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The Relationship Between Organizational Trust and Mindfulness: An Exploration of NCAA Division III Athletic Departments

Jacob K. Tingle

Trinity University, jtingle@trinity.edu

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**THE RELATIONSHIP BETWEEN ORGANIZATIONAL TRUST AND MINDFULNESS:
AN EXPLORATION OF NCAA DIVISION III ATHLETIC DEPARTMENTS**

APPROVED BY SUPERVISING COMMITTEE:

Alan R. Shoho, Ed.D., Chair

Bruce Barnett, Ph.D.

Anne-Marie Nunez, Ph.D.

Wes Wilson, Ed.D.

Accepted: _____
Dean, Graduate School

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DEDICATION

This dissertation is dedicated to my father, Tim Tingle. Your passion for learning, leading, and telling the important, but oft unheard story has been a source of pride and inspiration since the milk man days.

**THE RELATIONSHIP BETWEEN ORGANIZATIONAL TRUST AND MINDFULNESS:
AN EXPLORATION OF NCAA DIVISION III ATHLETIC DEPARTMENTS**

by

JACOB KEITH TINGLE, B.A., M.A.

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August 2011

**THE RELATIONSHIP BETWEEN ORGANIZATIONAL TRUST AND MINDFULNESS:
AN EXPLORATION OF NCAA DIVISION III ATHLETIC DEPARTMENTS**

Jacob Keith Tingle, Ed.D.
The University of Texas at San Antonio, 2011

Supervising Professor: Alan R. Shoho, Ed.D.

The drive to have a successful college athletic program is an acknowledgement of marketplace realities; universities are competing for ever scarcer resources. As a result, the desire to be *better than* has led some department personnel and student-athletes to commit unethical, even illegal acts. Recent examples call into question the credibility of college sports. Therefore, understanding organizational dynamics associated with trust and decision-making in athletic departments is important. This study explored the relationship between organizational trust and mindfulness operating in NCAA D-III (non-scholarship) athletic departments.

After a pilot study confirmed reliability and validity of instruments designed for this study, data were gathered using the Athletic Department Mindfulness (ADMS) and Athletic Department Trust Scales (ADTS) and collected from coaches at 59 randomly selected NCAA D-III athletic departments. Factor, correlational, and multiple regression analyses were also performed on the variables from the ADMS and ADTS.

The results indicate that coaches' perceived level of trust in their colleagues and the athletic director has a significant relationship with and impact on department-wide organizational mindfulness (i.e. decision-making).

Athletic directors and coaches who place an importance on trust view themselves as being: benevolent, competent, honest, open, and reliable. Furthermore, the findings suggest that departments infused with trust are more likely to have personnel who are: pre-occupied with failure avoidance, reluctant to oversimplify, sensitive to the day-to-day, committed to resilience,

and defer to experts regardless of their position. The findings present methods to elevate levels of trust and better incorporate mindful decision-making practices in intercollegiate athletic departments.

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CHAPTER ONE: INTRODUCTION

In an 1890 speech to alumni, Princeton University President Woodrow Wilson said, “Princeton is noted in this world for three things: football, baseball, and college instruction” (Frans, 2002, p. 9).

Turn on the television or the car radio, open a newspaper, or log onto a web site, and at some point you will receive reports about the world of sport. Such news is not exclusive to the dedicated sports-only outlets. The Washington Post, CNN, NPR, and BBC World News, among others, all regularly report on sports-related activities. While much of the news from these media outlets focuses on professional sports, the world of intercollegiate sports receives much attention as well; bottom line, America is a country crazy about sports.

For an explanation, one needs to look no further than statements from leaders and great thinkers of the 20th century. Pope Pius XII wrote, “Sport is the school of loyalty, of courage, of fortitude, of resolution and universal brotherhood” (Keating, 2007, p. 142). Albert Camus indicated that all he knew about ethics was learned from sport (Keating, 2007). President Herbert Hoover held, “Next to religion, the single greatest factor for good in the United States . . . has been sport” (Keating, 2007, pg. 141). In 1981 Yale President, A. Bartlett Giamatti, addressed the Association of Yale Alumni and said, “Athletics teaches lessons valuable to the individual by stretching the human spirit in ways that nothing else can” (Bowen & Levin, 2003, p. 243). What flows from this philosophical mindset is the idea of sports as an enhancer to the collegiate experience, i.e., it is additive to the lessons learned inside the classroom. In essence, these statements from Camus, Giamatti, Hoover, and Pope Pius XII provide implicit approval for spectators to enjoy and participants to play sport.

This introductory chapter highlights the benefits associated with participation in college sports. It continues with a statement of the problem and then details the characteristics that make National Collegiate Athletic Association (NCAA) Division III (D-III) institutions ideal for research on intercollegiate athletics and related social processes. The subsequent section establishes the foundation for the theoretical framework of this study by touching briefly on research in the fields of organizational mindfulness and trust. The chapter concludes with the research questions guiding this study and definitions of relevant terms.

The Benefits and Pitfalls of College Sports

Whether focusing on NCAA Division I (D-I) or D-III institutions, researchers have argued that because sports can lead to material institutional benefits such as increased enrollment and specific interpersonal benefits for athletes, they are an important aspect of life on college campuses (Chressanthis & Grimes, 1993; Goff, 2000). More importantly, however, sports and athletics express many of the cultural beliefs held by society, including the Protestant work ethic, capitalism, the bureaucratic mentality, and the ideals of fairness and sportsmanship, all of which are associated with collectivism (Beyer & Hannah, 2000). Whatever the reasons, there is no denying college athletics, be they D-I or D-III, are an important facet of the modern American university. Although research regarding the benefits of sports involvement has been varied (Pascarella & Terenzini, 2005), much of it has indicated participation offers many positives for college students.

There are numerous indirect effects an athletic department and thus, intercollegiate and intramural athletics can have on a college campus, including exposure for the university in local, regional, and national media outlets and increased interest from potential students in the form of applicants (Goff, 2000; Toma & Cross, 1998). Toma and Cross (1998) found a significant

increase in applications to Georgia Tech during the three year period following its shared D-I national football championship. In a later study on Northwestern University in Chicago, while controlling for other factors such as nationwide increases in higher education enrollment, Goff (2000) replicated Toma and Cross' findings. Furthermore, the year Northwestern University's D-I football team played in the Rose Bowl, articles about the institution increased 185% over the previous year. Moreover, Goff found, an unsuccessful athletic year notwithstanding, media coverage of the athletic department accounted for 70% of all exposure the university received, while articles about research-related topics accounted for only 5% of all media coverage.

Additionally, in a longitudinal study of scholarship athletes (i.e. not D-III, but not exclusively D-I), Long and Caudill (1991) found numerous individual benefits for the intercollegiate student-athlete. Among the findings, male student-athletes had higher post-graduation income. Athletes of both genders had a higher probability of graduating. These conclusions led the researchers to postulate that participation in athletics may enhance the development of discipline, confidence, motivation, and many other principles which cannot be learned from a textbook and often are not taught in the classroom. It is a commonly held notion that education has many modes and a lot of important learning takes place outside the classroom. It can therefore be held that, in this way, athletics contributes to an institution's educational goals (Bowen & Levin, 2003; Noble, 2004).

Moreover, success in athletics at the D-I level has shown to contribute to institutional unity (Gerdy, 1997). In both D-I and D-III institutions, success has been positively related to increased alumni loyalty (Bowen & Levin, 2003) and monetary donations (Daughtrey & Stotlar, 2000). Additionally, the subsequent exposure during a successful season can lead to an increase in student applications and matriculations at D-I institutions (Goff, 2000; Grimes &

Chressanthis, 1994; Smart & Wolfe, 2000). The benefits of intercollegiate athletic programs, however, do not manifest themselves only at “big time” schools.

In fact, there is a feeling among university administrators, especially those at smaller, academically-sound institutions that a strong intercollegiate athletic program is important in terms of promoting student life and developing well-rounded students. For example, when discussing the formation of the University Athletic Association, senior administrators at Washington University, Emory University, Carnegie Mellon University, and Johns Hopkins University believed the quality of life for students on their campuses was diminishing and each viewed stronger athletic programs as a means to revive the undergraduate experience (Bowen & Levin, 2003). Research has shown that indeed D-III student-athletes and institutions may be the biggest beneficiaries of thriving athletic programs.

As Weatherall (2006) noted, “For many colleges, Division III athletics provides an opportunity to attract excellent students, build community, create publicity, and provide a meaningful experience for their athletes” (p. 24). In their study, Richards and Aries (1999) compared D-III athletes to their non-athlete peers and found no difference in the number of hours spent studying. The athlete cohort, in fact, spent significantly more time pursuing extracurricular activities and had no significant difference in grade point average. Furthermore, the athletes showed no significant difference in the number of extracurricular groups joined or in the number of cultural events attended.

In a comprehensive study of more than 57,000 undergraduates representing both scholarship and non-scholarship institutions, student-athletes and the general student population, Umbach, Palmer, Kuh, and Hannah (2006) found both male and female D-III student-athletes have higher reported levels of academic challenge. Umbach et al., indicate that academic

challenge is a construct referring to the rigor of a student's academic courses. Some elements of the construct include, number of hours spent studying, number of papers or reports that are at least 20-pages, and the type of learning emphasized in coursework (e.g. synthesis, analysis, or theory application). Additionally, those student-athletes had more interaction with faculty, and a greater likelihood of engagement in active and collaborative learning activities than their peers at scholarship-granting institutions. These reported benefits, however, did not simply materialize, "just because."

Problem Statement

In fact, studies also indicate that participation in athletics can lead to the experience of negative outcomes. Tatum (2007) asserts that school leaders, in this case NCAA D-III athletic departments and coaches, must be intentional in their efforts to positively influence the lives of their student-athletes. Without intentionality on the part of staff members, D-III student-athletes will not reap the potential benefits of participation (Doty, 2006). The research on sports in D-III institutions suggests those student-athletes may experience similar harm to that felt by athletes competing at scholarship granting institutions, problems including: academic underperformance, a disconnect from the general student body, and low graduation rates (Deford, 2005; Gerdy, 2006; Shulman & Bowen, 2001; Sperber, 1990, 2000). Moreover, if left unchecked, participation in sports can have more disturbing negative impacts, such as intentional unsporting conduct on the field of play and a propensity to cheat in the classroom.

Shields, Bredemeier, LaVoi, and Power (2005) found nearly one in ten athletes admitted to cheating on the playing field. Another 13% indicated an attempt to hurt an opponent and 27% displayed poor sportsmanship. Furthermore, Rees (2001) found no positive association with the development of character variables such as self-control, aggression, commitment to fair play, and

sportsmanship through sports participation. Moreover, Kavussanu and Roberts (2001) identified a major issue with the nature of some athletes' goals-perspective. Student-athletes who are more ego-oriented in their goal setting, that is, they only feel successful when outperforming others, are more likely consider behaviors resembling intimidation or purposefully injury of an opponent as acceptable. That sense of bracketed morality displayed by some student-athletes may fuel the perception that lessons learned through participation in organized sports have drifted far afield from what is acceptable for our college campuses. It is essential to recognize that problems associated with college sport do not rest wholly with the student-athlete.

Reports indicate that private universities expect to see a slowdown in both the growth of endowments (Moser, 2008) and in donations from alumni groups (Masterson, 2008). While simultaneously experiencing the reduction in income, many universities are incurring increased costs associated with the current economic downturn. As a result, many universities have begun exploring ways to reduce costs. Combine the current budgetary unease with continued concerns regarding trustworthiness and athletic departments may very well need to justify their relationship to the educational goals and contributions to the institutional mission (Gerdy, 2006).

While examples of dishonesty within college athletics are well-noted (Gerdy, 1997, 2006; Kihl & Richardson, 2009; Sperber, 1990, 2000; Thelin, 1996; Zimbalist, 2006), the news is not all bad. During the current period of admissions difficulty for many universities, Butler University yielded 133 more students in spring 2010 than in spring 2009. Although the trend has not formally been studied, there is much speculation that the tiny Indianapolis university's good fortune is, in part, attributable to the men's basketball teams performance in the 2010 NCAA Division I (D-I) national tournament (Sander, 2010). Moreover, Mitten, Musselman, and Burton (2009) cite the examples of Boise State, Georgia State, South Florida, and D-III Adrian College

to explain the perceived institutional value a successful athletic department can bring to a college campus. That is, a winning college sports program can lead to, “stronger faculty recruitment, larger student bodies with better academic credentials, more financial resources, and statewide political clout” (p. 207-208).

Mitten et al. (2009) contend the drive to have a successful athletic program is a rational acknowledgement of marketplace realities i.e., more universities are being forced to compete for scarce resources. This competition for scarce resources is among the elements native to our species. At our most basic levels, we are hard-wired to compete. This primitive force, in fact, lead to the creation and development of modern team sport in America; competition was a natural extension of the underlying survival impulse (Gems, Borish, & Pfister, 2008).

Unfortunately, this desire to be *better than* has lead people to act unethically or even illegally. As university administrators feel pressure to hire the best faculty, complete capital campaigns, and matriculate more students, i.e. to raise the university profile, they often lean on athletic directors to bring home the proverbial bacon. Consequently, some athletic directors and high profile coaches may understand this pressure to be tacit approval to *win-at-all-costs*. In athletic departments these behaviors often manifest themselves in the form of illegal recruiting, the use of ineligible athletes, and academic fraud perpetrated by athletic department staff. This type of corruption can erode a college athletic program’s reputation, have a negative impact on public trust, and be detrimental to workplace outcomes such as, organizational commitment and job performance, for departmental personnel (Kihl & Richardson, 2009).

Additional outcomes of this drive to compete may range from widespread problems with institutional control to simple inattention to regulatory detail by one or two coaches. Either way, recent NCAA sanctions against the likes of Florida State, Georgetown, and the Universities of

Alabama, Michigan, and Southern California further support the belief that college athletic departments are places where public trust needs to be earned. Furthermore, examples abound of athletic department personnel and student-athletes engaging in behavior which calls into question the credibility of the college sports experiment (Gerdy, 2006). Whether the threat of massive conference realignment, academic tutors at the University of Minnesota writing term papers for basketball players, coaches at Oregon State, Rutgers, and Texas Tech publicly humiliating their players, or athletes at Maryland, Arizona State, and Tulane participating in gambling rings, there now exists widespread doubt that those in the business of college sport can be trusted. The ever growing numbers of NCAA sanctions and associated concerns about trust have led many scholars (Gerdy, 1997, 2006; Sperber, 1990, 2000; Thelin, 1996; Zimbalist, 2006) to argue that big time college athletic departments have become capricious organizations led by insolent bosses who are filled with hubris.

Highlighting the problems associated with distrustful behavior and academic fraud, Kihl and Richardson (2009) reported there were long lasting ramifications for the entire department, including coaches, players, and departmental administrators. Specifically they found other university departments had higher levels of distrust for all athletics personnel. They reported that, “In the first 12 months post-corruption, the distrust felt among affected units generate[d] much hostility, which in turn impact[ed] relationships and productivity” (p. 292). Moreover, athletic personnel described being more cautious when interacting with faculty or staff from outside the department. Perhaps the most negative outcome associated with scandal and corruption is that others in the campus community may doubt the decision-making capability of athletics staff.

Another example of why trustworthiness is not the cornerstone upon which college athletic departments are built can be found through closely inspecting departmental financial reports. As there are no generally accepted accounting practices for college athletics, the typical D-I program is able to report a budgetary surplus. For all but those at the very highest levels (e.g. The Ohio State University and The University of Texas), however, the true economic picture of college athletic departments is unflattering. The reality is that a majority of American universities have large athletic deficits (Zimbalist, 2006). The noticeable discrepancy leads some to question the credibility of the NCAA and those who work in D-I athletic departments.

Moreover, in an effort to meet academic demands, serve boosters, and maintain a quasi-professional relationship with corporate sponsors and the media, many college athletic programs end up leading, “a schizophrenic existence” (Zimbalist, 2006, p. 242). Consequently, much like it would be difficult to have confidence in the reliability, competence, openness, honesty, and benevolence of a person suffering from schizophrenia, trusting some athletic programs has become a formidable task. As a result of athletes willfully violating the NCAA amateurism rules, superstar coaches receiving multi-million dollar salaries, or athletic departments’ blatantly ignoring NCAA compliance rules, there has developed a serious problem with trust in the realm of intercollegiate athletics. To state the problem succinctly, “As long as the charade of student-athletes is tolerated and self-serving athletic administrators run the show, dishonesty and hypocrisy will rule the day” (Zimbalist, 2006, p. 242). While the sanctions and violations described above have occurred in D-I programs, because D-III athletic departments more closely resemble the *typical* academic unit, they are perfect places to study organizational trust. Problems with trust, however, are not the only issues facing university athletic programs in the twenty-first century.

Given the amount of time coaches spend with student-athletes and considering that athletes make matriculation decisions based upon relationships with coaches, there is significant opportunity for athletic departments to enhance or detract from an athlete's college experience. That is, the decisions made by athletic department personnel can have a tremendous affect on the growth and development of an ever-expanding population of college goers (Pascarella & Terenzini, 2005). As existing D-III athletic departments add sports and as new institutions seek to join their ranks, the number of students competing as athletes at the D-III level continues to grow. In fact, the trend in D-III athletics is that of rapid growth. As of August 2010, fifteen new institutions applied for D-III membership. Additionally, from 2008-09 to 2009-10, the total number of D-III student-athletes grew from 163,211 to 168,810 (NCAA, 2010). In a best case circumstance, more athletes on a campus will lead to more coaches being hired. A more likely scenario, however, is that the size of the athletic department staff will remain static. As a result each coach will be accountable for a greater number of athletes.

Consequently, while the inflated roster size gives more opportunities for student-athletes to experience the benefits of participation, it creates even more difficulty for the coach to be mindful in his/her decision making process. Furthermore, the additional pressures placed on individual coaches may generate problems for an athletic director aspiring to operate his or her department as a High Reliability Organization (Weick & Sutcliffe, 2007). Some of the challenges for both individual coaches and the organizational unit include: establishing feedback loops; maintaining effective department-wide communication; and providing adequate training for new and returning staff. Therefore, with the current educational climate in which issues associated with the economy, graduation rates, student academic achievement, and student

retention are so critical, understanding the organizational dynamics associated with trust and mindfulness in D-III athletic departments are of vital importance.

While there have been significant amounts of research generated in the fields of sport management, sport psychology, sport economics, kinesiology, human performance, and coaching pedagogy, there has been little research focused on trust or decision-making in sport organizations. Jowett and Cockerill (2003) asserted that sport psychology researchers might benefit from considering theories and methods used in other, non-sport, areas of study. Rail (1988) points to both applied and theoretical reasons as to the import of studying sports organizations in a similar fashion to other organizations. Practically speaking, the successful operation of sports organizations is a central to the life of those involved, i.e., coaches, student-athletes, and athletic directors. Furthermore Rail expounded, “. . . they share a number of structural features: a division of labor, structure of authority defining hierarchical groups, a communication system, a decision-making process, a set of policies, and a set of criteria for performance” (p. 40).

Coakley (2008) found that D-III athletic departments are understudied entities. In compiling a twenty-page reference list on studies focusing specifically on intercollegiate sports, he discovered most studies focus on D-I schools and specifically on the revenue-producing sports of football and basketball. He further explained that despite having close to 60% of all intercollegiate athletes in their programs, very little research exists on D-III athletic departments. By pairing Coakley’s findings with the appearance of two organizational trust characteristics (i.e., openness and honesty) in the D-III philosophy statement, NCAA Division III institutions emerge as perfect entities to conduct this research. Consequently, the purpose of this study was

to explore two organizational social processes (trust and mindfulness) operating in D-III athletic departments.

NCAA Division III Athletics

This investigation examines NCAA D-III athletic departments in terms of organizational trust and mindfulness. Prior to addressing organizational trust and mindfulness, however, it is important to articulate the differences between scholarship granting and non-scholarship granting (Division III) institutions. While there are other levels of classification for institutions that award athletic scholarship, this study focuses on the non-scholarship granting institutions at that D-III level. For example, D-I schools strive to finance athletic departments, as much as possible, from revenue generated from the department itself (NCAA, 2006). In contrast the philosophical statement from the Division-III manual, states schools are to: “Assure that athletic programs support the institution’s educational mission by financing, staffing, and controlling the programs throughout the same general procedures as other departments of the institution” (NCAA, 2007, p. 212).

Furthermore, D-I institutions grant financial aid (commonly referred to as scholarships) based on athletic ability. The NCAA goes so far as to stipulate the minimum allowable number of grants or dollar amount that an institution is required to spend to achieve D-I status. The complicated formulas take almost an entire page (single-spaced) in the operations manual (NCAA, 2006). In comparison, D-III institutions are places where athletes are truly considered students and play for a love of the game, rather than for financial reasons. Additionally, D-III institutions typically enroll athletes meeting the same admissions criteria as the rest of the student-body. Division-III athletic departments are also funded like any other department within

the institution, i.e., if budgets were cut on a college campus; the athletic department would suffer shortfalls like all other areas of campus (Carroll, 2006; Snow, 2006).

Another difference between D-I and D-III institutions is manifested in the rationale for why athletic programs exist. The D-I philosophy statement, “Recognizes the dual objective in its athletics program of serving both the university or college community (participants, student body, faculty-staff, alumni) and the general public (community, area, state, nation)” (NCAA, 2006, p. 357). The D-III philosophy, however, specifically states that the student-athlete is the primary beneficiary of the program, as noted below:

Intercollegiate athletic programs shall be conducted in a manner designed to protect and enhance the physical and educational well-being of student-athletes. It is the responsibility of each institution to establish and maintain an environment that fosters positive relationships between student-athlete and coach (NCAA, 2007, p. 3).

Yet another characteristic distinguishing D-I and D-III programs is found through a closer examination of the D-III philosophy statement. Division III athletic departments are directed to, “Assure that the actions of coaches and administrators exhibit fairness, openness, and honesty in their relationships with student-athletes” (NCAA, 2007, p. 212). In addition to the philosophical differences as stated in the respective NCAA manuals, scholars have found D-III schools are smaller and more likely to be private institutions (Fink, Pastore, & Riemer, 2003; Turner & Chelladurai, 2005). Moreover, D-III institutions place greater emphasis on the academic values of participation in sports, and typically, athletes in these institutions are not treated differently than other members of the student body (Naughton, 1997).

The research indicates that Division III athletics staff members have responsibility for determining whether the benefits of participation in intercollegiate sports lead to positive or

negative outcomes for students. Staff members are held accountable for student-athlete grades, graduation rates, winning games, and with regard to small colleges, with recruiting a large percentage of the freshman class (Bowen & Levin, 2003; Weatherall, 2006). In addition to focusing on institution-wide outcomes, however, the day-to-day decisions made by athletics department staff have long-term consequences on the lives of their student-athletes. For example, scheduling a practice to interfere with class time could negatively affect the students' ability to succeed in the classroom (Adler & Adler, 1988; Bowen & Levin, 2003; Pascarella & Terenzini, 2005).

Consequently, staff members at intercollegiate athletic departments have a tremendous obligation to ensure the unit functions as what Weick, Sutcliffe, and Obstfeld (1999) refer to as a High Reliability Organization (HRO). The importance of athletics in the life of the university, coupled with the impact staff members have on the lives of students, highlight the importance of examining an aspect of the American university which has been understudied to date. The section that follows discusses HROs and the constructs of organizational trust and mindfulness.

Organizational Mindfulness and Trust

High Reliability Organizations

Organizations which have a high level of interrelation among elements are considered to be highly complex. When the actions of one component can swiftly and directly impact other units, scholars refer to that organization as being tightly coupled (Knight, 2004). Some organizational researchers contend the more complex and tightly coupled an organization and the riskier its decision environment, the greater the likelihood of a system-wide failure (Perrow, 1986). Other scholars have found even highly complex and tightly coupled organizations can avoid catastrophe, if they are managed in a highly reliable manner (Roberts, 1990a). High

Reliability Organizations (HROs) have an organizational culture which rises above complexity through well established lines of communication and an emphasis on detailed job-related training. Potential issues with coupling are resolved systematically through organizational redundancies and by allowing employees with expertise to make decisions (Knight, 2004).

Seeing that D-III athletic departments are relatively small in size (compared to D-I departments) and coaches often have substantial job crossover, these departments can be considered both highly complex and tightly coupled. Although task failure of athletic department personnel does not typically lead to a loss of life, as it may if an HRO fails (Weick & Sutcliffe, 2001, 2007), researchers contend that the penalty for reliability collapse should be considered relative to the activities being performed (Knight, 2004; Vogus & Welbourne, 2003). Slack and Parent (2006) assert that very few choices made in sport organizations are done so under circumstances of certainty. In fact, far more decisions are made under conditions of risk. That is, “a decision maker has a basic understanding of the available alternatives, but the potential cost and benefits associated with each are uncertain” (Slack & Parent, 2006, p. 259). As a result, athletic departments without strong feedback loops, well-trained staff, and decision makers on the front lines, may have games and contests which are, at worse, mismanaged in such a way as to compromise the safety of participants and spectators alike.

One need look no further than to the events surrounding the Southeastern Conference’s (SEC) men’s basketball tournament in March 2008 to understand the importance of risk management and emergency planning. As Mississippi State and Alabama played in a first-round game, a massive tornado swept through the streets of downtown Atlanta. The tornado produced substantial damage to the exterior and interior of the Georgia Dome, the host site for the SEC tournament, and caused a delay of over one hour. The SEC, however, had contingency plans and

completed the tournament at another venue. The above scenario highlights the value of organizational management and the need for skillful decision-makers to be involved in intercollegiate athletic departments.

Scholars have found an exclusive focus on outcomes at the expense of day-to-day processes leads to poor planning and task oversimplification for many organizations (Langer, 1989; Weick & Sutcliffe, 2001, 2007). Recognizing the importance of decision-making on the day-to-day performance of tightly coupled and highly complex organizations (Weick & Sutcliffe, 2001, 2007), this study examines the concepts of organizational trust and mindfulness in D-III college athletic departments. Organizational mindfulness is framed on the theoretical conceptualization developed by Weick and Sutcliffe (2001, 2007), while organizational trust is derived from the work of Hoy and Tschannen-Moran (1999) and has its historical roots in business management, education, and psychology. To date, there has been limited exploration into mindfulness and trust as it pertains to athletics and universities.

Mindfulness

Although Patton (1981) did not specifically use the term, he found that strong organizations operate with mindfulness at their core. That is, healthy organizations are those in which employee concerns are considered important, employees are free to openly discuss issues, conflict is addressed openly and directly, and an environment of trust and mutual respect are the norm. Early mindfulness research took place in the health care field and focused specifically on issues of aging and control (Langer, 1989; Langer & Moldoveanu, 2000a, 2000b). Extending the work of Langer and her colleagues, researchers in business psychology examined related topics such as “sensemaking” (Weick, 1995), decision-making (Weick, 2001), and how HROs function in the wake of an ever changing, potentially dangerous world (Bigley & Roberts, 2001; Roberts,

1990b; Vogus & Welbourne, 2003; Weick, & Sutcliffe, 2001, 2007; Weick, Sutcliffe, & Obstfeld, 1999).

Weick and Sutcliffe (2001) defined mindfulness as,

The combination of ongoing scrutiny of existing expectations, continuous refinement and differentiation of expectations based on newer experiences, willingness and capability to invent new expectations that make sense of unprecedented events, a more nuanced appreciation of context and ways to deal with it, and identification of new dimensions of context that improve foresight and current functioning (p. 42).

