2009, Rankin & Ingersoll, 2001; Ray, 2000). Although many athletic training sources made note of conflict within the athletic training profession, those sources were primarily focused on burnout, attrition, quality of life, and professional socialization within athletic training. Some of the sources which noted the prevalence of conflict within athletic training presented the perspective of role conflict and was not specifically described as interpersonal conflict. However, other sources presented conflict which was described as originating from the interaction with other individuals.

In addition to relevant literature, professional experience of the researcher also noted the prevalence of conflict within athletic training. As a practicing athletic trainer and a supervisor of practicing athletic trainers, the researcher noted interpersonal conflict among athletic trainers and the people they interact with such as coaches, administrators, athletes, parents, and other healthcare personnel. Although literature and personal experience of the researcher support the prevalence of conflict within the athletic training profession, descriptive studies focusing on interpersonal conflict within athletic training

were lacking. Through online searches utilizing various search engines, no research could be found which specifically examined interpersonal conflict within athletic training in regard to its degree of prevalence and sources. Furthermore, no literature could be found which studied athletic trainers and successful strategies to managing conflict, barriers to managing conflict, and confidence with managing conflict.

Purpose of the Study

The purpose of this study was to describe the nature of interpersonal conflict within high school athletic training. More specifically, the purpose was to explore the interpersonal conflict experienced by high school athletic trainers (ATs) during their interactions with other individuals. Research Question (RQ) 1 was directed at the *prevalence* of interpersonal conflict during the high school ATs daily routine. RQ2 was designed to obtain each respondent's estimate of his or her degree of *confidence* in effectively managing interpersonal conflict. RQ3, RQ4, and RQ5 were developed to gain an understanding from each participant's perspective regarding (a) the *sources* of interpersonal conflict, (b) *challenges* to managing interpersonal conflict, and (c) *strategies* successful with managing interpersonal conflict.

Research Questions

Within the context of this study, a concurrent, mixed methods approach was utilized to address the following research questions:

1. How prevalent was interpersonal conflict in the daily routine of high school athletic trainers?
2. How confident were high school athletic trainers in effectively managing interpersonal conflict?

3. What were the common sources of interpersonal conflict for high school athletic trainers?
4. What were the common challenges for high school athletic trainers in their management of interpersonal conflict?
5. What were the common strategies for high school athletic trainers in their management of interpersonal conflict?

Limitations, Assumptions, and Design Controls

Limitations

Data for this study were collected from high school athletic trainers in NATA District 5 who provided athletic training services to high school athletic programs for at least 15 hours per week during the academic year. The athletic trainers were employed by local school districts or were employed by local sports medicine clinics which provided services on a contract basis. The sample used for this study posed a limitation in the ability to generalize the findings of this study to all athletic trainers. Different work settings and differences in how athletic trainers function in other geographical regions limit the ability to generalize the findings of this study to the larger population of athletic trainers across the USA.

A second limitation to the study was the time of year in which the data were collected. The data were collected during the time frame in which many athletic programs were concluding their winter seasons and beginning their spring seasons. The amount of workload, stress, and injury rates are likely to differ from sport season to sport season. Collection of data during the fall sport season may have produced different results due to the sports active during this time and inherent injury risks. The fall sport season typically

involves football and boys soccer. These sports historically have a greater incidence of serious injury and an increased number of overall injuries.

A third limitation was the instrument used to collect the data. The Athletic Trainer Interpersonal Conflict Inventory (ATICI) was developed by the researcher for this study and was limited in the established levels of validity or reliability.

Assumptions

The researcher chose to study athletic trainers who provided services to a high school athletic program with the underlying assumption that the competitive personalities of coaches and athletes would contribute to creating interpersonal conflict with athletic trainers. Athletic trainers are often considered the “bearer of bad news” in the sense of communicating the nature of an injury with the athlete and coach. Often, the recommended course of treatment is for the athlete to not participate in sports, at least for a period of time in which to allow the injury to heal. The interest of the athletic trainer to provide the best quality healthcare to the athlete, while protecting the liability risk of the school, is often contradictory to the interest of the coach and athlete. The interest of the coach and athlete often is more focused on competing in the next game as opposed to discontinuing activity for a period of time to allow the injury to properly heal. The competitive nature of a game and the culture of “winning” also contributes to the potential of conflict as a result of differences in goals and values among athletic trainers, coaches, and athletes in regard to injury care.

The researcher also assumed the employment status of high school athletic trainers may result in a heightened level of interpersonal conflict with coaches. Although some athletic trainers providing services to high school athletic programs are employees

of the school district, some may be contract employees of a local hospital or sports medicine clinic. This “outsider” status of the athletic trainer was assumed to lead to a greater potential for conflict as opposed to an athletic trainer who is an employee of the same organization as the coaching staff.

Design Controls

The National Athletic Trainers’ Association is comprised of over 30,000 members. The membership is organized by regional districts, member category, and employment setting. The membership is regionally organized into 10 districts, 4 membership categories (professional, student, international, and inactive), and 16 job settings with 35 sub-settings. Subsequently, there is much diversity in the job roles among athletic trainers. In order to provide the greatest potential to generalize the findings of this study to other athletic trainers, a well defined sample was obtained. This study examined only athletic trainers who provided athletic training services to high school athletic programs in District 5. In order to be included in the study, athletic trainers had to provide athletic training services for at least 15 hours per week to the high school athletic program during the academic year.

The researcher employed measures to control for the limitation of the ATICI. An extensive review of the literature provided no evidence of an instrument designed to measure interpersonal conflict with athletic trainers. However, similar instruments were found in the literature of other disciplines and were used in the development of the ATICI. Validity of the ATICI was established through literature review, expert review, and a pilot study. Preliminary development of the ATICI resulted from a review of literature and similar instruments used in other disciplines. The researcher of this study

performed preliminary interviews with athletic trainers, athletic training educators, research experts, and conflict resolution experts to gain an understanding of the nature of conflict within athletic training and the design of an instrument to measure such conflict. After initial development of the ATICI, it was reviewed by research and conflict resolution experts. A revision of the ATICI was administered to a small, convenient sample to determine clarity.

Definition of Key Terms

Key terms and concepts relative to this study are defined and discussed.

ATICI. Athletic Trainer Interpersonal Conflict Inventory (ATICI) is a survey developed by the researcher and used to measure prevalence of interpersonal conflict, confidence with managing interpersonal conflict, sources of interpersonal conflict, challenges to managing interpersonal conflict, and strategies for managing interpersonal conflict.

Athletic training. “Athletic training is practiced by athletic trainers, health care professionals who collaborate with physicians to optimize activity and participation of patients and clients. Athletic training encompasses the prevention, diagnosis, and intervention of emergency, acute, and chronic medical conditions involving impairment, functional limitations, and disabilities (NATA, 2010b).”

Athletic setting. The athletic setting is defined as an employment setting for athletic trainers which involves the daily interaction with individuals during sport related practices and competitive events. Daily duties focus on prevention, evaluation, treatment, and rehabilitation of athletic related injuries.

Athletic trainer. An athletic trainer is a healthcare provider who specializes in prevention, assessment, treatment, and rehabilitation of injuries/illnesses (NATA, 2010b).

BOC. The Board of Certification (BOC) is the accredited certifying agency for athletic trainers in the USA and establishes standards for the practice of athletic training (BOC, 2009).

CAATE. The Commission on Accreditation of Athletic Training Education is the accrediting agency for entry-level athletic training educational programs (CAATE, 2008).

Challenges. Situations, actions of others, or personal characteristics which impede or hinder a person's ability to resolve or manage conflict.

Interpersonal conflict. Barki and Hartwick (2001) defined interpersonal conflict as "a phenomenon that occurs between interdependent parties as they experience negative emotional reactions to perceived disagreements and interference with the attainment of their goals" (p. 198).

NATA. The National Athletic Trainers' Association is the operating body for certified athletic trainers and those who support athletic training (NATA, 2010b).

Sources. Sources of conflict are those actions, inactions, behaviors, or situations which cause or contribute to the development of interpersonal conflict.

Strategies. Techniques or actions implemented (such as communication, listening, controlling emotions, collaborating) in an attempt to resolve or manage a conflict situation.

Summary

The inevitable nature of conflict results from factors such as diversity among individuals, a rapidly changing environment, scarce resources, and different perspectives.

Whether viewed as positive or negative, conflict should be effectively managed in order to assist individuals and organizations with attaining their goals. Individuals working collaboratively as a team may help minimize the negative effects of conflict. Individuals of an organization working as a team create a cycle of change, adaptation, and growth. A key component of this cycle is organizational learning. Effective organizational learning occurs as a result of effective communication among members and a sharing of individual knowledge.

However, interpersonal conflict can create an obstruction to effective communication and organizational learning. An organization unable to effectively communicate and learn is at risk for failure as a result of the inability to change, adapt, and grow. Implementing effective conflict management strategies allows individuals to address the disagreement, negative emotion, and interference which are key characteristics of interpersonal conflict.

Chapter Two consists of a synthesis of literature on conflict, conflict management, conflict in healthcare professions, conflict in athletic training, and a historical perspective of athletic training and athletic training education. Chapter Three presents the research methodology used in this study. Chapter Four consists of the findings and data analysis. Chapter Five presents the implications of the findings, limitations of the study, and recommendations for future research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

Morgan (2006) asserted conflict develops in the presence of antagonistic interests among individuals or groups. He asserted conflict will always be present and is often viewed as negative for an organization and its members. However, Morgan also stated that conflict can have a positive effect on organizations. Similarly, Blake and Mouton (1964) stated conflict is inevitable and acknowledged the duality of conflict with its positive and negative effects on an individual or organization. They asserted conflict:

...must be dealt with in some way. On the one hand, conflict can delay or prevent the achievement of organization objectives and personal goals, and from that standpoint it is bad. But at the other extreme, conflict can promote innovation, creativity, and the development of new ideas which make organizational growth possible, and from that standpoint, conflict is good. The issue, then, is not in whether conflict is present. It will be present. The key is in how conflict is managed. (p. 163)

Consistent with this perspective, Rahim and Bonoma (1979) stated “conflict must not necessarily be reduced, eliminated or suppressed, but managed“ (p. 1342). Because of its positive effects, they argued conflict should not be resolved, rather it should be managed so it has a positive outcome. In their model of conflict management, they argued conflict must be diagnosed prior to implementing an intervention. They continued by stating it is essential to understanding the nature of conflict and the underlying factors of a specific conflict situation. In order to help address the research questions presented

in this study, the remainder of this chapter will provide a synthesis of relevant literature to develop a better understanding of conflict, the management of conflict, conflict within healthcare professions, conflict within athletic training, and the history of athletic training.

The review of literature presented in the section below is divided into (a) conflict, (b) conflict management styles, (c) conflict in health care professions, (d) conflict in athletic training, and (e) history of athletic training and athletic training education. The first section titled conflict is subdivided into definition, types, sources, prevalence, effects, stages, and management of conflict. The second section presents literature related to conflict management styles. The third section is concerned with conflict in healthcare professions and is comprised of sources, effects, management, and recommendations as it pertains to healthcare professions such as nursing, medicine, and physical therapy. The fourth section focuses on conflict within the healthcare profession of athletic training and consists of the following subsections: presence of conflict, sources of conflict, and recommendations. The final section of the review of literature is concerned with the history of the athletic training profession and the history of athletic training education.

Conflict

Similar to many words, there is not a consensus on how to define conflict. Merriam-Webster alone identified several interpretations of conflict as a noun. The word conflict is derived from the Latin word “conflictus,” which means an “act of striking together” (Merriam-Webster, 2007, p. 261). Merriam-Webster defined conflict as a “fight, battle, war” (p. 261). Additionally, they defined conflict as (a) “an antagonistic state or action” such as divergent interests, ideas, or persons, (b) “mental struggle

resulting from incompatible or opposing needs, drives, wishes, or external or internal demands”, and (c) “the opposition of persons or forces that gives rise to the dramatic action in a drama” (p. 261). A review of relevant literature provided additional definitions for conflict.

Definition of Conflict

In 1964, Blake and Mouton published *The Managerial Grid* which is well known in the business and management sectors. Their managerial grid helped to create the foundation for common conflict management styles used today. These conflict management styles and their managerial grid are presented later in this chapter. Blake and Mouton characterized conflict as the tension which results from disagreement in points of view between individuals.

Using some of the early conflict literature as a guide, Thomas (1976) defined conflict as “the process which begins when one party perceives that another has frustrated, or is about to frustrate, some concern of his [sic]” (p. 891). However, he noted a lack of consensus in the literature on the definition of conflict. He identified two common approaches in the literature to defining conflict. One approach focused on the competitive actions used to interfere with the goals of another individual or group. The competitive actions were those activities which were associated with the management or resolution of the conflict. The second approach focused more on the activities which occurred prior to the method of conflict management.

Although numerous definitions had been proposed since his description in 1976, Thomas (1992) noted most definitions consisted of three themes: interdependence, perception to incompatibility, and interference. However, while reflecting on his original

definition, Thomas contended his interpretation was “useful as a starting point for a conflict episode” (p. 269).

As a result of the lack of consensus noted by many authors, Wall and Callister (1995) summarized definitions from key researchers and developed a comprehensive definition. They noted a consistency in key definitions and suggested conflict consisted of two variables. First, conflict required two or more parties and second, the involved parties must perceive the opposition to each other. Although they identified a discrepancy in the nature of the opposition, most definitions indicated the opposition focused on concerns, values, interests, needs, aspirations, or goals. Similar to Thomas’ definition, Wall and Callister defined conflict as “a process in which one party perceives that its interests are being opposed or negatively affected by another party” (p. 517).

Other authors provided definitions with similarities to Thomas’ (1978) original definition. Robbins defined conflict as “any kind of opposition or antagonistic interaction between two or more parties” (p. 67). He described conflict as falling along a continuum where one extreme is no conflict, and the other extreme is conflict which can be destructive. Similarly, Rahim (2002) defined conflict as “an interactive process manifested in incompatibility, disagreement, or dissonance within or between social entities” (p. 207). More recently, Thomas, Thomas, and Schaubhut (2008) defined conflict as the incompatibility of concerns among people. Barki and Hartwick (2001) described interpersonal conflict as “a phenomenon that occurs between interdependent parties as they experience negative emotional reactions to perceived disagreements and interference with the attainment of their goals” (p. 198). This definition served as the operational definition for this study.

Types of Conflict

Beyond providing a definition of conflict, different types of conflict were noted within the literature. Rahim (2002) presented two general classifications of conflict: affective and substantive. He described affective conflict as those situations associated with interpersonal relationships, feelings, and emotions. Substantive conflict was described as not involving personal factors, rather issues related to content or task. Furthermore, Rahim identified specific types of conflict. He described interpersonal conflict as occurring between two or more individuals, intragroup conflict as occurring among members of a specific group, and intergroup conflict as occurring between two or more different groups.

Wall and Callister (1995) included interorganizational conflict and international conflict which were defined as conflict between or among organizations and conflict between or among nations, respectively. Forté (1997) described intrapersonal conflict as occurring within an individual while Wall and Callister referred to this simply as personal conflict. Fritchie (1995) characterized conflict as either hot or cold. A hot conflict was described as one with intense activity, competitiveness, high ideals, and divisiveness. Conversely, a cold conflict was one characterized by avoidance, poor communication, and insensitivity. Fritchie made the analogy of conflict which is boiling over for the former, and freezing over for the latter.

Sources of Conflict

In addition to types of conflict, components and sources of conflict were identified within the literature. Robbins (1978) identified three categories for sources of conflict: communication, structure, and personal behavior factors. Communication

sources included ineffective communication and misunderstandings. Likewise, Sportsman (2005) and Porter-O'Grady (2003) identified communication as an underlying factor of conflict. Porter-O'Grady referred to communication sources as interactional difficulties which included communication and relational skills.

The structure category identified by Robbins (1978) referred to the opposition which develops from the roles and barriers imposed by management. Robbins also presented the category of personal behavior which pertained to the individual differences among people. Comparatively, Porter-O'Grady (2003), Holton (2003), and Sportsman (2005) identified personal and relational issues as underlying factors of conflict. Differences in values, culture, and level of relationship were noted as contributing factors. Holton identified the power imbalances or hierarchical nature of many organizations as an underlying factor to conflict. Content was identified by Holton and Sportsman as an additional category. This referred to the nature or subject of the conflict. An additional category noted by Porter-O'Grady was differences in perspective and perception. He noted people perceive situations differently and their perceptions may be antagonistic to another individual.

In a synthesis of over 200 articles related to conflict, Wall and Callister (1995) provided a summary of the causes of conflict. They identified three general categories for sources of conflict: individual characteristics, interpersonal factors, and issues. Individual characteristics included personality, values, goals, stress, anger, and desire for autonomy. Interpersonal factors consisted of variables such as perception, communication, behavior, structure, and previous interactions. The issues category was concerned with the complexity of the situation, the number of issues present, and the size of the issue.

Similarly, Barki and Hartwick (2001) initially identified four dimensions of interpersonal conflict based on their review of the literature. The four dimensions noted were interdependence, disagreement, interference, and negative emotion. However, based on the results of their 2001 study with information systems directors, they noted a lack of empirical support for interdependence as a dimension of interpersonal conflict.

Subsequently, Barki and Hartwick (2001) noted the three dimensions of interpersonal conflict were disagreement, interference, and negative emotion. Hence, these dimensions form the basis for their definition of conflict: "...a phenomenon that occurs between interdependent parties as they experience negative emotional reactions to perceived disagreements and interference with the attainment of their goals" (p. 198). Although differences were noted in defining conflict and components of conflict, there was no lack of agreement on its prevalence.

Prevalence of Conflict

Perhaps the most consistent descriptor of conflict in the literature was describing it as inevitable (Barki & Hartwick, 2001; Callanan & Perri, 2006; Harper, 2004; Kunaviktikul, Nuntasupawat, Srisuphan, & Booth, 2000; Pondy, 1992; Rahim, Buntzman, & White, 1999). Others characterized conflict as ever-present and a constant entity within one's personal and professional life (Corcoran & Mallinckrodt, 2000; Holton, 2003; Palmer, 2001). Porter-O'Grady (2003) stated conflict is normal and basically is the acknowledgement of the differences among individuals. Similarly, Forté (1997) asserted conflict is a part of everyday life and literally permeates the work environment. Robbins (1978) stated conflict had become a significant organizational factor in the 1970s and became a prominent interest among managers and researchers.

Effects of Conflict

Reflecting on his own publication in 1967 on organizational conflict, Pondy (1992) asserted conflict within organizations was negative and something to be avoided or eliminated. He noted conflict suggested a breakdown of the management and the relationships among the organization's members. The contention of conflict as negative was supported by Wall and Callister (1995). In their review of literature, they explored whether moderate conflict was beneficial, if too little conflict was dysfunctional, and if conflict should be promoted to attain organizational goals. They stated the answer was no to all three questions. Wall and Callister suggested conflict should be avoided as it was easier to prevent conflict from occurring as opposed to managing conflict. If conflict did occur, it should be resolved as soon as possible. In addition, they argued conflict should never be promoted by management.

However, in his reflection paper, Pondy (1992) subsequently rescinded his initial position on conflict and viewed conflict as benign. Subsequently, he claimed conflict was functional and necessary for survival of an organization. He asserted if an organization has no conflict, "then the organization has no reason for being" (p. 259).

Rather than conflict being either positive or negative, many authors supported the contention that conflict was positive and negative (Callanan & Perri, 2006; Forté, 1997; Holton, 2003). Callanan and Perri (2006) noted the traditional viewpoint saw conflict as negative, but the contemporary viewpoint saw it as positive if the conflict was managed properly. Although Rahim (2000) noted much of the literature presented techniques for conflict resolution, suggesting conflict was something to be eliminated, he also supported

the idea of conflict being negative and positive. Rahim (2002) noted stagnation in organizations which had little or no conflict.

However, unchecked conflict could be destructive to an organization. For example, Rahim (2000) asserted conflict such as personal attacks, racism, and sexual harassment had a negative effect and should be eliminated. Conversely, he noted conflict such as disagreements related to tasks and policies can have a positive effect on an organization and its members. Callanan and Perri (2006) claimed positive effects of conflict included motivating staff, providing feedback, enhancing organizational knowledge, and improving decision quality. Support for this contention was provided by Barki and Hartwick (2001) who argued conflict was considered positive or negative based on how it was managed. Conflict managed effectively was considered positive, whereas conflict managed ineffectively was considered negative.

Stages of Conflict

Robbins (1978) asserted theories on conflict have progressed through three stages: traditionalist, behaviorist, and interactionist. The traditionalist phase was present up to the middle 1940s and viewed conflict as something to be avoided. Conflict represented a dysfunction of the organization and was destructive. The behaviorist phase acknowledged conflict was a natural component of organizations and tolerated it to some degree. However, similar to the traditionalist phase, the overall viewpoint was to resolve the conflict. Robbins noted the interactionist phase acknowledged conflict as an inherent component of organizations and classified conflict as either functional or dysfunctional.

Robbins (1978) claimed dysfunctional conflict hinders organizational performance and should be resolved. He identified dysfunctional conflict as that which

is antagonistic to the organization's goals. On the other hand, Robbins noted functional conflict should be encouraged in moderate amounts. Morgan (2006) supported this claim by stating managers should maintain the right amount of conflict. He reported too much conflict can redirect member activity and immobilize an organization, whereas too little conflict may lead to lethargy and complacency. Similar to the positive benefits noted previously by Callanan (2006), Robbins stated organizational survival "...can result only when an organization is able to adapt to constant changes in the environment. Adaptation is possible only through change, and change is stimulated by conflict" (p. 69).

In summary, conflict was essentially defined as the opposition in interests between two or more parties. Types of conflict noted in the literature included intrapersonal, interpersonal, intragroup, and intergroup. Common sources of conflict were related to communication, organizational structure, personal characteristics, power inequities, and differences in perceptions. The literature reviewed identified conflict as pervasive and an inherent aspect of organizations. However, there was discrepancy as to whether conflict was beneficial, destructive, or both. Perhaps Forté (1997) summed up the effects of conflict by claiming conflict "is neither good nor bad, it is how we respond to its presence that determines whether conflict proves to be costly or constructive" (p. 199).

Conflict Management Styles

Throughout the literature related to conflict, a variety of terms were used in reference to addressing conflict. While most of the literature used conflict resolution or conflict management, some literature used the terms conflict handling, conflict mediation, or conflict behavior. In regard to conflict resolution or conflict management,

many authors have proposed conceptual models which present specific techniques commonly used to address conflict. The following section provides a discussion of conflict management vs. conflict resolution. In addition, conceptual models of styles used to address conflict are presented as well as literature identifying the most commonly used and preferred styles.

Management vs. Resolution

Regardless of whether conflict was considered productive or destructive to an organization, the literature consistently referred to the inevitability of conflict (Barki & Hartwick, 2001; Callanan & Perri, 2006; Harper, 2004; Kunaviktikul, Nuntasupawat, Srisuphan, & Booth, 2000; Pondy, 1992; Rahim, Buntzman, & White, 1999). Conflict which is destructive to an organization, must be resolved quickly and effectively. However, if conflict is productive for an organization, then it must be controlled or managed.

Blake and Mouton (1964) asserted conflict could prevent an organization from attaining its goals and therefore considered conflict as being negative. However, they also noted conflict promoted creativity and contributed to organizational growth and therefore considered conflict as being positive. Their contention was not whether conflict was good or bad, rather it was more important to examine how it was managed. A discrepancy was noted throughout the literature in the terminology as it pertained to dealing with conflict. The two dominant terms were conflict resolution and conflict management.

Robbins (1978) argued conflict resolution and conflict management were not synonymous. Those who viewed conflict as negative, tended to use the term resolution (Barki & Hartwick, 2001; Wall & Callister, 1995). The resolution of conflict essentially

refers to a reduction, elimination, or termination of such conflict (Rahim, 2002). Others who viewed conflict as positive, tended to use the term management (Callanan & Perri 2006; Rahim; Robbins, 1978).

As noted previously in Rahim's (2002) concept of affective and substantive conflict, he suggested conflict should be managed rather than eliminated completely. He contended affective conflict was viewed as negative and should be minimized, while substantive conflict was viewed as positive and should be maintained to a moderate degree. Rahim and Bonoma (1979) noted a moderate amount of conflict was necessary for an optimal level of organizational effectiveness. They proposed an inverted-U model whereby a moderate amount of conflict corresponded to an optimal level of organizational effectiveness. Too little or too much conflict contributed to lower levels of organizational effectiveness. Similar to Rahim and Bonoma, Robbins (1978) recommended resolving certain types of conflict while stimulating or managing other types of conflict. Regardless of perspective (resolution vs. management) to handling conflict, various styles have been proposed.

Conflict Management Styles

Mary Parker Follett (1942) was perhaps the first to identify styles of handling conflict. She noted three primary styles of managing conflict: domination, compromise, and integration. She added avoidance and suppression as secondary methods for managing conflict. In 1964, Blake and Mouton were the first to offer a conceptual presentation of five managerial styles in their presentation of *The Managerial Grid*. Their grid presented five styles for different managerial aspects. Among the managerial aspects presented was conflict management.

The five managerial styles presented by Blake and Mouton (1964) were presented on a 9x9 grid and consisted of two dimensions: concern for production and concern for people. See Figure 2. The horizontal axis consisted of the concern for production dimension and the vertical axis consisted of the concern for people dimension. The first

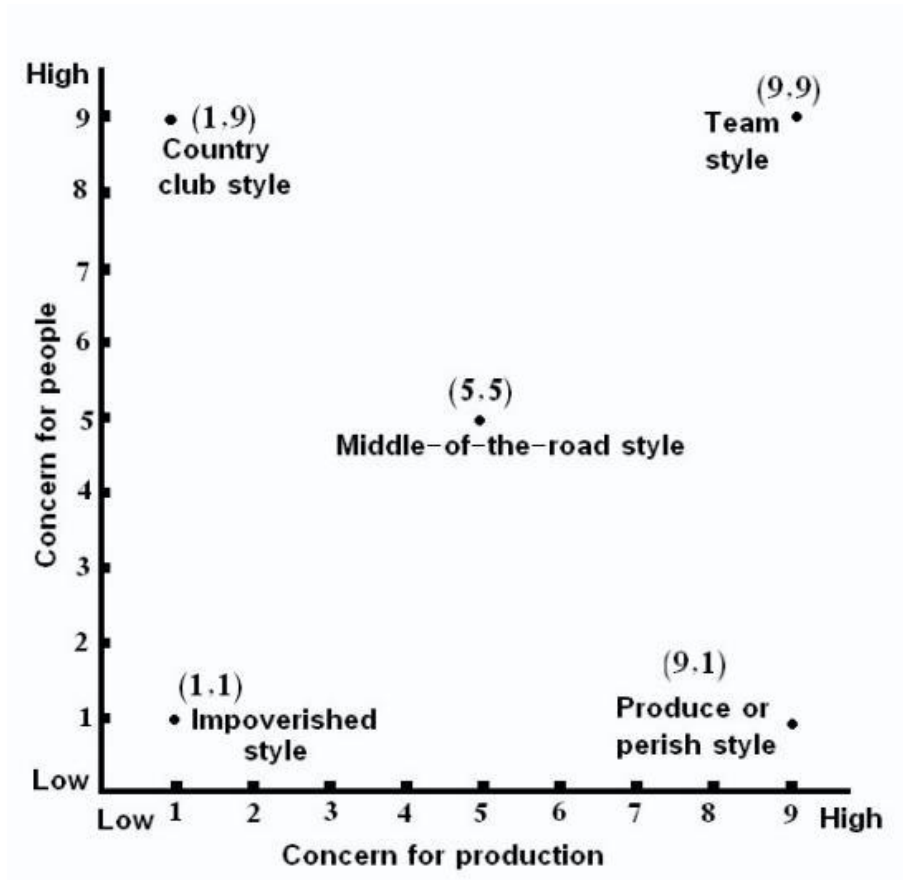


Figure 2. Managerial grid proposed by Blake and Mouton (1964).

box on the vertical and horizontal axes represented minimal concern (noted as 1) and the ninth box on both axes represented maximal concern (noted as 9). The combination of the two dimensions created the five managerial styles. Each of these styles pertained to several managerial aspects including the handling of conflict.

The “Impoverished” style (1,1) was characterized by a low concern for people and a low concern for production (Blake & Mouton, 1964). A maximal level of concern for others and for production was represented as a “Team” (9,9) style. A high concern for people and a low concern for production was labeled a “Country club” style (9,1), whereas a high concern for production and a low concern for people was termed “Produce or perish” (9,1). A moderate amount of concern for people and production (5,5) was termed “Middle-of-the-road.” The five styles proposed by Blake and Mouton were derived from the managerial perspective. Using this perspective as a guide, Thomas (1976) later developed a taxonomy which was not based upon the superior-subordinate managerial relationship.

Thomas’ (1976) reinterpretation of Blake and Mouton’s (1964) managerial grid was represented by a modification of the two dimensions. Blake and Mouton originally presented concern for production and concern for others as the two dimensions. The two dimensions on Thomas’ conceptualization were “Attempting to satisfy other’s concerns” and “Attempting to satisfy one’s own concerns”. See Figure 3. The horizontal dimension was related to the extent of attempting to satisfy the concerns of others and was measured in terms of “Cooperativeness.” The vertical dimension was related to the extent of attempting to satisfy one’s own concerns and was measured in terms of “Assertiveness.” Comparative to Blake and Mouton’s managerial grid, Thomas’ model consisted of five conflict handling styles which he labeled as accommodating, avoiding, collaborating, competing, and compromising.

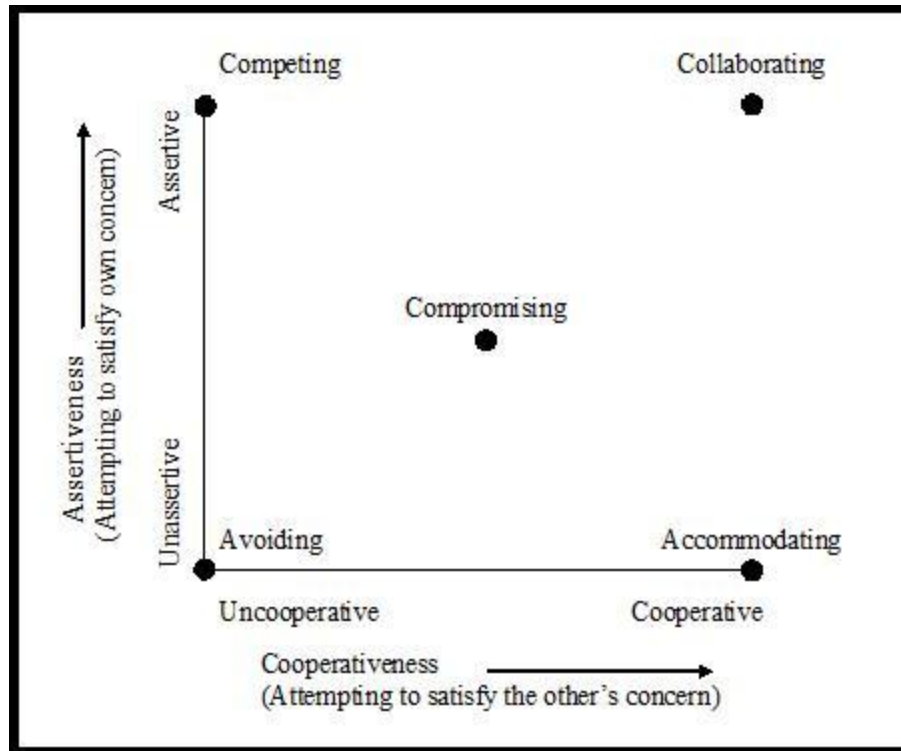


Figure 3. Two-dimensional model of conflict handling styles adapted from Thomas (1976).

A competing style of conflict management was characterized by a high concern for self and low concern for others. Thomas (1978) described it as an assertive and uncooperative style of management. It was classified as a “win-lose” orientation that favored oneself. Thomas recommended the use of a competitive style when a quick and vital decision was needed. He also recommended competition when an unpopular decision was warranted and in opposition to others who took a competitive approach.

The collaborating style was characterized as a combination of assertive and cooperative behaviors which attempted to satisfy the needs of both parties (Thomas, 1978). It displays a high concern for self and a high concern for others. Others referred to the collaborative style as integrating or problem solving. The focus of the collaborative

style is identifying differences among parties and developing creative solutions to the conflict (Gross & Guerrero, 2000; Rahim & Buntzman, 1989). Thomas recommended the collaborative style when the objective is to learn, merge multiple perspectives, create a consensus, and build relationships. He also noted the collaborative style was effective with developing an integrative solution when multiple perspectives should be considered.

Avoiding was depicted by a low concern for self and a low concern for others (Gross & Guerrero, 2000; Rahim & Buntzman, 1989; Thomas, 1978). In addition, avoidance was described as unassertive and uncooperative. Although it may be referred to as side-stepping, evasive, and denial, Thomas noted uses for avoidance. He indicated avoidance should be used when the issue is trivial or when others could better manage the situation. Its use was also recommended when more information needed to be gathered, involved members needed a “cooling-down” period, or no hope of resolution seemed apparent.

Thomas (1978) noted the accommodating style proposed an unassertive and cooperative stance which consisted of a low concern for self and a high concern for others. Gross and Guerrero (2000) and Rahim (2000) referred to this as the obliging style and was a *giving in* to the interests of others. This style was deemed appropriate when the desires of both parties could not be met and one party was less apt to *give in*. Furthermore, Thomas noted it allowed for one party to concede when they were wrong or outmatched in terms of power.

The compromising style portrayed a moderate amount of concern for self and a moderate amount of concern for others (Gross & Guerrero, 2000; Rahim, 2000; Thomas, 1978). Thomas described it as intermediate in terms of assertiveness and cooperativeness.

The intent was to partially satisfy the concerns of both parties, however, this also implied the concerns of both parties were partially unsatisfied. Thomas noted compromising was effective when conflicting parties had an equal power base, a quick solution was needed, or when more assertive approaches failed. He also noted compromise was beneficial when the goals of both parties were important and maintaining relationships was warranted.

Rahim (1986) proposed a model similar to Thomas (1976). Rahim's model also consisted of two dimensions. Similarly, these two dimensions were labeled "Concern for Others" and "Concern for Self." Whereas Thomas scaled each dimension on a continuum (assertiveness and cooperativeness), Rahim measured each dimension as low or high. Another difference noted between the two models was the terms used for the five styles. Both models used compromising and avoiding. However, Rahim labeled the competing style as "Dominating," the collaborating style as "Integrating," and the accommodating style as "Obliging."

An adaptation of Thomas' (1976) model was presented by Callanan and Perri (2006). They adapted Thomas' original model by simply adding more contextual factors. Refer back to Figure 1. In addition to the dimensions of assertiveness and cooperativeness, they included the dimension of "Perceived organizational power of self" and "Perceived organizational power of others." Furthermore, they included the dimension of "Criticality of the central issue" as it pertained to self and to others.

Preferred Management Styles

Throughout the first half of the 1970s, research on organizational conflict favored collaboration (integration) as the most prevalent style used and linked many positive

attributes to this style (Thomas & Kilmann, 1975). However, Thomas and Kilmann believed much of the empirical findings were misleading as a result of research predominantly using questionnaires and the subsequent effect of social desirability.

Although many researchers considered collaboration to be the ideal conflict handling style, Thomas (1977) believed the style of conflict management used by individuals was based upon the situation. Support for this contention was provided by Robbins (1978) who asserted the style chosen should be appropriate to the situation. Others believed the style used was based upon contextual factors such as power base, gender, age, and culture (Al-Ajmi, 2007; Al-Hamdan, 2009; Kunaviktikul et al., 2000; Rahim, 1986).

Rahim (1986) examined the effect of referent role on choice of conflict management style. He noted avoidance was commonly used by subordinates. Additionally, he noted managers used an obliging style with superiors, an integrating style with subordinates, and a compromising style with peers. However, in a subsequent study, Rahim and Buntzman (1989) noted coercive power base had no effect on choice of style used. Although coercive power had no effect on style chosen, they did note a positive relationship among legitimate, expert, and referent power and the conflict management style chosen. They asserted integrating and obliging styles were positively associated with attitudinal compliance and integrating had a positive relationship with behavioral compliance. Furthermore, Rahim (2000) asserted a positive effect of integration with a decrease in relational conflict and stress. Contrarily, a dominating or avoiding style resulted in an increase in relational conflict and stress.

Other literature supported the contention of minimizing the use of certain styles of conflict management (Gross & Guerrero, 2000; Rahim, Buntzman, & White, 1999).

While noting integrative and compromising approaches were appropriate and effective, Gross and Guerrero asserted dominating was inappropriate and avoiding was ineffective. In a study of employed business students, Rahim and colleagues recommended the use of an integrative style while minimizing the use of dominating and avoiding styles.

In summary, depending on whether an author viewed conflict as negative, positive, or both, this perspective partly determined whether conflict should be resolved or managed. Despite the issue of conflict resolution vs. conflict management, several authors presented different conceptual models on styles of addressing conflict. The different models proposed were interpretations of Blake and Mouton's (1964) original managerial grid which presented five managerial styles which were conceptualized by Thomas (1976) into five conflict handling styles: accommodating, avoiding, collaborating, competing, and compromising. The most commonly used conflict handling styles were characterized by a moderate to high degree of concern for others (collaborating, accommodating, and compromising). However, appropriate uses of avoiding and dominating styles were presented by Thomas (1977) and Rahim (2002). Rather than a preference to consistently use a preferred conflict management style, many authors supported the contention of a situational or contingency model (Callanan et al., 2006; Rahim, 2002; Stanley & Algert, 2007; Thomas, 1977; Wall & Callister, 1995).

Conflict in Health Care Professions

A variety of healthcare related journals were searched using key words such as conflict, interpersonal conflict, and conflict management. More specifically, key words

associated with conflict were searched within professions such as medicine, athletic training, nursing, physical therapy, and occupational therapy. Subsequently, results associated with conflict and healthcare professions provided results predominantly with the nursing profession. The following section will provide a synthesis of the health care literature associated with conflict. Subsections will include conflict within nursing, medicine, and physical therapy.

Conflict within Nursing

Conflict within healthcare professions was identified as inevitable and endemic (Almost, 2006; Gardner, 1992; Kunaviktikul et al., 2000; Sportsman & Hamilton, 2007; Vivar, 2006). Gardner-Huber (1995) asserted the prevalence of conflict within healthcare was a result of the turbulent changes occurring to the healthcare industry. Although numerous authors noted the presence of conflict within nursing, few quantified the extent of such conflict.

In a study on sources of stress with Australian nurses, Healy and McKay (1999) observed 38% of the nurses noted interpersonal conflict within their work environment. In a study of recent nursing graduates working at a Midwestern hospital, Gardner (1992) measured perceived conflict, job satisfaction, and performance. Use of a perceived conflict instrument developed by the researcher, Gardner identified a moderate level of conflict among recent nursing graduates. The highest levels of conflict were associated with intrapersonal conflict. Likewise, Kunaviktikul et al. documented moderated levels of overall conflict among a sample of Thai nurses. Although the majority of literature focused on nurses functioning as clinicians, conflict was also identified between nursing students and their preceptors (Mamchur & Myrick, 2003). Despite the prevalence of

literature on conflict within nursing, Sportsman and Hamilton (2007) noted a lack of knowledge regarding the management of conflict within healthcare professions.

Sportsman and Hamilton (2007) stated there had been extensive research on conflict and nursing from 1980 to 2000. However, they suggested the limited amount of research since 2000 and the significant changes in healthcare justified the need for more research within healthcare. Almost (2006) confirmed conflict had been researched extensively, yet noted there was limited knowledge on the elements and processes of conflict. Gardner (1992, 1995) noted the lack of research in the diagnosis of conflict and its management, especially in recent nursing graduates. The remaining synthesis of literature on conflict within nursing was categorized by sources of conflict, effects of conflict, management of conflict, and recommendations for nurses.

Sources of conflict in nursing. Hipwell, Tyler, and Wilson (1989) noted sources of conflict were variable and differed among nurse settings. However, the recurrent source of conflict noted was a result of interaction with other individuals. Although interpersonal conflict among nurses was noted with their patients, patient family members, administrators, and other nurses, interpersonal conflict between nurses and physicians was most prevalent throughout the nursing related literature (Gardner-Huber, 1995; Healy & McKay, 1999; Hipwell et al; McVicar, 2003; Tyler & Ellison, 1994). Furthermore, Gardner-Huber acknowledged the inter-professional “turf battles” among nurses, physicians, and other health care professionals.

The underlying factor for the interpersonal conflict between nurses and physicians was postulated to result from the power inequity and hierarchical nature of the physician-nurse relationship (Northam, 2009; Vivar, 2006). Similarly, Mamchur and Myrick (2003)

noted conflict resulting from the power inequity between nursing students and their preceptors. Specific sources of interpersonal conflict included personality conflicts, poor communication, extensive patient contact, and lack of inter-personal skills (Almost, 2006; Hipwell et al., 1989; Kunaviktikul et al., 2000; Marco & Smith, 2002; McElhaney, 1996). Additional sources of conflict included a difference in goals, needs, desires, perceptions, opinions, and choice of patient care.

In a study on sources of stress within nursing, Hipwell et al. (1989) identified a correlation between job responsibility and conflict. As nurses gained more job related responsibilities, they had higher levels of conflict with physicians. This finding was supported by Tyler and Ellison (1994) in a study with nurses working within a hospital in England. They noted nurses with additional education reported higher levels of stress as a result of increased job responsibilities. The increased job responsibilities contributed to conflict with physicians and other nurses. Conversely, Hipwell et al. reported nurses who had post-qualification training in management had lower conflict scores with physicians.

A final source of conflict was identified as inadequate professional preparation (McVicar, 2003; Northam, 2009; Tyler & Ellison, 1994). The authors noted inadequate preparation of the nurses to effectively manage conflict. As a result of the inadequate preparation, nurses may have low levels of confidence in managing conflict. McGowan (2001) postulated conflict and stress arise as a result of nurses not being prepared to handle unplanned events.

Effects of conflict in nursing. Conflict was originally described as a negative aspect of organizations and something to be avoided (Almost, 2006; Gardner, 1992; Mamchur & Myrick, 2003; Vivar, 2006). Over time, conflict began to be viewed as a

positive aspect as well as negative. Rather than viewing conflict as either positive or negative, experts became concerned with the effective management of conflict. Despite the acknowledgement of the positive effects of conflict, a significant portion of the literature continued to focus on the negative effects.

Sportsman and Hamilton (2007) asserted the healthcare profession was vulnerable to the negative effects of conflict. The harmful effects of conflict within healthcare were not limited to nurses, physicians, and other healthcare professionals. Healy and McKay (1999) suggested the negative effects of conflict led to psychological distress in nurses which subsequently affected the quality of care provided to patients. The contention of negative effects sustained by patients was supported by Northam (2009). Cox (2003) examined the effects of intrapersonal, intra-group, and inter-group conflict in relation to team performance effectiveness and work satisfaction. She noted the highest level of conflict in the nurses surveyed was intrapersonal conflict which was associated with higher levels of intragroup conflict. Furthermore, she noted the intragroup conflict had a negative effect on team performance effectiveness.

In an extensive literature review of conflict in the work environment, Almost (2006) categorized the consequences of conflict. Her review of literature identified three consequence themes: effects on people, interpersonal relationships, and organizational effects. First, effects on people included anger, fear, inflexibility, and skepticism. Additionally, conflict can result in psychosomatic complaints, decreased job satisfaction, and attrition. Hipwell et al. (1989) previously noted nurses who identified conflict with other nurses were more likely to leave their current setting. Likewise, Gardner-Huber (1995) added to the notion of decreased job satisfaction as a result of conflict. Concern

with negative self-image and detrimental health effects resulting from conflict was asserted by Mamchur and Myrick (2003) in their study on nursing students and preceptors.

Second, conflict can lead to negative interpersonal relationships ranging from passive actions such as avoidance to aggressive actions such as confrontation. Third, Almost (2006) noted organizational effects which occur as a result of conflict. As a result of conflict, leaders often become more authoritative or autocratic. Subsequently, decreased productivity can occur as a result of decreased collaboration among organizational members. However, she also noted the positive effects of a moderate level of conflict such as improvements in ideas, collaboration, success, employee control, and satisfaction.

Management of conflict in nursing. McElhaney (1996) reported approximately 20% of a manager's time is spent on managing conflict. Considering management of conflict takes time and energy, it is imperative for it to be effectively managed. Otherwise, failure to effectively manage conflict can have detrimental effects on a healthcare organization, its members, and stakeholders (Gardner-Huber, 1992; Northam, 2009; Vivar, 2006). Furthermore, time is of essence and conflict should be managed early by those most involved with the conflict.

Northam (2009) suggested compromise is generally regarded as the best option for managing conflict. This is based on the premise that compromise decreases competition and avoidance without the use of excessive accommodation or collaboration. She also noted burnout levels decreased when conflict was resolved through compromise. However, Vivar (2006) asserted there was no single best method for managing conflict.

Rather, style of conflict management depended upon the individuals involved and the context of the conflict.