More succinctly stated, mindfulness is, “a rich awareness of discriminatory detail” (Weick & Sutcliffe, 2007, p. 32).

Oft-studied qualitatively, there has been little research exploring the construct of mindfulness empirically and few studies which attempt to replicate or extend previous findings. Using Weick and Sutcliffe’s work as a foundation, Vogus and Welbourne (2003) explored mindfulness in software firms, Knight (2004) investigated mindfulness among staff members at swimming pools, and Baker (2007) studied mindfulness in small businesses. Additionally, educational leadership scholars empirically explored the construct of mindfulness in the American secondary school system (Gage, 2003; Hoy, 2003; Hoy, Gage, & Tarter, 2006; Scarbrough, 2005). It is because D-III athletic departments operate hierarchically in a similar manner to other school entities that the framework developed by Weick and Sutcliffe (2001) and refined by Hoy (2003) guides and informs this research. An important distinction is that where Hoy studied schools, teachers, and principals, this research will focus on athletic departments, coaches, and athletic directors.

Specifically, the investigation explores the construct of mindfulness along five elements. Mindful organizations are theorized to: 1) have a preoccupation with failure; 2) be reluctant to simplify; 3) be sensitive to day-to-day operations, 4) be committed to resilience, and 5) defer to expertise rather than strictly following organizational hierarchy (Weick & Sutcliffe, 2001, 2007). Along these five dimensions, this study explored overall departmental mindfulness as a combined measure of coaching staff and athletic director mindfulness. Additionally, by examining the relationship between trust and mindfulness in D-III athletic departments, this study attempted to extend the research of Hoy et al. (2006). Hoy and his colleagues found a relationship between trust and mindfulness, concluding that trusting schools are more mindful.

Trust

Although trust is a difficult concept for both practitioners and researchers to grasp theoretically, it is important to study because high levels of trust result in elevated organizational performance (Dirks, 2000). The benefits of creating an organizational environment of unconditional trust outweigh the costs, “especially in terms of cooperation and teamwork that promote high performance and competitive advantage” (Jones & George, 1998, p. 543). An important subject in many aspects of modern life, trust is oft-studied as a construct, but one in which there is little consensus about how to operationalize (Creed & Miles, 1996; Dietz & Den Hartog, 2006).

For example, some researchers include the concept of reciprocity in their definition of trust (Tyler & Kramer, 1996), while others conclude that in order to trust, one party must make a commitment to the relationship without *a priori* knowledge as to whether reciprocation will occur (Coleman, 1990). Creed and Miles (1996) found that teamwork is negatively impacted when trust is lacking. Furthermore, with several high profile breaches in public trust (Bernie

Madoff and his ponzi scheme, the British Petroleum oil pipe disaster in the Gulf of Mexico, Enron's faulty accounting, Fannie Mae, A.I.G., Bear Stearns, etc . . .), organizational scholars and practitioners recognize anecdotal evidence, which indicates organizations need to focus on building and maintaining trust (Lorenz, 1988). *A, we know it is good because*, attitude does no justice to the field of organizational studies.

Numerous researchers have indicated the importance of trust in the workplace. Whether that workplace is an elementary school (Hoy & Kupersmith, 1985), a middle school (Hoy, Sabo, & Barnes, 1996), a higher education institution (Shoho & Smith, 2004; Smith & Shoho, 2007), or a place of business (Creed & Miles, 1996; Cunningham & MacGregor, 2000; Lewicki & Bunker, 1996; Mishra, 1996), there is still much research to be done. With the exception of work done by Hoy and his colleagues, Dietz and Den Hartog (2006) suggest that there has been very little repeat testing of established research instruments involving trust conducted. Thus, more exploration is required to improve the understanding of trust as a concept.

Institutions of higher education, like K-12 schools (Hoy & Tschannen-Moran, 1999; Tschannen-Moran & Hoy, 2000), aircraft carriers (Weick, & Sutcliffe, 2007), professional sports teams (Slack & Parent, 2006), and large corporations (Goris, Vaught, & Pettit Jr, 2003) are highly complex and tightly coupled organizations with many actors occupying numerous roles in firmly established divisions and departments. Additionally, even at the smallest institutions, there are multiple levels of authority and several operating locations. As such, Pope (2004) contends it is important to ascertain whether the positive trust dynamics in the corporate world also exist in institutions of higher education. Despite its importance, the exploration of trust in higher education institutions has been scant. The extant body of knowledge includes studies on the public's trust of faculty research (Fairweather, 1996), student's trust of the system (Ghosh,

Whipple, & Bryan, 2001), multiple dimensions of faculty trust (Shoho & Smith, 2004; Smith & Shoho 2007), and strategic planning as a means to develop trust (Opatz & Hutchinson, 1999).

As previously highlighted, D-III athletic departments are similar to other university organizational units; hence, they provide an excellent locale for the type of research proposed by Pope (2004). While there has been exploration of trust in the realm of athletic competition, there is a dearth of studies on trust and the athletic department as an organization. Much of the research on trust in the world of athletics has explored the relationship between coach and athlete (Gould, Guinan, Greenleaf, & Chung, 2002; Jowett & Cockerill, 2003), the relationship between sports and society at large (Nooteboom, 2007; Seippel, 2006), and the impact of trust in leadership on team performance (Dirks, 2000).

Despite the outpouring of research over the past 20 years, the concept of trust is still rife with confusion and uncertainty (Nooteboom, 2007). With that critique in mind, this study builds on the scholarly work developed in the realm of educational leadership. Using a concept developed in over thirty years of exploration, this study operationalizes trust as having five facets: benevolence, reliability, competence, honesty, and openness (Hoy, 2003; Hoy et al., 2006; Shoho & Smith, 2004; Smith & Birney, 2005; Smith & Shoho, 2007; Tschannen-Moran, 2004; Tschannen-Moran & Hoy, 2000). Furthermore, similar to the work of Hoy and his colleagues, this study explores the dimension of risk, i.e., that trust involves a relationship where one party is vulnerable to another (Baier, 1986; Chhuon, Gilkey, Gonzalez, Daly, & Chrispeels, 2008; Pope, 2004; Rousseau, Sitkin, Burt, & Camerer, 1998).

Research Questions

Not only are D-III athletic departments themselves understudied organizations, but the role of trust in the organizational culture of higher education is also an underdeveloped field

(Pope, 2004). Tierney (1988) made explicit the importance of understanding organizational culture when he wrote, “individuals can minimize the occurrences and consequences of cultural conflict and help foster the development of shared goals” (p. 5). Accordingly, the question of whether organizational mindfulness is related to trust in higher education settings, particularly in the realm of intercollegiate athletics, remains critical. The following research questions guided this study:

Q1: Which aspect of trust (colleagues, athletic director, or student-athletes) is the best predictor of organizational mindfulness in Division III athletic departments when controlling for other key organizational factors?

Q2: Is there a statistically significant relationship between the coaching staff’s trust in colleagues and organizational mindfulness?

Q3: Is there a statistically significant relationship between the coaching staff’s trust in the athletic director and organizational mindfulness?

Q4: Is there a statistically significant relationship between the coaching staff’s trust in student-athletes and organizational mindfulness?

Significance

Numerous campus stakeholder groups may find value in the results of this study. Specifically, athletic directors interested in understanding current trust levels and the impact of trust on organizational decisions could use the results to assess the current climate of their departments. Additionally, if it is found that trust does have a significant relationship with decision-making, senior level university administrators might use the instruments discussed herein to diagnose the level of organizational trust and mindfulness in the athletic department on their campus. Coaches may be interested in the results, expressly as a means to aid the job search

process. Those coaches who are aware of the relationship between trust and organizational decision-making might be more selective in the job search process. That is, coaches may be willing to inquire about the current level of organizational trust and mindfulness at potential job sites. Lastly, prospective student-athletes and their parents may find the information useful to assist in the important college choice process. By understanding the potential impact of trust and mindfulness on the college-going experience, students and their parents might more intentionally explore the current levels of those two processes operating in the athletic departments recruiting the students.

Definition of Terms

This investigation of the relationships between organizational trust and mindfulness employed the following constitutive definitions to assist the reader's understanding:

Athletic Conference refers to a group of similar institutions that have affiliated with the purpose of providing consistent opponents for their athletic teams (Bowen & Levin, 2003).

Athletic Director (or Director of Athletics) refers to the person responsible for the entire operation of the intercollegiate athletic program, including planning, organizing, leading, and evaluating coaches and other personnel. S/he is simultaneously a mentor, a businessperson, a motivator, and an enforcer (Branch, 1990).

Coaches are designated as paid or volunteer members of the athletics department staff who are under contract to perform on field duties and are involved in the recruitment of prospective student-athletes (NCAA, 2007).

Colleagues refer to those coaches (head and assistant) who work in the same athletic department.

Mindfulness refers to organizations and individuals who exhibit the following five characteristics: preoccupation with failure, a reluctance to simplify, sensitivity to operations, a commitment to resilience, and deference to expertise (Hoy, et al., 2006; Weick & Sutcliffe, 2001, 2007).

NCAA Division III institutions are those that do not grant scholarships to student-athletes on the basis of athletic performance (NCAA, 2007).

NACDA Director's Cup: A program created by the National Association of Collegiate Athletic Directors (NACDA) to recognize colleges and universities that maintain successful broad-based athletic programs. Institutions are awarded points based on post-season success in a pre-determined number of team sports. The school that accumulates the highest point total throughout the academic year is recognized as the champion of its division (NACDA, 2010).

Student-Athlete is a term which refers to an individual who participates in an intercollegiate practice or contest under the purview of the athletics department (NCAA, 2007).

Supervisor – See Athletic Director

Trust refers to an individual or group's willingness to be vulnerable to another party based on the confidences that the trustee is benevolent, competent, honest, open, and reliable (Shoho & Smith, 2004).

Summary

This study is an attempt to explore the relationship between organizational trust and mindfulness in NCAA Division III athletic departments. All members of the coaching staff, head and assistant, were surveyed to compare their perceptions of trust along the five dimensions of benevolence, competence, honesty, openness, and reliability with their perceptions of

organizational mindfulness. To that end, the discussion now shifts to a review of the relevant extant literature.

CHAPTER TWO: REVIEW OF LITERATURE

“Theoretically and empirically, trust is necessary for school mindfulness and school mindfulness reinforces a culture of trust” (Hoy, Gage, & Tarter, 2006, p. 252).

Organizations can be designed in ways that facilitate or discourage trustworthy actions. The structure, policies, and culture of an organization can all impact the level of trustworthiness felt within (Hardin, 1996; Whitener, Brodt, Korsgaard, & Werner, 1998). Intercollegiate athletic departments are no different. They can be structured such that members of the coaching staff are given high levels of freedom and flexibility over such areas as recruiting, practice time, and athlete discipline decisions. An understanding of organizational culture is therefore of paramount importance with regard to the study of the intercollegiate athletic department.

“A culture of trust should provide a setting in which people are not afraid of breaking new ground, taking risks, and making errors” (Hoy et al., 2006, p. 237). This culture of trust can be considered analogous to Wenger’s (1998) communities of practice. A theory which, at its foundation, asserts human beings form communities as a means to disclose cultural procedures which reflect concepts learned by the collective. Communities of practice are further described as places where proficiencies are characterized in with a specific context. Members of the community develop a communal sense of what they are about. They then ensure all are held responsible to be adequately skilled enough to engage in establishing community norms and to, “negotiate competence through an experience of direct participation” (Wenger, 2000, p. 229).

The athletic director who desires to create a trusting environment must shape values and norms of the organization in such a way that coaches can be given freedom; such that coaches can rest assured in the knowledge they are trusted. This trusting environment develops because the departmental expectations have been inculcated in a positive, strong manner. Furthermore,

those expectations are based more on open, social and informal processes rather than formal control mechanisms (Khodyakov, 2007). The athletic director who desires to create a trusting environment must make reliable decisions that demonstrate benevolence and reward competence. Those decisions must be coupled with a culture valuing openness and honesty. These types of organizations are more likely to have high levels of organizational trust (Hoy, 2002; Hoy & Kupersmith, 1985; Hoy & Miskel, 1987; Hoy & Tschannen-Moran, 1999).

As this research is focused on trust and mindfulness at the organizational, i.e., macro-level, it is important to commence the literature review section with an overview and description of organizational cultures and how scholars have defined and studied them. Subsequently, a brief history of the development of Division III (non-scholarship) athletics and operational specifics of a typical D-III athletic department follows. The exploration of the relevant literature then proceeds with an examination of organizational trust. Finally, a review of the mindfulness literature is examined, both at the individual and organizational level. It is hoped that through insights gained from this review of the literature, a framework or model will be revealed to assist intercollegiate athletics personnel as it pertains to organizational trust and mindfulness and how these two constructs affect performance.

Organizational Culture

Robbins (1996) asserted that the culture of an organization has six important functions. First, it defines boundaries by creating distinction among organizations. Second, it provides identity to the organization. Third, by defining appropriate standards for conduct, culture acts as the glue binding the organization together. Fourth, culture fosters dedication to the group. Fifth, culture acts to improve stability in the community. Lastly, culture serves to mold attitudes and

behaviors on organizational constituents. While Robbins explains the functionality of organizational culture, others have taken more direct aim at defining it.

One of the early works on organizational culture was that of Peters and Waterman (1982) who defined organizations as institutions with commonly shared values, purposes, and assumptions. Using a scholarly approach to study sport organizations, Slack and Parent (2006) wrote that “a sport organization is a social entity involved in the sport industry; it is goal-directed, with a consciously structured activity system and a relatively identifiable boundary” (p. 9).

Definitions of organizational culture come from a wide variety of disciplines. However, even as many scholars have attempted to add unique elements, at its core, most scholars describe organizational culture using similar concepts. For example, Schein (1992) defined organizational culture as a

pattern of shared basic assumptions that the group learned as it solved its problems of external adaption and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (p. 12).

Many of these definitions assert culture to be a system of values, ideologies, strategy, and practices (Cook & Yanow, 1996; Deal & Kennedy, 1982; Mitroussi, 2003). Cook and Yanow (1996) defined culture as “a set of values, beliefs, and feelings together with the artifacts of their expression and transmission . . . that are created, inherited, shared, and transmitted within one group of people and that, in part, distinguish that group from others” (pp. 439-440).

Scholars in the field of educational leadership have explored organizational culture as a set of shared values and interpretations that establish the purpose and orientation of work for

organization members (Hoy, Tarter, & Kottkamp, 1991). From the field of industrial management, Morris (1992) contends organizational culture to be “the shared values or common perceptions that are held by each member” (p. 28). More recently, scholars have defined organizational culture as a “complex pattern of beliefs, expectations, ideas, values, attitudes, and behaviors shared by the members” (Hellriegel, Slocum, & Woodman, 2001, p. 512).

In describing the study of organizational culture as a set of guides, feelings, attitudes, and ideals, Owens (1998) wrote:

One looks at artifacts, and technology that people use and one listens to what they say and observes what they do in an effort to discover the patterns of thought, beliefs, and values that they use in making sense of the everyday events that they experience. Thus, organizational culture is the study of the wellsprings from which the values and characteristics of an organization arise (p. 166).

Similar to Owens, other scholars have used more descriptive language to describe organizational culture. Deshpande and Webster (1989) portrayed organizational culture as being the blueprint of values and beliefs that supplies members with behavioral norms and aids in their understanding of organizational operations and procedures. Sergiovanni and Corbally (1984) found organizational cultures to be the “informal understanding of the way we do things around here or what keeps the herd moving roughly west” (p. 161). Still other researchers choose to be more parsimonious in their descriptions. Smith and Peterson (1988) uphold that organizational culture is comprised essentially of members’ estimations about what works and what does not.

Another important element of culture is the expression of an organization’s values through a shared history which may be manifest through different traditions and expressions. Sergiovanni and Corbally (1984) described the use of symbols, ceremonies, and sagas by

institutions as a means to communicate its shared history, cultural values, and beliefs. In detailing their findings, Hofstede, Neuijen, Ohayv, and Sanders (1990) name these same elements as symbols, rituals, and heroes.

Still other researchers went further. For example, Martin (1992) described organizational culture by bringing together many of previously described elements:

As individuals come into contact with organizations, they come into contact with dress norms, stories people tell about what goes on, the organization's formal rules and procedures, its informal codes of behavior, rituals, tasks, pay system, jargon, and jokes only understood by insiders. These elements are some of the manifestations of organizational culture. When cultural members interpret the meanings of these manifestations, their perception, memories, beliefs, experiences, and values will vary so interpretations of these interpretations, and the ways they are enacted, constitute culture (p. 127).

Tierney (1988) argued that by understanding the institution's culture, university administrators might become better decision makers. In an effort to make the concept of organizational culture relevant to higher education, Tierney describes a university's culture as consisting of six elements: environment; mission; socialization; information; strategy; and leadership. While not creating a formal definition per se, Tierney's work is important because he called for scholars to explore organizational culture in a previously understudied environment.

Despite the wide variety of descriptions and definitions relating to organizational culture, the consensus among scholars is that through an exploration of commonly held values, one can gain significant insight into an organization's culture (Kilman, Saxton, & Serpa, 1985). Said another way, in order to recognize how members continue to be in good standing within an

organization, researchers must understand the cultural norms to which constituents adhere. An organization's norms are unwritten rules of shared beliefs about what behaviors are appropriate (Ott, 1989). It is in these norms that accepted and supported behaviors, whether explicit or tacit, are fully encompassed (Kilman et al., 1985).

Notwithstanding attempts to preserve these norms and practices, overwhelming forces for change can develop (Cook & Yanow, 1996; Weick & Sutcliffe, 2001). Organizational members may be more willing to adopt new standards when, either because of external forces or internal crises, the organization is deemed to be ineffective (Mitroussi, 2003). Schein's (2004) model of the levels of organizational culture (Figure 1) consists of the most apparent manifestations of culture. The model displays the relationship between artifacts, values, and basic assumptions found in organizations. Because of the organizational structure of many D-III athletic departments, the need for a strong culture is important. The literature review next moves to a brief description of the D-III experience.

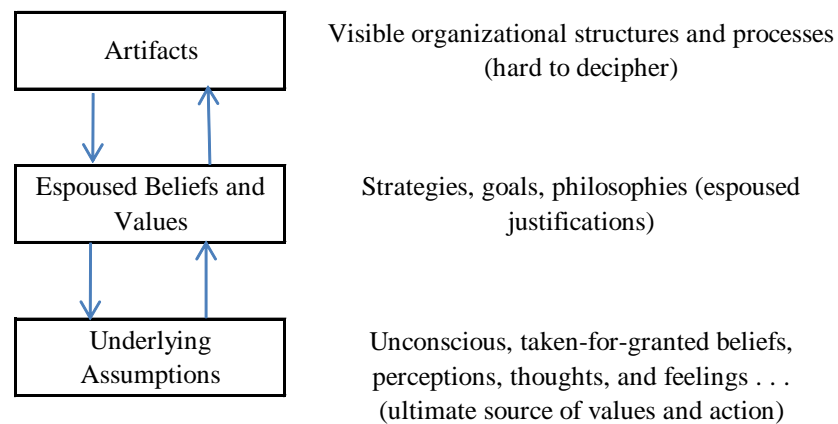


Figure 1 Levels of Culture. Adapted from Schein (2004).

National Collegiate Athletic Association (NCAA) Division III Athletics

Historical Development

Formal intercollegiate athletic competition began in 1852 when the crew teams from Yale and Harvard raced in New Hampshire. Though never *pure* in the truest sense (the first contest was sponsored by a railroad magnate hoping to promote the new mode of transportation), intercollegiate athletics began as student-led enterprise and were a distant cousin to the present day commercialized model. It did not take long, however, for this concept of inter-institutional competition to be embraced by university administrators. Many believed a strong athletic program (e.g. football) could help stimulate significant support from both alumni and the local community and in turn, enhance the institution's reputation and financial position (Gems, Borish, & Pfister, 2008; Weatherall, 2006).

As intercollegiate athletics continued to grow, the problem of over-commercialization first appeared as an issue in the late 1890's. Commercialization has continued to be an issue leading to numerous calls for reform. The reform efforts have been led by different constituencies (e.g., politicians and university faculty) and have achieved varying degrees of success. One successful reform effort arose as a result of the high number of deaths which had occurred on the football fields. It was through the efforts of President Theodore Roosevelt, a Harvard football man, that many life-saving rules were implemented. Many argue that President Roosevelt's intervention saved the sport (Martin, 2010). Other reform efforts such as the *NCAA Sanity Code* and calls for reform from the Carnegie Foundation and The Drake Group have, however, resulted in little of the way of substantive change.

In the late 1960s, the gap between the haves and the have-nots reached epic proportions. The balance of power became so tilted, the playing field so uneven, and according to many

university presidents, athletics had moved so far afield from the principles in which they were founded, there was a movement to split NCAA athletic programs into different classifications (Crowley, 2006; Noble, 2004). The issue was finally settled during the NCAA's Special Convention of 1973. During that meeting, the current federated organizational structure was created. Under the federation model, each division is empowered to create its own specific governance rules and membership criteria. Though it has since undergone modification, the three division federation model still serves as the NCAA's governance framework (Crowley, 2006).

As detailed previously, the divisions were partitioned based upon specific philosophical distinctions. NCAA D-I schools maintained a focus on national competition, offered a substantial number of sports and grants-in-aid (athletic scholarships), remained primarily concerned with attendance, and were dependent upon self-generated finances. NCAA Division II (D-II) schools, in contrast, focused more on regional competition, a smaller selection of sports, fewer numbers of athletic scholarships, and a reliance on the institution as a significant funding source. The operating philosophy of D-III schools "owed much to precepts cherished by the NCAA's founders: no athletics grants-in-aid, no distinctions between student-athletes and other students, and sports programs conducted not for the general public but for the competitors and the campus community" (Crowley, 2006, p. 220). With this philosophical divergence came a very real difference in the way *business is done*.

The D-III Experience

With the focus of D-III athletics being primarily on the athlete, not on the spectator, operational guidelines are more about creating a positive experience and not generation of revenue. The philosophical differences have in fact led to diverse reporting lines. Whereas many D-I athletic departments report directly to the university's executive officer or to chief financial

officer, many D-III athletic department report to the Divisions of Student or Academic Affairs. Another example of the distinction can be seen by examining graduation rates. The most recent NCAA graduation report highlights the importance of academic success and the overall student experience at D-III institutions. Using the NCAA developed *Academic Success Rate* metric, D-III students had an 89% academic success rate, compared to a success rate of 79% for D-I student athletes (Sander 2010, 2011). The role of coaches in helping student-athletes achieve this balance cannot be overstated. In fact, “For many colleges, Division III athletics provides an opportunity to attract excellent students, build community . . . and provide a meaningful experience for their athletes” (Weatherall, 2006, p. 24).

Danehy (2006) reported that both the individual team coaches and the entire athletic department have the ability to positively or negatively affect a student's college experience. It is therefore important to study trust and mindfulness to determine to what extent those making hiring decisions need to be concerned about a coach's values and attitudes. Scholars have argued for the need to hire employees (coaches in this case) who understand and identify with specific educational aims and who will recruit the student-type the institution wants on its campus. Coaches have such a large influence on the organizational culture of an athletic department and as a result, on the overall campus climate at many smaller institutions (Bowen & Levin, 2003; Schein, 1985; Slack & Parent, 2006). Consequently it is important to study organization trust levels in D-III athletic departments. For if the athletic department is a breeding ground for non-trusting culture, i.e., is a non-trusting environment, there could be broader systemic, institution-wide issues.

However, studying the intercollegiate sport organization has proven to be difficult. Coakley (2008) highlights three constraints within the academy that make studying intercollegiate athletic departments at the macro-level a complex task. First:

Studying valued traditions and rituals in our social worlds is especially challenging because it exposes their inconsistencies, internal contradictions, and taken-for-granted ideological foundations. Secondly, it is risky to study traditions and rituals that serve the interests of powerful people in our social worlds, including our campuses. Third, when researchers cannot design studies that directly serve athletic department needs, they are not likely to gain access to much useful data. This institutionalized suspicion means that collecting valid and reliable data about intercollegiate sports requires administrative, athletic department, and coach support, in addition to having a researcher with the ability to develop rapport with people who create and live within sport cultures (p. 15).

Despite the obstacles, intercollegiate athletic departments are organizations which need to be explored at the macro level. In the long term, the impact of organizational trust on coaches' decision-making processes could provide great insight into why some departments function more effectively than others. After this description of the D-III experience, the focus of the literature review moves to an examination of the construct of trust.

Trust

"Trust begins where knowledge ends" (Lewis & Weigert, 1985, p. 462).

During the latter half of the twentieth century, scholars turned their attention to the construct of trust. Early empirical studies focused on trusting games and developed out of the Cold War suspicions. The use of the Prisoner's Dilemma as a method to research trust also was an offspring of the belief that scientific (positivist) research could provide solutions for almost

any problem (Deutsch, 1958). In the 1960s as an emerging counter culture grew ever suspicious of and disillusioned with government agencies and authority in general, Rotter's (1967) research focused on trust as a personality trait. Into the 1980s, with a burgeoning divorce rate and basic changes to the structure of the American family, research moved into exploring interpersonal relationships (Johnson-George & Swap, 1982). As technology became more omnipresent and as society witnessed rapid changes in daily life (e.g., cell phones and email) a variety of fields such as, sociology (Coleman, 1990), economics (Williamson, 1993) and organizational studies (Mishra, 1996; Tyler & Kramer, 1996) began to examine trust.

While trust in everyday interactions is regularly discussed, it continues to be a fragile and elusive variable (Kramer & Cook, 2004). Describing the notion of trust as worthy of exploration, Flores and Solomon (1997) wrote, "There seems to be a nearly unanimous agreement, across the political spectrum, that more trust is needed in our society" (p. 47). Rotter (1967, p. 651) eloquently established the importance for studying trust by writing,

. . . much of the formal and informal learning human beings acquire is based on the verbal and written statements of others, and what they learn must be significantly affected by the degree to which they believe their informants without independent evidence.

Rotter's rationale that trust is an integral part of the learning process is why the study of trust has been undertaken in such a wide array of academic areas. Hosmer (1995) attempted to build a bridge between the fields of organizational theory and ethics and as such "proposes that trust is based upon an underlying assumption of an implicit moral duty" (p. 379). Extending the concept of moral good, Hoy and Tschannen-Moran (2003) wrote, "Trust is good. Everyone wants to trust and be trusted" (p. 182).

Much of the current research on trust confirms Hoy and Tschannen-Moran's conclusion and further established it as a variable of significance in organizational studies. To that end, Elangovan and Shapiro (1998) indicated "There appears to be a general consensus among researchers that trust is important and useful in a range of organizational activities such as teamwork, leadership, goal setting, performance appraisal, development of labor relations, and negotiation" (p. 547). Trust has been associated with positive work behaviors such as job satisfaction, organizational commitment, and job performance (Dirks & Ferrin, 2002). Additionally, trusting allows us to reduce uncertainty and to be sure that our belief in others will be met (Hoy & Tschannen-Moran, 1999). Moreover, trust encourages collaboration while distrust destabilizes it (Deutsch, 1958). Tyler and Kramer (1996) found that where trust is not present people are guarded, less likely to take a chance, and insist on greater security for personal interests.