Kunaviktikul et al. (2000) noted nurses tend to use avoidance as their predominant style of conflict management. However, their study of Thai nurses and conflict management styles, job satisfaction, and intent to stay showed contradictory findings. They noted the Thai nurses most often used accommodation and compromise followed by avoidance. Less than 10% of the nurses sampled used collaboration or competition. The researchers further noted a relationship between job dissatisfaction and high conflict scores as well as an accommodation style of management. Sportsman and Hamilton (2007) studied choice of conflict management style among undergraduate nursing students and other allied healthcare students. Their findings indicated compromise and avoidance were the preferred styles followed by accommodation as the third most common style.

In a study of nurse managers in the Sultanate of Oman, Al-Hamdan (2009) reported different styles of conflict management among the participants. The primary style of conflict management varied among different levels of nurse managers. First level managers predominantly used an obliging style whereas middle level managers and top level managers preferred an integrating style. In the same study, female nurse managers preferred an avoiding management style whereas male nurse managers preferred a compromising management style.

Recommendations for nursing. Mamchur and Myrick (2003) asserted conflict was present between nursing students and their preceptors. Although they noted conflict can have positive effects, especially in the area of personal growth, the authors also noted

unresolved conflict can have detrimental effects on individuals and organizations.

Considering their study was concerned with conflict among nursing students and their preceptors, the researchers asserted conflict and its management is generally not taught at the academic level. This contention for a lack of academic preparation in regard to conflict management was noted by numerous authors (Northam, 2009; Marco & Smith, 2002; Saulo & Wegener, 2000; Vivar, 2006). Vivar specifically commented on the limited coursework on conflict management available to nurses and the lack of training available to nurse managers.

Saulo and Wegener (2000) suggested conflict management should be included in the curricula of healthcare programs. They also asserted conflict management can be learned. They studied the effectiveness of a mediation training program among healthcare professionals. Their results indicated an increase in the overall comfort level of participants to manage conflict. Furthermore, the participants indicated managing conflict required less time and energy as opposed to avoidance of conflict. They also identified managers had a greater level of conflict comfort as compared to non-managers. They postulated this was a result of the managers having prior experience with conflict management.

Similarly, Hipwell et al. (1989) noted the positive effects of additional training. They reported lower levels of conflict for those nurses who had additional training following their initial nurse qualification. However, not all studies noted benefits as a result of conflict management training.

Boone, King, Gresham, Wahl, and Suh (2008) implemented a conflict training program based on the concept whereby conflict begins with a misunderstanding and

defensiveness. The training program was designed to change one's thinking process as opposed to changing behavior. Their findings indicated the training program was not successful in increasing nurse perception of conflict management. The focus of the conflict in this study was conflict which occurred between nurses and physicians. The authors did note several limitations which may have affected the results. In addition to participant demographics which may have affected the outcomes, they noted approximately 60% of the test group had prior training in conflict management as opposed to 22% of the control group which had prior conflict management training.

Due to the lack of conflict management training in academic programs, Tyler and Ellison (1994) recommended organizations provide training for their nursing staff. They recommended professional development activities should include assertiveness training in order to enhance their effectiveness with communicating with physicians. Others recommended training which should focus on intrapersonal conflict, collaboration, role playing, negotiation, and mediation (Gardner 1992; Gardner-Huber, 1995; Marco & Smith, 2002; Sportsman & Hamilton, 2007). In addition to conflict management training for nurses, Cox (2003) identified the need for managers to measure conflict among individuals and among groups as well as provide interventions as needed. Her study highlighted the negative effect conflict had on team performance effectiveness and work satisfaction.

Northam (2009) noted nurses are trained in therapeutic communication which focuses on the expression of feelings. She added this type of communication often does not focus on finding a solution and thereby is not effective with conflict management. Northam provided six guidelines nurses could use in managing conflict.

First, individuals involved should focus on a common goal. Rather than focusing on the feelings and individual people involved, the participants should focus on the problem and viable solutions. Second, she recommended participants change their language from an “I” and “you” to a “we.” The participants should view the problem and solutions as a group effort rather than an individual effort. Third, she suggested active listening in order to gain a thorough understanding of the other person’s perspective. Fourth, consider equal positioning of participants. In situations where a power inequity exists, a neutral area to discuss the conflict may minimize the power inequity. Fifth, ground rules can be established in order to minimize emotions, interruptions, and further conflict. Sixth, Northam recommended limiting the number of participants in the discussions. She suggested including only the individuals directly involved and excluding third parties.

Conflict among Physicians

Limited information was found regarding conflict and physicians. However, in a study of conflict among physicians, Skjørshammer and Hofoss (1999) stated conflict was endemic within the healthcare profession and was often the result of personality factors or inter-professional issues. However, the results of their study noted little conflict among physicians with other healthcare professionals. In their study, conflict reported by the physicians was primarily related to issues between physicians and their immediate supervisors. The researchers surmised the low incidence of conflict reported by the physicians was a result of their high prevalence of using avoidance as their preferred conflict management style.

Conflict in Physical Therapy

A review of the physical therapy literature resulted in limited references to conflict. Several of the studies concerned with burnout, job role, and work satisfaction (Campo, Weiser, & Koenig, 2009; Donohoe, Nawawi, Wilker, Schindler, & Jette, 1993; Schuster, Nelson, & Quisling, 1984) had little or no discussion on interpersonal conflict or sources of conflict. In a study on burnout by Balogun, Titiloye, Balogun, Oyeyemi, and Katz (2002), they noted the emotionally draining aspect of a health care provider working in close contact with a patient. Wolfe (1981) added to this contention by noting close contact with patients is a requirement of physical therapy. Similar to studies of burnout in other professions, Balogun et al. asserted burnout in physical therapists often results in an environment which contains emotional and physical overload.

Limited information regarding specific sources of interpersonal conflict was noted in the physical therapy literature. Balogun et al. (2002) noted the presence of inter-professional conflicts in physical therapy and occupational therapy which can lead to burnout. In their study on role stress, emotional well-being, and burnout, Deckard and Present (1989) indicated stress can develop among clinicians as a result of conflicting viewpoints of patient needs and staff responsibilities.

Balogun et al. (2002) asserted recent physical therapy graduates lacked the knowledge and skills needed to navigate a managed care clinical environment. Among the skills lacking by new graduates was interpersonal skills. Wolfe (1981) also noted a lack of professional preparation and suggested physical therapy education programs should include education on work related stressors and burnout.

In review, the search for pertinent literature related to conflict and healthcare professions yielded results primarily within nursing. Conflict was noted as prevalent between nurses and people they interact with such as physicians, patients, preceptors, and other nurses. Sources of conflict were related to power inequities, professional turf battles, personality differences, and a lack of interpersonal skills. Although the majority of the nursing literature focused on the negative aspect of conflict, support was provided for positive effects of conflict as well. Among the negative effects of conflict were decreased team effectiveness, decreased job satisfaction, increased attrition, and diminished patient care. Various studies identified a variety of conflict management styles utilized by nurses, however, no particular style was deemed the most appropriate. Recommendations provided by authors focused on adequate preparation and training of students and established professionals.

Conflict in Athletic Training

Similar to other healthcare professions, athletic training involves a significant amount of interaction with other individuals. Often, this interaction with other individuals is coupled with antagonistic values, goals, and perceptions in an emotionally charged environment (Capel, 1990). As a result, conflict and job related stress often results. Similar to the physical therapy literature, the majority of the athletic training literature related to conflict was found in articles on attrition, burnout, and quality of life. The following section provides a synthesis of the athletic training literature related to conflict. Specific subsections include the prevalence of conflict in athletic training, sources of conflict in athletic training, and recommendations for athletic trainers.

Prevalence of Conflict in Athletic Training

Rankin and Ingersoll (2001) defined conflict as a “type of competition in which the parties to the conflict are aware of the directly opposite (or conflicting) nature of their positions and in which each side wishes to continue to hold its position” (p. 73). They asserted most organizations are affected by conflict and it “literally permeates” the athletic training profession. The prevalence of conflict in athletic training was supported by Ray (2000) who noted conflict management is a required responsibility of athletic trainers. He stated conflict management is a difficult task and is often required as a result of change. Literature regarding organizational change identified it as an ever-present aspect of today’s society and organizations (Bolman & Deal, 2003; Yukl, 2006). Brumels and Beach (2008) suggested conflict is a part of the daily culture of athletic training.

Literature pertaining to conflict in athletic training was not directly or consistently stated as interpersonal conflict. The majority of the literature referred to conflict in a general fashion as it related to the presence and characteristics of conflict in athletic training. Overwhelmingly, studies and professional articles in athletic training noting conflict were related to attrition, burnout, and quality of life in athletic training (Brumels & Beach, 2008; Capel, 1990; Gieck, Brown, & Shank, 1982; Kania et al., 2009; Pitney, 2002, 2006; Vergamini, 1981). Although conflict was identified in numerous articles and books, no qualitative or quantitative studies which noted the degree of prevalence and specific sources of interpersonal conflict could be found. Synthesis of the literature related to burnout, attrition, and quality of life identified common themes of conflict. Although some themes were specific to role conflict, role ambiguity, and organizational

factors (administrative support, role complexity, power imbalances), other themes were presented as sources of conflict with an interpersonal component.

Sources of Conflict

Rankin and Ingersoll (2001) noted three areas which resulted in disagreement and contributed to conflict: scarce resources, power strategies, and personal characteristics. Competition for scarce resources sets the stage for a win-loss scenario among competitors thereby leading to conflict (Bolman & Deal, 2003; Morgan, 2006). The hierarchical nature of many organizations (such as athletics) further adds to conflict as a result of power inequities (Northam, 2009; Rahim, 1986; Rahim & Buntzman, 1989; Vivar, 2006). Brumels and Beach (2008) characterized athletics as requiring a high degree of interpersonal interaction. Rankin and Ingersoll stated controversial power techniques determined the potential for ensuing conflict. The use of threats, bullying, and punishment in a position of power contributed to a conflicting environment. Taking a competitor approach may lead to winning a conflicting situation. However, this situation also results in a loser.

Rankin and Ingersoll (2001) continued by stating the cooperator approach attempts to create a situation whereby everyone gains. However, this approach can be too forgiving and lead to a withdrawal from the conflict in order to avoid repeated losses. They suggested an integrative (problem solving) approach in an attempt to create a win-win situation in which the needs and interests of all parties are met. The third source of conflict noted by Rankin and Ingersoll was personal characteristics. Qualities such as aggression, defensiveness, and closed-mindedness contribute to conflict, whereas

qualities such as effective listening, sensitivity, and emotional stability help to minimize conflict.

In addition to Rankin and Ingersoll's (2001) book on management in athletic training, numerous journal articles contained references to conflict. The majority of conflict-related journal articles found in the literature were associated with burnout, attrition, and quality of life. A synthesis of these articles identified the following themes related to conflict and athletic training: interpersonal interaction, organizational issues, and professional preparation.

Interpersonal interaction. The first theme of interpersonal interaction was predominant throughout the literature and often focused on interactions with a sport coach. In a burnout study on collegiate athletic trainers, Kania et al. (2009) identified interaction with coaches as a source of conflict and a common reason for leaving the profession. The conflicting interaction with coaches was often related to return to play decisions regarding injured athletes. This contention of pressure from coaches was supported by the findings of other studies. Capel's (1990) study on attrition and Pitney's (2006) research on quality of life issues substantiated the contention of pressure from coaches to return athletes to play following an injury.

Additionally, interpersonal conflict was demonstrated by a relationship between athletic trainer burnout and personality conflicts with coaches, athletic department staff, and other athletic trainers (Capel, 1990; Judd & Perkins, 2004; Pitney, et al., 2002; Pitney, 2006; Rankin & Ingersoll, 2001; Vergamini, 1981). Brumels and Beach (2008) alluded to a relationship among attrition, high levels of stress, and conflict in a study on job satisfaction with collegiate athletic trainers.

Lack of support from administration was also noted as a source of conflict. In many cases, the lack of administrative support originated from athletic directors and was related to the conflict between the athletic trainer and coach as it applied to care of the athlete and return to play decisions (Kania et al., 2009; Pitney, 2002, 2006). These studies also suggested a link between a lack of value/respect for the athletic trainer from coaches and athletic directors and burnout or quality of life issues.

An additional aspect of interpersonal interaction contributing to conflict related to the amount of time athletic trainers were in contact with athletes/patients. Capel (1990) asserted the continuous interaction with athletes, especially in emotionally charged situations, was a contributing factor for athletic trainer burnout. Pitney et al. (2002) supported this claim in a study on professional socialization of athletic trainers. They noted the extended amount of time athletic trainers spent with coaches and athletes over the course of a season and off-season. Additionally, they noted the incidence of attrition as a result of unrealistic job expectations including those which extended beyond the scope of health care.

A final area of conflict within the interpersonal interaction theme was concerned with athletic trainers functioning as disciplinarians (Capel, 1990; Judd & Perkins, 2004). In a study on job satisfaction and attrition with athletic training education program directors, Judd and Perkins noted one of the least satisfying aspects of a program director's job was the interaction with students in a disciplinarian role.

Organizational factors. The second theme of conflict noted in the athletic training literature was categorized as organizational factors. In many cases, the type of conflict noted could not be classified as interpersonal conflict. For example, types of conflict

often noted were role conflict and intrapersonal conflict. In such cases, the conflict was not described as directly resulting from the interaction with another individual or group of individuals. Rather, the conflict was in relation to job demands vs. expectations or conflict within an individual.

The findings which contributed to the organizational factors theme originated from a combination of organizational structure and the individuals involved. Pitney et al. (2002) noted the high demands and unrealistic expectations of the collegiate setting and athletic department personnel as a source of stress and attrition. Studies on burnout and attrition of collegiate athletic trainers corroborated this claim of high expectations, excessive workload, and lack of social support characteristic of athletic training in the collegiate setting (Capel, 1990; Hendrix, Acevedo, & Hebert, 2000; Kania et al., 2009; Vergamini, 1981). This theme was also supported by Pitney's 2006 professional socialization study in which he noted the political and bureaucratic nature of collegiate athletics was a stressor for athletic trainers.

Professional preparation: The third conflict theme related to the professional preparation of athletic trainers. Pitney et al. (2002) studied the professional socialization of athletic trainers in the collegiate setting. In this study, they noted inexperienced athletic trainers demonstrated a lack of adequate professional preparation for the challenging and conflicting nature of their positions. Pitney reinforced this contention in his 2006 study on professional socialization by again noting the lack of preparation athletic trainers received during their undergraduate and graduate education. He specifically noted the collegiate setting experienced by the participants while they were

undergraduate and graduate students was not representative of their full-time athletic training positions.

Other studies substantiated the lack of adequate preparation during the educational and formative years of an athletic trainer (Gieck, Brown, & Shank, 1982; Kania et al., 2009). Klossner (2008) examined the role of legitimation of undergraduate athletic training students as a required component leading toward professional socialization. She described legitimation of athletic training students as the process of gaining affirmation through socialization efforts such as successful learning experiences, positive feedback, and trusting relationships. She identified the need of legitimation leading toward professional socialization as a necessary component of the undergraduate athletic training student.

Recommendations for Athletic Trainers

Recommendations for the athletic training profession focused on suggestions for the management of work related stressors leading to conflict as well as future research considerations. First, authors suggested the use of professional development activities such as human resource programs and continuing education seminars for the purpose of educating practicing athletic trainers in the recognition and management of job related stressors (Brumels & Beach, 2008; Judd & Perkins, 2004; Kania et al., 2009; Pitney, 2006). Specific topics of educational activities included stress management, workload, conflict resolution, life balance, quality of life, and role complexity. In addition, they suggested the need to educate administrators regarding work related stressors faced by athletic trainers such as lack of support, organizational bureaucracy/politics, and pressure from coaches.

Pitney (2006) suggested the value of a mentoring program for athletic trainers entering the profession in order to assist with professional socialization into a demanding work environment. He also contended undergraduate and graduate athletic training education programs should incorporate life-like situations replicating the stressors of the athletic training profession. This contention was previously noted by Gieck et al. (1982) as a recommendation based on the results of their study in burnout with collegiate athletic trainers.

Mensch, Crews, and Mitchell (2005) examined organizational socialization of athletic trainers in the high school setting. Their findings suggested good working relationships between athletic trainers and coaches resulted from effective communication. They postulated the conflict between coaches and athletic trainers may be a result of poor communication and lack of a clear understanding of the job role of the athletic trainer. Their primary recommendation was the development of communication skills in the didactic and clinical aspects of athletic training education programs.

The second recommendation was concerned with suggestions for future research. Hendrix et al. (2000) recommended the need to study a variety of settings in which athletic trainers practice. The majority of research on work-related stressors in athletic training was focused on certified athletic trainers employed at a National Collegiate Athletic Association institution. Additional recommendations suggested the examination of work related stressors to other variables such as gender, age, years of certification, job role, educational background, workload, locus of control, and professional socialization in athletic training education programs. Although many instruments are available to

measure stress, job satisfaction, conflict, and burnout, Kania et al. identified the need to develop instruments more specific to athletic trainers.

In summary, specific literature related to interpersonal conflict within athletic training was limited. However, numerous sources suggested the prevalence of conflict within the profession. A synthesis of the literature related to athletic training and conflict led to the development of three conflict themes: interpersonal interaction, organizational issues, and professional preparation. In essence, the literature noted conflict in athletic training often resulted from the intense interaction with other individuals as well as from organizational issues such as role conflict or lack of professional respect.

Additionally, many of the sources cited provided recommendations for the athletic training profession. Recommendations were concerned with the professional preparation of athletic trainers and the need to design education programs to replicate the real world setting. Furthermore, recommendations for future research included examining different interest groups, examining alternate variables, and developing instruments specific to athletic training.

History of Athletic Training and Athletic Training Education

In one regard, athletic trainers have been present for a long time, yet the profession of athletic training is relatively new. Evidence of athletic trainers dates back to the time of the Roman Empire (O'Shea, 1980; Prentice, 2006). During this time, athletics were an integral part of society. Similar to modern athletics, injuries occurred to the participants of these ancient competitions. Although the level of care was obviously not comparable to modern medicine, the ancient Roman athletes were treated by people who were trained in the treatment of athletic injuries. Perhaps one of the first "athletic

trainers” was Herodicus of Megara, a Greek physician who received training under Hippocrates (Ebel, 1999).

However, following the fall of the Roman Empire, athletics and athletic trainers were not an important aspect of any country until the 19th century (Ebel, 1999). Although “athletic trainers” may have been present for quite some time, the profession of athletic training is relatively young. In 1968, Jack Rockwell, an athletic trainer and the executive secretary of the NATA, indicated athletic training was a long way from being a profession (Ebel). His contention was based on the inability of the NATA and its members to show evidence of (a) providing an essential social service, (b) developing high standards for membership, (c) requiring rigorous academic preparation, and (d) achieving self-regulatory status.

By 1967, progress toward becoming a profession had been made when the American Medical Association (AMA) House of Delegates recognized the NATA as a professional organization. Professional status was officially attained in 1990 when the NATA was recognized by the AMA House of Delegates as an allied health care profession (Delforge & Behnke, 1999; Ebel, 1999). The remainder of this section will discuss (a) the development and growth of athletic training and the NATA and (b) growth and development of athletic training education.

Athletic Training and the NATA

Much of the literature on the history of the athletic training profession came from two historical perspectives of the NATA. O’Shea (1980) provided a historical view of the early development of athletic training and the first 30 years of the NATA. Based on personal interviews and document review, Ebel (1999) provided a chronicle and perhaps

the most comprehensive documentation of the first fifty years of the development and growth of the NATA. O'Shea and Ebel noted the early development of the modern day athletic trainer possibly began in 1881 when Harvard University hired James Robinson as an athletic trainer. Another pioneer during this time was Michael C. Murphy, a track coach and athletic trainer at Yale and the University of Pennsylvania until 1913 (Ebel).

However, Dr. Samuel Bilik is considered by some to be the "Father of Athletic Training" while William E. "Pinky" Newell is considered the father of modern day athletic training (Ebel, 1999; Legwold, 1984; O'Shea, 1980; Prentice, 2006). While a medical student at the University of Illinois, Samuel Bilik worked as an athletic trainer with the university's football team. In 1916, he published *Athletic Training*, considered to be the first textbook dedicated to athletic training. He later published *The Trainers Bible*. As a physician, he was credited for providing many educational opportunities for athletic trainers and in 1949 brought together a group of athletic trainers for a gathering in New York. This group of athletic trainers developed into the Eastern Athletic Trainers Association and later became Districts 1 and 2 of the NATA (Ebel).

In 1938, the National Athletic Trainers Association was founded. However, by 1944, the association folded as a consequence of limited funds and the effects of World War I (Ebel, 1999; Legwold, 1984; O'Shea, 1980). Through the continued effort of athletic trainers and Charles and Frank Cramer (Cramer Chemical Co.), the new National Athletic Trainers' Association was formed in 1950 at the National Training Clinic held in Kansas City, Missouri (Ebel; Legwold; NATA, 2009). The national meeting in 1950 was funded by Cramer Chemical Co. and was attended by approximately 125 people.

During the next 60 years, the NATA witnessed significant growth in its membership and net worth. Membership numbers increased from 279 members in 1955, 773 members in 1960, 1000 members in 1965, 1600 members in 1970, 10,000 members in 1986, 15,598 members in 1990, 25,000 members in 1999, to more than 32,000 members in 2009 (Ebel, 1999; Legwold, 1984; NATA, 2009; NATA, 2010e; Newell, 1984; Schwank & Miller, 1971). Geographically, the NATA membership is divided into 10 districts within the USA. In addition, the membership of the NATA includes international members. The first NATA had a net deficit of \$41.19 in 1942. In 1951, the new NATA had 595.14 in the treasury. By 1988, the NATA had over \$2 million in assets. Similar to the growth of athletic training as a profession, the education of athletic trainers underwent tremendous growth as well.

Athletic Training Education

Prior to 1950, many athletic trainers believed formal coursework was not needed in order to become an athletic trainer. They contended athletic trainers could learn the skills needed through an apprentice model (Ebel, 1999; Legwold, 1984). However, when the NATA was formed in 1950, the purpose of the organization was to grow the athletic training profession by exchanging ideas and knowledge (Newell; 1984; O'Shea, 1980).

In 1955, the NATA Board of Directors assigned William E. Newell (athletic trainer at Purdue University) as National Secretary of the NATA (Delforge & Behnke, 1999). This position would later become the Executive Director. His charge was to gain public recognition for athletic training and develop standards for professional preparation of athletic trainers.

Although Indiana University had a four year athletic training program in 1948, there was no established model for the professional preparation of athletic trainers (Ebel, 1999). Under the direction of Newell, the Committee on Gaining Recognition submitted an academic model in 1959 to the Board (Delforge & Behnke, 1999). The recommendations were approved by the Board, thus setting the stage for the first NATA athletic training curriculum model.