Other scholars have further solidified the importance of studying trust in the organizational setting. Trust is "vital for the maintenance of cooperation in society and necessary as a grounds for even the most routine, everyday interactions" (Zucker, 1986, p. 56). Furthermore, trust is crucial in facilitating cooperation (Bromiley & Cummings 1995; Coleman, 1990; Deutsch, 1958), improving the free exchange of knowledge and information (Jones & George, 1998), developing open school cultures (Hoffman, Sabo, Bliss, & Hoy, 1994), in student achievement (Goddard, Tschannen-Moran, & Hoy, 2001), and in increasing the quality of schools (Hoy & Sabo, 1998). In fact, Golembiewski and McConkie (1975) assert "there is no single variable which so thoroughly influences interpersonal and group behavior as does trust" (p. 131).

The public's trust in organizations, including institutions of higher learning, has certainly taken numerous *hits* in the last decade. As Kramer and Cook (2004) reported, "The stunning collapse of Enron . . . forced a search for answers about trust . . . These events have generated deep ambivalence and even pervasive distrust, which challenges the fundamental legitimacy of professional and managerial authority" (p. 2). However, even before the scandals at Enron, Worldcom, Arthur Anderson, the steroid scandal that was endemic in Major League Baseball, and the recent gambling conviction of a National Basketball Association referee, Caudron (1996) observed, "organizational trust has hit rock bottom" (p. 20). This could be true because trust in many regards is a concept we take for granted, it is something we do numerous times each day without ever thinking about. We trust co-workers, total strangers in places like libraries, health clubs, and restaurants, doctors, and those with whom we share the road. In fact "we inhabit a climate of trust as we inhabit an atmosphere and notice it only when it becomes scarce or polluted" (Baier, 1986, p. 234). Hoy (2002) further argued that trust is ever-present when he wrote "Trust is a little like water – we all pay little attention to it until we need it, but we don't have it" (p. 88).

Although analyzed extensively in other fields, there is a dearth of trust literature in higher education and it has even more scarcely been mentioned in terms of its role with the organizational culture of athletic departments (Pope, 2004). Moreover, despite trust being a term used ubiquitously in the culture of athletics, there has been little systematic research on trust in athletic departments (Hoffman et al., 1994). What little research there has been, much like the research in other fields, has found trust to be an important concept. In their study Goris, Vaught, and Pettit (2003) found trust to be a significant moderating variable in predicting both job

satisfaction and performance. Cunningham and MacGregor (2000) found trust to affect satisfaction, absenteeism, intention to leave, and performance.

In a study on trust and athletic team performance, Dirks (2000) found the variance accounted for in team performance based on the level of trust to be nearly equal to that accounted for by each individual team member's the level of ability. Elsass (2001) conducted research with 355 basketball players at both the NCAA Division I and Division III levels and reported that a higher level of players' *trust in coach* resulted in improved team performance. Moreover, in a qualitative study of 12 Olympic medalists, Jowett and Cockerill (2003) found that athletes are more likely to be open with coaches with whom they respect and trust. Their findings lend credence to organizational trust as an area for study in the realm of sport. If athletes respond better to trusting environments, it is not a far-flung notion to believe that coaches, themselves former athletes, will more likely be open with colleagues and supervisors whom they respect and trust. The review next moves to a discussion of the trust definitions present in the literature.

Definitions of Trust

Early trust research focused on intentions and motives surrounding trust (Deutsch, 1958) whereas more recent research has focused on trust as a behavior (Hosmer, 1995; Mayer, Davis, & Schoorman, 1995). Much of the research on trust focuses on dispositions, decisions, behaviors, social networks, and institutions (Deutsch, 1958; Granovetter, 1985; Rotter, 1967; Williamson, 1993; Zucker, 1986). Yet, despite the difficulty in pinning down a definition, trust has been studied in a variety of academic fields, such as, education (Hoffman et al., 1994; Hoy, 2002; Hoy & Tschannen-Moran, 1999), economics (Williamson, 1993), higher education (Pope, 2004), management (Elsass, 2001), marketing (Moorman, Zaltman, & Deshpande, 1992), personnel management (Huang & Dastmalchian, 2006), philosophy (Lewis & Weigert, 1985),

psychology (Deutsch, 1958; Dirks 1999; 2000; Rotter, 1967), sociology (Granovetter, 1985; Zucker, 1986) and sport management (Turner & Chelladurai, 2005).

Researchers have long acknowledged the significance of trust, however, there remains little consensus about its meaning (Shapiro, 1987). Bennis and Nanus (1985) asserted,

Trust is the lubrication that makes it possible for organizations to work. It's hard to imagine an organization without some semblance of trust operating somehow, somewhere. An organization with trust is more than an anomaly, it's a misnomer, a dim creature of Kafka's imagination. Trust implies accountability, predictability, and reliability. It's what sells products and keeps organizations humming. Trust is the glue that maintains organizational integrity. Like leadership, trust is hard to describe, let alone define. We know it when its operating and when its not and we cannot say much more about it except for its essentiality and that it is based on predictability (p. 43).

Perhaps because trust has been studied in different contexts and by scholars with divergent research agendas, it has been conceptualized in a variety of ways. Widely considered to be among the earliest to explore trust, Deutsch (1958) defined trust in terms of expectations held by the trusting party. He considered trust to be the non-rational choice of a person facing an uncertain circumstance in which the anticipated loss was greater than the projected gain. Rotter (1980) defined trust as "a generalized expectancy help by an individual that the word, promise, oral or written statement of another individual or group can be relied upon" (p. 1).

Zand's (1972) findings furthered the work of Rotter by keeping the element of confidence, but went one step further by adding the concept of dependence. According to Zand, trust is a personal choice based upon hopeful expectations of confidence about the result of an uncertain event; especially when there is a certain level of vulnerability and lack of direct control

over the actions of others. In discussing trust in organizational terms, Golembiewski and McConkie (1975) indicated trust to be an important element that impacts the basic designs of group behavior in all social organizations. They went further and indicated trust is “strongly linked to confidence in, and overall optimism about, desired events taking place” (p. 134).

In the early stages of studying trust in schools, Hoy and Kupersmith (1985) based their research on the work of Rotter (1967) and Golembiewski and McConkie (1975), and doing so operationalized trust as “a generalized expectancy help by the work group that the word, promise, and written or oral statement of another individual, group or organization can be relied upon” (p. 2). Hoy, Tarter, and Witkoskie (1992) later refined that definition and offered trust as “a generalized expectancy held by teachers that the word, action, and written or oral statements of others can be relied upon” (p. 39).

Zucker (1986) defined trust as a preconscious belief that all parties involved in the exchange hold similar expectations, until such time when those expectations are violated. According to Shapiro (1987), trust is a “social relationship in which principals – for whatever reason or state of mind – invest resources, authority or responsibility in another on the behalf for some uncertain future return” (p. 626). The rational choice theorists, such as Gambetta (1988), indicated that the trustor made a calculated decision based upon personal qualities and social controls of the trustee. He specifically defined trust as “the probability that one economic actor will make decisions and take actions that will be beneficial or at least not detrimental to another” (p. 217).

As trust studies moved forward to the last decade of the twentieth century, some focus remained on the individual, but the organization was explored with greater frequency. As a

result, the definitions of trust became less expansive and started to include more specific elements or facets. Bromiley and Cummings (1995) wrote,

Trust is an expectation that another individual or group will (1) make a good faith effort to behave in accordance with any commitments, both implicit and explicit; (2) be honest in whatever negotiations preceded those commitments; and (3) not take excessive advantage of others even when the opportunity is available (p. 4).

From the field of marketing, Moorman, Zaltman, and Deshpande (1992) defined trust as “a willingness rely on an exchange partner in whom one has confidence” (p. 315). Without specifically using the term, Hosmer (1995) implied that benevolence was an important element of trust. He articulated that trust was a hopeful belief about the positive outcome of an event. Specifically “trust is the reliance by one person, group, or firm upon a voluntarily accepted duty on the part of another person, group, or firm to recognize and protect the rights and interests of all others engaged in a joint endeavor or economic exchange” (p. 393). Rousseau et al. (1998) meanwhile defined trust as one party’s willingness to be vulnerable to another party based on expectations that the party will perform an action of importance; “Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (p. 395). Furthering the element of confidence and positive expectations, Smith and Birney (2005) indicated “Trust is general confidence and optimism in occurring events or believing in others in the absence of compelling reasons to disbelieve” (p. 473).

Maintaining the element of vulnerability found in other conceptualizations, Huang and Dastmalchian (2006) from the field of personnel management and human resources, defined trust as the “willingness of one party to be vulnerable to the actions of another party based on the

assumption that the other will perform a particular action to the trustor” (p. 363). Moreover, though not specifically using the terms competence or benevolence, Huang and Dastmalchian (2006) imply those facets by expanding on their definition. Defining trust necessarily involves an element of uncertainty and it “requires confidence in the party’s ability and faith in the other party’s benign intention” (p. 363). More recent research in educational leadership has sustained vulnerability as a major building block in the construction of a trusting relationship. Chhuon et al. (2008) defined trust as “one’s willingness to participate in a relationship that involves being vulnerable to another person” (p. 288).

Despite the outpouring of research over the past twenty years, the concept of trust is still rife with confusion and uncertainty (Nooteboom, 2007). Rousseau et al. (1998) posit an explanation for the ambiguity; “One thing is apparent: scholars operationalize trust differently, depending on the focus and phase of trust they study” (p. 398). Because the study of organizational trust is so diverse in its approaches, attempting to achieve consensus is likely a wasted undertaking (Bigley & Pearce, 1998). McEvily, Perrone, and Zaheer (2003) wrote that rather than debating which definition of trust is most accurate, the field is better served by researchers identifying which definition is appropriate for their specific research questions and applying that definition with consistency.

Others (Gambetta, 1988; Whitener et al., 1998) highlight that part of the difficulty in studying trust rests with the numerous definitions and seemingly endless number of research instruments used to explore the variable. Dietz and Den Hartog (2006) suggest that there has been very little repeat testing conducted with previously established research instruments. Hosmer (1995) stated “there appears to be widespread agreement on the importance of trust in

human conduct, but unfortunately there also appears to be equally widespread lack of agreement on a suitable definition of the construct” (p. 380).

Widespread divergence of this nature can be regarded as an obstruction to scientific advancement (Pfeffer, 1993). With that critique in mind, this study builds on the scholarly work developed in the realm of educational leadership. Using a concept developed in over thirty years of exploration, this study explored trust using five facets: benevolence, reliability, competence, honesty, and openness (Hoy, 2003; Hoy et al., 2006; Shoho & Smith, 2004; Smith & Birney, 2005; Smith & Shoho, 2007; Tschannen-Moran & Hoy, 2000) and operationalized the variable using the following definition previously put forth by Hoy and Tschannen-Moran (1999): “*Trust is one party’s willingness to be vulnerable to another party because of the confidence that the latter party is (a) benevolent, (b) reliable, (c) competent, (d) honest, and (e) open*” (p. 189). The next section provides a detailed analysis of the five facets of trust found in Hoy and Tschannen-Moran’s definition.

Facets of Trust

Similar to Hoy and Tschannen-Moran’s definition of trust, Butler and Cantrell (1984) suggested that trust has five facets: integrity, competence, consistency, loyalty, and openness. In their 1998 meta-analysis, McKnight, Cummings, and Chervany (1998) found that competence, openness, benevolence, and reliability to be prevalent in close to eighty articles and books on the topic of trust. Building on those findings, McKnight et al. (1998) defined trust such that the trustee possesses benevolence, competence, honesty, and predictability. Mayer et al. (1995) posited that competence, benevolence, and integrity are core elements of trustworthiness. Cunningham and MacGregor (2000) included the elements of predictability, benevolence, and fairness in their definition. Gabarro (1978) discusses nine bases of trust: integrity (honesty and

moral character), motives (intentions and agenda), consistency of behavior, openness, discreetness, functional, interpersonal competence, business sense, and judgment. One thing in common among these scholars is the contention that every facet of trust is important. They argue that a chair with a missing leg ceases to be functional, so too is trust not fully developed without all of the facets.

Reciprocity and vulnerability. An important underlying element of trust involves the concept of risk. The contract or concept of quid pro quo, according to philosophers, has no place in a discussion of trust. To that end, Baier (1986) posited “Not only has the child no concept of virtual contract when she trusts, but the parent’s duty to the child seems in no way dependent upon the expectation that the child will make a later return” (p. 244). Baier continued by asserting,

only those determined to see every moral transaction as an exchange will construe every gift as made in exchange for an IOU, and every return gift as made in exchange for a receipt . . . As Hume says, a contract should not replace, the more generous and noble intercourse of friendship and good offices (p. 243).

Sociologists also contend that reciprocity should be excluded from the trust discussion because reciprocity in its truest, quid pro quo sense, is not noticeable in a true trusting relationship.

According to Lewis and Weigert (1985) “The most effective trust building action is one which directly benefits one person without any agreement what-so-ever on how, when, or even whether the recipient will reciprocate” (p. 467).

Moreover, Axlerod (1984) indicated that reciprocity manifests itself from the belief in the relationship’s longevity, rather than a simple this-for-that exchange. McEvily et al. (2003) further discussed the element of time by writing “Trust reduces the need for the perfect

congruence in value in a single exchange because there is the expectation that balance will be reached across a series of exchanges that occur over the course of an ongoing relationship” (p. 96). Reciprocity, in fact implies a contract or a formal obligation. Trust, however, extends further. As defined in this study, trust extends well beyond the scope of a mere contract, bond, or agreement. With the safety measures and levels of protection built into a contract, the two parties are decidedly not vulnerable to each other. Flores and Solomon (1997) maintained that, “Contracts, with their enforcement stipulations may well represent a lack of trust rather than the basis or the culmination of trust” (p. 70).

Mishra (1996) went further by positing that since there is no consequence to a negative outcome without some vulnerability, the construct of trust is not necessary. Other scholars have detailed the importance of vulnerability in the trust relationship. Hosmer (1995) wrote that trust is “the willingness of one person to increase his or her vulnerability to the actions of another person whose behavior he or she could not control” (p. 383). Granovetter (1985) stated that by the nature of becoming involved in the trusting relationship, the trustor is exposing him or herself to wrongdoing. Lewis and Weigert (1985) contended that if actions could be undertaken without risk and in conditions of absolute guarantees, trust would not be required. Without reliance upon another to complete a task, trust is not needed (Hoy & Tschannen-Moran, 1999; Hoy, 2002; Rousseau et al., 1998).

Detailing the development of vulnerability, scholars explain that interdependence or tight-coupling is often a component of the relationship. More succinctly, vulnerability is manifest when interdependence exists. Hoy (2002) described the connection as such, “Interdependence produces vulnerability in the relationship, and vulnerability leads to reliance and risk. Risk creates opportunities for trust” (p. 90). When two parties must rely on each other to accomplish a

task, there is inherently some risk to which they are exposing themselves (Wicks, Berman, & Jones, 1999). Deutsch and Krauss (1962) indicated that trust occurs when one party undertakes actions, which increase vulnerability to another party. Moorman et al. (1992) found “Without vulnerability trust is unnecessary because outcomes are inconsequential for the trustor” (p. 315).

Recent research has repeatedly indicated that without vulnerability in a relationship, trust is not overly important (Chhuon et al., 2008). Where one depends upon the goodwill of another, one is by definition vulnerable to the limits of that benevolence. Trust ceases to be a factor in a relationship if, through the involvement, parties stand to neither gain nor lose anything (Pope, 2004). Curzon-Hobson (2002) found the concept of risk to also be a key element with the practice of trust in a higher education setting. Gambetta (1988) affirms “for trust to be relevant there must be the possibility of exit, betrayal, and defection” (p. 217). According to Coleman (1990), trust occurs when one party is exposed to some risk which is dependent upon another’s achievement. Rotter (1980) identified varying levels of vulnerability individuals are willing to expose themselves to, based upon different circumstances in which they find themselves. Mayer et al. (1995) put forth a model (see Figure 2) which proposes that subordinates who believe a leader to have integrity, competence, and benevolence will be more comfortable performing actions that put themselves at risk.

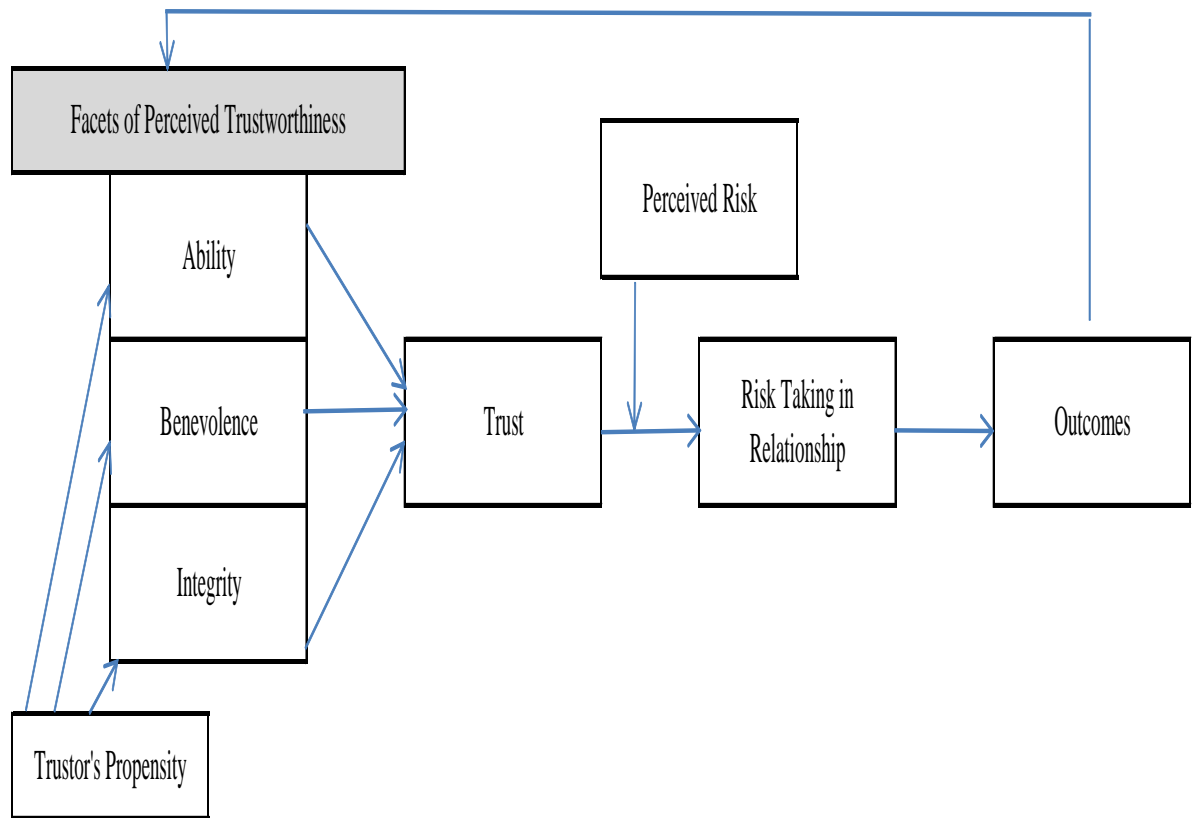


Figure 2 An integrative model of organizational trust. Adapted from Mayer, Davis, & Schoorman (1995)

An important point is that the displayed vulnerability present among the subjects in many of the studies was based on subject's knowledge and prior experiences; not solely on blind faith. In highly efficient organizations, trust is constantly monitored and updated based on continuing and ongoing interactions. In other words, trusting relationships require the occasional inspection to examine whether actors should increase or decrease their willingness to be vulnerable (McEvily et al., 2003; Wicks et al., 1999). Despite the fact that trusting relationships can endure over long periods of time, the behavior of trust is none-the-less episodic, that is, the trustor continually reevaluates her decision to trust the other. Failure to do so leads one to believe the trustor is naïve, is exhibiting blind faith or foolish trust (Flores & Solomon, 1997).

Other scholars view vulnerability through a different lens. Because she views trust as an expectation in the formation of relationships, Zucker (1986) indicates vulnerability only becomes relevant to the trustor after the trustee have caused some harm. Gambetta (1988) and Coleman (1990) view vulnerability and trusting decisions as being based upon the rational choice model i.e., decisions are made based on the likelihood that some harm will come. Regardless of the field of scholarly inquiry, be it psychology, sociology, economics, or educational leadership (Coleman, 1990; Granovetter, 1985; Rotter, 1967; Tschannen-Moran, 2004; Williamson, 1993), researchers continue to explore risk as a condition considered essential to the construct of trust. A willingness to expose oneself to risk, however, does not alone make a trusting relationship. An important element in the willingness to be vulnerable is the belief that the trustee will be benevolent towards the vulnerable party.

Benevolence. Benevolence is another facet frequently associated with the development of trusting relationships (Baier, 1986; Barber, 1983; Brenkert, 1997; Bromiley & Cummings, 1995; Butler & Cantrell, 1984; Chhuon et al., 2008; Cunningham & MacGregor, 2000; Gabarro, 1978; Gambetta, 1988; Mayer et al., 1995; McAllister, 1995; McKnight et al., 1998; Mishra, 1996; Whitener et al., 1998).

Mishra (1996) described benevolence as a firm belief that one's interests will not be harmed by the trusting party. Goddard et al. (2001) defined benevolence as "confidence in the goodwill of those who are trusted or an attitude of mutual concern" (p. 7). When benevolence is present, there exists a special level of thoughtfulness and an authentic concern for the welfare of the trustor (Dietz & Den Hartog, 2006). Baier (1986) indicated that the trusting party depends upon the goodwill of the trustee. Without that belief in the benevolence of the other, one can be vulnerable to, but certainly does not trust in. Specifically, Baier concluded benevolence is the

“accepted vulnerability to another’s possible, but not expected ill will” (p. 236). Benevolence is showing concern for the well-being of others, especially when one stands to benefit (Bromiley & Cummings, 1995) and consists of three actions: demonstrated sensitivity to the needs of others (Mishra, 1996); protecting the interests of others (Mayer et al., 1995); and refraining from the exploitation of others. Jones (1995) described benevolence as one individual’s “reputation of trustworthiness,” actually being “a reputation for not being opportunistic” (p. 421).

Barber (1983) added the element of fiduciary duty or the morally correct role performance by asserting that a professional is required to place the interests of others above his or her self-interests. Instead of trying to hide a problem, an organization desiring to build trust may need to alert the public to problems associated with specific products. The decision to conduct a product recall on its surface seems to reduce trust, but in many cases quite the opposite is true. If handled appropriately, the company can discuss the recall in terms of its goodwill and concern for the public’s well-being, which may indeed help engender trust (Brenkert, 1997). Benevolence may indeed be the cornerstone in any trusting relationship. Openness, honesty, reliability, and competence can all be present, but without benevolence the relationship could turn into oppression or lead to injustice (Baier, 1986). The next section turns to a description of reliability, another oft-cited trust facet.

Reliability. Reliability is possibly the most frequently cited facet defining trust (Butler, 1991; Cunningham & MacGregor, 2000; Hoy & Tschannen-Moran, 1999; Johnson-George & Swap, 1982; McKnight et al., 1998; Mishra, 1996; Shoho & Smith, 2004; Smith & Shoho, 2007). Reliability relates to consistency and regularity of behavior (Dietz & Den Hartog, 2006). As described by Goddard et al. (2001), reliability is “Not usually a onetime affair, trusted individuals are expected to behave both positively and consistently” (p. 7).

Researchers have used others terms to describe the reliable actor (Gabarro, 1978). According to Bryk and Schneider (2003), *synchrony* occurs when the view of job responsibility of the subordinate and supervisor are consistent with each other. This value congruence results when, over time, behaviors are consistent with organizational culture (Forsyth, 2008; Jones & George, 1998). Brenkert (1997) indicated the reliable actor label is given when “Those who do act consistently develop a reputation for steadfastness which may serve to identify them as potential trustworthy agents” (p. 88). Butler and Cantrell (1984) posited that trust develops with the consistency of knowing what to expect from others. Whitener et al. (1998) described the importance of consistency by asserting that when “managers behave consistently over time and across situations, employees can better predict managers’ future behavior, and their confidence in their ability to make such predictions should increase” (p. 516).

Reliability alone, however, is insufficient to establish trust. There is, after all, the chance that someone can be predictably selfish or spiteful. To be considered trusting therefore, this predictable actor must also exhibit genuine concern both in words and actions. Rousseau et al. (1998) indicated that dependability combined with good will “forms the basis for relational trust and gives rise to positive expectations about the trustee’s intentions” (p. 399).

Having one’s welfare predictably weakened, may indeed meet expectations, but the level of trust in the other person or group will certainly be weakened. Reliability, therefore, goes beyond simply being consistent or predictable. It involves a firm belief that one’s requirements or opportunities will be addressed positively (Hoy & Tschannen-Moran, 2003). Furthermore, “more than dependability, reliability combines a sense of dependability, predictability, and benevolence” (Hoy, 2002, p. 91). Even with the belief that the trustee has your best interest in mind (benevolence) and that s/he will act consistently (reliable) without a firm belief that the

person is capable to complete the task, it is highly unlikely trust will develop. As such, the review will next move to another important element in a trusting relationship, the concept of competence.

Competence. In an athletic setting, displaying benevolence and reliability are not enough for one to be trusted. The tasks required of coaches, student-athletes, or athletic directors involve a certain level of competence or skill. Many researchers have been interested in the connection between trust and competence (Gabarro, 1978; Hosmer, 1995; Mayer et al., 1995; Mishra, 1996). Competence refers to the trustee's ability to fulfill specific obligations with regards to skill and knowledge. A person who desires to have trust imparted on her must possess the requisite skills to complete the task at hand (Goddard et al., 2001). Hoy (2002) defined competence as "the ability to perform as expected and consistent with standards appropriate to the task" (p. 91).

In his discussion of the marketplace of trust, i.e., how companies try to sell themselves as firms that can be trusted, Brenkert (1997) indicated competence was an important facet. Specifically he found that in order to be trusted, an organization must have the technological wherewithal considered necessary to complete a project. Other scholars found, without a belief that organizational members possess the requisite competence to fulfill their roles trust is unlikely to develop (Butler, 1991; Mayer et al., 1995; McKnight et al., 1998; Mishra, 1996).

As many scholars have asserted, simply because an individual means well or has good intentions does not signify a person who can always be trusted (Butler & Cantrell, 1984; Hoy, 2002; Mishra, 1996). For example, the student-athlete may perceive that her mentor (coach) wishes nothing but the best and has a strong desire to further develop the athlete's knowledge about the sport. If, however, her coach has a poor record of performance, the athlete may be less likely to trust the coach. While researchers have established the importance of benevolence,

reliability, and competence, those factors alone do not establish trust. Many scholars found a willingness to listen and share information to also be important in the development of a trusting relationship. As such, the next section explores the element of openness.

Openness. Numerous researchers have pointed to the importance of openness in the development of a trusting relationship, be the bond between individuals or organizations (Butler & Cantrell, 1984; Chhuon et al., 2008; Gabarro, 1978; McEvily et al., 2003; Mishra, 1996). Hoffman et al. (1994) found openness and trust to be compliments of each other. It was this important finding which led Hoy and colleagues to add the concept of openness to their operational definition of trust. Accordingly, Goddard et al. (2001) defined openness as “the extent to which relevant information is shared and not withheld” (p. 7). Whitener et al. (1998) found employees who were allowed to participate in decision making were more likely to develop trust in the organization. The open exchange and sharing of information and a full accounting of how and why decisions are made are important components of the openness principle (Butler, 1991; Gabarro, 1978).