The 1959 model was primarily composed of physical therapy school prerequisites and physical education coursework. The intent of the coursework was to prepare a student to become a secondary school teacher and an athletic trainer (Delforge & Behnke, 1999; Ebel, 1999). A limited amount of the coursework was specific to athletic training. Subsequently, this model was criticized as it was not considered a unique program due to the emphasis on physical education coursework and physical therapy prerequisites. Along with the criticism, the model was unrecognized by many university administrators.

A 1968 survey of university administrators identified over half of the department administrators at colleges and universities were unaware of the model approved by the NATA in 1959 (Delforge & Behnke, 1999). The Committee on Gaining Recognition had become the Professional Advancement Committee in 1969 and was divided into two subcommittees: the Subcommittee on Certification and the Subcommittee on Professional Education. Two significant events occurred as a result of the efforts of the two subcommittees: (a) athletic training certification and (b) NATA approval of athletic training curriculums.

The first significant event was the establishment of the national certification examination for athletic trainers. Under the lead of Lindsay McLean Jr., the Subcommittee

on Certification helped to establish a national certification examination for athletic trainers (Delforge & Behnke; 1999; Ebel, 1999). The Board of Certification (BOC), originally an entity of the NATA, was established in 1969 and was the certifying entity for athletic trainers (Board of Certification, 2007, 2009).

In 1989, the BOC separated from the NATA and became incorporated (BOC, 2007, 2009). The BOC received accreditation from the National Commission for Certifying Agencies as the only accredited program for certifying athletic trainers. The first certification examination was administered to 28 registrants in 1970. Registrations for the certification examination increased to over 4500 candidates in 1997 (BOC 2007, 2009; Ebel, 1999; Newel, 1984). One of the significant actions of the BOC which contributed to athletic training education was the first role delineation study in 1982.

The purpose of the role delineation study was to identify the skills and knowledge needed to function as an athletic trainer and to subsequently develop performance domains of practicing athletic trainers (BOC, 2004, 2009; Delforge & Behnke, 1999; Ebel, 1999). The findings of this study were used to assist with the development of the *1983 Guidelines for Development and Implementation of NATA Approved Undergraduate Athletic Training Education Programs*. In short, this document was referred to as the Guidelines.

Numerous references to effective interaction of the athletic trainer with other individuals can be found within the findings of the Board of Certification's (2004) 5th edition role delineation study. In the 5th edition, the role of an athletic trainer is divided into domains which are comprised of tasks, knowledge, and skills. The domains of an athletic trainer identified in the role delineation study are (a) prevention, (b) clinical

evaluation and diagnosis, (c) immediate care, (d) treatment, rehabilitation, and reconditioning, (e) organization and administration, and (f) professional responsibility. Noted within the organization and administration domain are several tasks (with required knowledge and skills) which specify athletic trainer duties such as organization of personnel, interaction with personnel, leadership, delegation, management, mitigation of conflict, development of professional relationships, respect of diverse opinions, and effective communication (CAATE, 2007).

Second, the Subcommittee on Professional Education (later evolved into the Professional Education Committee), under the direction of Sayers Miller Jr. (athletic trainer at University of Washington), developed the curriculum evaluation and approval process. In 1969, Indiana State University, Lamar University, Mankato State University, and the University of New Mexico became the first institutions with an NATA approved curriculum (Delforge & Behnke, 1999; Ebel, 1999). The number of approved curriculums increased to 46 by 1978, 62 by 1982, and 75 in 1984 (BOC, 2007; Delforge, 1982; Ebel 1999; Legwold, 1984).

During the mid-1970s, the Professional Education Committee modified the original 1959 curriculum model (Delforge & Behnke, 1999; Ebel, 1999). The committee determined the physical education certification and physical therapy prerequisites were no longer viable employment options for athletic trainers nor were they representative of a specialized curriculum. Consequently, physical therapy prerequisites and physical education courses were removed from the curriculum. However, Delforge and Behnke asserted the modified curriculum made limited progress toward specialization. Aside

from the addition of clinical experiences under the supervision of a certified athletic trainer, no additional athletic training coursework was added.

Subsequently, Sayers Miller recommended the need for more extensive coursework (Delforge & Behnke, 1999). Prior to his untimely death in 1981, Miller suggested the development of an athletic training major to prepare athletic training students. Delforge and Behnke asserted this contention was based on the skills needed of an athletic trainer could not be fully taught through a minor, concentration, or emphasis tract. Ahead of the curve was Central Michigan University as it was the first university to develop a major in athletic training in 1979 (Central Michigan University, 2009; Ebel; 1999).

The results of a survey during the 1981-82 academic year revealed administrative support for an undergraduate major in athletic training (Delforge & Behnke, 1999; Ebel, 1999). In June of 1982, the Board of Directors passed the recommendation which required all approved athletic training education programs to offer a major in athletic training or its equivalent. If an institution did not offer a degree in athletic training, then it could offer an equivalent major. The equivalency would be a major requiring the same number of credit hours in athletic training coursework as it required of another content area. All approved athletic training programs were required to implement the major by 1986. This date was later amended to July 1, 1990.

During the summer of 1983, the Professional Education Committee published the *Guidelines for Development and Implementation of NATA Approved Undergraduate Athletic Training Education Programs*. This publication contained the established standards for developing a major in athletic training and was referred to as the 1983

Guidelines (Delforge & Behnke, 1999). Contained within the *Guidelines* were the *Competencies in Athletic Training*. The *Competencies* were designed to promote competency-based athletic training education.

In 1996, the Professional Education Committee was disbanded and was replaced by the Education Council (Delforge & Behnke, 1999; Ebel, 1999). The Education Council continued the effort of standardizing athletic training education. By 2004, candidacy for the BOC examination required completion of a CAAHEP (Commission on Accreditation of Allied Health Education Programs) accredited athletic training education program. Considering there were four routes leading to certification in the 1970s, this helped confirm the standardization of athletic training education (BOC, 2007; Delforge & Behnke).

Continued growth of athletic training education was demonstrated by the accreditation of athletic training education programs. Upon recognition by the American Medical Association as an allied health care profession in 1990, athletic training education programs moved into the era of accreditation (Delforge & Behnke, 1999; Ebel, 1999). Initial accreditation of athletic training education programs was provided by the AMA Committee on Allied Health Education and Accreditation (CAHEA). Upon membership with CAHEA, a review committee was developed with members of the NATA, AMA, American Academy of Family Physicians, and the American Academy of Pediatrics. The charge of this committee, the Joint Review Committee on Educational Programs in Athletic Training (JRC-AT), was to develop the guidelines for the initial CAHEA accreditation of and regular review of entry-level athletic training education programs (CAATE, 2008; Delforge & Behnke; NATA News, 2007).

One output of this committee was the publication of the *Essentials and Guidelines for an Accredited Educational Program for the Athletic Trainer* (CAATE, 2008; Delforge & Behnke, 1999). This publication, commonly referred to as the *Essentials*, was developed from the framework of the *1983 Guidelines*. CAHEA was disbanded in 1994 and became an independent entity known as the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Despite the transition, the accreditation process underwent minimal changes. The *Guidelines* were now referred to as the *Standards for Entry-Level Athletic Training Educational Programs*.

Another major transition to accreditation occurred in July 2006 when the JRC-AT legally separated from CAAHEP (CAATE, 2006). The JRC-AT, now called the Commission on Accreditation of Athletic Training Education (CAATE), became the independent accrediting agency for athletic training education programs. By 1998, there were 82 programs accredited by CAAHEP. As of 2010 there were 363 programs accredited by CAATE (CAATE, 2010; NATA, 2010c).

Another example in the growth of athletic training education was seen in the development of scholarships for student education. The first scholarship was awarded by the NATA in 1971 (Ebel, 1999; Legwold, 1984; Newell, 1984). The William E. Newell Scholarship was awarded for \$250 in honor of Newell's service to the development of future athletic trainers. In 1991, the NATA Research and Education Foundation (NATA-REF) was developed. Among its goals was to promote the athletic training knowledge base, encourage scholarly research in athletic training, and provide scholarships for students (NATA Research and Education Foundation, 2009). The scholarship program grew and in 2009 the NATA-REF administered \$150,000 over 75 graduate and

undergraduate scholarships. From 1991 to 2009, over \$2.8 million have been awarded in the form of research grants.

As noted above, the athletic training profession and athletic training education underwent tremendous growth over the past 60 years. Although the profession may be considered young, early athletic training perhaps originated during the Roman Empire. However, modern day athletic training was considered to have originated with the development of the second NATA in 1950. Since that time, the profession has seen growth as evidenced by an increase in membership, the development of athletic trainer certification, and acceptance as an allied health care profession by the AMA. Additionally, athletic training education has grown from a time of no formalized curriculums for athletic trainers to formal accredited athletic training education programs.

Summary

Mary Parker Follett (1942) was perhaps the first to present styles of handling conflict. Many years later, Blake and Mouton (1964) expanded the three styles presented by Follett and introduced the Managerial Grid. Since that time, conflict and its many variables have been popular research interests in sectors such as business, management, psychology, and medicine. The review of literature presented above provides a synthesis of conflict, conflict management styles, conflict in healthcare, conflict in athletic training, and athletic training history.

Numerous definitions of conflict have been presented by authors. Most definitions focus on the perceived incompatibility between two or more people. The operational definition used in this study defined interpersonal conflict as a phenomena resulting from the negative emotions of perceived disagreements and interference with one's goals

(Barki & Hartwick, 2001). Common types of conflict include intrapersonal, interpersonal, and intergroup. This study focused on interpersonal conflict. Resolution of conflict was generally recommended if conflict was perceived as a negative entity. If viewed positively, it was recommended to manage conflict. The five styles of managing conflict are competing, collaborating, compromising, avoiding, and accommodating.

A search of the healthcare related literature revealed some relevant information within medicine and physical therapy. However, the majority of the healthcare related information presented was found in nursing literature. Conflict within nursing was noted as a prevalent factor due to reasons such as differences in professional opinion, power inequities, lack of conflict management knowledge, and rapid changes within the healthcare profession. A review of the athletic training literature identified a limited amount of information directly related to interpersonal conflict and its prevalence, sources, effects, and management. Rather, the athletic training literature related to conflict predominantly dealt with burnout, attrition, and quality of life in athletic training. The review of literature related to the history of the athletic training profession and athletic training education identified significant growth since 1950.

Chapter Three presents the research design and methodology used in this study. Specifically, information provided will include the research questions examined, the population and sample studied, the data collection techniques and instruments used, and a description of the statistical procedures used to analyze the data. Chapter Four includes an analysis of the data collected and research findings. Chapter Five is a summary of the findings, implications for athletic trainers, limitations of the study, and suggestions for future research.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

The construct of interpersonal conflict and styles of conflict management provided the conceptual framework for this study. Current literature identified conflict as a constant entity within one's personal and professional life (Callanan & Perri, 2006; Corcoran & Mallinckrodt, 2000; Palmer, 2001; Rankin & Ingersoll, 2001; Ray, 2000). Many factors contribute to conflict; however, it often results from interpersonal contact and competing interests (Barki & Hartwick, 2001). Although conflict is often viewed negatively, the effective management of conflict can have positive results such as the driving force for implementing change (Caffarella, 1984; McNary, 2003).

Athletic training is a people-helping profession dependent upon interpersonal relationships with a variety of personality types (Brumels & Beach, 2008; NATA, 2010a). In addition, athletic trainers (ATs) and the individuals they interact with often have competing interests (Judd & Perkins, 2004; Kania et al., 2009; Pitney, 2006). Consequently, this combination of interpersonal contact and competing interests commonly leads to conflict. Rankin and Ingersoll (2001) and Ray (2000) asserted conflict was endemic within the athletic training profession. Furthermore, the literature suggested a relationship among conflict, burnout, and attrition of athletic trainers as well as the need for conflict management education (Judd & Perkins; Kania et al.; Pitney). Although the athletic training literature indicated the presence of conflict within the profession, information on the specific nature of this interpersonal conflict was limited. More specifically, the athletic training literature was limited in regard to (a) the prevalence and

(b) sources of interpersonal conflict as well as (c) challenges, (d) strategies, and (e) confidence in managing interpersonal conflict. Therefore, the purpose of this study was to gain an understanding into the nature of interpersonal conflict within athletic training. More specifically, the purpose was to address the limitations in the literature noted above as they pertain to athletic trainers providing services in the high school athletic setting.

A concurrent, mixed methods approach was utilized to address the stated research purpose. The *prevalence* in which athletic trainers (ATs) experience interpersonal conflict and their level of *confidence* in managing interpersonal conflict were obtained through simple quantitative questions. However, *sources* of interpersonal conflict, *challenges* to managing interpersonal conflict, and *strategies* to managing interpersonal conflict were obtained through forced choice and open-ended questions.

Research Questions

Within the context of this study, a concurrent, mixed methods approach was utilized to address the following research questions:

1. How prevalent was interpersonal conflict in the daily routine of high school athletic trainers?
2. How confident were high school athletic trainers in effectively managing interpersonal conflict?
3. What were the common sources of interpersonal conflict for high school athletic trainers?
4. What were the common challenges for high school athletic trainers in their management of interpersonal conflict?

5. What were the common strategies for high school athletic trainers in their management of interpersonal conflict?

Design for the Study

The purpose of research is to discover and interpret information. Booth, Colomb, and Williams (2003) indicated it is the process of gathering information, answering a question, and solving a problem. They emphasized research goes beyond finding an answer to a question of interest to the researcher. Rather, the answer should address a problem of interest to the researcher's audience. Patten (2007) claimed some of these problems of interest lend themselves best to quantitative methods while others are best served by qualitative methods. Similarly, Creswell (2003) and Crotty (1998) asserted the research question and problem to be addressed will provide guidance for the specific methods employed.

Quantitative methods typically involve post-positivist claims for knowledge development (Creswell, 2003). Post-positivism, also known as quantitative research or scientific research, refutes the possibility of an absolute truth. This perspective indicates that researchers can never be absolutely positive about their knowledge claims. Typically, quantitative research attempts to explain a causal effect for a particular outcome (Johnson & Onwuegbuzie, 2004). The researcher deducts from the literature a plausible theory for the effect. The researcher then proceeds to test the established theory through techniques such as surveys and experiments. Since the post-positivist believes the absolute truth cannot be found, data analysis allows the researcher to either support or refute the theory, rather than prove the theory correct. Booth et al. (2003) suggested the use of quantitative methods when the researcher has an explicit research question and problem to address.

This research design is rigid with a predetermined course of action (Creswell; Johnson & Onwuegbuzie). The participants studied, the instrumentation utilized, and the statistical analysis performed are determined in advance. Typical instruments for a quantitative study include surveys, questionnaires, and standardized tests. Data collected may be categorical and/or numeric and analyzed through descriptive, comparative, correlation, and regression analysis. Quantitative methods ought to be utilized when one needs to provide concrete facts/data, collect data quickly, predict an outcome, sample a large population, or analyze numeric data.

Qualitative researchers make knowledge claims from a social constructivist perspective and attempt to discover and explain through the development of observed trends and themes (Johnson & Onwuegbuzie, 2004; King, Keohane, & Verba, 1994; Patten, 2007). In other words, they combine the knowledge and experiences of a group of individuals (social) in order to answer a question (Creswell, 2003). The research design is emergent and develops throughout the study. Researchers collect data from observations, interviews, and document mining by using research strategies such as ethnography, grounded theory, case study, and phenomenology. Contrary to quantitative research, interview questions and questionnaires used in qualitative research are open-ended. The data are organized into themes in an attempt to answer the stated research questions. Qualitative research does not test an existing theory, rather it attempts to induce or develop a theory. Researches ought to use qualitative methods when there is not an existing theory addressing the research question/problem, very little is known regarding the research problem, or the researcher wants to develop an understanding of the research problem from the perspective of multiple individuals (Creswell).

However, King et al. (1994) asserted “most research does not fit clearly into one category or the other” (p. 5). Rather, they suggested the best research was characterized by quantitative and qualitative aspects. Furthermore, they stated “neither quantitative nor qualitative research is superior to the other, regardless of the research problem being addressed” (pp. 5-6). Crotty (1998) identified the difference between qualitative and quantitative research lies at the methods level, rather than the epistemological or theoretical perspective levels. He suggested the divide between the two methods is unjustified and he asserted “either qualitative methods or quantitative methods, or both,” can serve one’s research purposes (p. 15).

Likewise, Creswell (2003) added research design is not a qualitative vs. quantitative issue, rather it is a continuum with qualitative and quantitative at each extreme. He stated the nature of the research problem determines where the research method falls upon this continuum. Patten (2007) asserted researchers ought to use mixed methods when the data can be collected through numbers and the development of themes. A portion of the research problem and research questions may be addressed by an existing theory, whereas the remainder may be addressed by a theory that is induced as a result of the data collection and theme development. Naturally, mixed methods would be an ideal approach for this type of research problem and question(s). Simply speaking, a researcher would incorporate a mixed methods approach when the research questions would best be answered through quantitative and qualitative strategies.

Creswell (2003) identified two basic strategies for implementing a mixed methods design: sequential and concurrent. The strategy chosen determines the order in which the quantitative and qualitative data are collected. Sequential strategies involve two phases of

data collection, with either qualitative or quantitative performed first. The decision on which type of data to collect first depends on the nature of the research problem and questions. For example, if the purpose of the study is primarily focused on testing an existing theory, then quantitative should be performed first. The qualitative data should be collected secondarily to support the quantitative findings. Concurrent strategies involve collecting the quantitative and qualitative data at the same time, or concurrently. Either the quantitative or qualitative can be the focus of the data analysis depending on the nature of the research purpose/questions. In other cases, the researcher can place an equal amount of focus on the quantitative and qualitative data.

This study utilized a concurrent, mixed methods approach using a survey instrument in order to best answer the research questions. Surveys are intended to capture the attitudes, opinions, and behaviors of individuals and thus was the instrument of choice (Creswell, 2003; Fink, 2006; Patten, 2007). Survey items one through five collected basic demographic information on the respondents. Item six was intended to identify the *prevalence* in which high school ATs experienced interpersonal conflict during their daily routine. Item seven was designed to obtain each respondent's estimate of their degree of *confidence* in effectively managing interpersonal conflict. Items six and seven were answered quantitatively with forced choice survey items. Items eight, nine, and ten were answered through quantitative and qualitative survey items. The intent of these items was to gain an understanding from each participant's perspective regarding (a) the *sources* of interpersonal conflict, (b) *challenges* to managing interpersonal conflict, and (c) *strategies* used with managing interpersonal conflict. Respondents answered these items quantitatively by indicating the frequency in which each construct

occurred in their work life. Additionally, respondents were given the option to answer items 8, 9, and 10 qualitatively. Respondents were provided the option to include constructs which were not one of the forced choice options through the use of an open-ended item. Survey item 11 was simply an open-ended question allowing participants to provide any additional information regarding their perception of interpersonal conflict within their work environment.

Population and Sample

The NATA is comprised of 10 districts containing states based on regional location (NATA, 2010d). District V is composed of Iowa, Kansas, Missouri, Nebraska, North Dakota, Oklahoma, and South Dakota. The population of interest was certified athletic trainers providing athletic training services in the high school athletic setting. For this study, athletic setting was defined as an athletic training employment setting which involved the daily interaction with individuals during sport related practices and competitive events.

As of January 2010, there were 33,549 members in the NATA (NATA, 2010e). Of the total membership, there were 26,515 certified members in 16 job classifications. In addition, there were 9,257 certified athletic trainers who were not members of the NATA. Of the certified members, 4700 were identified as working in the high school setting and provided the population for the study.

The sample for this study was a convenience sample comprised of 213 ATs providing services in the high school athletic setting within District 5. The sample included all NATA members within District 5 who were employed in the high school

setting. A qualifying criteria for participation in the study was the athletic trainer had to provide at least 15 hours of service per week to a high school athletic program.

As its name implies, a convenience sample is a group of participants who are readily available to the researcher (Creswell, 2003; Fink, 2006; Fraenkel & Wallen, 2006; Merriam, 1998). Convenience samples are a non-random selection which may minimize the ability of the researcher to generalize the findings of the study to the overall population. The decreased ability to generalize findings occurs if the sample is not representative of the population (Fraenkel & Wallen). Providing detailed demographic information on participants enables one to determine if the findings can be generalized to the larger population. A benefit to convenience sampling is the decreased effort needed to obtain a sample that is adequate in size, timely, and information rich. Fraenkel and Wallen recommended 100 subjects for a descriptive study. Therefore, the goal during the data collection phase was to obtain at least 100 useable instruments.

Data Collection and Instrumentation

Institutional Review Boards (IRBs) were developed to approve research and provide guidance on the ethical treatment of subjects (Herr & Anderson, 2005). Prospective researchers must demonstrate to sponsoring institutions that their proposed research adheres to the guidelines developed by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (Commission). The guidelines, Ethical Principles and Guidelines for the Protection of Human Subjects of Research, are commonly referred to as the “The Belmont Report” (The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979).

The three principles of the Belmont Report are (a) beneficence, (b) autonomy, and (c) justice. Beneficence states potential harm to subjects must be minimized and benefits must outweigh any potential harm. The concept of autonomy refers to informed consent of participants indicating their awareness of the benefits and any potential harm from their participation. Furthermore, autonomy refers to voluntary participation of participants within the study. Justice is concerned with the equitable selection of participants as well as the participants being representative of the population receiving benefits from the findings. In summary, potential subjects should understand their participation is voluntary, safe, and confidential. Following the principles set forth in the Belmont Report, the researcher submitted an application to the Institutional Review Board (IRB) at the University of Missouri. Upon IRB approval of the study, the researcher proceeded with sending a request for participation to the selected participants.

An e-mail address was obtained for each member of the sample. Each subject was e-mailed an introductory letter requesting his/her participation in the study, highlighting the nature of the study, identifying benefits to participation, and explaining instructions for completion of the survey. The introductory letter contained a hyperlink which directed the respondent to the SurveyMonkey website. SurveyMonkey is a web-based survey instrument commonly used for research. Each subject was e-mailed a reminder e-mail one week after the initial introductory letter. The initial page of the online survey consisted of the informed consent letter which highlighted the voluntary nature of the respondent's participation. Furthermore, the informed consent letter identified participation would be anonymous and participants could discontinue the study at any time. Upon clicking on the acknowledgement button and digitally "signing" the consent

form, the subject was presented with the survey questions. Upon completion of the survey questions, the subject submitted the survey by clicking on the “Submit Survey” button. Completed surveys were collected by the researcher from the online data base. The introductory e-mail letter, the reminder e-mail letter, and the informed consent are represented in Appendix A, B, and C.

Athletic Trainer Interpersonal Conflict Inventory

The instrument used for this study was the Athletic Trainer Interpersonal Conflict Inventory (ATICI) developed by the researcher. See Appendix D. Prior to this study, the researcher performed 10 individual interviews with ATs working in the athletic setting. The purpose of the interviews was to develop baseline information on the nature of conflict experienced by ATs working in the athletic setting. Interviewees were asked three questions: (a) What are sources of interpersonal conflict in your daily work routine? (b) What are challenges to your ability to effectively manage interpersonal conflict in your daily routine? (c) What strategies have been successful in your management of interpersonal conflict? Likewise, the three questions above were e-mailed to 25 ATs working in the athletic setting. A total of 15 useable surveys were returned. Additionally, five interviews were performed with experts in athletic training and conflict resolution. The athletic training experts were ATs working as educators or administrators; however, all of them had previous and/or current experience working in the athletic setting. The conflict resolution expert was the director of a university Dispute and Resolution Center. The qualitative information collected from all interviews and e-mail surveys was organized into themes and used in the initial draft of the ATICI.

Validity refers to whether an instrument measures what it is intended to measure (Creswell, 2003; Fink, 2006; Fraenkel & Wallen, 2006; Merriam, 1998). Three types of validity are construct validity, criterion (concurrent) validity, and content validity (Fink; Fraenkel & Wallen). An instrument demonstrating construct validity measures the presence of a construct (condition) that has been shown by experts to be present. Criterion validity is demonstrated by comparing the results of the unproven instrument against a valid instrument measuring the same construct. However, construct and criterion validity cannot be demonstrated if there is not proven documentation a construct exists or if there is not an existing, proven instrument measuring the same construct. A review of literature did not reveal an existing instrument to measure interpersonal conflict in athletic training, nor were any studies found documenting the specific nature of interpersonal conflict in athletic training. Therefore, established validity for the ATICI was limited to content validity which is defined as the appropriateness of the content and format of the instrument. Appropriateness is usually determined by (a) comparing the construct measured in the instrument against current theories, (b) review of the instrument content by experts on the construct being measured, and (c) review of instrument format by experts. The ATICI was reviewed by practicing ATs, experts in research and survey development, and conflict management experts. After review of the instrument and receiving feedback, appropriate modifications were made until all content experts agreed on the appropriateness of the instrument.

Reliability is the consistency of an instrument to obtain the same measurement (a) on successive administrations of the instrument or (b) on similar items within an instrument (Creswell, 2003; Fink, 2006; Fraenkel & Wallen, 2006; Merriam, 1998).

Three types of reliability are internal-consistency, equivalent-forms, and test-retest.

Cronbach's alpha (coefficient alpha) is a statistic used to measure internal consistency. It calculates how well similar items on an instrument measure the same quality. Survey items 8, 9, and 10 each consisted of 13-14 sub-questions divided into three subscales.

Cronbach's alpha was calculated for each subscale on survey items 8, 9, and 10.

Equivalent-forms reliability is determined by administering two versions of an instrument to the same group of people. A high degree of reliability is present if the findings on both versions of the instrument are similar. A second version of the ATICI was not developed, therefore equivalent-forms reliability was not measured. Test-retest reliability is determined by administering an instrument to a sample and then re-administering the instrument to the same sample after a certain amount of time has elapsed. Similar scores on both administrations of the instrument yields a high test-retest reliability. The second administration of the instrument should be of sufficient time, usually two to three months, to demonstrate stability of the scores (Fraenkel & Wallen). Due to time constraints, test-retest reliability was not performed.

The ATICI consisted of instructions for completing the survey and 11 items designed to answer the stated research questions. Survey items one through five collected demographic information on the participant (age, gender, years of certified experience, job setting, and hours worked in setting). Survey items 6 through 10 directly related to the stated research questions. Items 6 and 7 were forced-choice responses consisting of a seven point Likert scale while items 8, 9, and 10 were combination forced-choice (seven point Likert scale) and open-ended items. Item 11 was an open-ended question which provided participants the opportunity to add any qualitative information regarding

interpersonal conflict within their daily work life. RQ 1 was addressed by survey item six in which participants indicated how often they experienced interpersonal conflict in their work lives. The seven point Likert scale ranged from “not at all” to “more than once a day.” RQ 2 was answered by survey item seven as participants indicated their degree of confidence with effectively managing conflict in their work lives. The seven point Likert scale for item seven ranged from “completely unconfident” to “completely confident.” Survey items 8, 9 and 10 were directed toward RQ 3, RQ 4, and RQ 5, respectively. Survey items 8 through 10, respectively, asked participants to indicate how often they (a) experienced specific sources of interpersonal conflict, (b) experienced challenges to managing interpersonal conflict, and (c) implemented specific strategies for managing interpersonal conflict. The seven point Likert scale for items 8, 9, and 10 ranged from “not at all” to “more than one a day.” In addition to the forced-choice responses, participants were given the option to add additional comments for items 8, 9, and 10 through the use of an open-ended item text box.

Survey items 8, 9, and 10 each were comprised of three subscales. The subscales were conceptually determined based on the literature and preliminary data collected for the development of the ATICI. Survey item 8 was directed toward sources of interpersonal conflict for athletic trainers and consisted of the Organizational Factors subscale (items a, b, c, d), the Interpersonal Interaction Factors subscale (items e, f, g, h, i, j), and the Interference Factors subscale (items k, l, m, n). Survey item 9 focused on challenges to managing interpersonal conflict and consisted of the Organizational Factors subscale (items a, b, c), the Interpersonal Interaction Factors subscale (items d, e, f, g, h), and the Intrapersonal Factors subscale (items i, j, k, l, m). Survey item 10 was aimed at

strategies to managing interpersonal conflict and consisted of the Organizational Factors subscale (items a, b, c), the Management Style Factors subscale (items d, e, f, g, h), and the Personal Strategy Factors subscale (items i, j, k, l, m).

Data Analysis

This study was a concurrent, mixed methods design and utilized quantitative and qualitative analysis on the collected data. Considering the study was descriptive in nature, descriptive statistics utilizing SPSS 16.0 was used. Frequency, mean, median, range, and standard deviation were utilized on the demographic data collected in items one through five. The mean, median, range, and standard deviation were provided for the demographic of age of all participants, male participants, and female participants. Frequency distribution was performed on gender. Number of years certified by the Board of Certification was analyzed for the mean, median, range, and standard deviation. Frequency distribution was performed on job position. Mean, median, range, and standard deviation was analyzed on the hours worked per week in the high school athletic setting.

Research question one (RQ 1) was directed at identifying the prevalence of interpersonal conflict within the daily routine of the high school AT. Survey item six used a seven point Likert scale in which respondents indicated the frequency of interpersonal conflict within their daily routine. Frequency distribution was used to describe the prevalence of interpersonal conflict in the sample surveyed.

Research question two (RQ 2) was intended to identify how confident athletic trainers were in effectively managing interpersonal conflict. Survey item seven provided

respondents a seven point Likert scale to indicate their level of confidence. Frequency distribution was also used to analyze the data obtained from survey item seven.

Research question three (RQ 3) examined sources of interpersonal conflict for high school athletic trainers. Survey item eight asked participants to identify the frequency in which specific sources of interpersonal conflict occur within their daily routine. A seven point Likert scale ranging from “not at all” to “more than once a day” was utilized for the 14 sub-questions of survey item eight. Frequency distribution was used to analyze the quantitative data obtained from survey item eight. The qualitative portion of survey item eight was analyzed, coded, and developed into additional themes as noted in the qualitative analysis below.

Research question four (RQ 4) was aimed at identifying challenges for athletic trainers to effectively manage interpersonal conflict and how often these challenges occurred. Survey item nine provided respondents the opportunity to quantitatively indicate how frequently specific situations challenged their ability to effectively manage interpersonal conflict. Frequency distribution was utilized on the quantitative data collected from 13 sub-questions of survey item nine. Similar to RQ 3, qualitative analysis was utilized for the open-ended portion of survey item nine.

Research question five (RQ 5) was directed at identifying common strategies for effectively managing interpersonal conflict. Survey item 10 allowed participants to indicate how often they employed specific strategies for managing interpersonal conflict. Similar to survey items 8 and 9, a seven point Likert scale was used to determine the frequency of 13 sub-questions on survey item 10. Frequency distribution was used for

each of the sub-questions and qualitative analysis was utilized for the open-ended portion.

Survey items 8, 9, and 10 each consisted of three subscales. The items for each subscale were determined based on the review of literature and conceptually organizing the items. Internal consistency reliability is a type of reliability testing which determines how well items on a test are consistent with one another (Salkind, 2008). Cronbach's alpha was used to determine the reliability of the items on each subscale.

Prior to this study, interviews and e-mail surveys were utilized to acquire the qualitative information needed to develop the forced-choice responses (themes) for survey items 8, 9, and 10 on the ATICI. Although these items were primarily forced-choice responses on the ATICI, there was the option for participants to input additional sources, challenges, and strategies. In addition, item 11 on the survey prompted participants to provide any additional information regarding interpersonal conflict within their work life. Qualitative analysis was utilized for the open-ended portions of items 8, 9, 10, and 11 of the instrument. The open-ended responses from these items were analyzed, coded, and developed into the existing themes. The additional responses were summarized and described qualitatively. Validity of qualitative data can be accomplished through techniques such as triangulation and peer review (Creswell, 2003; Merriam, 1998). In order to ensure validity of the open-ended items on the ATICI, the researcher triangulated the data with data collected from previous interviews and conflict related literature. Additionally, the researcher utilized peer examination to assist with the analysis and summary.

Summary

The literature indicated conflict is endemic throughout society (Callanan & Perri, 2006; Corcoran & Mallinckrodt, 2000; Palmer, 2001; Rankin & Ingersoll, 2001; Ray, 2000). Furthermore, athletic training literature regarding burnout and quality of life suggested conflict as a common denominator (Judd & Perkins, 2004; Kania et al., 2009; Pitney, 2006). What was lacking in the athletic training literature was descriptive studies on interpersonal conflict among athletic trainers. Therefore, the purpose of this study was to identify (a) the *prevalence* of interpersonal conflict, (b) the *confidence* of ATs in managing interpersonal conflict, (c) common *sources* of interpersonal conflict, (d) *challenges* to effectively managing interpersonal conflict, and (e) *strategies* successful with managing interpersonal conflict.

The ATICI was developed by the researcher with the intent of addressing the previously stated research questions. The population for the study was ATs working in the high school athletic setting in District 5. A sample of 213 athletic trainers received an introductory e-mail requesting their participation. The participants completed an online questionnaire and data collected was quantitatively and qualitatively analyzed.

Chapter Four presents the findings from the ATICI. Descriptive statistics are provided regarding the data collected for each research question. Chapter Five presents implications, limitations, and suggestions for further research.

CHAPTER FOUR

RESULTS

Introduction

There are many references to conflict throughout the athletic training literature (Brumels & Beach, 2008; Capel, 1990; Gieck, Brown, & Shank, 1982; Kania et al., 2009; Pitney, 2006; Pitney, Ilsley, & Rintala, 2002; Vergamini, 1981). Although these sources and others identified the presence of conflict within athletic training, the focus of these articles was related to burnout, attrition, and quality of life in the athletic training profession. A review of the literature resulted in a limited amount of information related to the (a) prevalence and (b) sources of interpersonal conflict within athletic training. In addition, there was limited information regarding (a) challenges, (b) strategies, and (c) confidence in managing interpersonal conflict within athletic training.

Therefore, the purpose of this study was to provide a description of interpersonal conflict within high school athletic training. More precisely, the purpose was to identify the prevalence of interpersonal conflict and the confidence level of athletic trainers in managing interpersonal conflict. Likewise, the purpose was to identify specific sources of interpersonal conflict, challenges to managing interpersonal conflict, and strategies employed to manage interpersonal conflict. Research Question (RQ) 1 was directed at the *prevalence* of interpersonal conflict during the high school ATs daily routine. RQ2 was designed to obtain each respondent's estimate of their degree of *confidence* in effectively managing interpersonal conflict. RQ3, RQ4, and RQ5 were developed to gain an understanding from each participant's perspective regarding (a) the *sources* of

interpersonal conflict, (b) *challenges* to managing interpersonal conflict, and (c) *strategies* successful with managing interpersonal conflict.

The purpose of Chapter Four is to present the research findings of this study. An overview of the study's purpose and the specific research questions will be presented. Next, justification for the methods used to collect data will be summarized. In addition, the specific methods used in the study will be presented. In order to assist with generalization of the findings in this study, the demographic data of the participants surveyed will be described. The remainder of the results section will present an analysis of the data collected in an attempt to answer the five stated research questions.

Research Questions

Within the context of this study, a concurrent, mixed methods approach was utilized to address the following research questions:

1. How prevalent was interpersonal conflict in the daily routine of high school athletic trainers?
2. How confident were high school athletic trainers in effectively managing interpersonal conflict?
3. What were the common sources of interpersonal conflict for high school athletic trainers?
4. What were the common challenges for high school athletic trainers in their management of interpersonal conflict?
5. What were the common strategies for high school athletic trainers in their management of interpersonal conflict?

Study Design

A concurrent, mixed methods approach using a survey instrument was used in this study. The researcher believed a combination of qualitative and quantitative methods would best answer the stated research questions. Justification for a mixed methods approach originated from the assertions of Creswell (2003), Crotty (1998), King et al. (1994), and Patten (2007). These authors suggested choice of methodology is dependent upon the research question(s) and problem. In some studies, the research question(s) and problem are best answered by a quantitative approach, whereas in other cases the question(s) and problem are best addressed by a qualitative approach. However, other situations are best addressed by a mixture of quantitative and qualitative methods.

Booth et al. (2003) recommended quantitative measures to (a) address a specific research question and problem, (b) collect a large amount of data in a short time, and (c) obtain concrete facts. The research questions used in this study were specific in nature and could be answered by respondents using simple Likert style questions. In addition, the sample consisted of over 200 athletic trainers throughout a seven state area. The size of the sample, its regional distribution, and the desire to collect and analyze the data in a timely fashion further guided the researcher toward implementing quantitative methods.

However, circumstances may limit the viability of quantitative methods. Creswell (2003) recommended the use of qualitative methods when there is limited information in the literature relevant to the research question(s) and problem. Likewise, Johnson and Onwuegbuzie (2004), King et al. (1994), and Patten (2007) supported the use of qualitative methods when the research questions(s) and problem can best be answered through the use of open-ended questions and the development of trends/themes based

upon the combined knowledge and experience of other individuals. Considering the lack of information in the athletic training literature specific to interpersonal conflict, qualitative methods had potential for effectively addressing the research questions and problem noted in this study. In summary, the researcher anticipated a combination of quantitative and qualitative methods would enhance the depth of data collected.

Prior to the onset of this study, the researcher interviewed individuals to assist with the development of the instrument used in the current study. Interviews were conducted with practicing athletic trainers, dispute resolution experts, researchers, and athletic training educators. Further development of the instrument was assisted by responses from an e-mail survey sent to practicing athletic trainers. These athletic trainers were not included in the sample used in this study. An initial instrument was developed and reviewed by individuals experienced in research. Modifications were made to the instrument to promote content validity, clarification, and conciseness. The resulting instrument was titled the Athletic Trainer Interpersonal Conflict Inventory (ATICI).

The sample for this study was comprised of certified athletic trainers in District 5 of the NATA and who were identified as employed at the secondary school setting. E-mail addresses were obtained for the athletic trainers in the sample group and they were e-mailed a letter requesting their participation. Willing respondents clicked on a hyperlink in the e-mail which directed the individuals to an online survey hosted by SurveyMonkey. The initial page of the survey consisted of the informed consent letter. Following this page, the participants were presented with five survey items related to participant demographics and six survey items related to the research questions.

Submitted surveys were stored on the SurveyMonkey server until downloaded by the researcher for analysis.

Researcher Background and Bias

Researcher Background

The researcher has been a certified athletic trainer since 1988. He has a total of 22 years providing athletic training services in the collegiate and secondary school settings. During this 22 years, he also provided rehabilitation services in a sports medicine clinic. The majority of the past 19 years he has taught in an undergraduate athletic training education program and provided athletic training services to secondary school aged athletes. In the past four years, he has coordinated the outreach services for a hospital-based sports medicine clinic and transitioned into the clinical coordinator for an athletic training education program. He has a lengthy history of working as an athletic trainer directly with athletes, coaches, administrators, parents, and other health care providers. Furthermore, he is aware of the educational needs of athletic training students and needs of a practicing athletic trainer.

Researcher Bias

The researcher entered the study with two biases. One bias was the belief interpersonal conflict was highly prevalent within the profession of athletic training. This bias had been developed from his awareness of athletic training literature related to burnout, attrition, and quality of life in athletic training. The researcher's master's thesis was related to burnout in athletic training students. Furthermore, the researcher has experienced interpersonal conflict during the past 22 years while working as an athletic trainer, educator, and supervisor. The second bias of the researcher was the inadequate

preparation of athletic training students in recognizing and managing interpersonal conflict and the inability of athletic trainers to effectively manage interpersonal conflict. This bias developed as a result of the lack of interpersonal conflict management within the researcher's athletic training education and the limited amount of content present in current undergraduate athletic training education programs. In addition, this bias has developed from the researcher's perspective of the inability of many athletic trainers to effectively recognize and manage interpersonal conflict. This perspective has developed as a result on the interactions and observations the researcher has experienced with practicing athletic trainers and other individuals.

The researcher employed three techniques to minimize the effect of bias while conducting the study and analyzing the data. First, the researcher recognized the potential for bias and identified the specific biases he brought into the study. The researcher maintained awareness of these biases throughout the study and was committed to controlling any negative effect. Second, the researcher employed the use of quantitative methods which are rigid in design and assist with the collection of concrete data (Creswell, 2003; Johnson & Onwuegbuzie, 2004). A commonly used statistical package was used to analyze the majority of the data. The collection of quantitative data and quantitative analysis assists with minimizing the potential for researcher bias. Third, the researcher employed techniques to minimize the effect of researcher bias while analyzing and interpreting the qualitative data collected with the survey. The qualitative data was interpreted by the researcher and compared to the interpretation by athletic training educators and experienced researchers. Furthermore, the interpretations were compared to existing literature related to interpersonal conflict.

Findings

Response Rate and Demographic Data

The subjects recruited for this study were certified athletic trainers who were identified as working in the secondary school setting within District 5 of the National Athletic Trainers' Association. District 5 comprises the states of Iowa, Kansas, Missouri, Nebraska, North Dakota, Oklahoma, and South Dakota. The number of certified athletic trainers in District 5 working in the secondary school setting varied significantly among the seven states (see Table 1). Inclusion criteria for the study consisted of working in the secondary school setting and providing at least 15 hours of athletic training services per

Table 1

Secondary school athletic trainers in District 5

State	Number of certified	Number excluded
Iowa	26	2
Kansas	23	0
Missouri	61	1
Nebraska	53	1
North Dakota	4	0
Oklahoma	41	0
South Dakota	5	0
Total	213	4

week to the school during the academic year. However, the inclusion criteria of 15 hours of service per week could not be determined prior to submitting e-mail requests for participation. The inclusion criteria of 15 hours per week was noted in the e-mail request letter and was obtained in the demographic section of the ATICI.

An initial e-mail request (see Appendix B) was sent to 213 certified athletic trainers. Two e-mails were immediately returned as undeliverable and two prospective participants replied to the e-mail and indicated they did not meet the inclusion criteria. After a spike in responses following the initial e-mail, a second e-mail request (see Appendix C) was sent one week after the first e-mail. A small spike in responses was noted after the second e-mail request, however, a third e-mail request was sent four days later. A total of 86 surveys were returned out of 211 successful e-mail transmissions yielding a return rate of 40.8%. Of the 86 surveys submitted, 9 incomplete surveys were deleted for a final return rate of 36.5%.

Participants ranged in age from 24 years to 61 years with a mean of 39.0 years and a standard deviation of 10 years. See Table 2. The participants were diverse in regard to age, however the 50th percentile compared well to the mean age. Fifty percent of the participants were aged 36 years or younger.

Table 2

Age of Participants

	<i>N</i>	Minimum	Maximum	Mean	SD
Age	77	24	61	39.0	10

Gender of participants was evenly distributed with 36 females (47.4%) and 40 males (52.6%). See Table 3. This distribution was consistent with the gender of District 5 membership listed as working in the secondary school setting. At the time of the study, the gender distribution in the targeted sample was 47.2% female and 52.8% male.

Table 3

Gender of Participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	37	48.1	48.1	48.1
Male	40	51.9	51.9	100.0
Total	77	100.0	100.0	

The average number of years certified by the Board of Certification was 14.0 years (SD = 8.0). Years certified ranged from 1 year to 34 years. The majority of participants indicated they worked in the secondary school setting with 74 (96.1%) athletic trainers selecting this option. Three subjects (3.9%) indicated they worked in the clinic/secondary school setting. Number of years certified by the Board of Certification ranged from 1 to 34 years with a mean of 14.0 years (SD = 8). Table 4 provides a summary of the data for number of years certified by the Board of Certification.

Table 4

Years Certified by the Board of Certification

	<i>N</i>	Minimum	Maximum	Mean	SD
Years Certified	77	1	34	14.0	8.0

The largest percentage of athletic trainers indicated they worked more than 40 hours per week within the athletic setting during the academic year. Nearly 33% ($n = 25$) of the participants indicated they worked over 40 hours. See Table 5 for a full summary of the hours worked per week.

Table 5

Hours Worked per Week (N = 77)

Hours	Frequency	Percent	Valid Percent	Cumulative Percent
11-15	3	3.9	3.9	3.9
16-20	10	13.0	13.0	16.9
21-25	17	22.1	22.1	39.0
26-30	13	16.9	16.9	55.8
31-35	3	3.9	3.9	59.7
36-40	6	7.8	7.8	67.5
40+	25	32.5	32.5	100.0
Total	77	100.0	100.0	

Research Question One

Research Question 1 stated: How prevalent was interpersonal conflict in the daily routine of high school athletic trainers? This research question was addressed by survey item six which asked participants to rate how often interpersonal conflict occurred in

their work life. A seven point Likert scale provided options ranging from “never” to “more than once a day.” In response to this question, 96.1% of the respondents indicated the presence of interpersonal conflict within their daily work life. Of this 96.1%, 52 participants (67.5%) indicated they experienced interpersonal conflict “Once a month” or less. Contrarily, 25 respondents (32.5%) reported interpersonal conflict occurring “Once a week” or more. Table 6 and Figure 4 provide a full description of the prevalence on interpersonal conflict.