Openness is the one facet, which has led scholars to contend that trust is reciprocal i.e., that trust begets trust. Dirks and Ferrin (2001) found because trust promotes the free exchange of knowledge, both party’s become more willing to grant access to each other’s information. This disposition to share information, they argued, indicates trust is reciprocal in nature. That is, the more trusting a relationship, the more willing partners are to share information and the more willing partners are to share information, the more trusting the relationship becomes (Bryk & Schneider, 2003; Dirks & Ferrin, 2001; Forsyth, 2008). If one party is truly open she exposes herself to great risk by sharing or divulging private, personal, or organizational information. By being open, the trustor is expressing confidence that the shared information will not be betrayed.

As described by Hoy (2002) “Openness breeds trust, just as trust creates openness” (p. 92).

While it is important for an actor to be benevolent, reliable, competent, and open those elements alone do not establish a trustworthy relationship. Researchers contend for trust to truly develop, the relationship must contain one more factor. Consider the scenario in which one member of the relationship, while being open, intentionally shares bad information. This lack of good faith would completely undermine the establishment of trust. Consequently, scholars have found that openness without honesty does not equate to trust.

Honesty. Honesty is considered adherence to a set of principles, which include fairness and non-hypocritical behaviors. In fact, honesty may be the first word that pops into the listener’s mind when the topic of trust is broached. Honesty consists of character, integrity, and authenticity (Hoy & Tschannen-Moran, 2003). Honesty is “the truthfulness, integrity, and authenticity of a person or group” (Hoy, 2002, p. 92). Numerous scholars included integrity as a key element in their exploration of trust (Baier, 1986; Butler & Cantrell, 1984; Cummings & Bromiley, 1996; Chhuon et al., 2008; Mayer et al., 1995; Whitener et al., 1998). An important facet of honesty, authenticity is described as a sense of personal responsibility, a willingness to own up for one’s actions and not attempt to shift blame by distorting the truth (Hoy & Tschannen-Moran, 2003). Honesty can be developed by telling the truth and keeping promises. Goddard et al. (2001) indicated that the “words and actions” (p. 7) of the trustee must both match and be reliable. Tschannen-Moran and Hoy (2000) indicated that honesty exists when there is consistency between words and deeds or when employees observe consistency between a supervisor’s language and performance.

These facets, though discrete, join together to create an overall organizational level of trust. For example, if an athletic director is talented with regard to his or her job capabilities

(competence), honest in his or her communication (honesty), open in his or her decision making strategies (openness), and concerned about the well-being of subordinates (benevolence), but his or her actions are erratic (reliability), the negatively perceived value will act as the meter by which the other four perceived positively facets are ultimately gauged. Moreover, one would not trust someone known to have plans to cause us injury; one would not trust someone whose future actions were completely unpredictable; and regardless of the trustee's level of benevolence, openness, and honesty, it would be hard to trust someone who does not possess the essential skills or knowledge to accomplish a task. Thus, organizational trust is the sum of the perception of all five facets taken from the combined organizational constituents (Pope, 2004). Supporting Pope's comments, Mishra (1996) found that the facets of trust combine "multiplicatively in determining the overall degree of trust that one party has with respect to a given referent" (p. 269). With the working definition and discussion of important conceptual elements completed, the theoretical foundation for trust must be established. As such, the next section provides an analysis of the key underpinnings for the study of organizational trust.

Theoretical Underpinnings of Trust Research

Empirical studies: Mixed-motive games. Mixed-motive games are those in which the outcome, either cooperation or competition, is completely dependent upon the decisions made by the game's players. As a means to seek answers to the Cold War tensions in the international community Deutsch (1958), Osgood (1959), and Solomon (1960) used variations of the mixed-motive game as a means to explore the concept of trust. Defining trust in behavioral terms, Deutsch (1958) suggested that trust existed when one player in the game agreed with another player in order to make a mutually beneficial move. Trusting behavior operationalized this way, i.e., in terms of the options selected by game participants, can be considered a process of rational

or calculated choices (Axlerod, 1984; Deutsch, 1958). On the other hand, Osgood (1959) proposed that one party could reduce the overall distrust present in the relationship by acting unilaterally.

Osgood proposed the Graduated and Reciprocated Initiatives in Tension Reduction (GRIT) model, whereby one party would declare that at a given time they would end some restriction, which was in place against the other party. For example, the United States would propose to end some economic sanction or a trade embargo, which would serve as an invitation for the other party to reciprocate. The theory contends that through these appeasing acts of mutual reciprocation, both parties would be encouraged to engage in the spirit of cooperation, rather than competition.

Solomon (1960) attempted to simultaneously support the theories of Deutsch and Osgood. He conceived of a two-person game, which measured how the disparity of social power would impact the expansion of interpersonal trust. Under situations of interdependence, Solomon (1960) proffered that a player who previously displayed an individualistic mindset will alter his behavior in favor of mutually beneficial cooperation. The mixed-method research, while seminal, was not without its critics. Modern day critics include Rousseau et al. (1998) who offer the following assessment: “This blurring of the distinction between trust and cooperation has led to a fuzziness in the treatment of behavior-based trust and the construct of trust itself” (p. 394). Additionally, Rotter (1967) indicated that the focus on the forced duality of cooperation or competition failed to take into consideration the effect an individual’s personality would have on her decision to trust.

Disposition to trust. Psychologists in the late 1960’s were witnessing great upheaval on college campuses around the world and shifted the focus of trust research to the study of

personality traits. Dispositional trust theory was developed using social learning theory and infers that a combination of the socialization process and personal experience will greatly affect an individual's ability to trust (Bigley & Pearce, 1998; Hardin, 1993). Thus as a means to develop his *Interpersonal Trust Scales*, Rotter (1967) theorized that social learning theory expectancies, born out of previous incidents or experiences, would generalize how someone believes they are expected to later respond if a similar situation were to arise. As Baier (1986) explained,

Some degree of innate, if selective, trust seems a necessary element in a surviving creature whose first nourishment come from another, and this innate, but fragile trust could serve as an explanation both of the possibility of other forms of trust and of their fragility (p. 242).

Later research into dispositional trust theory instead focused more on distrusting predispositions. According to Hardin (1993), if an individual has an expectation that they will be exploited, those with a predisposition to distrust will tend to avoid cooperation or participation in group activities. Gambetta (1988) found that initial trust is based more on a dearth of contradictory evidence as opposed to a surplus of confirmatory evidence. Trusting (or not) can in fact be a self-fulfilling prophecy, which predisposes us to make decisions confirming our previously held beliefs (Tschannen-Moran, 2004). McKnight, Cummings, and Chervany (1998) posited a theory of initial trust, which was based upon an individual's disposition to trust or an institutional culture which allows for trust. They contend trust develops during childhood as a child searches for help from a caregiver.

In a study replicating earlier research of Mayer, Davis, and Schoorman (1995), Gill, Boies, Finegan, and McNally (2005) found perceived ability, benevolence, and integrity of the

trustee to be strong predictors of an individual's intention to trust. Their findings confirmed those of the earlier study in that "the characteristics of the trustee influence the trustor's intention to trust" (p. 297). While there is still a research focus on dispositional trust, into the 1980's trust research began to have more of a focus on the interpersonal relationship, especially among members of the same organizational structure. Relational-based trust is an oft-used lens through which trust has been explored (Hoy, 2002; Shoho & Smith, 2004).

Interpersonal trust. Often referred to as relationship-based trust (Rousseau et al., 1998), interpersonal trust has been a branch of trust literature explored by scholars in a variety of fields (Dirks, 1999; Dirks & Ferrin, 2002; Hoy & Tschannen-Moran, 1999; Johnson-George & Swap, 1982; Mayer et al., 1995; McAllister, 1995; Whitener et al., 1998). Relational-based trust arises through multiple interactions between two parties over some period of time and refers to the development of a common, shared identity such that each party can represent the other with full confidence (Dietz & Den Hartog, 2006). These regular exchanges lead to parties becoming emotionally invested and attached to one another based upon the communal benevolence (McAllister, 1995). Furthermore, these repeated, on-going, and regular social exchanges have been shown to be an important factor in helping trust to develop in educational settings (Chhuon et al., 2008).

As described by Rousseau et al. (1988) "Repeated cycles of exchange, risk taking, and successful fulfillment of expectations strengthen the willingness of trusting parties to rely upon each other and expand the resources brought into the exchange" (p. 399). A consequence of the strong emotional bonds created in interpersonal trust is that relationships are more likely to withstand a breach than are the more calculus-based or rational exchanges. However, as relational-based trust has a foundation built upon personal qualities and motives, which reflect

benevolence rather than on process-based specific behaviors, it is more subjective and emotional in nature (Creed & Miles, 1996).

Detailing that level of subjectivity, Whitener et al. (1998) defined interpersonal trust as “an attitude held by one individual – the trustor – toward another – the trustee” (p. 513). They indicated that interpersonal trust has three facets (benevolence; a willingness to be vulnerable; and a level of interdependency) all of which are a combination of the trustor’s insights and attitudes based on observations of the trustee’s behavior. Whitener et al. posited that managers and leaders are responsible for initiating the trusting relationship. They propose five behaviors that impact the growth of trust: behavioral consistency (reliability), behavioral integrity (honesty), participative decision making (openness), communication (openness), and demonstrating concern (benevolence).

Another major consideration in relational trust is how one individual or group interprets the other’s behavior and how that interpretation in turn impacts the trustor’s decision to expose herself to risk (Bigley & Pearce, 1998; Chhuon et al., 2008). Dirks and Ferrin (2001) found that “because trust represents an individual’s understanding of a relationship, we propose it engenders two distinct processes through which it fosters or inhibits positive outcomes in a relationship” (p. 456). Specifically, trust affects both how one assesses the expected future behavior of the trustee and how the trustor interprets past or current trustee behavior. McAllister (1995) described interpersonal trust as the extent to which a person is confident in and willing to act on the basis of the words, actions, and decisions of another. McAllister proposed two forms of interpersonal trust; cognitive and affect-based.

Competence (Butler, 1991) and reliability (Johnson-George & Swap, 1982) are two facets of cognition-based trust. In cognitive or knowledge-based forms of trust, scholars contend

that trust develops over time as one accumulates relevant knowledge about the other party or organization (McEvily et al., 2003). Researchers found trust relies on a person's ability to make effective first impressions using cognitive clues (Lewis & Weigert, 1985). McAllister (1995) indicated that we select who we are going to trust on sound rationale, based upon knowledge-based evidence. Cognition-based trust, however, is not without its critiques.

For example, research has uncovered a significant distinction between affect-based and cognitive-based forms of interpersonal trust. Johnson-George and Swap (1982) view cognition-based trust as “more superficial and less special than affect-based trust” (p. 1316). It is for this reason that organizational trust can be better understood using a combination of both cognitive and affect-based trust facets. Many scholars discuss trust in terms of it being an emotional state (Johnson-George & Swap, 1982; Lewicki & Bunker, 1996; Mayer et al., 1995; McAllister 1995). McAllister specifies that affect-based trust consists of the emotional bonds between people. A basic tenet of affect-based trust includes the expression of genuine concern for the well-being of the other (benevolence).

Jones and George (1998) explored interpersonal trust more deeply and developed a model consisting of three separate qualities (values, attitudes, and moods or emotions), which evolved from their interactions. They posited that values are more similar to affect-based forms of trust and consist of reliability, openness, consistency, integrity, and competence. Conversely, attitudes are more congruent with knowledge-based trust and are based on knowledge, beliefs, and feelings about the other. These attitudes are inherently evaluative in nature. The third quality, moods or emotions, indicated how people feel and how they go about day-to-day living. Using the intersection between these variables as the place where trust exists (or does not), Jones

and George (1998) theorized three states of trust: distrust; conditional trust; and unconditional trust.

Conditional trust as described by Jones and George (1998) is a “state of trust in which both parties are willing to transact with each other, as long as each behaves appropriately, uses a similar interpretive scheme to define the situation, and can take the role of the other” (p. 536). The attitudes of the two parties involved in the exchange are positive enough to foster future interactions. They further contend that conditional trust is the common form of trust in most organizational settings and it is typically adequate to make possible a wide range of organizational exchanges. They concluded that conditional trust, i.e., a positive expectation of the other (Hoy, 2002), is part of the foundation upon which other levels of trust are established.

Jones and George (1998) indicated unconditional trust consists of mutually assured trustworthiness. When a state of unconditional trust is reached, each party has the utmost confidence in the other’s benevolence, competence, reliability, openness, and honesty (Shoho & Smith, 2004; Smith & Shoho, 2007). In other words, knowledge of the other’s attitude, values, and emotions has continuously been confirmed through frequent behavioral interactions (Butler, 1986). The relationship then bolsters each party’s positive emotions, which in turn strengthens the emotional bonds between parties, leading to even deeper feelings of trust. Jones and George (1998) thus argued that in a state of unconditional trust, the reciprocal nature of the trusting relationship might lead to feelings of shared identity (Dietz & Den Hartog, 2006; Lewicki & Bunker, 1996). Another term for this value congruence is situation normality. That is, a team member’s belief in the normalcy of the organizational situation helps to quickly establish a level of comfort which can aid in the rapid formation of intention to trust others in the organization

(McKnight et al., 1998). Put another way, the setting appears as normal; you walk into a library, you see books, the surroundings appear as they should (Baier, 1986).

These various states of trust are found at the interaction between values, attitudes, and moods and emotions and involve a dynamic process, which evolves over time. Jones and George (1998) further postulated that, in terms of organizations, conditional trust allowed for effective work, but unconditional trust could “convert a group into a team” (p. 539). In concluding their study of interpersonal trust, Jones and George (1998) wrote that “a real source of competitive advantage deriving from organizational capabilities is an organization’s ability to create the conditions that allow its members to experience unconditional trust” (p. 543). While much of the recent trust literature has focused on expectations and vulnerability associated with risk, other scholars have taken a more economic based view of the trust relationship. As such, the review next proceeds to an examination of rational models of trust.

Calculus-based trust. Calculus-based trust is referred to by many names, deterrence-based (Rousseau et al., 1998), calculative-based (Lewis & Weigert, 1985), and rational choice trust (Gambetta, 1988). It has its underpinnings in both social exchange and agency theory. The social exchange theory assumes that trust develops from repeated mutually beneficial. Whitener et al. (1998) detailed the social exchange process as beginning when “One individual voluntarily provides a benefit to another invoking an obligation of the other party to reciprocate by providing some benefit in return” (p. 515). Blau (1986) asserted that trust can be developed through two methods. The first is by two parties regularly reciprocating benefits received from another party. The second method involves a progressively expanding number of exchanges accumulated over time. The social exchange theory is different from other economic exchange theories because the specific benefits are typically not addressed *a priori*. In essence, according

to social exchange theory, the trust exchanges involve ambiguity and the benefits are offered voluntarily, since there is no assurance the benefit will be reciprocated. As a result, trusting relationships develop slowly and begin with relatively low-value remuneration. These low-level exchanges continue until the parties demonstrate sustained trustworthiness.

Conversely, agency theory examines how principles and agents act to insure their own interests by closely examining the relationships they develop. Agency theory describes the trusting relationships between two parties as a series of economic exchanges (Whitener et al., 1998). It assumes self-interest and as a result the parties seek to minimize risk. An offshoot of agency theory, deterrence-based trust does not involve any positive expectations of goodwill and involve situations in which there is effectively no risk. The threat of sanctions is the only thing assuring compliance (Dietz & Den Hartog, 2006; Rousseau et al., 1998). Whether referred to as calculative-based or rational choice trust, in this framework trust is a state of mind and purely cognition-based (Johnson-George and Swap, 1982).

In describing rational choice trust, Gambetta (1988) asserted the one who trusts (trustor) calculates the risk (or lack thereof) before deciding to trust. Furthermore, Coleman (1990) stated “the elements confronting the potential trustor are nothing more or less than the considerations a rational actor applies in deciding whether to place a bet” (p. 99). Calculus-based trust is based on rational choice and economic exchanges. In other words, trust is only considered viable after a strict cost-benefit analysis is performed (Dietz & Den Hartog, 2006). Those involved in relationships trust, but verify and are only willing to do so under specific or limited circumstances. According to Rousseau et al. (1998) in calculus-based trust “opportunities are pursued and risks continually monitored” (p. 399). Moreover, elements of reciprocity may factor into one party’s decision to trust. If one party knows there are clearly defined, built-in

punishments activated with a trust violation, the possible sanction may provide the required element to underpin a trusting relationship.

Axlerod (1984) and Deutsch (1958) also discussed trust from a rational decision framework and defined it in terms of competition and cooperation. Other scholars contend that by-products of rational-based trust, contracts and controls, can actually be viewed as “substitutes for trust” (Hosmer, 1995, p. 386), rather than trust in its true form. While contracts and other control mechanisms may be trust substitutes, in reality they are required components of business because of the difficulty in identifying the untrustworthy agent. An offshoot of the complexity in distinguishing the trustworthy from the untrustworthy, many organizations often structure themselves as if no one can be trusted (Williamson, 1975). Williamson (1993), also a proponent of the economic based model, indicated that trust decisions are based upon a rationally derived cost-benefit analysis undertaken by the trusting party.

Lewis and Weigert (1985) hinted at a calculative-based trust form but use the term rational prediction. In describing rational prediction, Lewis and Weigert indicated that trust decisions are made in a calculating way. One agent will make a rational choice with regards to the risks and benefits involved in trusting another. Lewis and Weigert concluded, however, that trust was not exclusively an individualistic and calculative decision. It is instead based upon social and normative interactions that required prior relationships. Much research has sought to disprove the strict economic relationships described in both social exchange and agency theory.

Wicks, Berman, and Jones (1999) indicated that proponents of the rational choice model removed many of the core fundamentals of trust, instead reducing it to a predictive model. They contend to earn the label of trust other elements must be present. Furthermore, two important affective elements, emotions and morals, are missing from the rational choice model. In order for

trust to occur, Wicks et al. (1999) argued there must be an emotional bond, which leads to a *leap of faith* or vulnerability. They also asserted there must be a belief in the moral goodwill, (i.e., the benevolence), of the trustee (Baier, 1986; Becker, 1996; Hosmer, 1995). Arguing against the rational choice perspective, Granovetter (1985) forwarded the belief that trust begets trust. If one party proved to be trustworthy in the past, the other party will be more likely to trust that person in the future.

Others disagree with the rational choice model more bluntly. Becker (1996) wrote, those who perpetuate calculative or rational choice model “appear to eliminate what they say they describe” (p. 47). Wicks et al. (1999) argued that context is the overarching element, which precludes the strict use of the rational choice model. Dietz and Den Hartog (2006) offered a critique of calculative-based trust by asserting that any potential *a priori* suspicion in the relationship is never fully mitigated. In their study on the development of functional school communities, Lee, Bryk, and Smith (1993) found that “relationships are based on trust, rather than contracts” (p. 197). Rousseau et al. (1998) argued that trust is neither a deed (as in cooperation) nor a selection (as in calculated risk), but is rather a psychological condition, an attitude, that causes or results from specific actions within the life of an organization; actions which have risk and interdependence at their heart.

Optimal trust. In Aristotelian ethics, the focus is based on finding the golden mean i.e., the optimal balance between too much and too little trust. Some scholars refer to this concept of the optimal balance as “prudence” (Wicks et al., 1999, p. 103). Expanding upon the idea of balance (or prudence) McKnight et al. (1998) developed a model to explain an individual’s initial high trust levels based on his or her *disposition to trust*. The model they created indicates disposition to trust is a combination of faith in humanity (personality-based) and a trusting stance

(calculative-based). Wicks et al. (1999) found trust to be a “conditional good” (p. 99). A good in which an individual can either under or over invest in; neither of which is ideal. They found an organization guilty of over-investment in trust exposes itself to too much risk. Conversely, the organization, which under-invests in trust misses out on opportunities to improve efficiencies and develop organizational competencies which are not possible without trust. Consequently, Wicks et al. (1999) asserted there needs to be a healthy combination of the rational choice perspective (to prevent blind, naïve trust) and affective based trust (required to develop and sustain relationships). This zone of optimal trust develops when there exists a match between levels of trust and levels of interdependence in a given relationship (McAllister, 1995; Wicks et al., 1999). Though not directly describing the concept as optimal trust, many researchers examined trust through multiple lenses.

Multiple framework studies of trust. Much of the research on inter-organizational functioning described trust as existing in three forms: contractual, competence, and goodwill. Contractual trust suggests that each party keeps promises and adheres to agreements. Competence trust refers to the belief that a party is capable of performing its role. Goodwill trust is present when both parties have an open commitment to each other. The combination of these three forms of trust adds to the social memory (Barney & Ouchi, 1986) and if highly developed can lead to a strong inter-organizational bond (Dodgson, 1993). Dodgson (1993) found “effective learning between partners depends on the construction of a climate of trust engrained in organizational modes of behavior and supported by the belief in the mutual benefits of collaboration throughout the organization” (p. 78).

Zucker (1986) described trust as being comprised of three stages, which are based upon commonalities shared by the trusting parties. *Process-based trust* was tied to a record of past

operations and exchanges were limited to those with whom histories were known and respected. *Person-based trust* resulted when two parties shared a background in a common cultural system. *Institution-based trust* exchanges are limited to those parties whom can provide the highest level of assurances regarding the outcome.

Williams (2001) asserted that trust is not an either or behavior, but the degree to which one trusts can be considered as varying along a continuum. Similarly, philosophers Flores and Solomon (1997) described five forms of trust. *Simple trust* is unchallenged and naïve, that of a well-raised child. It is effortless and devoid of trust in a refined sense. *Blind trust* is stubborn and obstinate, possibly self-delusional, and it denies the very existence of distrust. They shift into what they call ‘real trust,’ by describing *basic trust* as the physical and emotional security taken for granted on a daily basis. Basic trust is aware of distrust, but considers it strategically. For example, if I drive my car at 2am I may be involved in a car crash with a drunk driver. There are, however, strategies I can use to avoid a collision. The next rung up the trust ladder, *articulate trust*, recognizes distrust as an alternative. Lastly, Flores and Solomon described *authentic trust* as the ultimate aspiration in the decision to trust. It is an attitude developed by one who has completely considered and taken into account the ramifications of distrust, yet has decided to be trusting anyway. Authentic trust is rational and warranted and always good, because the alternatives have been strongly considered.

Although Flores and Solomon (1997) described a sliding scale, they contend trust and distrust exist as shadows of each other rather than occupying opposite ends of the same continuum. Trust and distrust are not contradictory (which would imply that only one can be present at any one time), instead they are contrary (in which case you can have both or neither). They describe the contrary nature of trust by using the following example. Party X does not trust

party Y because they have no interactions or relations with each other. This lack of trust does not automatically imply party X distrusts party Y. Rather than distrusting party Y, party X may simply be indifferent. Flores and Solomon (1997) espoused, “The truth seems to be that both [trust and distrust] are necessary, in healthy proportion” (p. 57).

Unlike Flores and Solomon’s contrary theory, Dietz and Den Hartog (2006) proffered a contradictory model which defines trust as existing along a five-pronged continuum ranging from deterrence-based trust on the far left to identification-based trust on the far right. The other categories of trust, from left to right are, calculus-based trust, knowledge-based trust, and relational-based trust. These scholars contend that “true trust” does not begin until the relationship moves beyond calculus-based and into knowledge-based trust. Their argument is that in deterrence-based trust, most facets of trust are missing. Additionally, in calculus-based trust, the concepts of benevolence and openness are not present. They asserted the entrance into true trust occurs when a relationship reaches the knowledge-based level. It is at that level where decisions to trust are made with consideration of the trustor’s knowledge about the trustee’s motivations and aptitudes. They indicated that trusting relationships develop first as a belief, then as a decision, and finally as an action.

Trust as Belief refers to the attitude about the relationship, which leads one party to draw conclusions regarding positive or negative impacts associated with actions of the other party (Dietz & Den Hartog, 2006). Nooteboom, Berger, and Noorderhaven (1997) found the trustor’s belief about the trustee’s trustworthiness to be a strong predictor of the decision to trust. *Trust as Decision* has been classified by numerous researchers as a willingness to be exposed to risk (Mayer et al., 1995; Mishra, 1996). At this stage the belief manifests itself and “implies . . . the intention to act” (Dietz & Den Hartog, 2006, p. 559). Importantly, however, though the decision

to act has been made, there is no implication that one party will actually follow through on that intention. Until *Trust as Action* starts, the belief in and decision to trust are hollow. Without this final important component, trust is nothing more than a theoretical conceptualization (Dietz & Den Hartog, 2006; McEvily et al., 2003). In summary, scholars have found trust to consist of three necessary components “an expectation, a willingness to be vulnerable, and a risk-taking act” (McEvily et al., 2003, p. 93).

The literature review next moves to a discussion of trust in terms of organizational culture and highlights the study of trust in various work settings.

Trust in the Workplace

“Trust is the essential lubricant of successful working relationships” (Gill et al., 2005, p. 288).

Trust and organizational culture. Ouchi (1981) indicated trust is readily recognized as paramount to the well-functioning organization. Providing empirical justification for Ouchi’s contention, numerous studies during the last decade highlight why trust does indeed matter (Tschannen-Moran, 2004). Tan and Tan (2000) found that “trust in supervisors was significantly and positively related to satisfaction with supervisor and innovative behavior” (p. 249). In their study on the types of trust found in economic exchanges, Barney and Hansen (1994) established strong trustworthy behaviors may provide an organization a source for competitive advantage.

Furthermore “research has demonstrated that organizations that develop positive relationships of this nature have benefited from outcomes such as decreased costs and increased risk taking behaviors, as well as increased motivation for collaboration and improved communication” (Pope, 2004, p. 75). Additionally, Bromiley and Cummings (1995) found that higher levels of organizational trust can lead to reduced transaction costs. These lower costs may

occur because an organization whose members can be trusted will spend less time and effort in the development of control mechanisms.

Building a culture of trust has been found to be essential to the operation of effective schools (Hoy, 2002; Hoy et al., 1996; Tschannen-Moran, 2004) and while no one person can completely shape the culture of the work environment, the role of the campus administrator or organizational leader is critical in doing so (Hoffman et al., 1994). Dirks and Ferrin (2002) reported significant relationships between the perception of leadership behavior and a failure to meet subordinate expectations. Trust has been established as critical in developing relationships among work colleagues (Bromiley & Cummings, 1995). Yet Pope (2004) found that an organization's ability to establish personal, trusting relationships was strained when increasingly complex decision making processes are coupled with the development of additional administrative layers.

Pope's findings indicate why trust can be difficult to establish in large, complex organizations. Wicks et al. (1999) discovered trust to be a dynamic and continuous variable, providing one more reason why trust is a difficult construct to study. McEvily et al. (2003) named the intricate nature of organizational trust *multiplexity*. The theory of multiplexity infers that trust takes time to develop because of its complex, multi-layered nature. Through a series of interactions, co-workers update information about each other and over time gain confidence in each other's reliability, competence, and honesty. The importance of developing trust, however, does not only extend to collegial relationships. Much research has explored the nature of trust in the context of the supervisor and subordinate relationship.

Trust in leadership or supervisor. Butler and Cantrell (1984) explored whether a difference existed between the conditions of trust when measured up the organizational chart,

rather than down. That is, are certain facets of trust more important when discussing subordinates rather than bosses? In terms of the organization, researchers have considered them analogous to social structures. Coleman (1984) wrote that “a social organization is like a power grid of trust” (p. 85), which could fail along its weakest point. Hosmer (1995) advanced this notion by asserting,

One person’s trust in another may be conditional upon trust in a third person to enforce the earlier . . . agreement. Trust in the third person, of course, may then be conditional upon trust in a fourth, and so on (p. 388).

Accordingly, research has indicated an important relationship between trust and workplace behavioral outcomes (Dirks & Ferrin, 2001). In their study with telephone and automotive plant workers in Canada, Cunningham and MacGregor (2000) found trust and job design to be complimentary, but independent constructs both of which enhanced job satisfaction. Additionally, in a multi-national study, Huang and Dastmalchian (2006) reported a significant relationship between trust and job satisfaction.

McEvily et al. (2003) found that when an employee has higher levels of trust in her manager, she will be more disposed to disclose limitation in skills and job abilities because she expects the manager will not use such openness negatively in the future. Confirming those results Dirks and Skarlicki (2004) indicated: “Trust in leadership allows the individuals in the team or organization to suspend their individual doubts and personal motives and direct their efforts toward a common team goal” (p. 27). Furthermore, Tyler and Kramer (1990) found that individuals are more likely to consider views of the organization to be legitimate when they feel a high level of trust for those in positions of authority. Lewis and Weigert (1985) wrote:

Trust underlies the operation of social power and actually *creates* power. Those who hold trust hold power. Whether power is based on control of money, property, political office, or other sources, there is one common denominator: those who have power are sooner or later tempted to exercise it, and the powerless must trust the powerful to use the power well, or else they live in constant fear (p. 459).

As Ouchi (1979) recognized, “people must either be able to trust each other or to closely monitor each other if they are to engage in cooperative enterprises” (p. 846). Researchers have indeed discovered that trust with benevolence at its core actually empowers employees and unshackles them to put their time and other resources to more effective use. McEvily et al. (2003) found empowerment develops if “organizations . . . grant agents the freedom to use their own discretion as a means of conveying their willingness to fulfill obligations and meet the positive expectations . . .” (p. 99). When one combines the reduction in transaction cost (Jones, 1995; Dyer & Chu, 2003) with the increased transaction value (Zajac & Olsen, 1993), it becomes evident that empowering employees through the use of trust may improve organizational output. Directly exploring the concept of empowerment, Moye and Henkin (2006) administered surveys to 2000 employees from 500 manufacturing companies and found employees who felt more empowered tended to have higher levels of interpersonal trust in their supervisors.

McEvily et al. (2003) attempted to conceptualize trust as an organizing principle or as “a heuristic for how actors interpret and represent information and how they select appropriate behaviors and routines for coordinating actions” (p. 92). As such, they contend that because it involves the element of vulnerability, trust allows co-workers to preserve intellectual or cognitive capital. In other words, the trust heuristic allows the person receiving information from a trusted source to immediately act upon the information and not take time examining its

veracity. Furthermore, using trust as a heuristic simplifies the decision making process because it allows information to be more easily processed and it creates certain expectations about peer group behaviors.

In a single case study of Orpheus, the world's largest conductorless orchestra, Khodyakov (2007) found that when members were considered to be skilled and dedicated, confidence in them grew, even when the orchestra's future was deemed to be uncertain. He found goodwill trust (benevolence) and competence trust to be the most important facets. This allowed the orchestra to use social control mechanisms rather than more formalized control techniques. Orchestra members overwhelmingly agreed that the social control measures allowed for greater creativity, freedom, and flexibility. Khodyakov did, however, find that behavioral, input, and output control techniques used in combination benefited the orchestra overall. Put simply "control and trust can complement each other because they create one another" (Khodyakov, 2007, p. 17).

As the above research indicates, when organizational members trust those in authority they are more likely to act in ways which benefit the entire organization (Axlerod, 1984; Dirks, 1999; Elsass, 2001; Gambetta, 1988; McAllister, 1995). Findings from numerous studies indicate that trustworthiness makes possible an adherence to management decisions and feelings of responsibility to adhere to the established norms, values, and practices (Jones & George, 1998; Tyler & Kramer, 1996). Moreover, in terms of the present study, trust is an important forbearer of voluntary collaboration in school settings and in teams. Subsequently, by recognizing the norms connected to trust, athletic department personnel engender members to trust and to be inspired to work towards a common good. The review proceeds to an examination of the ways trust has been studied in various K-12 settings.

Trust in the school environment. Rotter (1967) provided the initial justification for studying trust in the school setting by designing a large-scale qualitative study on teacher and student relationships. He found that since the students are without the ability to corroborate the teacher's information, the student must trust and believe the teacher's lessons in order for learning to take place. Furthermore, in terms of academic success, Hoy (2002) found a trusting relationship between students and faculty to be of utmost importance. Other research showed a significant relationship between strong teamwork culture and school effectiveness. Tschannen-Moran and Hoy (1998) posited school climate to be the enduring quality of organizational life on an individual campus. Scholars asserted that one important element in establishing a positive school climate (organizational culture) was a strong link between trust and openness (Cummings & Bromiley, 1996; Hoy & Tschannen-Moran, 1999; Mishra, 1996). Numerous studies found that openness can lead to high levels of collaboration between teachers and principals, between faculty and peers (Hoy, Tarter, & Witkoskie, 1992), and between faculty and students (Goddard et al., 2001).

Educational leadership scholars have found that regardless of grade level (elementary or secondary), there is a positive association between openness and faculty trust (Hoffman et al., 1994; Hoy et al., 1991; Hoy et al., 1992). In order for organizational leaders to produce an organizational climate capable of pushing employees to do more than the bare minimum, they must focus on developing trust (Hoy, 2002; Hoy & Kupersmith, 1985; Hoy & Miskel, 1987; Hoy & Tschannen-Moran, 1999). In addition, to promoting a more positive school climate (Hoy et al., 1991), openness is considered an important facet of organizational mindfulness as well (Weick & Sutcliffe, 2001).

Butler (1991) and Gabarro (1978) found that managers who freely and openly exchanged thoughts and ideas with employees enhanced the perception of organizational trust. The accomplishment of group objectives has also shown to be positively related to interpersonal communication (Dirks, 1999). Others have found as employees' trust-in-coworker expands, the more willing they are to cooperate and share information (Zand, 1972). Tschannen-Moran and Hoy (2000) furthered the findings of Zand by finding that communication has an impact on employee trust. By contrast, in organizations where low levels of trust are present and data are frequently withheld, members end up cooperating only under a mindless system of formal policies and controls (Shapiro, 1987; Zucker, 1986).

Trust is also crucial in both school leadership and the development and impact of quality relationships between school administrators and faculty (Hoy et al., 1992; Tschannen-Moran, 2004). In a study of more than 2500 teachers in 86 middle schools, Tschannen-Moran and Hoy (1998) indicated that the principal directs her own fortune by behaving in ways that either encourages the development trust or distrust. Hoy and Kupersmith (1985) found that leaders who exhibited consistency in beliefs, goals, and performance were more likely to be trusted by school faculty.

Furthermore, Hoy et al. (1992) found compassionate leadership on the part of the principal impacted the extent to which teachers felt trust for their campus administration. Moreover, exhibiting the mindful characteristic of shared decision-making proved to be a trust engendering activity for school leaders (Tschannen-Moran, 2004). Yet another mindful method school leaders can employ to develop a trusting organizational climate is by encouraging faculty, without the fear of reprisal, to openly voice concerns and frustrations (Tschannen-Moran & Hoy, 1998).

Trust in student and trust in leader, however, are not the only important aspects of a positive, trusting school culture. Numerous studies found a positive relationship between the faculties trust in each other and their trust in school leadership (Hoffman et al., 1994). Bryk and Schneider (2003) conducted research into the improvement of Chicago public schools over a ten-year period. They found four distinct lenses through which teachers determined whether or not to trust their colleagues. Faculty members who respected the specific roles each individual played in the educational process, were competent in their abilities to carry out their own duties, had personal regard for the working environment, and had a strong moral guidepost which lead to high levels of integrity were more likely to garner trust than those who did not exhibit those characteristics. Trust is clearly an important element associated with positive outcomes in the K-12 setting, but is that the case in the college sport setting as well? To discuss that question it is important to review the previous studies of trust in university athletic offices.

Organizational trust in intercollegiate athletics.

“In order to pull the wagon, all the horses have to be pulling in the same direction and cadence. Trust helps with that” (Dirks & Skarlicki, 2004, p. 27).

The economic downturn, which begun in 2008, has begun affecting the campuses of small, private liberal arts colleges (most of which compete at the D-III level) and will continue to do so for the foreseeable future. One rationale for this study lies in the financial commitment made by many institutions to maintain an athletic department. Both in terms of actual and opportunity, the costs associated with maintaining intercollegiate athletic departments are real and documented (Bowen & Levin, 2003). So the question becomes, is the cost justifiable? Would the university be a better place without departments of athletics – with that money being spent on other endeavors? In the current economic environment, with rising fuel costs and other

expenses, the D-III athletic director may face pressure to justify the costs associated with travel, a large number of teams, and expanding roster sizes. Intercollegiate athletics especially at the D-III level, however, has little to do with dollars and cents. It is about impacting the lives of student-athletes, not selling tickets or advertising.

There has been no research which explores the relationship between trust and mindfulness in higher education, and scant research has focused on NCAA Division III coaches and their perceptions (Rouff, 2007). Most of the athletic-related trust studies explored micro-level organizational behavior topics such as satisfaction, job performance, and organizational commitment rather than macro-level organizational theory topics like culture (Chelladurai & Ogasawara, 2003; Dirks, 2000; Turner, 2001; Turner & Chelladurai, 2005). In the limited research there has been, however, trust appears to be an important organizational process operating in athletic departments.

In a macro-level study, Gould, Guinan, Greenleaf, and Chung (2002) found that a coach's inability to establish trust with his/her athletes and to appropriately manage crisis situations while making evenhanded decisions influenced his/her perceived effectiveness. As Hoy and colleagues discovered, it is important to study trust in all areas of the organization; "The culture of trust is an organizational ethic that is compromised of collegial professional relations and trust in both one's colleagues and one's supervisors" (Hoy, Tarter, & Witkoskie, 1992, p. 39). Furthermore, Dirks and Skarlicki (2004) contended, "Exploring trust from the viewpoint of peers is highly relevant in light of the growing presence of lateral relationships in organizations" (p. 32).

Organizational culture is not a theoretical construct, but one that can have real world, practical applications. Understanding culture can assist organizational members to minimize both

the incidence and cost of conflict and help cultivate the growth of shared goals (Tierney, 1988). Conversely, Yukelson (1997) indicated the inability of an athletic director to create a trusting environment can,

subsequently lead to problems in performance and feelings of withdrawal or resentment.

In addition, factions and cliques divide team loyalties, individuals can become disconnected from the realities of teamwork, drives and motivation can shift direction and/or intensity, and as a consequence, chaos can prevail (pp. 74-75).

Moreover, evidence exists which indicates a negative relationship between job satisfaction and turnover (Mathieu & Zajac, 1990). The effects of turnover, including cost (Turner, 2001) and impact on team performance (McQueary, 1997) indicate a strong reason to retain members of the coaching staff by focusing on the creation of an open, collegial, and trusting environment (Chelladurai & Ogasawara, 2003). As Yukelson (1997) found, “one of the most gratifying experiences a coach or athlete can have is to be a member of a team that gets along well and works together efficiently in a cohesive, task-oriented manner” (p. 74).

Furthermore, Turner and Chelladurai (2005) found it much more cost effective to retain a competent coach than to replace and train a new one. Additionally researchers have shown that trust develops over a period of time (Baier, 1986; Jones & George, 1998). Thus, reducing turnover in organizations is important, both as a means to reduce expenses and to facilitate the development of a trusting environment. It can therefore be understood that trust and organizational climate factors, such as retention, are reciprocal. That is, the more trust established in the organization, the more likely there is to be a positive working environment. Reciprocally, the more positive the working environment, the more likely there is to be trust in the organization (Forsyth, 2008).

This network of mutually reinforcing expectations creates the opportunity for cooperation rather than non-cooperation, as an organizational outcome. Trust and honor are, in essence, by-products of an organization whose culture embodies these shared values. Dirks and Skarlicki (2004) indicated trust in leadership is important because it simultaneously supports maximizing the effort of organizational members and guiding those efforts toward a common end. Put simply, the behavior of the leader matters in regards to creating an environment conducive to retaining employees in non-academic university positions (Smerek & Peterson, 2006), in athletic departments (Snyder, 1990), and specifically in Division III athletic departments (Weaver & Chelladurai, 2002; Yusof, 1998).

This review of the extant trust literature presents an exhaustive exploration of trust in the many forms it has been researched. The broad exploration of the various trust studies provides an understanding of why organizational trust in intercollegiate athletic departments is a topic worthy of focus. As described by Butler (1991, p. 647),

. . . the literature on trust has converged on the beliefs that a) trust is an important aspect of interpersonal relationships, b) trust is essential to the development of managerial careers, c) trust in a specific person is more relevant in terms of predicting outcomes than is the global attitude of trust in generalized others, and d) a useful approach to studying trust consists of defining and investigating a number of conditions (determinants) of trust. Embedded in the trust literature, there were a few references to the linkage to mindfulness. The focus of the literature review now proceeds to an examination of the construct of organizational mindfulness.

Mindfulness

“There are no failures, only ineffective solutions” (Langer, 1989, p. 34).

Deal and Kennedy (1982) describe effective organizations as having similar characteristics. These organizations show concern for the individual at the expense of formal rules and policies, have a shared philosophy, have an understanding of the informal operating rules, and a belief that the actions of every employee is important to everyone else. Without using the exact terms, Deal and Kennedy described a culture of interconnectedness, shared benevolence, and commitment to mindful practices.

Mindfulness is fundamentally a method of making organizational decisions. Slack and Parent (2006) indicate that organizations make two basic types of decisions. Programmed decisions are considered to be repetitive and routine. Moreover, they are usually made when there is a large amount of data and options are easy to calculate. Non-programmed decisions, conversely, occur in situations that are novel. Slack and Parent contend these non-programmed decisions are typically made by upper level staff or by other staff members who have been highly trained and may be considered expert in a particular area.

Slack and Parent (2006) detailed three conditions under which those programmed or non-programmed decisions are made. A under a condition of certainty is considered made when “When the manager making the decision knows exactly what the available alternatives are, and the costs and benefits of each alternative” (Slack & Parent, 2006, p. 259). Under the condition of risk the potential harms and gains associated with a particular decision are not readily known. Other research has indicated decisions made in conditions of risk typically occur in high velocity environments (Parent, 2010). These high velocity environments are places “where decision makers have little or no time to make decisions” (Parent, 2010, p. 291). Slack and Parent asserted conditions of risk are a “common condition for decision making in sport organizations”

(p. 259). The last condition, that of uncertainty, exists when absolutely no data or past encounters for a particular situation is present.

Many organizations have the need to make sense out of unusual situations. That is they experience the necessity to quickly make decisions either from a high velocity environment and condition of risk or uncertainty, which may involve numerous inputs and no time to study trends or hold committee meetings. Kezar and Eckel (2002) described sensemaking “as a process where individuals seek information, assign it meaning, and take action. It is the process of structuring some meaning that makes sense, out of uncertain and ambiguous organizational situations” (p. 314). The acquisition of this information and the ability to quickly analyze it has become increasingly important (Bettis & Hitt, 1995; Parent, 2010).

Good decisions, however, are made with more than knowledge, facts, and concepts. They also necessitate an organization to regularly process data acquired from earlier decisions, be those good or bad choices (Ireland & Miller, 2004; Russo & Schoemaker, 1992). Furthermore, when called upon to make intricate decisions, organizations often rely on a multiplicity of sources both from within and outside the organizations (McGee & Sawyer, 2003). One way organizations can make sense of rapidly changing situations (and thus better decisions) is to create a culture of mindfulness. The next section describes mindfulness, first from the individual and then from the organizational perspectives.

Individual Mindfulness

Though this study focuses on organizational mindfulness, it is important to understand how the concept was developed. As such, the review now focuses on mindfulness on the individual level. The concept of individual mindfulness is often attributed to psychological research conducted by Ellen Langer and her Harvard students and colleagues (Langer, 1989).

She described mindfulness as “a cognitive process that involves a state of alertness and lively awareness that is manifested by active information processing” (Baker, 2007, p. 14).

Rather than blind adherence to organizational policies and regulations, mindfulness is present when individuals display a nuanced appreciation of which rules are reasonable and when it may be appropriate to challenge unreasonable ones. Too often, individuals seize on standard classifications, use routine rules and procedures, and then proceed to become seduced by habits. Furthermore, mindlessness relies on old classifications, whereas mindfulness is the construction of fresh categories (Hoy et al., 2006). The narrowing of viewpoint or element of contextual confusion obstructs thoughtful behavior (Langer, 1989). This reliance on old categories, automatic behavior, and a single perspective characterizes mindlessness. Conversely, mindfulness is characterized as a three pronged approach: “the creation of new categories, openness to new information, and an implicit awareness of more than one perspective” (Langer, 1997, p. 4).

Langer further contended that individual mindfulness requires one to be flexible, vigilant, and open. Hoy et al. (2006) wrote, “Mindfulness requires openness to new information and different points of view” (p. 239), and is a habit of mind which constantly scans for evidence contrary to previously held assumptions. Langer (1989) sustained, “Mindfully engaged individuals will actively attend to changed signals. Behavior generated from mindful listening or watching, from an expanding, increasingly differentiated information base, is, of course, likely to be more effective” (p. 67). Another important aspect of individual mindfulness is that of an orientation focused on process rather than one centered on outcome. Reminding us about the joy of doing something, Langer (1997) wrote:

Even play can lose its intrinsic value if it is done with another goal in mind . . . Adding other motives such as doing it because we have to, fear of evaluation, or letting the outcome overshadow the process can also turn play into work (pp. 56-57).

Accordingly, coaches who blindly adhere to pre-developed game plans are operating in a mindless paradigm. Therefore, by making in-game strategy adjustments i.e., substituting judgment for following a set schedule, coaches begin to operate mindfully. Additionally, the “single-minded” (Hoy, Gage, & Tarter, 2006, p. 238), pursuit of outcomes rather than processes can lead to mindlessness. When coaches and teams mindlessly focus exclusively on the end result (e.g., winning a conference championship) rather than on the minutia of skill development (i.e., the process of winning) those teams often fall short of the desired outcome in the end.

Recognizing the concept of mindfulness can be difficult to define, Langer and Moldoveanu (2000a) described mindfulness as the practice of sketching unique distinctions. Many of the early mindfulness studies focused on the propensity for individuals to make “premature cognitive commitments” (Langer, 1997, p. 92). Langer describes these commitments as “mindsets we accept unconditionally, without considering or being aware of alternative . . . information” (p. 92). Langer contended premature cognitive commitments make us lazy and ultimately lead to poor decision making. Chanowitz and Langer (1981) found that study participants not given a reason to mindfully consider information regarding a fictitious disease and its symptoms made premature cognitive commitments. Making these premature cognitive commitments caused study participant to later act as if they actually had the purported disease. This concept of the premature cognitive commitment was embraced by Weick and Sutcliffe (2001) as an important element in their development of organizational mindfulness.

Later studies focused on the numerous individual benefits associated with mindfulness. For example, mindful individuals have been found to be more charismatic (Langer & Sviokla, 1988), to have increased levels of creativity while simultaneously experiencing less burnout (Langer, Heffernan, & Kiester, 1988), and in elderly populations to have greater concentration, attention, and memory (Langer, 1989). Understanding the theoretical underpinnings of individual mindfulness helps establish the framework for organizational mindfulness. As such, the next section focuses on mindfulness as constructed at the organizational level. Recent books by Weick and Sutcliffe (2001, 2007) and empirical research in educational leadership (Hoy, 2003; Hoy et al., 2006) have moved the concept of mindfulness from the individual areas of medical and psychological research into an entirely different direction.

Organizational Mindfulness

Using Langer's (1989) work as a foundation, Weick, Sutcliffe, and Obstfeld (1999) described organizational mindlessness as occurring in organizations, which are "drifting toward inertia without consideration that things could be different" (p. 91). Weick and Sutcliffe (2007) asserted that mismanaged organizations, as opposed to High Reliability Organizations (HROs), "ignore small failures, accept simple diagnoses, take frontline operations for granted, neglect capabilities for resilience, and defer to authorities rather than experts" (p. 8).

Similar to Langer's description of individual mindlessness, Weick and colleagues contend organizations are situated in a mindless condition when decisions are made exclusively using formal operating procedures and preexisting categories. The irony of relying on habits and regular procedures, which protect organizations from the vagaries of individuality, is they often appear at the expense of flexibility (Hoy et al., 2006). As Baker (2007) asserted, "Being overly

reliant on past categories and learned behaviors, organizations potentially limit their performance by failing to recognize novel events” (p. 18).

Organizational researchers do not discount the value of experience, but warn that complacency has been associated with over-familiarity of a given situation. Experience can reduce an organization’s environmental scanning and can create hard-to-see-beyond expectations (Baum & Ingram, 1998). Team coaches expect the playing fields to be ready (lined and painted), arenas to be set-up (doors unlocked), and game day brochures to be printed and folded. They should be confident that these routine tasks have been completed by other athletic department personnel - because they always have been. In reality, surprises happen, things do not always occur as they should. It is the complacency that accompanies routine, which causes organizations to lose focus on mindful decision making practices. In turn, the loss of focus exposes those organizations to carelessness and ensures they are more prone to mistakes. Additionally, as experience is gained and events unfold as expected, organizations can lose their ability to successfully respond to non-routine events (Gersick & Hackman, 1990).

Using a modified version of Slack and Parent’s (2006) description of non-programmed decisions, Weick and Sutcliffe (2001, 2007) described non-routine events as taking three different forms. The first type of event arises when that which was expected to happen fails to occur. An example from an athletic department would occur when the training room did not open on time. The second non-routine event occurs when an incident that was not projected to happen does in fact take place. A leak in the roof covering an indoor basketball court is an example in athletic management where the second form of the non-routine could happen. The leak, if undetected, could at worst cause an athlete to sustain serious injury and at best cause the game to be delayed or suspended.

The last category of the non-routine event takes place when a previously unforeseen incident occurs. For example, many athletic conferences offer an end-of-the-year award to the highest performing institution. Points are accumulated based on where member institutions finish in the final conference standings (e.g., by finishing first place in a sport an institution earns 60 points and by finishing last place an institution earns five). Therefore, if an athletic conference adds a sport as a championship event in which only six of the 12 member institutions compete, those six institutions not offering the sport would immediately be placed at a competitive disadvantage with regards to conference-wide, all-sport supremacy. It can be said those six member institutions had a delayed detection system regarding the unexpected. That is, they had developed a “blind spot” (Weick & Sutcliffe, 2007, p. 23) based on past experiences. In essence organizations, which rely solely on past performance and expectations, i.e., operate mindlessly, may be missing a key decision-making element. Organizations operating in this manner are not making continuous “efforts to update the routines and expectations and to act in ways that would compel such updating” (Weick & Sutcliffe, 2007, p. 26).

Not all organizations, however, operate mindlessly. According to Barrett (2008) there are many organizations, which despite routinely operating within the glow of tragic breakdowns do not experience severe crashes. To ensure they do not experience the disastrous effects of a major failure, these organizations have successfully constructed strategies and practices, which lead to exceptionally mindful processes and systems. They continually scan the environment for subtle changes and are thoughtful about how their day-to-day actions can help avert a collapse. Organizational scholars have dubbed these High Reliability Organizations (HROs). HROs, organizations that operative mindfully, are able to “leverage surprise to entice learning and creativity” (McDaniel, Jordan, & Fleeman, 2003, p. 274).

Organizational mindfulness is the theoretical method which permits organizations to uphold long-lasting watchfulness, identify that which requires attention, and notify how given information should be processed (Vogus & Welbourne, 2003; Weick et al., 1999).

Reconceptualizing Langer's individual mindfulness variable through an organizational lens is useful because mindfulness can decouple organizational processes, increase the understanding of convoluted situations, and enable organizations to mitigate problems before they become unmanageable (Weick et al., 1999; Weick & Sutcliffe, 2001, 2007).

Traditional definitions of HROs assume organizational operations occur in hazardous settings where malfunctions or failures are likely lead to loss of life (Busby, 2006; Roberts 1990b). Others have identified HROs as those danger-facing organizations, which have had superb safety records over a long time period (Roberts, 1990a). Specifically nuclear power plants, aircraft carriers, fire departments, emergency rooms, and air traffic control towers have been identified as HROs because in their day-to-day operations the prospect for loss of life and disastrous failure is significant (Barrett, 2008; Busby, 2006; Weick, 1993; Weick & Roberts, 1993; Weick & Sutcliffe, 2001, 2007; Weick et al., 1999).

Weick and Roberts (1993) argued that in settings, which have significant interdependence, for example aircraft carrier flight decks, there is the tendency for a collective mindset to develop. Yet, even while operating in hazardous environments of technical complexity and a tight coupling of their processes, certain organizations display extraordinary skill in avoiding the failures often linked with significant political and economic expenses (Barrett, 2008; Busby, 2006; Heimann, 2005; Roberts, 1990b; Weick & Sutcliffe, 2001, 2007). These HROs have been considered "expert at recognizing and containing the effects" (Waller & Roberts, 2003, p. 814), associated with operating in such settings. Waller and Roberts (2003)

asserted that HROs, “once regarded as exotic are now becoming exemplars . . . and may now hold critical answers for ‘normal’ organizational adaptability, growth, and survival” (p. 814).

Scholars have identified four essential elements of high reliability theory. The first is a commitment to make safety and reliability high on the list of organizational priorities. The second is the need for organizational redundancies. The next element is the creation of a reliability culture, which is facilitated through socialization and employee training. The last element is the value of organizational learning which is often coupled with extensive training (Barrett, 2008; Heimann, 2005). By combining these four elements with Ellen Langer’s (1989) concept of individual mindfulness, Weick and Sutcliffe (2001) extracted the five facets of organizational mindfulness: a preoccupation with failure, reluctance to simplify, sensitivity to operations, commitment to resilience, and deference to expertise (Weick & Sutcliffe, 2001, 2007). After defining organizational mindfulness, the review moves to a detailed analysis of each of the five facets.

According to Weick and Sutcliffe (2001), mindfulness is,

the combination of ongoing scrutiny of existing expectations, continuous refinement and differentiation of expectations based on newer experiences, willingness and capability to invent new expectations that make sense of unprecedented events, a more nuanced appreciation of context and ways to deal with it, and identification of new dimensions of context that improve foresight and current functioning (p. 42).

Or more parsimoniously, mindfulness is “a rich awareness of discriminatory detail” (Weick & Sutcliffe, 2007, p. 32). Moreover, organizational mindfulness is not simply a process of being observant, but rather it is a habit of mind that searches for slight differences which may be harbingers for bigger troubles (Hoy et al., 2006). Organizational members need to assume a

style of intellectual operation, which enables nonstop learning as well as ongoing fine-tuning of expectations (Weick & Sutcliffe, 2007). Weick and Sutcliffe (2007) divide these five processes into two larger categories, principles of anticipation and principles of containment. The first category contains the facets of preoccupation with failure, reluctance to simplify, and sensitivity to operations.