Table 6

Prevalence of Interpersonal Conflict (N = 77)

Rating	Frequency	Percent	Valid Percent	Cumulative Percent
Never	3	3.9	3.9	3.9
Less than once a month	23	29.9	29.9	33.8
Once a month	26	33.8	33.8	67.5
Once a week	18	23.4	23.4	90.9
More than once a week	4	5.2	5.2	96.1
Once a day	2	2.6	2.6	98.7
More than once a day	1	1.3	1.3	100.0

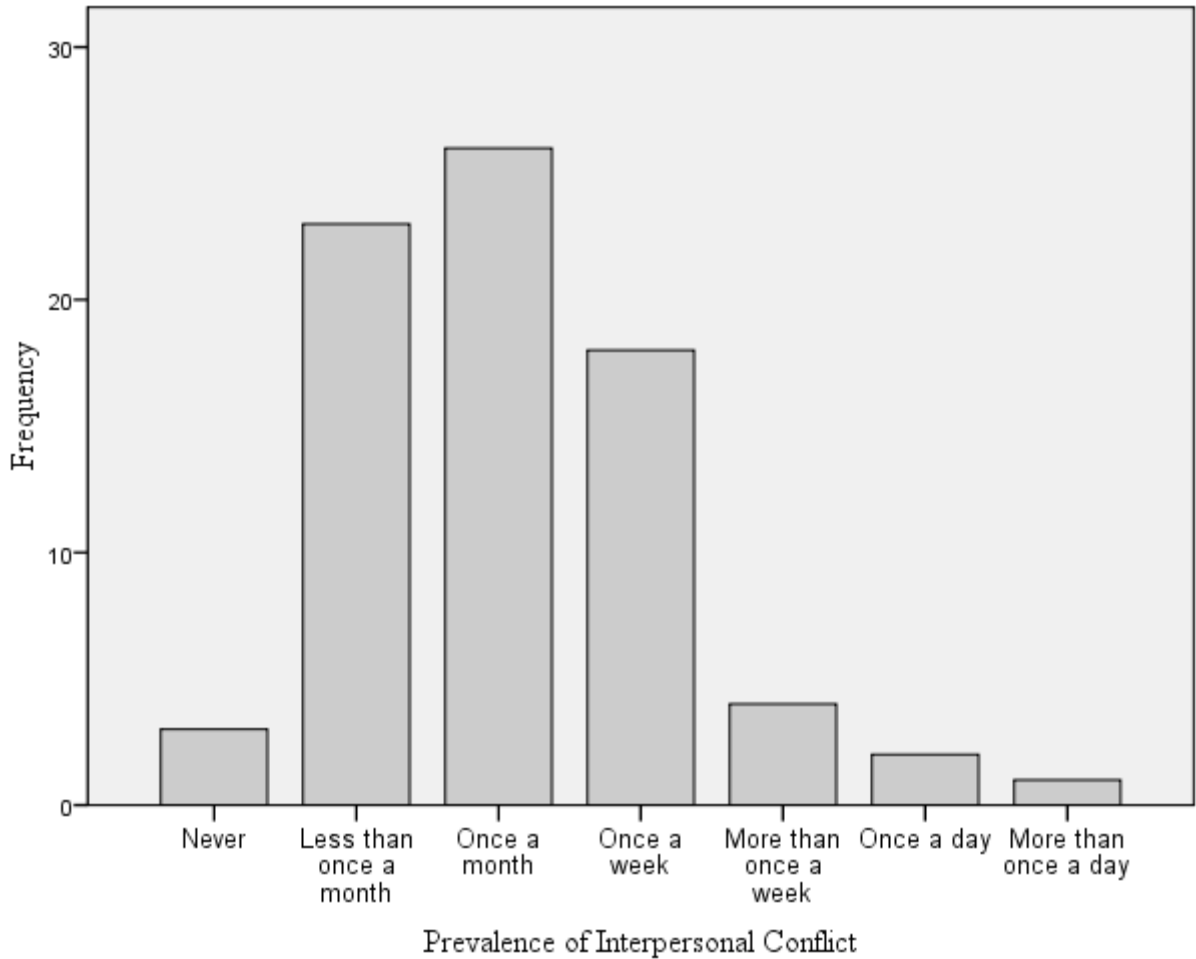


Figure 4. Prevalence of interpersonal conflict within high school athletic training.

Research Question Two

Research Question Two stated: How confident were high school athletic trainers in effectively managing interpersonal conflict? This research question was examined by survey item seven in which respondents rated the degree of confidence with managing interpersonal conflict. Similar to research question one and survey item six, respondents were presented with a seven point Likert scale. However, this scale ranged from “completely unconfident” to “completely confident.” Overall, 70 respondents (90.9%) indicated they were “Slightly confident” or greater with managing interpersonal conflict

while only 9.1% rated themselves as “slightly unconfident” or less in their ability to manage interpersonal conflict. Table 7 and Figure 2 provide a description of the level of confidence of the sample in managing interpersonal conflict.

Table 7

Confidence in Managing Interpersonal Conflict (N = 77)

Rating	Frequency	Percent	Valid Percent	Cumulative Percent
Completely unconfident	3	3.9	3.9	3.9
Mostly unconfident	1	1.3	1.3	5.3
Slightly unconfident	3	3.9	3.9	9.1
Neither confident nor unconfident	0	0.0	0.0	9.1
Slightly confident	12	15.6	15.6	24.7
Mostly confident	46	59.7	59.7	84.4
Completely confident	12	15.6	15.6	100.0
Total	77	100.0	100.0	100.0

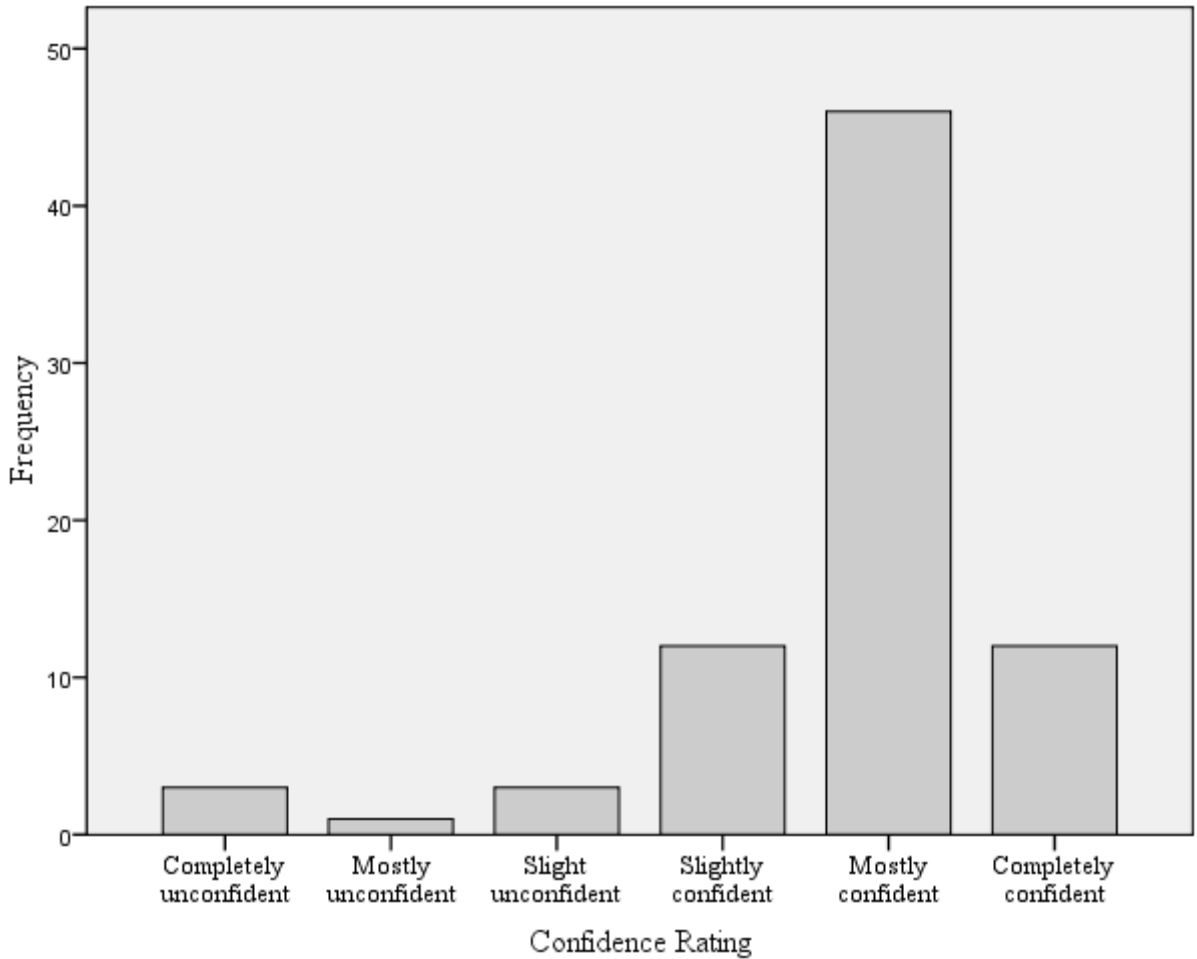


Figure 5. Level of confidence in managing interpersonal conflict among the sample.

Research Question Three

Research Question Three stated: What were the common sources of interpersonal conflict for high school athletic trainers? This question was answered by survey item eight and was aimed at identifying the frequency of specific sources of conflict within the respondents’ work life. Respondents indicated the frequency on a seven point Likert scale ranging from “Not at all” to “More than once a day.” Survey item 8 contained 14 sub-questions organized into three subscales. The first four sub-questions (a, b, c, and d) were related to *Organizational Factors*. This subscale examined (a) organizational hierarchy,

(b) imposed workload, (c) amount of direct contact with others, and (d) disrespect for the role of the athletic trainer. A cumulative percentage of 83.2% for all four items on this subscale occurred once a month or less. However, interpersonal conflict was reported as occurring at least once a week due to organizational hierarchy ($n = 6$, 7.8%), imposed workload ($n = 19$, 24.7%), amount of direct contact with others ($n = 15$, 19.5%), and disrespect for the role of the athletic trainer ($n = 12$, 15.6%). A composite summary of conflict sources related to organizational factors is provided in Table 8.

Table 8

Sources Related to Organizational Factors Subscale (N = 77)

Frequency	Sub-questions				Total	Percent	Cum. Percent
	a	b	c	d			
Not at all	45	20	36	31	132	42.9	42.9
Less than once a month	20	24	18	23	85	27.6	70.5
Once a month	6	14	8	11	39	12.7	83.2
Once a week	4	13	9	9	35	11.4	94.6
More than once a week	1	3	3	2	9	2.9	97.5
Once a day	1	0	1	1	3	1.0	98.5
More than once a day	0	3	2	0	5	1.5	100.0

Note. Sub-question a: My position within the organization's hierarchy.
 Sub-question b: The workload imposed upon me by others.
 Sub-question c: A high percentage of time working in direct contact with others.
 Sub-question d: Disrespect for my role as an athletic trainer.

The next subscale (sub-questions e, f, g, h, i, j) examined *Interpersonal Interaction Factors* and is summarized in Table 9. The Interpersonal Interaction Factors addressed were interaction with (e) parents, (f) coaches, (g) athletes, (h) peers, and (i) others as well as (j) ineffective communication. A cumulative percentage of 92.0 for all six items on this subscale occurred once a month or less. Interaction with athletes was the most commonly selected item as occurring once a week or more. Nearly 16% ($n = 12$) of the respondents indicated interaction with athletes was a source of interpersonal conflict on a weekly basis or more often.

Table 9

Sources related to Interpersonal Interaction Factors Subscale (N = 77)

Frequency	Sub-question						Total	%	Cum. %
	e	f	g	h	i	j			
Not at all	25	18	25	43	38	23	172	37.2	37.2
Less than once a month	35	31	25	22	26	34	173	37.5	74.4
Once a month	14	23	15	9	7	12	80	17.3	92.0
Once a week	2	1	7	2	4	5	21	4.5	96.5
More than once a week	1	2	2	1	1	2	9	2.0	98.5
Once a day	0	1	2	0	1	1	5	1.1	99.6
More than once a day	0	1	1	0	0	0	2	0.4	100.0

Note. Sub-question e: Interacting with parents.
 Sub-question f: Interacting with coaches.
 Sub-question g: Interacting with athletes.
 Sub-question h: Interacting with peers.
 Sub-question i: Interacting with others.
 Sub-question j: Ineffective communication with others.

The remaining subscale is summarized in Table 10 and addressed *Interference Factors* such as (k) noncompliance of athletes, (l) noncompliance of coaches, (m) staff members not meeting job responsibilities, and (n) students not meeting their clinical responsibilities. The four items on this subscale had a cumulative average of 85.1% for occurring once a month or less. Respondents indicated interpersonal conflict occurring once a week or more as a result of non-compliance from athletes ($n = 18, 23.4\%$), coaches ($n = 12, 15.6\%$) staff members ($n = 8, 10.4\%$), and athletic training students ($n = 8, 10.4\%$). See Table 10 for a summary of interference factors subscale and Appendix E for a complete summary of all sub-questions for sources of interpersonal conflict.

Table 10

Sources related to Interference Factors Subscale (N = 77)

Frequency	Sub-question				Total	Percent	Cum. %
	k	l	m	n			
Not at all	9	23	35	43	110	35.7	35.7
Less than once a month	31	30	23	18	102	33.2	68.9
Once a month	19	12	11	8	50	16.2	85.1
Once a week	12	8	1	4	25	8.1	93.2
More than once a week	2	2	3	1	8	2.6	95.8
Once a day	3	2	3	1	9	2.9	98.7
More than once a day	1	0	1	2	4	1.3	100.0

Note: Sub-question k: Working with athletes who are not compliant with my recommendations.
 Sub-question l: Working with coaches who are not compliant with my recommendations.
 Sub-question m: Working with staff who are not meeting their work responsibilities.
 Sub-question n: Supervising students who are not meeting their responsibilities.

Research Question Four

Research Questions Four stated: What were the common challenges for high school athletic trainers in their management of interpersonal conflict? Survey item nine provided respondents the opportunity to identify specific challenges to their ability to manage interpersonal conflict. The 13 sub-questions used a seven point Likert scale and were organized into three subscales. The first three sub-questions (a, b, and c) addressed *Organizational Factors* and focused on (a) lack of administrator support, (b) lack of resources, and (c) lack of time. See Table 11 for a summary of the challenges subscale related to organizational factors.

Table 11

Challenges related to Organizational Factors Subscale (N = 77)

Frequency	Sub-question			Total	Percent	Cum. Percent
	a	b	c			
Not at all	38	34	17	89	38.5	38.5
Less than once a month	23	21	18	62	26.8	65.3
Once a month	8	12	16	36	15.6	80.9
Once a week	4	4	12	20	8.7	89.6
More than once a week	3	2	5	10	4.3	93.9
Once a day	0	3	5	8	3.5	97.4
More than once a day	1	1	3	5	2.2	99.6
Missing data	0	0	1	1	0.4	100.0

Note. Sub-question a: Lack of support from administrators.
Sub-question b: Lack of resources.
Sub-question c: Lack of time.

The majority of respondents reported the above challenges as occurring once a month or less. A cumulative percentage of 80.9% of the responses for sub-questions a, b, and c corresponded to once a month or less. Challenges to managing interpersonal conflict occurred once a week or greater as a result of lack of administrator support ($n = 8$, 10.4%), lack of resources ($n = 10$, 13%), and lack of time ($n = 26$, 33.8%).

The next subscale (sub-questions d, e, f, g, and h) was aimed at *Interpersonal Interaction Factors* and allowed respondents to identify challenges related to (d) others unwilling to work toward a solution, (e) others unwilling to adapt/change, (f) the emotions of others, (g) the extent of the relationship with others, and (h) the level of communication with others. Nearly 90% of the responses for the five sub-questions on this subscale corresponded to occurring once a month or less. Interpersonal conflict as a result of unwillingness to work toward a solution was reported once a week or more by 12 (15.6%) respondents. Likewise, the emotions of others resulted in the occurrence of interpersonal conflict once a week or more in 11 (14.3%) respondents. See Table 12 for a summary of the challenges related to interpersonal interaction factors subscale.

Table 12

Challenges related to Interpersonal Interaction Factors Subscale (N = 77)

Frequency	Sub-question					Total	%	Cum. %
	d	e	f	g	h			
Not at all	32	34	25	40	26	157	40.8	40.8
Less than once a month	23	27	26	23	38	137	35.6	76.4
Once a month	10	9	15	9	5	48	12.5	88.9
Once a week	7	3	5	1	3	19	4.9	93.8
More than once a week	2	3	4	3	2	14	3.6	97.4
Once a day	3	0	1	1	3	8	2.1	99.5
More than once a day	0	1	1	0	0	2	0.5	100.0

Note. Sub-question d: Others unwilling to work toward a solution.
 Sub-question e: Staff/coworkers unwilling to adapt or accept change.
 Sub-question f: The emotions of others.
 Sub-question g: The level of relationship I have with others.
 Sub-question h: The level of communication between myself and others.

The final subscale attempted to measure *Intrapersonal Factors* which provided challenges to managing interpersonal conflict. The five sub-questions of this subscale addressed the respondent's (i) emotions, (j) impatience, (k) inability to affect other people's perspective, (l) lack of confidence in managing interpersonal conflict, and (m) lack of preparation in managing interpersonal conflict. A cumulative percentage of 92.4% of the responses for the five sub-questions indicated these challenges occurred once a month or less often. The sub-questions with the most responses for occurring once a

week or greater were related to “My emotions” ($n = 7, 9.1\%$) and “My impatience” ($n = 9, 11.7\%$). See Table 13 for a summary of challenges to managing interpersonal conflict related to intrapersonal factors. A complete summary for challenges to managing interpersonal conflict can be found in Appendix F.

Table 13

Challenges related to Intrapersonal Factors Subscale (N = 77)

Frequency	Sub-question					Total	%	Cum. %
	i	j	k	l	m			
Not at all	31	26	34	43	50	184	47.8	47.8
Less than once a month	31	36	26	25	20	138	35.8	83.6
Once a month	8	6	9	6	5	34	8.8	92.4
Once a week	2	4	4	2	1	13	3.4	95.8
More than once a week	1	1	2	1	1	6	1.6	97.4
Once a day	3	3	0	0	0	6	1.6	99.0
More than once a day	1	1	0	0	0	2	0.5	99.5
Missing data	0	0	2	0	0	2	0.5	100.0

Note. Sub-question i: My emotions.
 Sub-question j: My impatience.
 Sub-question k: My inability to affect other people’s perspective.
 Sub-question l: My lack of confidence in managing conflict.
 Sub-question m: My lack of education/knowledge on conflict management.

Research Question Five

Research Question Five stated: What were the common strategies for high school athletic trainers in their management of interpersonal conflict? Survey item 10 allowed respondents to indicate the frequency of strategies they used to manage interpersonal conflict. A seven point Likert scale was used, ranging from “Not at all” to “More than once a day”. The 13 sub-questions comprised three subscales: (a) *Organizational Factors*, (b) *Management Style Factors*, and (c) *Personal Strategy Factors*. The Organizational Factors Subscale was addressed by the strategies of (a) utilizing organizational resources, (b) allowing superiors to manage the situation, and (c) utilizing policy and procedures. See Table 14 for a summary of organizational factors.

Table 14

Strategies Related to Organizational Factors Subscale (N = 77)

Frequency	Sub-question			Total	Percent	Cum. Percent
	a	b	c			
Not at all	23	20	19	62	26.8	26.8
Less than once a month	19	34	23	76	32.9	59.7
Once a month	17	16	18	51	22.1	81.8
Once a week	10	5	12	27	11.7	93.5
More than once a week	1	1	3	5	2.2	95.7
Once a day	3	0	1	4	1.7	97.4
More than once a day	4	1	1	6	2.6	100.0

Note. Sub-question a: Utilizing organizational resources.
 Sub-question b: Allowing superiors to resolve the conflict.
 Sub-question c: Resolving the conflict based on organizational policies and procedures.

A cumulative percentage (81.8%) of the responses for all three sub-questions in this subscale corresponded to once a month or less. Utilizing organizational resources once a week or more was reported by 18 (23.4%) subjects. Use of policies and procedure once a week or more was reported by 17 (22.1%) of the respondents.

The subscale of Management Style Factors referred to five common conflict management styles (avoidance, competition, collaboration, accommodation, and compromise). The five sub-questions related to conflict management styles asked participants to indicate how often they managed interpersonal conflict through (d) avoidance, (e) accommodation, (f) compromise, (g) collaboration, and (h) competition. See Table 15 for a summary of the Management Style Factors subscale.

A cumulative percentage of 80.8% was noted for all five styles as being reported to occur once a month or less. The most commonly used styles among the respondents was reported as compromise and collaboration. Compromise was reported once a week or more by 21 (27.3%) of the respondents and collaboration was reported once a week or more by 28 (36.4%) of the respondents.

Table 15

Strategies Related to Management Style Factors Subscale (N = 77)

Frequency	Sub-question					Total	%	Cum. %
	d	e	f	g	h			
Not at all	39	28	5	6	48	126	32.7	32.7
Less than once a month	20	32	22	19	17	110	28.6	61.3
Once a month	10	10	28	22	5	75	19.5	80.8
Once a week	4	3	12	16	4	39	10.1	90.9
More than once a week	2	4	4	7	2	19	4.9	95.8
Once a day	1	0	4	4	0	9	2.3	98.1
More than once a day	0	0	1	1	1	3	0.8	98.9
Missing data	1	0	1	2	0	4	1.1	100.0

Note. Sub-question d: Avoiding the issue altogether.
 Sub-question e: Giving in (accommodate) to the other person(s).
 Sub-question f: Compromising (give some, take some).
 Sub-question g: Collaborating with the other person(s) to resolve the conflict.
 Sub-question h: Taking a competitive approach to “win” the conflict

Sub-questions concerned with Personal Strategy Factors (i, j, k, l, and m) allowed participants to indicate the frequency in which they employed the following strategies: (i) conflict prevention, (j) situation analysis, (k) open communication, (l) identification of expectations, and (m) attentive listening. See Table 16 for a summary of the personal strategies related to managing interpersonal conflict.

Table 16

Strategies related to Personal Strategy Factors Subscale (N = 77)

Frequency	Sub-question					Total	%	Cum. %
	i	j	k	l	m			
Not at all	8	4	6	11	7	36	9.4	9.4
Less than once a month	23	20	14	21	14	92	23.9	33.3
Once a month	18	23	13	10	7	71	18.4	51.7
Once a week	12	12	12	11	13	60	15.6	67.3
More than once a week	7	8	12	12	8	47	12.2	79.5
Once a day	4	3	5	6	7	25	6.5	86.0
More than once a day	5	6	15	6	21	53	13.8	99.8
Missing data	0	1	0	0	0	1	0.2	100.0

Note: Sub-question i: Preventing conflict.
 Sub-question j: Taking time to analyze the conflict situation.
 Sub-question k: Using open communication.
 Sub-question l: Identifying my expectations of others.
 Sub-question m: Listening attentively.

A cumulative percentage of 51.7% was noted for the above strategies as occurring once a month or less. Open communication was reported as being used once a week or more to manage interpersonal conflict by 44 (57%) of the respondents. Likewise, listening attentively was reported once a week or more by 49 (63.6%) of the respondents. Prevention ($n = 28$, 36.4%), analyzing the situation ($n = 29$, 37.7%), and identifying expectations ($n = 35$, 45.5%) were reported as occurring once a week or more. Appendix G offers a summary of all sub-questions related to conflict management strategies.

Internal Consistency Reliability of ATICI

Cronbach's alpha reliability was used to measure the internal consistency reliability of the ATICI. The ATICI measured five constructs: prevalence of interpersonal conflict, confidence in managing interpersonal conflict, sources of interpersonal conflict, challenges to managing interpersonal conflict, and strategies to managing interpersonal conflict. The constructs of sources, challenges, and strategies consisted of sub-questions and subscales.

The construct measuring sources of interpersonal conflict consisted of 14 items and three subscales. The first subscale focused on organizational factors and included four items. The second subscale focused on interpersonal interaction factors and consisted of six items. The third subscale focused on interference factors and consisted of four items. The overall alpha was .782 for the four items on the organizational factors subscale, .877 for the six items on the interpersonal interaction factors subscale, and .796 for the four items on the interference factors subscale. No increase would have been obtained for any of the alpha scores with the elimination of any items.

The construct measuring challenges to managing interpersonal conflict consisted of 13 items and three subscales. The first subscale focused on organizational factors and included three items. The second subscale focused on interpersonal interaction factors and consisted of five items. The third subscale focused on intrapersonal factors and consisted of five items. The overall alpha was .877 for the three items on the organizational factors subscale, .939 for the interpersonal interaction factors subscale, and .931 for the intrapersonal factors subscale. No increase in any of the alpha scores would have been obtained from elimination of any survey items.

The construct measuring strategies to managing interpersonal conflict consisted of 13 items and 3 subscales. The first subscale focused on organizational factors and included three items. The second subscale focused on management style factors and consisted of five items. The third subscale focused on personal strategy factors and consisted of five items. The overall alpha was .855 for the three items on the organizational factors subscale, .831 for the five items on the management style factors, and .935 for the five items on the personal strategy factors subscale. No increase in overall alpha would have resulted from the elimination of any items.

Qualitative Analysis

Respondents were asked to offer additional qualitative information on survey items 8, 9, 10, and 11. Survey items 8, 9, and 10 allowed respondents to offer any additional sources of interpersonal conflict, challenges to managing interpersonal conflict, and strategies for managing interpersonal conflict. However, a limited amount of information was submitted through the open-ended component of survey items 8, 9, and 10. Survey item 8 collected comments from four respondents whereas survey item 9 collected comments from 1 respondent. A respondent submitted information on survey item 10, however, the information did not provide any additional strategies. Rather, the respondent simply identified some of the challenges noted in the quantitative portion of the question. The general, open-ended question from survey item 11 resulted in comments from 9 respondents.

Analysis of the open-ended comments on survey items 8, 9, 10, and 11 did not lead to the development of any additional themes or categories. Likewise, the information did not provide any additional sources of interpersonal conflict, challenges to managing

interpersonal conflict, or strategies for managing interpersonal conflict. Nearly all of the comments submitted related well to the existing survey items. The additional comments submitted will be discussed as they relate to sources, challenges, and strategies.

Sources. One respondent indicated a lack of the administrator understanding and respecting the role of an athletic trainer as a source of interpersonal conflict. This comment related well to survey item 8c and survey item 9a which were directed toward administrator support and respect for the role of an athletic trainer. This comment was supported by another respondent who indicated “our young boss, does not understand how to work with and employ the teacher/ATC.”

Related to workload, one respondent indicated “classroom responsibilities not relating to athletic training” was a source of conflict. However, the respondent recorded “Less than once a month” on survey item 8b which was directed at workload. Another individual commented on the workload and indicated “I wear too many hats to do a good job at anything I do.” The respondent identified multiple job duties and subsequently indicated the required workload caused conflict “Once a week.”

“Coaches challenging me with my treatment options” was noted as a source of conflict by one respondent. This respondent rated interpersonal conflict as occurring “Once a day” in regard to the sub-question related to noncompliant coaches. However, another respondent indicated “I rarely have too much conflict,” yet added that when conflict does occur, “it is usually between myself and coaches regarding an athlete and their return to play or state of injury.”

Although this study was not focused on the relationship between work and family life, one respondent commented twice on the interpersonal conflict resulting from factors

associated with work and family life. The respondent indicated that the job “is extremely demanding and time consuming” and affects family life. The participant added, “if I had a dollar every time my job stressed my [spouse] or caused conflict in our marriage I wouldn’t have to work any longer.” An additional source of conflict noted by the same respondent was having to make season or career-ending decisions regarding injured athletes.

A final source of interpersonal conflict noted by one respondent was interference from outside sources. This respondent indicated hospital sponsored programs interfered with the ability to provide the necessary care for athletes. The participant stated the hospital programs “are actively ‘Pimping’ for my athletes to use [their] services rather than allowing me to provide same services at school.” This comment may be reflected in survey item 8d (disrespect for role of the AT) in which the respondent indicated as occurring “Once a day.”

Challenges. One individual provided additional comments on the open-ended question for survey item 9. This individual noted an additional challenge as “a supervisor who doesn’t get what Athletic Training is and how it works.” This individual rated lack of administrator support on survey item 9a as occurring “Once a month.” Contrarily, the respondent recorded “Not at all” for survey item 8d which was related to disrespect for the role of an athletic trainer. An additional challenge offered by a respondent was when students “refuse to change what they are doing to resolve the conflict despite repeated conferences about how to change.”

Strategies. Several respondents offered information on successful strategies for managing interpersonal conflict. Suggestions primarily related to communication,

teamwork, and respect. One respondent indicated “open communication goes a long way.” This respondent also noted it was beneficial to have “full support from my athletic director.” Another respondent noted the importance of support from others. This athletic trainer commented on the value of involving others with decision-making processes so “they have buy-in and are a part of the process, not just a passive participant.” The respondent also utilized policies/procedures, job expectations, and codes of conduct to minimize work-related interpersonal conflict. A final comment was made by a respondent who reported no daily conflicts. The athletic trainer claimed to work “in an atmosphere of true teamwork, and mutual respect.”

Summary of Findings

The purpose of this study was to explore interpersonal conflict within high school athletic training. A concurrent, mixed methods design was utilized. A convenience sample consisting of certified athletic trainers identified as working in the secondary setting within District 5 was used. A return rate of 40.8% (86 surveys) was achieved from 211 e-mail requests for participation. After examination of the returned surveys, 9 were discarded due to incomplete data. This provided 77 useable surveys (36.5% return rate) for data analysis.

The average age of respondents was 39.0 (sd = 10) with 14.0 (sd = 8) years of certified experience. The sample was comprised of 48.1% females and 51.9% males. Respondents (67.5%) indicated interpersonal conflict occurred “Once a month” or less while 32.5% reported interpersonal conflict occurred “Once a week” or more. Overwhelmingly, 90.9% of the sample indicated they were “Slightly confident” to “Completely confident” in their ability to manage interpersonal conflict. Of all the

sources of interpersonal conflict presented on the ATICI, 87.1% of the respondents indicated they occurred “Once a month” or less. Likewise, 88.3% of the challenges and 72.1% of the strategies occurred “Once a month” or less. Analysis of the qualitative data did not reveal additional themes. Rather, the submitted information related well with the items on the ATICI.

Chapter Five presents a general overview of the study and integrated findings relevant to the research questions. Limitations of the study will be presented as well as implications for athletic trainers and athletic training education programs. Last, recommendations for future research will be offered.

CHAPTER FIVE

DISCUSSION

Introduction

Conflict has been described as an ever-present entity and a part of everyday life (Barki & Hartwick, 2001; Forté, 1997; Harper, 2004; Rahim, Buntzman, & White, 1999). It has also be noted as a common factor in the athletic training profession (Brumels & Beach, 2008; Ray, 2000). Although conflict has been studied extensively over the past 50 years, little research has been done within the athletic training profession. Therefore, the intent of this study was to add to the athletic training body of knowledge regarding interpersonal conflict. This chapter will present a general overview of the study, integrated findings relevant to the research questions, limitations of the study, implications for athletic trainers and athletic training education programs, and recommendations for future research.

Purpose of the Study

Although existing literature discusses conflict within athletic training, the focus has generally been directed toward burnout, attrition, and quality of life issues. Existing athletic training literature provides limited information to provide a clear picture of conflict within athletic training. Specific causes of interpersonal conflict, challenges to managing interpersonal conflict, and strategies to managing interpersonal conflict are not well described. In addition, quantitative studies noting the prevalence of interpersonal conflict and the confidence level of athletic trainers in managing interpersonal conflict could not be found. Therefore, the purpose of this study was to provide a broad description of interpersonal conflict within high school athletic training. More precisely,

the purpose was to identify the prevalence of interpersonal conflict and the confidence level of athletic trainers in managing interpersonal conflict. In addition, the purpose was to identify specific sources of interpersonal conflict, challenges to managing interpersonal conflict, and strategies employed to manage interpersonal conflict.

Design and Procedures

Prior to the onset of this study, the researcher interviewed individuals to assist with the development of the instrument used in the current study. Interviews were conducted with practicing athletic trainers, dispute resolution experts, researchers, and athletic training educators. Further development of the instrument was assisted by responses from an e-mail survey sent to practicing athletic trainers. These athletic trainers were not included in the sample used in this study. An initial instrument was developed and reviewed by individuals experienced in research. Modifications were made to the instrument to promote content validity, clarification, and conciseness. The resulting instrument was titled the Athletic Trainer Interpersonal Conflict Inventory (ATICI).

A concurrent, mixed methods approach using a survey instrument was used in this study. The researcher believed a combination of qualitative and quantitative methods would best answer the stated research questions. Certified athletic trainers working in the secondary school setting within District 5 served as the sample. Prospective participants were e-mailed a letter requesting their participation. Willing respondents completed an online version of the ATICI hosted by SurveyMonkey. The survey consisted of the informed consent letter, five demographic questions, and six questions (with sub-questions) directly related to the stated research questions. Submitted surveys were stored on the SurveyMonkey server until downloaded by the researcher for analysis.

Quantitative analysis (descriptive statistics) using SPSS 16.0 was performed on the five survey items collecting demographic data and the five survey items collecting quantitative data related to the research questions. Qualitative analysis was performed on the data collected from the open-ended questions on the survey. The researcher analyzed the data utilizing existing research as a reference. The qualitative data was cross-referenced by using peer review.

Conclusions

Research Questions

Within the framework of this study, a concurrent, mixed methods approach was utilized to address the five research questions. Each research question will be presented along with an analysis of the data.

1. *How prevalent was interpersonal conflict in the daily routine of high school athletic trainers?* Nearly all of the respondents reported the presence of interpersonal conflict in their daily routine. However, the majority of participants in this study did not experience interpersonal conflict on a frequent basis. This was noted by two-thirds of the respondents reporting interpersonal conflict occurring once a month or less. However, nearly one-third of the respondents reported they experienced interpersonal conflict at least once a week. Although the numbers were low, three respondents indicated they experienced interpersonal conflict on a daily basis.
2. *How confident were high school athletic trainers in effectively managing interpersonal conflict?* Over half of the participants indicated they were “Mostly confident” with managing interpersonal conflict. Over 90% indicated at least

some degree of confidence with managing interpersonal conflict. Almost 1 out of every 10 participants reported they were slightly to completely unconfident with managing interpersonal conflict. However, nearly a fourth of the individuals reported they were “completely unconfident” to only “slightly confident” in managing interpersonal conflict.

3. *What were the common sources of interpersonal conflict for high school athletic trainers?* Organizational sources of interpersonal conflict were most commonly related to the workload imposed upon the athletic trainer by other individuals. Nearly a fourth of the sample indicated this was a source of interpersonal conflict which occurred once a week or more. The amount of direct contact with other people and the disrespect for the role of an athletic trainer were other common sources of interpersonal conflict for athletic trainers. The amount of direct contact and lack of respect were sources of interpersonal conflict once a week or more for approximately 16-20% of the sample. The athletic trainer’s position within the organization’s hierarchy was the least common source of organizational interpersonal conflict.

Sources of conflict as a result of interpersonal interaction was most often associated with interaction with athletes. Interpersonal conflict due to interaction with athletes occurred once a week or more for nearly 16% of the sample.

Interaction with coaches was the next most common interpersonal interaction source, followed by ineffective communication, interaction with others, interaction with coaches, and interaction with peers or parents. However, these sources of interpersonal conflict occurring once a week or more presented at a

low rate. Similar to the interpersonal interaction subscale, sources of interpersonal conflict as a result of interference (non-compliance) resulted most often from athletes, followed by coaches, staff, and students. Nearly a fourth of the respondents indicated non-compliance from athletes created interpersonal conflict once a week or more.

4. *What were the common challenges for high school athletic trainers in their management of interpersonal conflict?* The most common organizational challenge to managing interpersonal conflict was related to a lack of time. Over one-third of the respondents indicated this as a challenge which occurred once a week or more. To a lesser degree, a lack of resources and a lack of administrator support were reported as challenges to managing interpersonal conflict. The most common challenge as a result of interpersonal interaction was concerned with other people who were unwilling to work toward a solution. The emotions of other people was the second most commonly reported challenge. To a lesser degree, coworkers unwilling to change, the level of communication, and the relationship level with others were reported by some respondents as challenges to managing interpersonal conflict. In relation to intrapersonal factors, respondents indicated their impatience and their emotions were the most common challenges to managing interpersonal conflict.

5. *What were the common strategies for high school athletic trainers in their management of interpersonal conflict?* The most common organizational strategies used to manage interpersonal conflict were utilizing organizational resources and policies/procedures. Respondents indicated they did not commonly

manage interpersonal conflict by having their superiors resolve the situation. The subscale related to management styles was not intended to determine the conflict management style most often used by athletic trainers. There are well established instruments available to measure conflict management style. Rather, the subscale was intended to simply gather which “styles” the respondents perceived themselves as using most often. The data in this study indicated respondents most often perceived themselves as using collaboration and compromise, followed equally by avoidance, accommodation, and competition. All of the personal strategies were noted as common strategies used by athletic trainers to manage interpersonal conflict. Listening attentively was reported as being used once a week or more by nearly two-thirds of the respondents. Open communication was the second most common strategy used, followed closely by identifying expectations. Analyzing the situation and using preventative techniques were also identified as common strategies.

Conclusions Related to Existing Literature

Extensive literature was presented in the review of literature section which identified interpersonal conflict as an ever-present entity within society (Barki & Hartwick, 2001; Callanan & Perri, 2006; Harper, 2004; Kunaviktikul, Nuntasupawat, Srisuphan, & Booth, 2000; Pondy, 1992; Rahim et al., 1999). However, the extent of prevalence has not been well documented. The findings of this study indicate the prevalence of interpersonal conflict within athletic training. Interpersonal conflict was reported by nearly all of the subjects in this study. Although some reported interpersonal conflict as occurring once a month or less, one third of the participants reported

interpersonal conflict once a week or more. This weekly occurrence of interpersonal conflict appears to relate well to the percentage of sources and challenges reported to occur once a week or more. Sources of conflict occurring once a week or more, challenges occurring once a week or more, and the frequency of interpersonal conflict occurring once a week or more were all close to one third. When comparing the frequency of specific strategies employed in managing interpersonal conflict to the reported prevalence of interpersonal conflict, there appeared to be a discrepancy. Interpersonal conflict was reported as occurring at least once a week in a third of the sample, yet two thirds of the participants indicated they used “attentive listening” at least once a week as a strategy in managing interpersonal conflict.

Several associations within the findings of this study were found when compared to existing literature. First, previous literature noted an association between conflict and interaction with coaches, athletes, and peers (Capel, 1990; Judd & Perkins, 2004; Kania et al., 2009; Pitney, 2006). The results of this study indicate interaction with athletes and coaches were sources of interpersonal conflict for athletic trainers. Likewise, Balogun et al. (2002) found in their study with physical therapists that the amount of direct contact with patients increased conflict for the therapists. Similarly, Capel (1990) and Pitney (2002) concurred with increasing amounts of direct contact with other people can lead to increasing amounts of stress or conflict. The results of this study support the previous literature as nearly one fifth of the respondents indicated the amount of direct contact with others contributed to interpersonal conflict at least once a week or more.

The workload required of athletic trainers was identified as a source of conflict in Capel’s (1990) study regarding attrition of athletic trainers. In addition, the professional

socialization studies of Pitney (2002, 2006) and the burnout study of Kania et al. (2009) supported the contention of workload and conflict. The findings of this study suggest workload was a source of interpersonal conflict as approximately one fourth of the respondents indicated this as a source occurring once a week or more.

Thomas and Kilmann (1975), Rahim and Buntzman (1989), and Rahim (2000) noted collaboration was often the preferred conflict management style. Other authors have supported the beneficial use of collaboration with managing interpersonal conflict. The results of this study indicate the respondents perceive themselves as most commonly using collaboration as their style of managing conflict. However, a well established instrument was not utilized to effectively determine the preferred conflict management style used by the subjects in this study.

Hierarchy and power inequities have been noted as sources of conflict or stress (Northam, 2009; Rahim, 1986; Vivar, 2006). The results of this study did not indicate the athletic trainer's position within the organization's hierarchy was a significant source of conflict. Very few of the respondents noted hierarchy placement contributed to interpersonal conflict at least once a week. The ATICI had a question related to the athletic trainer's position within the organization's hierarchy. Perhaps including a question which included "power inequity" may have generated more prevalence of hierarchy/power as a source of conflict.

Lack of administrative support has been noted as a source of conflict (Kania et al., 2009; Pitney, 2006; Pitney, Ilsley, & Rintala, 2002). The findings of this study weakly suggest this as a challenge of the participants to managing interpersonal conflict. Only 10% of the respondents indicated this as occurring once a week or more.

Numerous authors noted the lack of adequate preparation or training in managing conflict. Kania et al. (2009), Klossner (2008), and Pitney (2002, 2006) noted the lack of adequate preparation and socialization of athletic trainers in managing conflict. However, three fourths of the participants in this study self-reported they were mostly confident or completely confident in managing interpersonal conflict. The majority of participants indicated their lack of confidence or lack of knowledge was a challenge to managing interpersonal conflict less than once a month. Overall, subjects reported a high level of confidence and knowledge in their ability to manage interpersonal conflict.

A common research area in conflict management is the effect of emotions. Many authors have studied the concept of emotional intelligence and its relevance to conflict and conflict management (Goleman, 1995; Mayer, Salovey, & Caruso, 2008; Rahim & Psenicka, 2002; Wakeman, 2006). Emotional intelligence is essentially defined as the ability to recognize one's own emotions, recognize the emotions of others, and manage those emotions. Balogun et al. (2002) noted the emotional aspect of working closely with patients as contributing to conflict and burnout among physical therapists. Participants in this study reported the emotions of others and their own emotions were occasional challenges to managing conflict.

Limitations of the Study

Several limitations of the study were noted in relation to the sample and the instrument. First, the sample was one of convenience which limits the ability to generalize the findings of this study to the larger population. Second, the size of the sample to draw from was small. There were only 213 athletic trainers in District 5 who met the initial selection criteria of working in the secondary school setting. Many

potential subjects may not have participated as a result of not meeting the secondary inclusion criteria of providing at least 15 hours of athletic training services per week to the high school. Subsequently, only 77 usable surveys were returned out of 211 successfully submitted e-mail requests. The return rate of 36.5% is acceptable, however the goal of data collection was to collect at least 100 surveys. The goal of 100 surveys was based upon Fraenkel and Wallen's (2006) recommendation for a descriptive study.

A third limitation was the inability of the researcher to identify all athletic trainers in District 5 who provided services to the secondary school setting. There are more than 200 athletic trainers in District 5 identified as working in the clinic/secondary school setting. However, the researcher was unable to obtain the e-mail addresses for those athletic trainers. This would have increased the number of potential subjects and may not have significantly changed the return rate, but would have increased the total number of usable surveys. The time of the year in which the study occurred may have affected the results. The participants completed the surveys the first two weeks of March. During the time of the study, the schedule and workload of many high school athletic trainers decrease due to winter sport seasons coming to an end. In addition, the fall season may have produced different results due to the number of athletes participating and the nature of the sports at that time of the year.

The ATICI is another limitation identified by the researcher. Although the development of the instrument was based on the literature and reviewed by experts for content validity, it was an untested instrument. Aside from content validity, there is limited established validity of the instrument. Reliability of the instrument was not determined prior to the study. Internal consistency of the items within the established

subscales was calculated. The internal consistency of the items within the subscale were all at the good level or better. A final limitation relates to the ATICI in regard to the wording of the definition and questions. The wording of the working definition provided to the participants may have led to difficulty with answering the questions. A simpler definition or clearer phrasing of the existing definition may have provided participants with a clearer picture of answering the survey items. In an attempt to keep the survey as short as possible, many of the questions were not elaborate. This may have led to difficulty in the respondents understanding the question as intended by the researcher.

Implications for Athletic Trainers

Prior athletic training related literature noted the prevalence of conflict within the profession. The results of this study suggested interpersonal conflict was a part of nearly every respondents work life. For some, it occurred once a week or more. Considering this, practicing athletic trainers should examine the prevalence of interpersonal conflict in their work setting. Substantial conflict related to issues is perhaps positive and assists with promoting change and growth. However, affective conflict is most likely negative and can retard progress. Beyond examining the prevalence of conflict, athletic trainers would be benefitted by identifying their preferred conflict handling mode. Thomas (2002) recommended individuals of an organization should identify their preferred conflict handling mode as well as that of their co-workers. He contended an understanding of your own and other's preferred conflict management style enables people to work through conflicting situations more effectively. Furthermore, he stated the benefit of understanding the strengths and weaknesses of the different conflict management styles and which one(s) are most effective in a given situation.

Literature was presented which suggested the lack of adequate preparation of athletic trainers to manage aspects of the “real work world” (Gieck, Brown, & Shank, 1982; Kania et al., 2009; Klossner, 2008; Pitney et al., 2002). In order to address the lack of preparation regarding conflict management, organizational leaders should provide professional development opportunities for their members aimed at the recognition and management of interpersonal conflict. Likewise, interpersonal conflict management should be included in the didactic coursework of athletic training education programs. In addition, athletic training students should be exposed to interpersonal conflict and its management through their clinical experiences.