Principles of Anticipation

Preoccupation with failure. Commenting on the concept of collapse, Weick and Sutcliffe (2007) wrote, “To avoid failure, you’ve first got to embrace it” (p. 46). For some, Weick and Sutcliffe’s contention may seem counterintuitive or suggest unmitigated cynicism. In so many aspects of life we are taught to focus on the positives, remember the wins, and to put the negative in the past. The old adage, learn from your mistakes, however is just another way of saying that as both individuals and organizations, the most important part involves listening for those weak signals of failure. This preoccupation means the organization is always aware of what might go wrong. It is then expected for organizational members to quickly report potential dangers after discovery (Weick & Sutcliffe, 2001).

Despite the fact that many organizational leaders are reticent to admit errors, having open discussions about mistakes can lead to higher levels of organizational learning (Edmondson, 1996). Edmondson studied the relationship between error reporting and performance at eight hospitals. She found the nursing units with the highest rate of reported errors rates also obtained the highest scores on various performance metrics. The suggestion is not that the other units were error free, rather that the environment was not one in which nurses were encouraged to openly admit mistakes. Edmondson asserted the failure of these units to scan for ways to learn and improve suggests that cultures of fear may lead to lower performance. Discussing the

relationship between openness and mindfulness, Tschannen-Moran and Hoy (2000) commented: “When a high degree of trust allows for the open exchange of information, problems can be disclosed and corrected before they are compounded” (p. 581).

A healthy preoccupation with failure is often on exhibit in the world of sport. The mindful coach will certainly be happy to escape with the narrow victory, but that does not mean she will be satisfied. Conversely, the mindless coach would chalk-up the near miss to a sign of being good or that her game plan worked, rather than as an opportunity to view the victory as a weak signal of potential impending failure (Weick & Sutcliffe, 2007). Starbuck and Milliken (1988) found:

Success breeds confidence and fantasy. When an organization succeeds, its managers usually attribute success to themselves or at least to their organization, rather than to luck. The organization’s members grow more confident of their own abilities, of their manager’s skills, and of their organization’s existing programs and procedures. They trust the procedures to keep them apprised of developing problems, in the belief that these procedures focus on the most important events and ignore the least significant ones (pp. 329-330).

The HROs’ preoccupation with failure manifests itself in the way they manage expectations. Moreover, in an athletic department we may expect the playing fields to be lined, the door or gate locks to function properly, the arena floor to be swept – and we may be right. But, if our assumptions prove to be wrong, we have to shift into a reactive mode. A healthy preoccupation with failure means we expect the worst and we are constantly scanning the horizon for potential harms. Unfortunately many athletic departments like many other organizations often seek evidence, which confirms expectations and shun data which disproves

them. The mindful athletic department must be cognizant that these systems, routines, or expectations were designed to tackle yesterday's problem. A failure today to seek tomorrow's problem leads to a failure to update and upgrade routines. Not paying attention to weak signals of failure causes us to miss the small clues that may prevent the worst from happening (Starbuck & Milliken, 1988). Weick and Sutcliffe (2007) warn that "Most of these lapses do not emerge as full blown issues. Instead small cues accumulate for some time and suggest that unexpected things are happening and aren't going away" (p. x).

Some scholars have posited reasons organizations may be reserved about reporting errors or scanning the environment for ways to improve. One such theory is that of *group think* or over identification with group values and norms. In this instance, trusting too much may lead to stagnation and rigidity, which precludes an organization from adapting and responding. Without healthy distrust "organizational members are less likely to countenance alternative views and critically evaluate their own organization resulting in group think" (McEvily et al., 2003, p. 98). Hence, preoccupation with failure can be an important element in improving organizational effectiveness. Lewicki, McAllister, and Bies (1998) refer to this phenomenon as distrust, expressing "distrust that gives rise to questioning and differences in perspective may be essential for effective group functioning" (p. 453). This healthy distrust is further reflected in the heterogeneity required to enhance decision making within organizations. Thus, preoccupation with failure should positively impact the level of organizational mindfulness. The review proceeds to a discussion of the second principle of anticipation, the reluctance to simplify.

Reluctance to simplify.

"Less mindful practice normalizes; more mindful practice anomolizes" (Weick & Sutcliffe, 2007, p. 34).

As Slack and Parent (2006) indicated, numerous sport organizations create opportunities for their staff to make programmed rather than non-programmed decisions. While there are certainly aspects of the athletic organizational culture, which should be simplified (e.g., travel schedules), the development of game plans, substitution tactics, and in-game adjustment strategies are not the appropriate circumstances for rigid decision trees to be used. That is not to insinuate all routines are inappropriate. Take for example the athletic equipment manager who creates a system to alert him it is time to order more laundry soap when the level gets below x . It can in fact be argued that mundane tasks should be simplified. Unfortunately, not all decisions lend themselves to this level of simplicity, yet many organizations continue to stuff *the square peg in to the round hole*. In fact “organizations reduce the opportunity for realizing the full meaning of information or events when they automatically simplify information” (Baker, 2007, p. 20). Although some decisions faced by athletic staff are that simple and can be programmed (deciding to buy more laundry soap), life on teams and in athletic departments can also be complex. Without using the exact term, Slack and Parent (2006) described the commitment to simplify as the tendency for managers to create policies and procedures as a means to solve every problem. This simplification often involves creating categories or what organizational scholars refer to as systems of control.

According to Khodyakov (2007), *formal control* is that which directly influences behavior, organizational inputs, and outputs. Whereas, *social control* consists of values and norms, which recognize, reinforce, and reward specific behaviors within the organization. Put another way, while formal control mechanisms directly control behavior, informal (or social) control mechanisms indirectly influence behavior. Rus and Igllic (2005) defined formal control as a system of regulations, which are made more predictable through the creation of procedures in

order to achieve some desired goal. Many organizations have a tendency to formalize structures of control, which can lead to lower level of socialization and integration within the organizational community. McEvily et al. (2003) found that “formal control mechanisms foster attitudes of ill-will, skepticism, and distrust by signaling suspicion” (p. 99).

Weick and Sutcliffe (2007) asserted, “It is impossible to manage any organization solely by means of mindless control systems that depend on rules, plans, routines, stable categories, and fixed criteria for correct performance” (p. 39). The movement toward oversimplification in fact, may not only cause a bigger problem to be missed, but the routinization may also reduce trust levels within the organization. The creation of excessive policies could actually create an element of mistrust, which in turn may negatively impact staff member’s creativity (Khodyakov, 2007) or a willingness to be involved in collective action (Curzon-Hobson, 2002). In contrast, encouraging socialization and integration into the organization’s culture through social control techniques rather than formal control mechanisms may encourage the development of trusting relationships (Khodyakov, 2007).

Athletic administration scholars have found that “Structurally, college athletic programs are hierarchical organizations characterized by an extreme centralization of authority” (Adler & Adler, 1988, p. 405) and are rigid hierarchies. While this may be true for many departments, it is not necessarily the norm for all. High reliability athletic departments understand that “rigid hierarchies have their own special vulnerability to error” (Weick & Sutcliffe, 2007, p. 16) and spend time nurturing a culture in which every member is expected to voice an opinion. All organization members are expected to ask questions or seek supplementary information by taking intentional strides to develop an in-depth, full, and therefore more complete picture of breakdowns and near misses as a way of fully understanding the risks and impending troubles

ahead (Frederickson & La Porte, 2002; Vogus & Welbourne, 2003; Weick & Sutcliffe, 2001, 2007).

However, the more voices are heard, problems are shared, and opinions are expressed, the more complex the organizational environment. While more complexity may be difficult to manage, the need to *complexify* information has been recognized as important by organizational scholars. There are those who contend that *connected decision-making* affords organizations the opportunity to obtain a mixture of appraisals and eventually procure a larger supply of problem solving strategies (Ashmos, Duchon, McDaniel, & Huonker, 2002). As Weick and Sutcliffe (2007) commented, “Reliability does not mean a complete lack of variation. It’s just the opposite. It takes mindful variety to ensure stable high performance” (p. x).

Another issue associated with simplification is that of labeling. Creating labels in organizations can erroneously lead to the belief that some work is more important or that some people are more important than others. Weick and Sutcliffe (2007) contend that labeling lends organizational members to remember the names of things, rather than the qualities of those items. That is, we focus on the label itself, rather than the thing being labeled. To combat this phenomenon of labeling and the problems associated with it, mindful organizations need to “wage a relentless attack on simplifications” (Weick & Sutcliffe, 2007, p. 54). Thus, mindful organizations are particularly reluctant to simplify. A healthy preoccupation with failure and reluctance to simplify do not alone create a culture of high reliability. As such, the discussion next shifts to the third and final principle of anticipation, the practice of maintaining a sensitivity to operations.

Sensitivity to operations. The third dimension of mindfulness refers to the need for an organization to focus to its principal purpose, its day-to-day operations. Sensitivity to operations

is, in short, about the work itself. Hoy et al. (2006) wrote, “surprises are not unexpected; mindful organizations anticipate them” (p. 240). In intercollegiate athletic departments, the best coaches are able to rework their strategies and game plans to fit changing conditions. While the best coaches are considered master planners, what chiefly distinguishes them is the ability to make precise in-game adjustments. These coaches can fine-tune in a high velocity environment (Parent, 2010) because they avoid making premature judgments or premature cognitive commitments (Langer, 1989, 1997) about a situation. That is, they pay attention to what actually occurs during the course of a game, rather than what ought to take place (McDaniel et al., 2003).

Premature cognitive commitments (Langer, 1989, 1997) inform the manner which people seek evidence and they more often than not seek evidence, which confirms previously held beliefs or notions. In fact organizations may experience trouble after a period of achievement because “Small successes may unintentionally induce low levels of attention and reduced information searches” (Sitkin, 1992, p. 232). Kahneman and Tversky (1973) found that people construe uncertain facts or partial information in a manner confirmatory to pre-existing viewpoints. They are likely to concentrate on information, which substantiates rather than seek information which disconfirms (Sitkin, 1992; Starbuck & Milliken, 1988).

By persistently appraising procedures and imparting information, HROs are quick to recognize systemic irregularities and make modifications or adjustments before major problems develop (Reason, 1998; Weick & Sutcliffe, 2001, 2007). As listening for weak signals of failure is an important factor in preoccupation with failure, “Doubt, discovery, and on-the-spot interpretation are hallmarks of sensitivity” (Weick & Sutcliffe, 2007, p. 60). An organization develops this sensitivity to operations by understanding that the day-to-day operations are not context free, by exchanging knowledge throughout the organization, and persuading others to

provide their own interpretations on that data (Baker, 2007). Mindful organizations, however, understand that while the principles of anticipation are important, even the most thorough and well developed systems will at times fail. As such, the HRO is also committed to resilience and defers to experts. The review continues with an examination of the principles of containment.

Principles of Containment

Commitment to resilience.

“Our greatest glory is not in never falling but in rising every time we fall.” – Confucius (Great Quotes, 2008).

There will be times when decisions made under conditions of uncertainty will result in a negative action (Slack & Parent, 2006). It is then that organizations need to be reactive and focus on mindfully containing situations lest they get out of control (Weick & Sutcliffe, 2007). HROs therefore understand the importance of containment, i.e., ensuring that the failure does not become catastrophic. The first facet of containment is the commitment to resilience. Weick and Sutcliffe (2007) identify three components of resilience. The first facet is the ability to absorb strain, the next is the ability to bounce back, and the last facet is an ability to learn and grow from prior events. As such, a commitment to resilience is defined as the ability to swiftly, precisely, and truthfully remedy mistakes that have occurred before they degenerate or cause more serious harm (Weick & Sutcliffe, 2001, 2007; Weick et al., 1999). Stated another way, resilience occurs when the organization continues to function despite failures in one (or more) of its sections.

As mistakes will arise and the unexpected is a daily occurrence, educational environments are places that must be committed to resilience (Wildavsky, 1991). As in the classroom, the achievement of perfection for athletics teams (i.e., the perfect season) is a rarity.

Consequently, athletic organizations seem to exist in a similar environment as schools. In the classroom no matter how great the teacher, conducive to learning the climate, or attentive the administration, students may have a negative home event impact their school achievement. Similarly, on any given game day a student might have failed a test, been scorned by a significant other, or experienced some personal tragedy which may lead to unexpectedly poor performance.

Therefore, in few other venues is there more opportunity for organizations to develop a commitment to resilience. Be they schools, businesses or athletic departments, HROs attempt to recognize “contain, and bounce back from those inevitable errors that are part of an indeterminate world” (Weick & Sutcliffe, 2001, p. 14). Furthermore, importance of organizational learning is again manifest in the mindful organization’s commitment to resilience. Wildavsky (1991) wrote: “To learn from error (as opposed to avoiding error altogether) and to implement that learning through fast negative feedback . . . are at the forefront of operating resiliently” (p. 120).

This swift negative feedback or the ability to fight fires (Weick & Sutcliffe, 2007) is also what good coaches do. They know that regardless of the level of planning, errors will occur. Teams have to absorb strain in the form of hostile crowds, bad game officials, and personnel problems. Mindful teams exhibit an ability to bounce back by making in-game adjustments and changing strategy. Finally, the best teams learn and grow by reviewing game tape, reflecting on successes and failures, and contemplating how previous errors may be corrected. Wildavsky (1991) asserted that anticipation leads organizations into “sinking resources into specific defenses against particular anticipated defenses” while resilience is “retaining resources in a form sufficiently flexible—storable, convertible, malleable—to cope with whatever

unanticipated harms might emerge” (p. 220). Another important factor in the principle of containment involves the ability for an organization to create an environment in which decisions are made by those with the most knowledge rather than those at the top of the organizational chart.

Deference to expertise. The final dimension of mindfulness occurs when organizations focus on “matching expertise with problem regardless of rank and status” (Hoy et al., 2006, p. 240). HROs work hard to train their front-line employees and assume those employees to possess the requisite expertise to therefore be given sufficient power to handle any problem, which may arise. Allowing decisions to be made by the nearest expert, rather than by the person on top of the organizational chart, ensures problems can be resolved before they expand in scope (Weick & Sutcliffe, 2001, 2007). Reaching a similar conclusion, Baum and Ingram (1998) found that matching the appropriate level of experience with a given problem improves organizational performance. Other scholars also found that group effectiveness can, in many situations, be improved when workers at all levels are involved in making decisions which have a direct effect on them (Latham, Winters, & Locke 1994; Yukelson, 1997).

Stated differently, a rigid allegiance to hierarchy can be disastrous. Weick and Sutcliffe (2007) theorized that: “Expertise is not necessarily matched with hierarchical position, so organizations that live or die by their hierarchy are seldom in a position to know all they can about a problem” (p. 74). While the stakes may not be as high in terms of human life, as they are in the typical HRO, failure for athletic departments to defer to experts can lead to less than desirable results. The reason they operate mindfully, is that HROs assume expertise to exist throughout the organization and give capable employees the authority to resolve emergencies quickly (Heimann, 2005; Vogus & Welbourne, 2003; Weick & Sutcliffe, 2001, 2007; Weick et

al., 1999). In the case of an athletic team, the capable employee may be an assistant coach or a player on the field. Either way, good head coaches understand their own limitations and rely on experts who may be positioned lower on the organizational chart.

Driving decision-making ability to the lowest levels of an organization (or wherever authority rests), supplying expansive preparation programs, and rewarding failure detection rather than punishing it can all help organizations overcome the frailty associated with being staffed by the not-always-rational human employees (Heimann, 2005; Weick & Sutcliffe, 2001, 2007). By allowing employees to detect weak signals of failure from interconnected and complex milieus, mindfulness loosens tight coupling. It thus can create multiple problem solving options and augment an organizations capacity towards innovation (Langer, 1989; Vogus & Welbourne, 2003). Consequently, by maintaining their capacity for mindfulness, HROs are afforded opportunity to function more reliably (Barrett, 2008; Weick & Sutcliffe, 2007). In short “by employing these processes together, HROs function as learning organizations actively responding to perceived aberrations, near misses, or errors and adapting to sustain or modify the organization’s responses as needed” (Barrett, 2008, p. 26). With a completed examination of the elements underpinning HROs, the review next explores previous empirical mindfulness research.

Organizational Mindfulness Research

Organizational mindfulness, in social science terms, is a relatively new phenomenon and as such there has been surprisingly little empirical research (Baker, 2007; Knight, 2004). To complicate matters, the extant research has explored mindfulness with diverse methodologies so there has been a lack of consistency regarding the findings. As a result, how the construct of organizational mindfulness is actually manifested remains unclear (Knight, 2004). Highlighting

the range of the research on the subject, a description of three conceptual studies, among the earliest explorations into mindfulness, follows.

Fiol and O'Connor (2003) explored the impact of mindfulness on bandwagon behavior in the health care setting. In the study, they proposed a conceptual model which detailed the relationship of mindfulness and bandwagon avoidance. Furthermore, Fiol and O'Connor attempted to expand the notion that mindfulness is useful exclusively in high risk organizations. They concluded that, regardless of the organizational type, a focus on mindful behaviors (i.e., reluctance to simplify, commitment to resilience, and preoccupation with success and failures) should guide the scanning, interpretation, and decision-making processes of all organizational members.

In his study of 80 audit reports from retail, private, and corporate banks, Ramanujam (2003) investigated the relationship between latent errors, change, and mindfulness. Though he did not directly examine the five facets of mindfulness, as defined by Weick and colleagues, his study is none-the-less important conceptually. Ramanujam found evidence supporting the idea that small changes and latent errors, if not addressed, can have a significant impact on organizational practices (Weick, Sutcliffe, & Obstfeld, 1999). Furthermore, because Ramanujam explores these variables in an industry considered low risk (i.e., the loss of life is not ever present), he extends the conversation of mindfulness to more traditional business settings.

Vogus and Welbourne (2003) examined 184 software firms who had initial public offerings between 1993 and 1996. They hypothesized that three organizational mindfulness facets (i.e., reluctance to simplify, sensitivity to operations, and commitment to resilience) would serve as a bridge between certain human resource practices and organizational innovation. Although the specific components of organizational mindfulness were unmeasured, their study

“should serve as a foundation for grounded fieldwork or surveys that more explicitly and extensively examine the process of collective mindfulness . . .” (Vogus & Welbourne, 2003, p. 899). Despite the fact that all three studies found positive support for the construct of organizational mindful, none were specifically designed using all five facets detailed by Weick and colleagues. Subsequently, the findings are important conceptually as each suggests a structural underpinning for organizational mindfulness. They, however, have no direct methodological significance.

Conversely, Baker and Plowman (2004), Knight (2004), and Hoy et al. (2006), designed their research to measure the individual principles of mindfulness. In a survey distributed to administrators and department chairs from 180 colleges of business, Baker and Plowman (2004) attempted to explore Weick and Sutcliffe’s (2001) five principles of mindfulness model. Their research suggested a three factor model which included respectful interaction, commitment to resilience, and reluctance to simplify, but they “were not able to successfully factor analyze mindfulness into the five dimensions” (Baker, 2007, p. 26). Knight (2004) designed a survey instrument based on the work of Weick and Sutcliffe (2001), which he distributed to swimming pool employees, managers, and patrons. He was unsuccessful in finding evidence of all five principles. He did, however, find evidence that four of the factors combined to create a construct he branded collective mindfulness. The study conducted by Hoy et al. (2006) found evidence supporting all five facets of mindfulness combined to create two constructs; principal mindfulness and faculty mindfulness. These two factors combined to create a construct they labeled organizational mindfulness. In both factors and in the combined organizational mindfulness construct, Hoy et al. (2006) found all five elements of Weick and Sutcliffe’s (2001) organizational mindfulness were present.

What scholars have yet to agree upon is whether the theoretical constructs associated with HROs are transferable to organizations not operating under the constant threat of catastrophic failure. This expansion of high reliability theory is of interest to organizational scholars as it opens additional lines of research, which have yet to be deeply explored (Barrett, 2008). This section detailed the concept of mindfulness, from its earliest roots as an individual construct to its more recent exploration and theorization by organizational scholars. It concluded with a discussion of the most recent empirical research conducted on organizational mindfulness. The review now moves to an examination of one study grounded upon much of the previously cited literature.

The Relationship Between Organizational Trust and Mindfulness

A review of the literature indicated the construct of organizational mindfulness to be understudied in all fields and completely unstudied in intercollegiate athletic settings. Additionally, the literature review indicated the construct of organizational trust to be understudied both in institutions of higher education and specifically in intercollegiate athletic departments. There has however been one study, which focused on the relationship between organizational trust and mindfulness.

The exploration of organizational trust and mindfulness conducted by Hoy et al. (2006) found evidence that all five mindfulness principles (preoccupation with failure, reluctance to simplify, sensitivity to operations, commitment to resilience, and deference to expertise) were indeed impacted by faculty trust. Using a series of factor analytic analyses, Hoy et al. (2006) found two mindfulness factors: principal mindfulness and faculty mindfulness, both of which measured all five components of mindfulness. Furthermore, these two factors combined to create what they labeled as organizational mindfulness. In their study of 75 middle schools, they found

lower levels of within school variance than between school variance, leading them to conclude that mindfulness is a collective property. Moreover, using multiple regression analysis, Hoy et al. (2006) found that the three faculty trust components each explained a large amount of the variance in faculty mindfulness. Additionally, they discovered faculty trust in principal was a significant predictor of principal mindfulness and faculty trust in clients had limited influence on mindfulness. Overall, they found organizational mindfulness (i.e., school mindfulness) to be best explained by both trust in colleagues and trust in their principal.

While organizational trust and mindfulness seem to be important aspects of the school environment, research needs to explore their relationship in intercollegiate athletic departments. Ouchi (1981) asserted that trust is a critical underpinning for well-functioning organizations. Does that hold true for college sport organizations? Not only are D-III athletic departments themselves understudied organizations, but the role of trust in the organizational culture of higher education is also an underdeveloped field (Pope, 2004). Tierney (1988) made explicit the importance of understanding organizational culture when he wrote “individuals can minimize the occurrences and consequences of cultural conflict and help foster the development of shared goals” (p. 5).

Accordingly, the question of whether organizational mindfulness is related to trust in higher education settings, particularly in the realm of intercollegiate athletics, remains critical. The need to understand the dimensions of trust and mindfulness remain relatively unexplored, regardless of setting. Hence, the central research questions for this study are as follows:

Q1: Which aspect of trust (colleagues, athletic director, or student-athletes) is the best predictor of organizational mindfulness in Division III athletic departments when controlling for other key organizational factors?

Q2: Is there a statistically significant relationship between the coaching staff's trust in colleagues and organizational mindfulness?

Q3: Is there a statistically significant relationship between the coaching staff's trust in the athletic director and organizational mindfulness?

Q4: Is there a statistically significant relationship between the coaching staff's trust in student-athletes and organizational mindfulness?

Conclusion

While many individuals in an athletic department are responsible for overall departmental success, it is the responsibility of those leaders to create an organizational culture where openness, honesty, reliability, benevolence, and competence are rewarded (Tschannen-Moran, 2004). Moreover, for athletic departments to operate like HROs, its members need to have a healthy preoccupation with failure, be reluctant to simplify daily operations, pay close attention to the 'small stuff,' be committed to containing mistakes when they do occur, and allow street level experts, rather than those at the top of the organizational chart to make front line decisions (Weick & Sutcliffe, 2001, 2007).

This chapter offered an overview of organizational culture and reviewed the theoretical underpinnings of trust and mindfulness. Additionally, the major tenets of both organizational trust, as defined by Hoy and Tschannen-Moran (1999) and organizational mindfulness, as described by Weick and Sutcliffe (2007) were reviewed. The chapter concluded with an examination of the Hoy et al (2006) study, which explored the relationship between organizational trust and mindfulness. It is anticipated the current study will add a deeper understanding of trust and mindfulness as it relates to coaches, athletic directors, and student-athletes. Furthermore, it is hoped that this study adds to the extant literature by providing an

unique examination of the impact of organizational trust on mindfulness and that findings provide the conceptual framework required for athletic department personnel to understand and influence the culture of their organization. Consequently, NCAA Division III athletic departments may better understand the qualities that define organizations as being High Reliability Organization. The following chapter describes the methodology and research instruments used to conduct the study.

CHAPTER THREE: METHODOLOGY

To investigate the research questions formulated from the previous chapter, data were collected from a stratified random sample of the 444 NCAA Division III athletic departments. Specifically, conducting the appropriate quantitative analyses required the collection of data from a relatively large percentage of the total population. As such, data were collected from 59 institutions. This chapter commences with a restatement of the study's purpose and research questions, then moves to a description of data collection methods (including an analysis of how the study instruments were developed), variables employed in this study, a description of operational measures, research participants, data analysis, and a chapter summary.

Purpose of the Study

Given the dearth of extant literature on the topic of organizational trust and mindfulness in the realm of intercollegiate athletics, athletic departments may not be focusing enough attention on hiring for and developing those traits with their staff. This leaves open the risk that student-athletes may not be receiving the full benefit of their participation in college sports. Furthermore, there is the prospect that institutions may not be garnering the full value of the dollars spent on athletics. Consequently, the purpose of this study was to explore two organizational social processes (trust and mindfulness) operating in D-III athletic departments. This study was based on analyses of coaches' perceptions of organizational trust and mindfulness operating within their athletic departments.

Research Questions

Not only are D-III athletic departments themselves understudied organizations, but the role of trust in the organizational culture of higher education is also an underdeveloped field (Pope, 2004). Tierney (1988) made explicit the importance of understanding organizational

culture when he wrote “individuals can minimize the occurrences and consequences of cultural conflict and help foster the development of shared goals” (p. 5). Accordingly, the question of whether organizational mindfulness is related to trust in higher education settings, particularly in the realm of intercollegiate athletics, remains critical. Specifically the following research questions guided this study:

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Q3: Is there a statistically significant relationship between the coaching staff’s trust in the athletic director and organizational mindfulness?

Q4: Is there a statistically significant relationship between the coaching staff’s trust in student-athletes and organizational mindfulness?

Data Collection

Variables

Using the framework forwarded by Hoy et al. (2006), the independent variable in this study was organizational trust, which consisted of three specific measures: trust in colleagues, trust in athletic director, and trust in student-athletes. The dependent variable in this study was organizational mindfulness (Figure 3). The decision to explore this specific relationship between organizational trust and mindfulness was based on prior research on trust and mindfulness (Hoy, 2003; Hoy & Tschannen-Moran, 1999; Hoy et al., 2006; Langer, 1989; Langer & Moldoveanu, 2000a, 2000b; Shoho & Smith, 2004; Smith & Birney, 2005; Smith & Shoho 2007; Tschannen-

Moran & Hoy, 2000; Weick & Sutcliffe, 2001, 2007; Weick, et al., 1999) and the need to expand this research to intercollegiate athletic departments.

Light, Singer, and Willett (1990) indicated that the presence of other factors might be responsible for any resultant effect predictor variables have on an outcome variable. Furthermore, they indicated a well designed study will attempt to differentiate the variation explainable by the substantive predictors from that accounted for by other factors. Therefore, in an effort to control for possible intervening or confounding effects, three moderating variables were used: 1) University endowment size, 2) Athletic department budget, and 3) Ranking in the D-III NACDA Cup standings. These variables were chosen through informal, electronic interviews conducted with athletic directors at five very successful D-III athletic programs. Each of the five athletic departments had finished in the top twenty NACDA Cup standings within three years prior to the interview and all five were highly regarded academically, as defined by the U.S News and World Report. All five athletic directors identified university endowment, athletic department budget, and NACDA Cup rankings as the three factors which have the greatest impact on departmental outcomes.

They indicated that endowment impacts recruiting with respect to the university's ability to provide merit and need-based financial aid. Additionally, the size of the athletic department budget directly impacts the ability to hire experienced, highly qualified head coaches and an adequate number of assistant coaches to impact student-athlete development. It is commonly held that, in a reciprocal way, success breeds success. As such, all five athletic directors agreed that previous department-wide performance, as measured by the NACDA Cup rankings has a tangible impact on the quality of recruits that arrive on campus (P. Cotton, personal communication, August 18, 2010; T. Downs, personal communication, August 20, 2010; C.

Katsiaficas, personal communication, August 20, 2010; R. King, personal communication, August 18, 2010; J. Schael, personal communication, August 18, 2010).

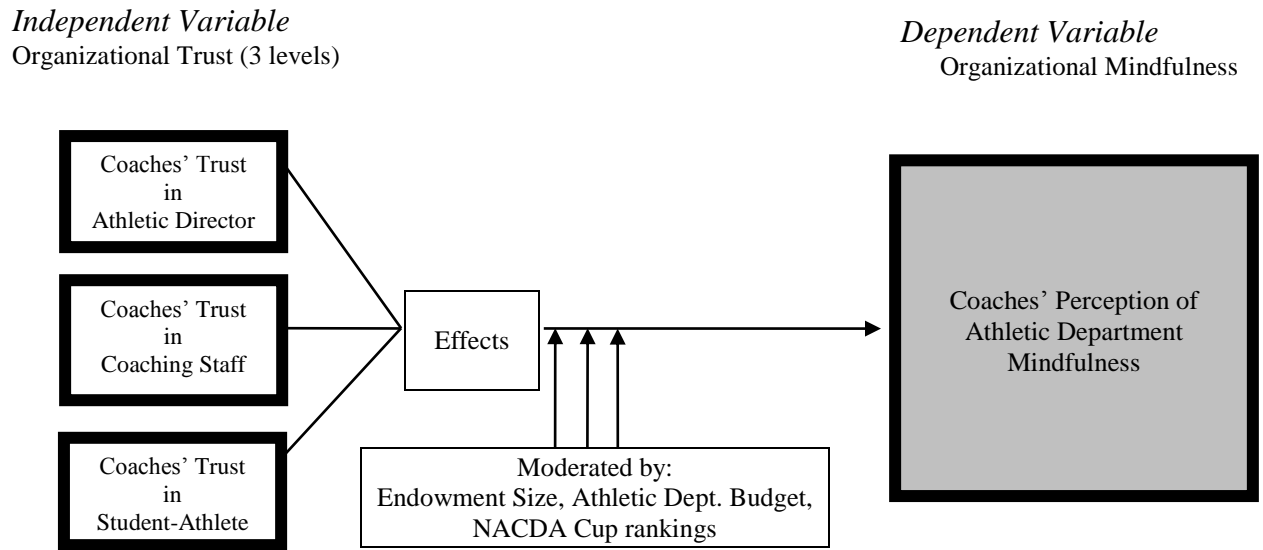


Figure 3 The independent, dependent, and moderating variables of the study

Operational Measures

To explore the research questions, operational measures of organizational trust and mindfulness were necessary. The Athletic Department Trust Scale (ADTS) was designed to measure coaching staff perception of organizational trust. The ADTS was a revision of the Higher Education Faculty Trust Inventory (HEFTI) developed by Drs. Page Smith and Alan Shoho at the University of Texas at San Antonio (Shoho & Smith, 2004; Smith & Shoho, 2007). Permission was sought and gained to modify the wording of the HEFTI to reflect the context of Division III athletic departments. The Athletic Department Mindfulness Scale (ADMS) was designed to measure athletic department mindfulness. The ADMS was a modification of the Mindfulness Scale (M-Scale) originally designed by Dr. Wayne Hoy at The Ohio State University. Similarly, permission was requested and granted to modify the M-Scale to reflect the context of Division III athletic departments. A discussion of each measure follows.

Organizational trust. Organizational trust is defined as “an individual’s or group’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open” (Tschannen-Moran & Hoy, 2000, p. 556). Building on the theoretical framework established by Hoy and colleagues over decades of research, Shoho and Smith (2004) developed an instrument to measure the three aspects of organizational trust at the higher educational level. Specifically, the HEFTI measured higher education faculty perceptions of trust in colleagues, trust in dean, and trust in students.

Because the HEFTI was designed for research with higher education faculty, not members of a coaching staff, it needed alterations. Therefore, in order to make the HEFTI applicable to this study’s sample, slight modifications were made. In particular, on the ADTS “dean” was changed to “athletic director,” “faculty” was altered to “coaching staff,” and “student” was modified to “student-athlete.” One specific item change was, “The Dean openly shares information with the faculty,” to “The A.D. openly shares information with the coaching staff.” The complete pilot study version of the ADTS can be found in Appendix A.

Organizational mindfulness. The decisions made by staff members of an athletic department, be they day-to-day or made in times of crisis, can have a tremendous impact on their constituents. Drawing on the work of Weick and Sutcliffe (2001) and Langer (1989), Hoy (2003) devised the M-Scale to measure mindfulness in the middle school setting. The instrument conceptualized five facets of mindfulness, (i.e., preoccupation with failure, reluctance to simplify, sensitivity to operations, commitment to resilience, and deference to expertise).

The M-Scale was intended for research with K-12 faculty and therefore required alteration prior to use with Division III coaches. Specifically on the ADMS, “school” was changed to “department,” “principal” was changed to “athletic director,” and “teacher” was

modified to “coach.” One particular item that was modified previously read, “The principal of this school does not value the opinions of the teachers.” That item appears on the ADMS as, “The A.D. of our department does not value the opinions of the coaches.” The complete pilot study version of the ADMS is found in Appendix B. Both the HEFTI and M-Scale are valid and reliable instruments, but the ADMS and ADTS measures for athletic department mindfulness and trust, specifically designed for this study, needed to be redesigned and pilot tested. What follows is a description of the design and testing of both instruments.

Development of the mindfulness and trust instruments. The basis used to design mindfulness items were conceived by Hoy, Gage, and Tarter (2006) described in chapter 2. Specifically, the items in the instrument used to collect mindfulness data were created by making slight revisions to items from the 14-item short form M-Scale developed by Hoy and colleagues (Hoy et al., 2006). While communicating with Dr. Hoy to obtain permission to revise the instrument for use in an athletic department setting, he suggested adding 10 items to the instrument. Dr. Hoy indicated that the addition of these items would aid in construct analysis and factor development. After reviewing suggested survey items found in Weick and Sutcliffe’s (2001) book, I ended up with a 24-item instrument. The instrument consisted of at least three items designed to measure each of the five facets of mindfulness.

As indicated previously, the trust instrument was designed using the HEFTI scale developed by Drs. Shoho and Smith. Specific changes to the HEFTI response items were discussed previously, but it should be noted that I modified the original 30-item HEFTI, not the final 28-item scale. In a conversation, Dr. Smith encouraged the replication of the full scale to aid in construct analysis and factor development. The instrument consisted of at least eight items designed to measure each of the three facets of trust. As both the ADTS and ADMS are

modifications of existent instruments, a pilot study was conducted at four local university athletic departments.

Field test. Prior to administering the formal pilot test, an informal field test was conducted to confirm face validity and to verify both that the response items and instrument directions were clear. A small group of veteran D-III coaches were asked to take the questionnaire focusing on the ease of responding to each item. Small changes were made, but in general the feedback was positive. The instruments were considered to be succinct, straightforward, and direct and thus remained intact.

Pilot Study. The purpose in conducting the pilot study was to test construct validity and reliability measures of the two scales which were revised by the principle investigator. In order to ensure construct validity of the measures, an exploratory factor analysis, using the Statistical Package for the Social Sciences (SPSS), was performed after conducting the pilot study. In order to collect data to conduct the parametric tests, the researcher obtained permission from the institutional review board (IRB) at four study sites. The four private, liberal arts universities were selected intentionally as they represented similar populations to be sampled for the larger study.

Upon obtaining IRB approval, the researcher obtained approval from athletic director to contact members of his/her coaching staff at each of the institutions. The second level “gatekeeper” proved to be an unnecessary step and created an undue hardship. That step was therefore removed from the final data collection procedure. Rather than obtaining their approval, it was determined the athletic directors should instead receive a courtesy letter informing them that members of the coaching staff will be asked to participate in a research study.

After receiving permission from the athletic directors, the principal investigator emailed the *Survey Monkey* version of the consent form and research instruments to the head, assistant,

and volunteer coaches at the four institutions. Email addresses for the coaches were obtained from the university webpage. Furthermore, because the survey instruments asked the coaches about their perceptions of their athletic directors, care was given to ensure that athletic directors were not included in the sample. In some cases, the athletic director also served as a coach of a team (e.g., the head men's golf coach). In those instances, the coach/athletic director was not asked to participate in the study. See Appendix C for the introductory letter to the coaches and Appendix D for the letter requesting permission from the athletic directors.

A total of 100 coaches were emailed requesting their participation. Additionally, two follow-up emails were sent to each of the coaches at each institution. The follow-up emails were sent to every coach in the department, with the following introductory language, "I'm sending this back out. If you've completed the survey, please delete. To those of you have already completed the survey – THANK YOU! Since your responses are 100% anonymous, however, there is no way for me to remove you from the list. So, I'm sorry that you're receiving this again." The response rate from the second email was much greater than the first. This could be attributed to two factors. It is possible that the second email simply served as a reminder and prompted survey completion. Alternatively, with its introductory text, the second email may have provided a great sense of confidentiality and thus prompted more coaches to complete the survey.

In the introductory text of the pilot study, respondents were informed that survey completion should take approximately 10-minutes. To verify this assertion, respondents were asked to indicate the length of time it took them to complete the survey. The times were averaged at a length of 9.8 minutes, thus validating the language used in the introductory text. As such, that language was kept in the introductory language for the full study. Fifty-one coaches

responded to the survey, for a response rate of 51%. Three of the four institutions had very high response rates. However, the department with the second largest coaching staff (27 members) only had three responses. According to Field (2005), a sample of 51 is sufficient for conducting a pilot study. As such, the investigator proceeded with parametric testing to validate the instruments.

A principal component analysis with a varimax rotation was also used to explore the construct validity of the athletic department mindfulness scale. Three unique factors were found after the first analysis, but a careful examination of the factor structure indicated that many variables loaded highly on more than two factors. The goal of this factor analysis was to reduce instrument size without substantially disrupting the factor structure or the reliability of the survey. An additional goal was to choose items such that all five facets of organizational mindfulness were represented by at least two items (Gage, 2003). Therefore, a factor loading cut-off of .400 was used to ensure that weak items were removed from further analysis. Furthermore, any variable loading at .500 or greater on at least two factors was removed. As such, 10 items were removed from the scale for further analysis. The subsequent factor analysis produced two factors, each of which had strong Cronbach's alpha reliability scores (see Appendix E for final version of the ADMS). The 2 factor structure with 14 total items was similar to the short form of the instrument designed by Hoy et al. (2006), the instrument upon which the Athletic Department Mindfulness Scale (ADMS) was modeled. See Table 1 for the complete analysis of the final 14-item mindfulness scale.

Table 1

Factor Analysis of the 14 Athletic Department Mindfulness Scale Items

Item	Factor	
	MCS	MAD
Mindfulness of Coaching Staff (MCS)		
Coaches in this department respect power more than knowledge	.772	
Coaches in this department jump to conclusions	.756	
Coaches in this department learn from their mistakes and correct them so they do not happen again	-.739	
If something out of the ordinary happens, the coaching staff knows who has the expertise to respond	-.711	
Coaches in this department treat errors as healthy information and try to learn from them	-.700	
Many coaches in this department give up when things go bad	.677	
Most coaches in this department are reluctant to change	.604	
Mindfulness of Athletic Director		
The A.D. appreciates skeptics		.747
My A.D. negotiates differences of coaching style, strategies, and decisions without destroying the diversity of opinions		.740
My A.D. often jumps to conclusions		-.726
Coaches do not trust the A.D. enough to admit their mistakes		.710
The A.D. seeks out and encourages the reporting of bad news		-.667
The A.D. of our department does not value the opinions of the coaches		-.643
During an average day, the A.D. comes into enough contact with the coaching staff to build a clear picture of the current situation		.635
Alpha Coefficient	.864	.870
Eigenvalues	4.641	3.903
Cumulative % of the Variance	33.15	61.03

In order to test the construct validity, a principal components analysis with a varimax rotation was conducted to analyze the 30 trust items. A factor loading cut-off of .400 was used to ensure that weak items were removed from further analysis. Additionally, any items that cross-loaded at .500 on more than two factors was removed from further analysis (Field, 2005). Two of the student-athlete items fell into one of those categories and were subsequently removed from the analysis. When the procedure was performed again, the athletic department trust scale produced three factors. The three factor structure with 28 total items was similar to the instrument designed by Shoho and Smith (2004), the instrument upon which the Athletic Department Trust Scale (ADTS) was modeled (see Appendix F for final version of the ADTS).

Furthermore, the Cronbach's alpha test indicated high reliability scores for each of the three factors. The results for the factor analysis of the final 28 item trust scale are reported in Table 2.

Table 2

Factor Analysis of the 28 Athletic Department Trust Scale Items

Item	Factor		
	TAD	TCS	TSA
Trust in Athletic Director (TAD)			
The A.D. in our department is unresponsive to the coaching staff's concerns	-.923		
The A.D. in our department keeps his or her word	.876		
The coaching staff in our department is suspicious of most of the A.D.'s actions	-.873		
The A.D. in our department typically acts with the best interest of the coaching staff in mind	.872		
The A.D. in our department is competent in performing his or her job	.863		
The A.D. openly shares information with the coaching staff	.857		
The coaching staff in our department trust their A.D.	.854		
The A.D. doesn't tell the coaching staff what is really going on	-.844		
The coaching staff in our department can rely on the A.D.	.836		
The coaching staff in our department has faith in the integrity of the A.D.	.819		
The A.D. in our department does not show concern for the coaching staff	-.807		
Trust in Coaching Staff (TCS)			
When the coaching staff in our department tells you something you can believe what they say		.797	
Even in difficult situations, the coaching staff in our department can depend upon each other		.762	
The coaching staff in our department typically looks out for each other		.759	
The coaching staff in our department believes in each other		.749	
The coaching staff in our department is open with each other		.734	
The coaching staff in our department trusts each other		.683	
The coaching staff in our department is suspicious of each other		-.579	
The coaching staff in our department has faith in the integrity of their colleagues		.538	
The coaching staff in our department is not competent in their coaching abilities		-.437	
Trust in Student-Athlete (TSA)			
Student-athletes in our department are reliable			.836
Student-athletes in our department can be counted on to do their work			.795
The coaching staff in our department believes student-athletes are competent in their ability to learn new skills			.786
The coaching staff in our department trusts their student-athletes			.785
The coaching staff in our department believes what students say			.772
The student-athletes in our department have to be closely supervised			-.769
Student-athletes in our department are secretive			-.694
Student-athletes in our department are caring towards one another			.541
Alpha Coefficient	.974	.908	.900
Eigenvalues	9.057	5.348	5.178
Cumulative % of the Variance	32.34	51.45	69.94

As a result of the findings of the pilot study, it was determined the scales were appropriate for use in the full study of organizational trust and mindfulness in NCAA Division III athletic departments.

Administration of the instruments

Procedures for Selecting Research Participants. The population for this study consisted of a sample of the 444 athletic departments competing at the NCAA Division III (D-III) level in 2008-2009. A stratified random sampling procedure resulted in the identification of sixty-four NCAA Division III athletic departments which were asked to participate in the study. To create the strata, all 444 universities were entered into a spreadsheet and assigned a number which corresponded to their final position in the 2008-2009 National Association of Collegiate Directors of Athletics (NACDA) Cup rankings. These rankings were based upon overall athletic department success in post-season competition. The numbers ranged from 001 to 444, so universities were then placed into quartiles (1-111, 112-222, 223-310, and 311-444). It should be noted that the third and fourth categories are not exactly quartiles because there were 133 universities all tied for last place (earning zero points) in the NACDA Cup standings. As there was no way to accurately rank them, the 133 athletic departments all earning zero points were entered alphabetically into the spreadsheet and assigned a code accordingly. With only 165 points separating university 112 (the first school in the second quartile) and university 310 (the last school to earn points), it was decided to take a random sample from the top quartile and those not scoring any NACDA Cup points. Additionally, it was decided that since there were twenty-two more schools in the lowest “quartile,” two extra universities would be selected from that strata. The random selection of schools from the top and bottom quartiles of the 2008-2009 NACDA standings allowed for a cross-section of athletic departments that experienced varying

degrees of success. Additionally, this stratification facilitated the creation of a dichotomous variable to be used as a control in the regression equations.

The last step in the process involved identifying thirty-one schools from the top quartile and thirty-three from the bottom quartile. Using a random number table of five digit numbers (Babbie, 1995) schools were selected starting with the first number of the third column. Because the table consisted of five digit numbers and the universities were coded using three digit numbers, the researcher choose to select participants using the right most three digits from the random number list. Prior to starting the random number selection process care was given to identify the four schools which participated in the pilot study. Two of these school's numbers were chosen. Consequently those two numbers were skipped and the next number on the list was selected (Field, 2005). Five invited schools from the bottom strata declined to participate and as such the final sample consisted of fifty-nine schools (thirty-one from the top quartile and twenty-eight from the bottom quartile) located in twenty states. A total of 1326 individual coaches from the 59 schools were solicited, of which, 405 completed the survey. Therefore, the response rate was 30.5%.

Athletic Department Staff. As established previously, the D-III athletic department is, philosophically, an extension of the educational environment on its campus. To date, no studies have been reported in the literature that investigated the perceptions of coaches or other college personnel charged with the care of student-athletes regarding organizational trust and mindfulness. However, the basis for this study lies in the strength of similar research conducted using higher education and K-12 faculty as the respondents. To that end, in each of the 59 athletic departments in the sample, surveys were distributed to all members of the coaching staff (i.e., head and assistant coaches) listed on the university athletics department webpage. A

member of the coaching staff was defined as paid or volunteer members of the athletics department staff under contract to perform on field duties and is involved in the recruitment of prospective student-athletes.

At the D-III level, many athletic directors also coach a sport; as such care was given to ensure that no athletic directors received an invitation to participate. In those cases in which the athletic director was also a coach, s/he did not receive the email with the survey link. It was determined that members of the coaching staff would be the appropriate sample population because their role in the athletic department is analogous to the role the school faculty serves in a K-12 setting. Coaches are the largest portion of the workforce and because they have the highest level of interaction with student-athletes. Furthermore, coaches are considered as the driving force of the organization. In addition to obtaining consent from the University of Texas at San Antonio's Institutional Review Board (IRB), prior to administration of surveys, consent was obtained from the IRB at each institution included in the study. Additionally, the athletic director at each institution was sent a courtesy letter informing him/her that his/her coaches would be contacted requesting their participation in the study.

Final Study Data Collection. Data were collected from the fall of 2009 through spring 2010. The questionnaires were administered to coaches electronically using the web-based survey administration program Survey Monkey. A brief letter of introduction was included in an email sent directly to each coach's campus email address. Included in the email was a link to the survey and the password required to access the instrument. The letter outlined the purpose for the research, defined specific terms used in the questionnaire, and emphasized the effort taken to maintain anonymity and confidentiality in all aspects of the research study. To that end, no names or other identifying characteristics (e.g., name of the sport coached, race, ethnicity, or

gender of the respondents) were included on the instrument. Additionally, the letter informed coaches that if they felt uncomfortable with any item, there was no requirement to respond and that they could quit the survey at any point. Dillman, Smyth, and Christian (2008) indicated follow-up reminder notices to be a well established means of enhancing response rates. As such, two follow-up emails were sent at five week intervals. Because there was no way to ascertain who had completed the survey, all coaches from each institution received both follow-up emails. A copy of the introduction letter is in Appendix G and a copy of the follow-up emails is in Appendix H. Additionally, a copy of the athletic director courtesy letter can be found in Appendix I.

Data Analysis

The focus of this study was to examine the relationship between organizational trust and mindfulness in D-III athletic departments, thus the unit of analysis was at the department level and not the individual members of the coaching staff. Consequently, while individual responses collected from coaches documented their perceptions of organizational trust and mindfulness, the data were aggregated to the department level. As such, analyses were conducted on the overall athletic department means rather than on the individual respondent means.

Confirmatory factor analysis was employed to examine the factor structure of both the ADTS and ADMS. It was expected that the factor structure for the fifty-nine athletic departments would reflect the findings of the pilot study. The instruments were assessed for reliability using Cronbach's alpha. Descriptive statistics, including means and standard deviations were calculated for the three measures of organizational trust and for organizational mindfulness to ensure that the data was not corrupt. As a means to test the research questions, correlation coefficients were calculated for each element of organizational trust and mindfulness.

Furthermore, a correlation matrix of Pearson product-moment correlation coefficients was constructed to ascertain the emergence of specific patterns. For example, did the perception of athletic director trust by coaches more strongly relate to overall department mindfulness or did trust in student-athletes have a significant relationship to overall department mindfulness? Lastly, multiple linear regression analyses were conducted to assess the relationship and predictability of the organizational trust measures on athletic department mindfulness. See Table 3 for a list of the variables and statistical procedures associated with each research question. In addition to using each measure of organizational trust, three control variables were used (university endowment size, athletic department budget, and D-III NACDA Cup standings). As such three separate regression equations were created. All variables were entered using the simultaneous method of entry (Field, 2005).

Table 3

Variables and Statistical Procedures Used to Test Research Questions

Research Question	Independent Variable (s)	Dependent Variable	Statistical Test(s)
Q1: Which aspect of trust (colleagues, athletic director, or student-athletes) is the best predictor of organizational mindfulness in Division III athletic departments when controlling for other key organizational factors?	Coaches' Trust in AD, Coaches' Trust in colleagues, and Coaches' Trust in student-athletes	Organizational Mindfulness	Simultaneous Entry Method Multiple Linear Regression
Q2: Is there a statistically significant relationship between the coaching staff's trust in colleagues and organizational mindfulness?	Coaches' Trust in colleagues	Organizational Mindfulness	Pearson product-moment correlation coefficients
Q3: Is there a statistically significant relationship between the coaching staff's trust in the athletic director and organizational mindfulness?	Coaches' Trust in AD	Organizational Mindfulness	Pearson product-moment correlation coefficients
Q4: Is there a statistically significant relationship between the coaching staff's trust in student-athletes and organizational mindfulness?	Coaches' Trust in student-athletes	Organizational Mindfulness	Pearson product-moment correlation coefficients

Chapter Summary

NCAA Division III athletic departments can impact student-athletes in a positive or negative manner (Pascarella & Terenzini, 2005). Prior research has indicated that organizational trust is an important element in creating organizations where growth occurs (Dirks, 2000; Hoy, et al., 1996; Shoho & Smith, 2004; Smith & Shoho, 2007; Tschannen-Moran & Hoy, 2000). Further research indicates that high levels of organizational mindfulness are required to operate as a high reliability organization (Hoy, 2003; et al., 2006; Weick & Sutcliffe, 2001, 2007). Consequently, the focus of this research is to explore the relevance of organizational trust to mindfulness in NCAA Division III athletic departments.

This chapter presented the methodology of the present study. First, a restatement of the study's purpose and research questions was discussed. Next, each variable was operationalized and a description of the instrument design and results of the pilot study followed. A description of research participants and data collection procedures ensued. Lastly, data analysis techniques were introduced. The study next moves to a discussion of the results from the analysis of the collected data.

CHAPTER FOUR: PRESENTATION AND ANALYSIS OF DATA

This chapter presents results from the analysis of the data to answer the research questions previously presented. It begins with a presentation of descriptive statistics, factor analysis, and reliability results for each variable. That is followed by a correlational analysis which addresses research questions two, three, and four. Finally, a multiple regression analysis is presented to examine which aspect of trust is the best predictor of organizational mindfulness.

Descriptive Statistics for Research Variables

The first step in the data analysis process was to derive the descriptive statistics for each variable. The independent variables of athletic department trust included: coaching staff's trust in colleagues, coaching staff's trust in athletic director, and coaching staff's trust in student-athletes. The dependent variable was organizational (athletic department) mindfulness. The descriptive statistics for each variable is presented in Table 4. An examination of ranges, means, and standard deviations took place to ascertain if any unusual findings were present. No anomalies were found to prevent further statistical analysis. As such, the following section concentrates on a more meaningful examination of the independent and dependent variables employed in this study.

Table 4
Descriptive Statistics of Research Variables

Variable	Mean	Standard Deviation	Range	Minimum	Maximum
Coaching Staff's Trust in Colleagues	4.4742	.62765	3.11	2.78	5.89
Coaching Staff's Trust in the Athletic Director	4.4806	.78928	3.93	1.64	5.57
Coaching Staff's Trust in Student-Athletes	4.5020	.44358	2.05	3.25	5.30
Organizational Mindfulness	4.0612	.52484	2.80	2.43	5.23

Examination of Variables

This section assesses the factor structure and reliability analysis of the organizational trust and mindfulness instruments used in this study.

Organizational Mindfulness

The construct of mindfulness is new in the exploration of NCAA athletic departments. As such, it is important to confirm the factor structure of the instrument to determine its stability and to ensure construct validity. The pilot study discussed in chapter 3 reported a stable, reliable, and valid instrument. Further confirmation of the factor structure, however, is necessary.

Specifically, the fourteen items were expected to cluster in two subsets: coaches' perception of coaching staff mindfulness (mindfulness of coaching staff) and coaches' perception of athletic director mindfulness (mindfulness of athletic director). Organizational (athletic department) mindfulness is the combined measure of mindfulness of coaching staff and mindfulness of athletic director as reported on the fourteen item survey instrument. While there are issues associated with the use of surveys to uncover respondent beliefs (Babbie, 1995), the assumption was made that the perceptions of the coaches were honest and forthright.

A factor analysis was performed on all fourteen items of the athletic department mindfulness scale and compared to results from the pilot test discussed previously in order to confirm those findings. A principal components factor analysis, using a varimax orthogonal rotation with Kaiser Normalization was the extraction method applied to all fourteen items. The factor loadings were consistent and stable in comparison to the pilot study results discussed in chapter three (see Table 5). Factor one describes how the coaching staff perceives their colleagues orientation towards mindfulness. This factor had strong factor loadings between .512 and .742 and it explained 27.72% of the cumulative variance. Factor two describes how the

coaching staff perceives the athletic director's behavior regarding mindfulness. This factor had strong factor loadings between .514 and .779 and the cumulative variance explained by both factors was 52.58%. Furthermore, because the two dimensions of mindfulness were significantly correlated ($r = .509$, $p < .01$) it supported the decision to utilize the combined measure of organizational (athletic department) mindfulness as the dependent variable (Hoy, Gage, & Tater, 2006).

Next, reliability coefficients were calculated for the two dimensions of organizational mindfulness. The results for each subset were strong and consistent with the findings from the pilot study. The Cronbach Alpha levels for each factor were determined to be: mindfulness of coaching staff .833 (.864 in the pilot study) and mindfulness of athletic director .841 (.870 in the pilot study). The factor analysis and Cronbach Alpha results support the factor structure, construct validity, and reliability of the athletic department mindfulness scale (ADMS). Thus, the use of the ADMS developed for this study is supported by the data, but the author promotes additional use of the scale to reproduce these findings.