Implications for Future Research

As previously mentioned, the athletic training related literature has made reference to conflict as it applied to burnout, attrition, and quality of life studies. However, limited information was available regarding interpersonal conflict within athletic training. The findings of this study begin to describe the nature of interpersonal conflict within athletic training. Further research is recommended similar to this study while addressing the stated limitations of the current study. Furthermore, a randomized sample of a larger population is recommended. Similar studies to this should be performed at different times of the year and occur during the more competitive and busy athletic seasons such a fall.

A second recommendation is to examine the conflict management styles commonly used by athletic trainers. Many tested instruments are available for measuring conflict management styles. Comparative studies could be performed to examine the

differences between conflict management style and selected demographic data such as age, years of certified experience, job role, and education level.

Another recommendation for future research is to examine the role of emotional intelligence. Literature has been presented which identified the role of emotions and conflict management. Furthermore, the findings of this study indicated emotions provided a challenge to effectively managing interpersonal conflict. Recommendations would be to use one of many established instruments for measuring emotional intelligence. Comparative studies could be performed examining variables such as emotional intelligence, conflict management style, and prevalence of interpersonal conflict.

Overall, the participants in this study reported a high level of confidence in managing interpersonal conflict. Another area of future research would be to measure the self-efficacy of athletic trainers in managing interpersonal conflict. Self-efficacy has been described by Bandura (2001) as a combination of the confidence, knowledge, and experiential success of performing a skill. In order to develop self-efficacy instruments, a detailed description of the entity being examined is required. Consequently, the current study was designed in part to provide a description of interpersonal conflict in athletic training in an attempt to assist with the development of a self-efficacy instrument. Such a study might focus on measuring the confidence, knowledge, and experiences of athletic trainers in managing interpersonal conflict.

Considering the athletic training literature on burnout, attrition, and quality of life, further research may be warranted to examine job satisfaction and prevalence of interpersonal conflict. However, a component which needs to be examined is not only the prevalence of interpersonal conflict, but the type of conflict as well. As mentioned

previously, interpersonal conflict may not always be considered negative. Future research could focus on the relationship between positive/negative interpersonal conflict and job satisfaction or intent to leave.

Thomas and Kilmann (1975) identified previous research had identified collaboration as the most prevalent conflict handling mode used by subjects. However, they noted the prior research had predominantly used self-reported questionnaire data. They asserted the tendency to report a collaborative style might be an influence of social desirability in which people self-identify with characteristics which are positive. The effect of social desirability poses a threat to the accuracy of findings particularly when measuring personality traits (Bäckström, Björklund, & Larsson, 2009; Ziegler & Buehner, 2009). Social desirability could have influenced subjects in this study to report a lower frequency of conflict and a higher level of confidence with managing conflict. Future studies may be improved with including a scale which measures for the effect of social desirability.

Additional considerations for future research may include examining the relationship of interpersonal conflict with gender, length of certified experience, age, and administrative experience. A general review of the data from this study provides some credibility to differences between males and females in regard to some of the information reported by the respondents. Furthermore, there appears to be a relationship between years of certified experience and self-reported confidence with managing interpersonal conflict.

A final recommendation lies in the methodology of future research. As a result of limited information available on interpersonal conflict in athletic training, qualitative

research may be justified to assist with gaining a richer description of interpersonal conflict from the perception of athletic trainers.

Summary

Interpersonal conflict is a common aspect of society and was initially viewed as negative. Rather than view conflict as only a negative entity and something to avoid or eliminate, it is important to understand the positive benefits of conflict. While some conflict is affective in nature and disruptive, other conflict is substantive and can have positive benefits. However, a key aspect of the potential benefit of interpersonal conflict lies in the ability to manage it effectively. Many years ago, Blake and Mouton (1964) provided a summary of conflict which still holds true today. They stated “it is not whether conflict is present. It will be present. The key is in how conflict is managed” (p. 163). It is the responsibility of leaders to guide their organizations and employees to effectively manage conflict, whether it be in a competing, avoiding, compromising, accommodating, or collaborating approach. Perhaps the best method in which to manage interpersonal conflict is not one particular style. Rather, it is based upon the situation. In today’s ever-changing society, teamwork and the effective management of interpersonal conflict may help contribute to organizational learning and growth.

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APPENDIXES

Appendix A: E-mail request letter

Appendix B: E-mail follow-up letter

Appendix C: Informed consent letter

Appendix D: Athletic Trainer Interpersonal Conflict Inventory

Appendix E: Frequency for Sources of Interpersonal Conflict

Appendix F: Frequency for Challenges to Managing Interpersonal Conflict

Appendix G: Frequency for Strategies to Managing Interpersonal Conflict

Appendix A

Dear Certified Athletic Trainer,

As a doctoral student in the Educational Leadership and Policy Analysis program at the University of Missouri, I am conducting a research study examining interpersonal conflict and athletic trainers.

I am requesting your participation which will require you to complete an anonymous survey on interpersonal conflict. You have been selected because you were identified as a certified athletic trainer in District 5 working in the high school setting. This study is intended for those athletic trainers who provide at least 15 hours of service per week to a high school during the academic year. Your participation in this study is voluntary and will require approximately 10 minutes. If you choose not to participate or withdraw from the study at any time, there will be no penalty. The results of this study may be published or presented, but no personally identifying information will be collected.

If you have any questions regarding this research study, please contact me at 417-836-8553 or Dr. Robert Watson (dissertation advisor) at 417-836-5177.

This research study has been approved by the Institutional Review Board at the University of Missouri.

Click on the link below to be directed to the survey:

www.surveymonkey.com%2fs%2f3QPWFV5

Thank you for your time.

Sincerely,

Allan Liggett ATC
Missouri State University
Professional 160
901 South National
Springfield, MO 65897
allanliggett@missouristate.edu
417-224-2222 (cell)
417-836-8553 (office)

Appendix B

Dear Certified Athletic Trainer,

You should have recently received an e-mail request to participate in my study on interpersonal conflict in athletic training. If you have completed the study, thank you for your time and please disregard this e-mail. If you have not yet completed the survey, please consider following the link below to complete the online survey. The survey should take approximately 10 minutes to complete.

You have been selected because you were identified as a certified athletic trainer in District 5 working in the high school setting. This study is intended for those athletic trainers who provide at least 15 hours of service per week to a high school during the academic year. Your information will be valuable to my research, however, your participation is voluntary.

If you have any questions regarding this research study, please contact me at 417-836-8553 or Dr. Robert Watson (dissertation advisor) at 417-836-5177.

This research study has been approved by the Institutional Review Board at the University of Missouri.

Click on the link below to be directed to the survey:

www.surveymonkey.com%2fs%2f3QPWFV5

Thank you for your time.

Sincerely,

Allan Liggett ATC
Missouri State University
Professional 160
901 South National
Springfield, MO 65897
allanliggett@missouristate.edu
417-224-2222 (cell)
417-836-8553 (office)

Appendix C

Informed Consent Form

Dear Research Participant:

Thank you for considering participation in the study “A Descriptive Study of Interpersonal Conflict in High School Athletic Training.” This study is being conducted in partial fulfillment of the requirements for the Doctor of Education degree in Educational Leadership and Policy Analysis at the University of Missouri-Columbia, 202 Hill Hall, 573-882-8221.

The purpose of this study is to gain an understanding into the nature of interpersonal conflict experienced by athletic trainers providing services to high school athletic programs. This information will be useful to understand the nature and the management of interpersonal conflict in athletic training.

Before you make a final decision about participation, please read the following about how your input will be used and how your rights as a participant will be protected:

- Participation in the study is completely voluntary. You may stop participating at any point without penalty.
- You need not answer all of the questions.
- Your answers will be kept confidential. Results will be presented to others in summary form only, without any identifying information.
- Your participation will take approximately 10 minutes to complete an online survey.
- The data collected will be anonymous and stored on web-based server until downloaded by the researcher for analysis.

This project has been reviewed and approved by the University of Missouri-Columbia Campus Institutional Review Board (IRB). The IRB believes that the research procedures adequately safeguard the subject’s privacy, welfare, civil liberties, and rights, and may be contacted at 573-882-9585. The project is being supervised by Dr. Robert Watson, Associate Professor, CLSE, Missouri State University (417-836-5177).

You can contact the researcher at 417-836-6158 if you have questions or concerns about your participation. Thank you very much for your time and consideration.

Sincerely,
Allan Liggett
University of Missouri-Columbia

If at this point you are still interested in participating and assisting with this important research project, please read the consent statement to indicate your willingness to participate in the study of “Interpersonal Conflict in Athletic Training: A Descriptive Study” conducted by Allan Liggett. By continuing with the survey, you indicate that you understand:

- My answers will be used for educational research.
- My participation is voluntary.
- I may stop participation at any time without penalty.
- I need not answer all of the questions.
- My answers and identity will be anonymous.

By clicking the “Next” button, you agree to participate in this activity, realizing that you may withdraw without prejudice at any time.

By clicking the “Next” button, you agree to participate in this activity, realizing that you may withdraw without prejudice at any time.

ATICI

1. Informed Consent Form

Informed Consent Form

Dear Research Participant:

Thank-you for considering participation in the study "Interpersonal Conflict in Athletic Training: A Descriptive Study." This study is being conducted in partial fulfillment of the requirements for the Doctor of Education degree in Educational Leadership and Policy Analysis at the University of Missouri-Columbia, 202 Hill Hall, 573-882-8221.

The purpose of this study is to gain an understanding into the nature of interpersonal conflict experienced by athletic trainers providing services to high school athletic programs. This information will be useful to understand the nature and the management of interpersonal conflict in athletic training.

Before you make a final decision about participation, please read the following about how your input will be used and how your rights as a participant will be protected:

- Participation in the study is completely voluntary. You may stop participating at any point without penalty.
- You need not answer all of the questions.
- Your answers will be kept confidential. Results will be presented to others in summary form only, without any identifying information.
- Your participation will take approximately 10 minutes to complete an online survey.
- The data collected will be anonymous and stored on web-based server until downloaded by the researcher for analysis.

This project has been reviewed and approved by the University of Missouri-Columbia Campus Institutional Review Board (IRB). The IRB believes that the research procedures adequately safeguard the subject's privacy, welfare, civil liberties, and rights, and may be contacted at 573-882-9585. The project is being supervised by Dr. Robert Watson, Associate Professor, CLSE, Missouri State University (417-836-5177).

You can contact the researcher at 417-836-6158 if you have questions or concerns about your participation. Thank-you very much for your time and consideration.

Sincerely,
Allan Liggett
University of Missouri-Columbia

If at this point you are still interested in participating and assisting with this important research project, please read the consent statement to indicate your willingness to participate in the study of "Interpersonal Conflict in Athletic Training: A Descriptive Study" conducted by Allan Liggett. By continuing with the survey, you indicate that you understand:

- My answers will be used for educational research.
- My participation is voluntary.
- I may stop participation at any time without penalty.
- I need not answer all of the questions.
- My answers and identity will be anonymous.

By clicking the "Next" button, you agree to participate in this activity, realizing that you may withdraw without prejudice at any time.

2. Demographics

This survey is intended for athletic trainers who provide athletic training services in a high school setting for at least 15 hours per week during the academic year. The purpose is to gain an understanding of interpersonal conflict in athletic training. Please answer each of the questions in regard to your role as an athletic trainer providing services in a high school athletic setting.

For the purpose of this study, interpersonal conflict is define as below:

Interpersonal conflict is a negative emotional reaction as a result of disagreements and interference with one's goals. (Barki & Hartwick, 2001)

1. Age

2. Gender

3. Number of years certified by the Board of Certification

4. Job setting

Other (please specify)

5. Approximately how many hours per week do you work within the high school athletic setting during the academic year?

3. Frequency and Confidence

6. On average, how often do you experience interpersonal conflict in your work life?

- never
- less than once a month
- once a month
- once a week
- more than once a week
- once a day
- more than once a day

7. How confident are you in your ability to effectively manage interpersonal conflict in your work life?

- completely unconfident
- mostly unconfident
- slightly unconfident
- neither confident nor unconfident
- slightly confident
- mostly confident
- completely confident

4. Sources of Conflict

8. Please rate how often each item below causes interpersonal conflict in your job as an athletic trainer?

	not at all	less than once a month	once a month	once a week	more than once a week	once a day	more than once a day
a. My position within the organization's hierarchy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. The workload imposed upon me by others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. A high percentage of time working in direct contact with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Disrespect for my role as an athletic trainer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Interacting with parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Interacting with coaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Interacting with athletes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Interacting with peers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Interacting with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Ineffective communication with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Working with athletes who are not compliant with my recommendations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Working with coaches who are not compliant with my recommendations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Working with staff members who are not meeting their work responsibilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Supervising athletic training students who are not meeting their clinical responsibilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify any other specific sources of conflict and indicate how often they occur.

5. Challenges to Conflict Management

9. Please rate how often each of the following situations challenges your ability to effectively manage interpersonal conflict in your work as an athletic trainer.

	Not at all	Less than once a month	Once a month	Once a week	More than once a week	Once a day	More than once a day
a. Lack of support from administrators.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Lack of resources.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Lack of time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Others unwilling to work toward a solution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Staff/coworkers unwilling to adapt or accept change.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. The emotions of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. The level of relationship I have with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. The level of communication between myself and others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. My emotions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. My impatience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. My inability to affect other people's perspective.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. My lack of confidence in managing conflict.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. My lack of education/knowledge on conflict management.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate any other specific challenges to managing conflict and indicate how often they occur.

6. Strategies to Conflict Management

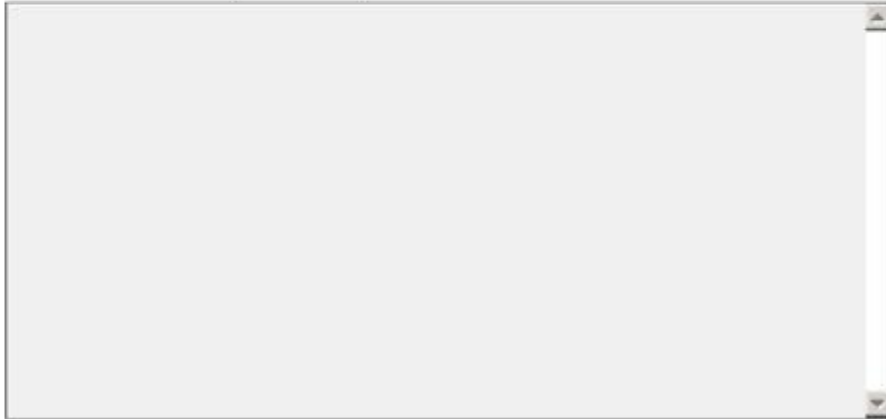
10. Please rate how often you use the following strategies to manage interpersonal conflict in your work as an athletic trainer.

	Not at all	Less than once a month	Once a month	Once a week	More than once a week	Once a day	More than once a day
a. Utilizing organizational resources.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Allowing superiors to resolve the conflict.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Resolving the conflict based on organizational policies and procedures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Avoiding the issue altogether.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Giving in (accommodate) to the other person(s).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Compromising (give some, take some).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Collaborating with the other person(s) to resolve the conflict.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Taking a competitive approach to "win" the conflict.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Preventing conflict.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Taking time to analyze the conflict situation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Using open communication.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Identifying my expectations of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Listening attentively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate any other specific strategies you have used to manage conflict and indicate how often you use them.

7. Additional Information

11. Please provide any additional information regarding interpersonal conflict within your daily work routine.

A large, empty rectangular text input field with a vertical scrollbar on the right side. The field is currently blank, intended for the user to provide additional information regarding interpersonal conflict within their daily work routine.

8. Thank-you

Thank-you for your time.

Send a request to allanliggett@missouristate.edu if you wish to receive an executive summary of the study or if you would like documentation that you participated in the study.

Appendix E

Frequency for Sources of Conflict

Source	Not at all	Less than once a month	Once a month	Once a week	More than once a week	Once a day	More than once a day
Hierarchical position	45 58.4%	20 26.0%	6 7.8%	4 5.2%	1 1.3%	1 1.3%	0 0%
Workload	20 26.0%	24 31.2%	14 18.2%	13 16.9%	3 3.9%	0 0%	3 3.9%
Direct contact	36 46.8%	18 23.4%	8 10.4%	9 11.7%	3 3.9%	1 1.3%	2 2.6%
Disrespect for role	31 40.3%	23 29.9%	11 14.3%	9 11.7%	2 2.6%	1 1.3%	0 0%
Interacting with parents	25 32.5%	35 45.5%	14 18.2%	2 2.6%	1 1.3%	0 0%	0 0%
Interacting with coaches	18 23.4%	31 40.3	23 29.9%	1 1.3%	2 2.6%	1 1.3%	1 1.3%
Interacting with athletes	25 32.5%	25 32.5%	15 19.5%	7 9.1%	2 2.6%	2 2.6%	1 1.3%
Interacting with peers	43 55.8%	22 28.6%	9 11.7%	2 2.6%	1 1.3%	0 0%	0 0%
Interacting with others	38 49.4%	26 33.8%	7 9.1%	4 5.2%	1 1.3%	1 1.3%	0 0%
Ineffective communication	23 29.9%	34 44.2%	12 15.6%	5 6.5%	2 2.6%	1 1.3%	0 0%
Noncompliant athletes	9 11.7%	31 40.3%	19 24.7%	12 15.6%	2 2.6%	3 3.9%	1 1.3%
Noncompliant coaches	23 29.9%	30 39.0%	12 15.6%	8 10.4%	2 2.6%	2 2.6%	0 0%
Noncompliant staff	35 45.5%	23 29.9%	11 14.3%	1 1.3%	3 3.9%	3 3.9%	1 1.3%
Noncompliant students	43 55.8%	18 23.4%	8 10.4%	4 5.2%	1 1.3%	1 1.3%	2 2.6%

Organizational Factors

Interpersonal Interaction Factors

Interference Factors

Appendix F

Frequency for Challenges to Managing Interpersonal Conflict

Challenge	Not at all	Less than once a month	Once a month	Once a week	More than once a week	Once a day	More than once a day
Administrator support	38 49.4%	23 29.9%	8 10.4%	4 5.2%	3 3.9%	0 0%	1 1.3%
Resources	34 44.2%	21 27.3%	12 15.6%	4 5.2%	2 2.6%	3 3.9%	1 1.3%
* Time	17 22.1%	18 23.4%	16 20.8%	12 15.6%	5 6.5%	5 6.5%	3 3.9%
Unwilling to resolve	32 41.6%	23 29.9%	10 13.0%	7 9.1%	2 2.6%	3 3.9%	0 0%
Unwilling to change/adapt	34 44.2%	27 35.1%	9 11.7%	3 3.9%	3 3.9%	0 0%	1 1.3%
Other's emotions	25 32.5%	26 38.8%	15 19.5%	5 6.5%	4 5.2%	1 1.3%	1 1.3%
Relationship level	40 51.9%	23 29.9%	9 11.7%	1 1.3%	3 3.9%	1 1.3%	0 0%
Communication level	26 33.8%	38 49.4%	5 6.5%	3 3.9%	2 2.6%	3 3.9%	0 0%
My emotions	31 40.3%	31 40.3%	8 10.4%	2 2.6%	1 1.3%	3 3.9%	1 1.3%
My impatience	26 33.8%	36 46.8%	6 7.8%	4 5.2%	1 1.3%	3 3.9%	1 1.3%
** Inability to affect others	34 44.2%	26 33.8%	9 11.7%	4 5.2%	2 2.6%	0 0%	0 0%
Lack of confidence	43 55.8%	25 32.5%	6 7.8%	2 2.6%	1 1.3%	0 0%	0 0%
Lack of preparation	50 64.9%	20 26.0%	5 6.5%	1 1.3%	1 1.3%	0 0%	0 0%

Organizational Factors

Interpersonal
Interaction Factors

Intrapersonal Factors

* N = 76

** N = 75

Appendix G

Frequency for Strategies to Managing Interpersonal Conflict

Strategy	Not at all	Less than once a month	Once a month	Once a week	More than once a week	Once a day	More than once a day
Organizational resources	23 29.9%	19 24.7%	17 22.1%	10 13.0%	1 1.3%	3 3.9%	4 5.2%
Involve superiors	20 26.0%	34 44.2%	16 20.8%	5 6.5%	1 1.3%	0 0%	1 1.3%
Policy and procedures	19 24.7%	23 29.9%	18 23.4%	12 15.6%	3 3.9%	1 1.3%	1 1.3%
* Avoidance	39 50.6%	20 26.0%	10 13.0%	4 5.2%	2 2.6%	1 1.3%	0 0%
Accommodation	28 36.4%	32 41.6%	10 13.0%	3 3.9%	4 5.2%	0 0%	0 0%
* Compromise	5 6.5%	22 28.6%	28 36.4%	12 15.6%	4 5.2%	4 5.2%	1 1.3%
** Collaborate	6 7.8%	19 24.7%	22 28.6%	16 20.8%	7 9.1%	4 5.2%	1 1.3%
Compete	48 62.3%	17 22.1%	5 6.5%	4 5.2%	2 2.6%	0 0%	1 1.3%
Prevention	8 10.4%	23 29.9%	18 23.4%	12 15.6%	7 9.1%	4 5.2%	5 6.5%
* Analyze the situation	4 5.2%	20 26.0%	23 29.9%	12 15.6%	8 10.4%	3 3.9%	6 7.8%
Open communication	6 7.8%	14 18.2%	13 16.9%	12 15.6%	12 15.6%	5 6.6%	15 19.5%
Identify expectation	11 14.3%	21 27.3%	10 13.0%	11 14.3%	12 15.6%	6 7.8%	6 7.8%
Listen attentively	7 9.1%	14 18.2%	7 9.1%	13 16.9%	8 10.4%	7 9.1%	21 27.3%

Organizational Factors

Management Style Factors

Personal Strategy Factors

* N = 76

** N = 75

VITA

Allan Liggett was born February 17, 1965, in LaCrosse, Kansas. After graduating from LaCrosse High School, he received the following degrees: BS in Physical Education with an emphasis in Athletic Training (Fort Hays State University, 1988), MA.Ed. in Exercise Science (University of Nebraska-Kearney, 1990), and Ed.D. in Educational Leadership and Policy Analysis (University of Missouri-Columbia, 2010). He has over 20 years of providing athletic training services to youth and adult athletes. He has over 20 years of serving as an educator in higher education. He is currently an assistant clinical professor and clinical coordinator for the Athletic Training Education Program at Missouri State University and the outreach coordinator for St. John's Sports Medicine in Springfield, Missouri. He is married to Brooke Liggett and has two daughters, Kennedy "KayKay" Liggett and Monroe "MoMo" Liggett.