Table 5

Factor Analysis of Athletic Department Mindfulness Scale

Item	Final Study
Mindfulness of Coaching Staff	
Most coaches in this department are reluctant to change	.742
Coaches in this department learn from their mistakes and correct them so they do not happen again	.731
Coaches in this department jump to conclusions	.704
Coaches in this department treat errors as healthy information and try to learn from them	.702
Coaches in this department respect power more than knowledge	.694
Many coaches in this department give up when things go bad	.676
If something out of the ordinary happens, the coaching staff knows who has the expertise to respond	.512
Alpha Coefficient	.833
Eigenvalues	3.880
Cumulative % of the Variance	27.72
Mindfulness of Athletic Director	
The A.D. of our department does not value the opinions of the coaches	.779
During an average day, the A.D. comes into enough contact with the coaching staff to build a clear picture of the current situation	.736
Coaches do not trust the A.D. enough to admit their mistakes	.711
My A.D. negotiates differences of coaching style, strategies, and decisions without destroying the diversity of opinions	.683
My A.D. often jumps to conclusions	.680
The A.D. appreciates skeptics	.600
The A.D. seeks out and encourages the reporting of bad news	.514
Alpha Coefficient	.841
Eigenvalues	3.481
Cumulative % of the Variance	52.58

Organizational Trust

The second variable examined in this study was organizational trust. The construct of organizational trust is also new in the examination of NCAA athletic departments. As such, it is important to confirm the factor structure of the instrument, as reported in chapter 3, to ensure construct validity. Specifically, the twenty-eight items were expected to cluster in three subsets: coaching staff's trust in colleagues, coaching staff's trust in athletic director, and coaching staff's trust in student-athletes. While there are issues associated with the use of surveys to uncover respondent beliefs (Babbie, 1995), the assumption was made that the perceptions of the coaches were honest and forthright.

Confirmatory factor analysis was performed on all twenty-eight items of the athletic department trust scale and compared to results from the pilot test (see Table 6). Principal components factor analysis, using a varimax orthogonal rotation with Kaiser Normalization, was the extraction method applied to all twenty-eight items. Eigenvalues represent the amount of variance for which each factor accounts. The analysis resulted in uncovering three factors with Eigenvalues greater than one, indicating the factor structure of the instrument is methodologically sound (Field, 2005). These factor loadings were consistent in comparison to the pilot study results discussed in chapter three.

Factor one describes how the coaching staff perceives their trust in athletic director. This factor had strong factor loadings between .776 and .886 and it explained 29.32% of the cumulative variance. Factor two describes how the coaching staff perceives their trust in colleagues. This factor had strong factor loadings between .459 and .854 and it explained 22.44% of the cumulative variance. Factor three describes how the coaching staff perceives their trust in student-athletes. This factor had strong factor loadings between .586 and .789 and it explained 15.37% of the cumulative variance. The cumulative variance explained by all three factors was 67.13%.

Table 6

Factor Analysis of the Athletic Department Trust Scale

Item	Final Study
Trust in Athletic Director (TAD)	
The coaching staff in our department can rely on the A.D.	.886
The A.D. in our department is unresponsive to the coaching staff's concerns	.880
The coaching staff in our department has faith in the integrity of the A.D.	.875
The coaching staff in our department trust their A.D.	.873
The A.D. in our department typically acts with the best interest of the coaching staff in mind	.845
The A.D. in our department is competent in performing his or her job	.845
The A.D. openly shares information with the coaching staff	.828
The coaching staff in our department is suspicious of most of the A.D.'s actions	.814
The A.D. in our department keeps his or her word	.812
The A.D. in our department does not show concern for the coaching staff	.793
The A.D. doesn't tell the coaching staff what is really going on	.776
Alpha Coefficient	.966
Eigenvalues	8.209
Cumulative % of the Variance	29.32
Trust in Coaching Staff (TCS)	
The coaching staff in our department believes in each other	.854
The coaching staff in our department typically looks out for each other	.843
Even in difficult situations, the coaching staff in our department can depend upon each other	.826
The coaching staff in our department trusts each other	.825
The coaching staff in our department is open with each other	.821
When the coaching staff in our department tells you something you can believe what they say	.792
The coaching staff in our department is suspicious of each other	.768
The coaching staff in our department has faith in the integrity of their colleagues	.733
The coaching staff in our department is not competent in their coaching abilities	.459
Alpha Coefficient	.944
Eigenvalues	6.285
Cumulative % of the Variance	51.76
Trust in Student-Athlete (TSA)	
Student-athletes in our department can be counted on to do their work	.789
Student-athletes in our department are reliable	.774
The coaching staff in our department trusts their student-athletes	.716
The coaching staff in our department believes what students say	.690
The student-athletes in our department have to be closely supervised	.669
Student-athletes in our department are secretive	.655
The coaching staff in our department believes student-athletes are competent in their ability to learn new skills	.632
Student-athletes in our department are caring towards one another	.586
Alpha Coefficient	.864
Eigenvalues	4.303
Cumulative % of the Variance	67.13

Next, reliability coefficients were calculated for the three dimensions of organizational trust. The results for each subset were strong. The Cronbach Alpha levels for each factor were determined to be: coaching staff's trust in athletic director .966 (.974 in pilot study), coaching staff's trust in colleagues .944 (.908 in pilot study), and coaching staff's trust in student-athletes .864 (.900 in pilot study). Additionally, intercorrelations were calculated among the factors of the Athletic Department Trust Scale. The results were moderately strong, though it should be noted that coaching staff's trust in athletic director did not have a significant relationship with coaching staff's trust in student-athletes ($r = .246$, n.s.). The correlations and alpha coefficients are presented in Table 7. The factor analysis and Cronbach Alpha results support the factor structure, construct validity, and reliability of the athletic department trust scale (ADTS). Thus, the use of the ADTS developed for this study is supported by the data, but the author promotes additional use of the scale to reproduce these findings.

Table 7

Athletic Department Trust Scale Alpha Coefficients of Reliability

	Coaches' Trust in Coaching Staff	Coaches' Trust in Athletic Director	Coaches' Trust in Student-Athlete
Coaching Staff's Trust in Colleagues	(.944)	.598**	.432**
Coaching Staff's Trust in Athletic Director		(.966)	.246
Coaches' Trust in Student-Athletes			(.864)

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

Alpha coefficients of reliability for the factors are displayed in parentheses.

Relationship Between Organizational Trust and Mindfulness

This section documents the relationships between the above independent and dependent variables as they relate to the research questions presented at the end of chapter 2. In order to

measure the degree to which a linear relationship exists between the facets of organizational trust and organizational mindfulness, the study utilized Pearson product-moment correlation coefficient analysis. The focus of the correlational analysis was on the degree to which a linear model may describe the relationship between the variables. Consequently, a correlation coefficient of zero ($r = 0.0$) indicates the absence of a linear relationship, while a correlation coefficient of one ($r = +/- 1.0$) indicates a perfect linear relationship. Additionally, the coefficient of determination (R^2) was analyzed in order to more fully understand the effect of the relationship between the independent and dependent variables (Field, 2005).

In addition to the independent and dependent variables, three moderating variables were also utilized for the data analysis. All three of these variables (University Endowment Size, Athletic Department Budget, and NACDA Cup rankings) were included in the analysis to assess any possible relationship with organizational trust and mindfulness. As discussed in chapter three, the NACDA Cup ranking variable is dichotomous rather than continuous. As such, the study utilized the Point-Biserial correlation coefficient (r_{pb}) to determine the relationship between the NACDA Cup rankings and all the other variables.

Research question two asked if a statistically significant relationship existed between the coaching staff's trust in colleagues and organizational mindfulness. Trust in colleagues ($r = .744$, $p < .01$) was positively correlated to organizational mindfulness and though causality cannot be inferred, the large coefficient of determination ($R^2 = .553$) indicated 55.3% of the variability in organizational mindfulness can be accounted for by trust in colleagues. Thus, it can be asserted that trust in colleagues has a large effect on organizational mindfulness. The third research question asked if a statistically significant relationship existed between the coaching staff's trust in athletic director and organizational mindfulness. Trust in athletic director ($r = .881$, $p < .01$)

was positively correlated to organizational mindfulness and though causality cannot be inferred, the coefficient of determination ($R^2 = .776$) indicated 77.6% of the variability in organizational mindfulness can be accounted for by trust in athletic director. Thus, it can be asserted that trust in athletic director has a large effect on organizational mindfulness. Research question four sought to discover if a statistically significant relationship existed between the coaching staff's trust in student-athletes and organizational mindfulness. Trust in student-athletes ($r = .352$, $p < .01$) was also positively correlated to organizational mindfulness and though causality cannot be inferred, the coefficient of determination ($R^2 = .124$) indicated 12.4% of the variability in organizational mindfulness can be accounted for by trust in colleagues. Thus, it can be asserted that trust in student-athletes has a medium effect on organizational mindfulness. The correlation results for all variables are presented in Table 8.

Table 8
Correlational Analysis of the Study Variables

	Coaching Staff's Trust in Colleagues	Coaching Staff's Trust in Athletic Director	Coaching Staff's Trust in Student-Athletes	Organizational Mindfulness	Endowment	Athletic Budget	Directors Cup Quartile
Coaching Staff's Trust in Colleagues		.598**	.432**	.744**	.020	.101	-.037
Coaching Staff's Trust in Athletic Director			.246	.881**	.002	.200	.070
Coaching Staff's Trust in Student-Athletes				.352**	.170	.099	.309*
Organizational Mindfulness					-.047	.211	.035
Endowment						-.046	.208
Athletic Budget							.139
Directors Cup Quartile							

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

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

Multiple Regression Analysis

Multiple linear regression is an important methodical procedure to determine the percentage of variance in the dependent variable which can be attributed to a set of predictor variables. When using regression analysis, one key is that the model be free of errors so that the regression coefficient is accurate and free from bias. One common concern is the size of the sample. Field (2005) indicated that if a researcher uses too many predictors with a small sample, random data may appear to show a strong effect. A commonly accepted metric for sample size is fifteen cases of data for each predictor variable (Field, 2005; Myers, Gamst, & Guarino, 2006). Consequently, because of the small sample ($N = 59$), the dependent variable, organizational mindfulness was regressed against each dimension of organizational trust (and the three moderating variables) separately.

Multiple regression analysis was utilized to develop a more refined understanding of the relationships between the elements of organizational trust and the aspects of organizational mindfulness, as well as to answer one of the research questions of this study. The first research question asks, “Which aspect of trust (colleagues, athletic director, or student-athletes) is the best predictor of organizational mindfulness in Division III athletic departments when controlling for other key organizational factors?” To answer this question, organizational mindfulness was regressed against the three facets of organizational trust (trust in colleagues, trust in athletic director, and trust in student-athletes), university endowment size, athletic department budget, and NACDA Cup rankings.

In the first analysis, organizational mindfulness was regressed against coaching staff’s trust in colleagues and all three moderating variables. The simultaneous entry method was employed. The coaching staff’s trust in colleagues along with university endowment, athletic

department budget, and NACDA Cup rankings, formed a linear combination accounting for a significant portion of the variance in organizational mindfulness ($R = .759$, $p < .001$, adjusted $R^2 = .544$). In other words, the model explained 54% of the variance in organizational mindfulness. It should be noted, however, that coaching staff's trust in colleagues was the only variable which made a significant independent contribution ($\beta = .746$, $p < .001$). See Table 9 for the coefficients in the regression model.

Table 9

Correlations and Multiple Regression of Coaching Staff's Trust in Colleagues and Organizational Mindfulness

Model	<i>r</i>	<i>B</i>	<i>SE B</i>	β
(Constant)		1.254	.372	
Coaching Staff's Trust in Colleagues	.744*	.624	.074	.746**
Endowment	-.047	-.073	.049	-.155
Athletic Budget	.211	.045	.055	.106
Directors Cup Quartile	.035	.051	.126	.049

* $p < .01$, ** $p < .001$

In order to answer the research question, “Which aspect of trust (colleagues, athletic director, or student-athletes) is the best predictor of organizational mindfulness in Division III athletic departments when controlling for other key organizational factors?,” a second regression analysis was performed. In this analysis, organizational mindfulness was regressed against coaching staff's trust in athletic director and all three moderating variables. The simultaneous entry method was employed. The coaching staff's trust in athletic director along with university endowment, athletic department budget, and NACDA Cup rankings, formed a linear combination that accounted for a significant portion of the variance in organizational mindfulness ($R = .882$, $p < .001$, adjusted $R^2 = .761$). In other words, the model explained 76% of the variance in organizational mindfulness. It should be noted, however, that coaching staff's

trust in athletic director was the only variable making a significant independent contribution ($\beta = .880, p < .001$). See Table 10 for the coefficients in the regression model.

Table 10

Correlations and Multiple Regression of Coaching Staff's Trust in Athletic Director and Organizational Mindfulness

Model	<i>r</i>	<i>B</i>	<i>SE B</i>	β
(Constant)		1.497	.223	
Coaching Staff's Trust in Athletic Director	.881*	.585	.043	.880**
Endowment	-.047	-.015	.036	-.032
Athletic Budget	.211	.002	.040	.006
Directors Cup Quartile	.035	-.019	.092	-.018

* $p < .01$, ** $p < .001$

In order to answer the research question, “Which aspect of trust (colleagues, athletic director, or student-athletes) is the best predictor of organizational mindfulness in Division III athletic departments when controlling for other key organizational factors?,” a third regression analysis was performed. In this analysis, organizational mindfulness was regressed against coaching staff's trust in student-athletes and all three moderating variables. The simultaneous entry method was employed. The coaching staff's trust in student-athletes along with university endowment, athletic department budget, and NACDA Cup rankings, did form a linear combination that accounted for a significant portion of the variance in organizational mindfulness ($R = .398, p < .05, \text{adjusted } R^2 = .096$). In other words, the model explained 10% of the variance in organizational mindfulness. It should be noted, however, that coaching staff's trust in student-athletes was the only variable which made a significant independent contribution ($\beta = .394, p < .005$). See Table 11 for the coefficients in the regression model.

Table 11

Correlations and Multiple Regression of Coaching Staff's Trust in Student-Athletes and Organizational Mindfulness

Model	<i>r</i>	<i>B</i>	<i>SE B</i>	β
(Constant)		2.199	.671	
Coaching Staff's Trust in Student-Athletes	.352*	.467	.156	.394**
Endowment	-.047	-.093	.069	-.197
Athletic Budget	.211	.044	.077	.104
Directors Cup Quartile	.035	-.086	.181	-.082

* $p < .01$, ** $p < .005$

According to Myers, Gamst, and Guarino (2006) if moderating variables do not explain a significant amount of the variance, it is not theoretically sound to keep them in the analysis. As such, a final regression analysis was conducted in order to answer the research question, "Which aspect of trust (colleagues, athletic director, or student-athletes) is the best predictor of organizational mindfulness in Division III athletic departments when controlling for other key organizational factors?" In this final analysis, organizational mindfulness was regressed against all the three facets of organizational trust. The simultaneous entry method was employed. The coaching staff's trust in colleagues, athletic director, and student-athlete did form a linear combination that accounted for a significant portion of the variance in organizational mindfulness ($R = .922$, $p < .001$, adjusted $R^2 = .843$). In other words, the model explained 84% of the variance in organizational trust. Specifically, an examination of the part correlations indicates coaching staff's trust in colleagues individually accounted for 24% of the variance, coaching staff's trust in athletic director explained 54% of the variance, and coaching staff's trust in student-athletes contributed 4.3% of the variance. Coaching staff's trust in colleagues ($\beta = .317$, $p < .001$) and trust in athletic director ($\beta = .679$, $p < .001$) both made statistically significant independent contributions to the variance in organizational mindfulness. Coaching staff's trust in

student-athletes, however, did not make a significant independent contribution ($\beta = .048$, n.s.). Additionally, multicollinearity diagnostics were conducted and the Variance Inflation Factor (VIF) statistics for the regression equation were found to be below 2, indicating that multicollinearity did not distort the analyses (Field, 2005). See Table 12 for the coefficients in the regression model.

Table 12

Correlations and Multiple Regression of Organizational Trust and Organizational Mindfulness

Model	<i>r</i>	<i>B</i>	<i>SE B</i>	β
(Constant)		.597	.295	
Coaching Staff's Trust in Colleagues	.744*	.265	.058	.317**
Coaching Staff's Trust in Athletic Director	.881*	.452	.043	.679**
Coaching Staff's Trust in Student-Athletes	.352*	.057	.068	.048

* $p < .01$, ** $p < .001$

Summary of Data Analysis

This chapter presented the results of statistical analyses. First, confirmatory principal components factor analyses were performed and confirmed the factor structure for the two instruments utilized in this study. Next, a correlational analysis pointed towards significant relationships between the three facets of organizational trust and organizational mindfulness. Lastly, in order to develop a more nuanced understanding of the relationships between the variables, four multiple regression analyses were performed that included important moderating variables previously identified by successful athletic directors. Though none of the moderating variables made significant independent contributions to explain the variance, two of the facets of organizational trust did so. A more detailed discussion of the data analysis along with implications of the findings will be presented in chapter 5.

CHAPTER FIVE: SUMMARY, DISCUSSION, AND IMPLICATIONS

Recently, public trust in college athletic departments has eroded. Numerous scandals involving athletes, high profile coaches, and administrators have challenged the notion that intercollegiate departments of athletics are places where trusting relationships can develop and in which good decisions can be made. One aspect of research into successful organizational performance that has received little scholarly examination explores how relevant facets of trust nurture mindful practices. To that end, emergent research (Gage, 2003; Hoy, Gage, & Tarter, 2004, 2006; Scarbrough, 2005) has indicated a strong relationship between organizational trust and mindfulness. All previous research has examined the trust/mindfulness relationship in elementary and secondary public school settings. As such, developing a more complete picture of the facets of organizational trust and mindfulness necessitated exploration in a unique setting.

This study represents a quantitative analysis that targeted specific processes of trust and mindfulness as they occur at the organizational level in NCAA D-III athletic departments. Since there is minimal extant literature that examines trust and none exploring mindfulness in the realm of intercollegiate athletics, this study was undertaken to examine the relationship between organizational trust and mindfulness in college department of athletics. With this intention in mind, it is hoped that organizational scholars are provided both with more refined conceptual models of organizational trust and mindfulness and additional research into the relationship between those constructs. Additionally, through this exploration, it is hoped that practitioners are able to develop a more keen understanding of the relationship between trust and mindful decision-making practices. It is also hoped, through this study, that athletic directors and university administrators understand the importance of developing a culture of trust and

mindfulness. By doing so, they may identify specific approaches to improve organizational trust and mindfulness in their athletic departments.

In this final chapter, the findings from the study are presented. Additionally, a discussion of the findings is offered as well as practical implications, limitations, and suggestions for future research. A summary of the research findings follows.

1. The Athletic Department Trust Scale was found to have a stable factor structure consistent with the theoretical underpinnings of the construct as developed by Shoho and Smith (2004) and with the findings of the pilot study discussed in chapter three.
2. Similarly, the Athletic Department Mindfulness Scale was also found to have a stable factor structure consistent with the findings of Hoy, Gage, and Tarter (2004) and the pilot study discussed in chapter three.
3. Descriptive statistics for each variable were computed and revealed the sample used in this study presented no anomalies, which would prevent further analysis.
4. A correlational analysis of all the facets of organizational trust and of organizational mindfulness indicated: a positive relationship between coaches' trust in colleagues and organizational mindfulness, a positive relationship between coaches' trust in athletic director and organizational mindfulness, and a positive relationship between coaches' trust in student-athletes and organizational mindfulness. Additionally, the correlational analysis revealed a significant relationship between coaches' trust in student-athletes and NACDA Director's Cup rankings.
5. To develop a more accurate picture of organizational mindfulness, it was regressed on the three dimensions of organizational trust, university endowment, athletic department budget, and NACDA Director's Cup rankings. The Multiple *R* for the

regression equation, which included the three trust variables as predictors, was statistically significant $F(3, 55) = 104.696, p < .001$. The analysis demonstrated that 84.3% of the variance in organizational mindfulness ($R = .922, p < .001, \text{adjusted } R^2 = .843$) could be explained by the three dimensions of trust. Further analysis indicated that coaches' trust in student-athletes, university endowment size, athletic department budget, and NACDA Director's Cup rankings did not contribute significant amounts of variance.

6. Specifically coaches' trust in colleagues ($\beta = .317, p < .001$) made a strong and statistically significant independent contribution to the variance of organizational mindfulness. That is, the greater the coaching staff's trust in the colleagues, the more mindful the athletic department.
7. Coaches' trust in athletic director ($\beta = .679, p < .001$) also made a strong and statistically significant independent contribution to the variance of organizational mindfulness. That is the higher levels of coaches' trust in athletic director, the greater the mindfulness of the athletic department. In fact, coaches' trust in athletic director emerged as the strongest predictor of organizational mindfulness.

One caveat should be noted. Although mindfulness was used as the dependent variable, the direction of causality is not absolute. In fact, based on the strong correlation between trust in athletic director and organizational mindfulness, it is suspected the relationship between trust and mindfulness is reciprocal in nature. That is, organizational trust facilitated an environment in which mindfulness can emerge and mindfulness created an atmosphere in which trust can flourish.

Discussion

This study sought to explore the relationship between specific facets of organizational trust and mindfulness that exist in NCAA D-III athletic departments. Correlational analysis revealed statistically significant relationships and medium to large effect sizes between the independent and dependent variables in the study. Regression analysis further confirmed strong independent contributions that two dimensions of trust made to organizational mindfulness.

Coaches' Trust in Colleagues and Organizational Mindfulness

Though no research has explored the relationship between trust and mindfulness in the realm of intercollegiate athletics, previous studies have discovered strong connections between the two constructs in elementary and secondary school contexts (Gage, 2003; Hoy, Gage, & Tarter, 2004, 2006; Scarbrough, 2005). Moreover, studies that explored trust in other organizational settings revealed it to be an important factor in the development of positive workplace outcomes, such as job satisfaction and performance (Goris, Vaught, & Pettit Jr, 2003) and in the reduction of negative workplace behaviors such as absenteeism and intention to leave (Cunningham & MacGregor, 2000). Though limited, the trust research in athletics does point to it being important in organizational areas such as satisfaction, job performance, and organizational commitment (Chelladurai & Ogasawara, 2003; Dirks, 2000; Turner, 2001; Turner & Chelladurai, 2005). Therefore, employees in intercollegiate athletic departments appear to function along similar paths as those working in other organizational settings. As such, it seems plausible to anticipate athletic departments with high levels of collegial trust are likely to engage in mindful decision-making practices. The results of this study seem to validate this notion.

The data revealed a statistically significant relationship between coaches' trust in colleagues and trust in athletic director ($r = .598, p < .01$) and coaches' trust in colleagues and

trust in student-athletes ($r = .432, p < .01$). Moreover, results of the regression analysis indicated that coaches' trust in colleagues accounted for 24% of the variance and had a strong statistically significant effect on organizational mindfulness ($\beta = .317, p < .001$). These results suggest that when coaches perceived their peers to be open, honest, reliable, competent, and benevolent, they were more likely to believe members of the athletic department to pay greater attention to day-to-day operations, be committed to resilience, let experts make decisions, take notice of the near miss, and not to be too quick to oversimplify. Stated more directly, coaches who perceived high level of trust for their colleagues were more likely to perceive their athletic departments to be operating in a manner consistent with principles associated with organizational mindfulness. This is important for athletic directors and university administrators interested in creating a climate where mindful decision-making practices are followed. For example, an administrator or athletic director who is aware of this connection may choose to hire coaches who have demonstrated trustworthy behaviors.

Coaches' Trust in Athletic Director and Organizational Mindfulness

While trust in colleagues is an important element, it is not the only necessary component required to create a culture infused with mindfulness. As past research indicated, trust in supervisor is vital to developing a strong organizational culture. Dirks and Skarlicki (2004) found that employees who trust their leadership are more likely to maximize effort and work towards common goals. Furthermore, Mayer et al. (1995) proposed that subordinates who perceived their leader to have integrity, competence, and benevolence were more comfortable performing actions for which they may be exposed to risk. Tan and Tan (2000) found that both satisfaction with supervisor and workplace innovation were positively related to trust in supervisor. Put simply, be it in non-academic university positions (Smerek & Peterson, 2006) or

in college athletic departments (Snyder, 1990; Weaver & Chelladurai, 2002; Yusof, 1998) research indicates leadership behavior matters with regards to an environment conducive to trust.

The findings of this study support the importance of workers' perceptions of a supervisor's level of trust. In fact, the results indicate coaches' trust in athletic director to be positively associated with trust in colleagues ($r = .598, p < .01$). Furthermore, trust in athletic director had a statistically significant correlation with organizational mindfulness ($r = .881, p < .01$). Additionally, regression analysis demonstrated that coaches' trust in athletic director has a strong statistically significant and independent effect on organizational mindfulness ($\beta = .679, p < .001$). The results suggest when coaches believe their athletic director to be trustworthy they are more likely to hold that the athletic department operates using the five principles of mindful decision-making. That is, coaches who thought their athletic director to be benevolent, competent, honest, open, and reliable also perceived the members of the athletic department as deferring to experts, paying attention to weak signals of failure, being sensitive to operations, committing themselves to bouncing back, and being reluctant to oversimplify. This is useful information for university administrators interested in having an athletic department infused with mindful decision-making practices. For example, an administrator who is aware of this connection may choose to hire an athletic director more likely to create an organizational climate in which trusting behaviors are recognized and rewarded.

Coaches' Trust in Student-Athletes and Organizational Mindfulness

Previous research has indicated trust to be an important component in the relationship between coach and athlete (Dirks, 2000; Elsass, 2001; Gould et al., 2002). The results from this study confirmed a statistically significant relationship between trust in student-athletes and both trust in colleagues ($r = .432, p < .01$) and organizational mindfulness ($r = .352, p < .01$). A

significant correlation, however, does not always lead to a strong predictive relationship. With that in mind, it is important to note that coaches' trust in student-athletes had a medium effect on organizational mindfulness. Furthermore, regression analysis did not indicate that coaches' trust in student-athletes had a significant independent contribution to organizational mindfulness ($\beta = .048$, n.s). Thus, coaches' perception of their student-athletes' reliability, openness, honesty, competence, and benevolence did not have a statistically significant impact on how the coaches viewed the level of mindfulness operating in the athletic department. This does not mean, however, that coaches would not be well-served to develop trusting relationships with their student-athletes. The results suggest a statistically significant relationship between coaches' trust in student-athletes and NACDA Cup rankings, i.e. success on the playing field ($r = .309$, $p < .05$). Despite the medium effect size, it may be well worth exploring the nature of that relationship in a future study.

Organizational Mindfulness and Dimensions of Organizational Trust

Though most organizations create policies, develop guidelines, and implement rules to facilitate day-to-day decision-making, unexpected events do occur. The routinization of tasks and the creation of labels may lead organizations towards complacency. Unfortunately, this contentment can permeate organizational practices such that it becomes deeply engrained into the organization's core culture. If the problem becomes endemic, organizational members may fail to be attentive to small fissures i.e., problems may not be recognized until they become too big to manage. Prior studies have found that organizations hoping to avoid the decision-traps associated with complacency need to operate using mindful practices described by Weick and Sutcliffe (2001, 2007). Additional research indicated an important ingredient in the development

of mindfulness to be organizational trust (Gage, 2003; Hoy, Gage, & Tarter, 2004, 2006; Scarbrough, 2005).

The findings of this study seem to support those previous results. Indeed, the three dimensions of organizational trust each had a statistically significant correlation with organizational mindfulness: coaches' trust in colleagues ($r = .744, p < .01$), coaches' trust in athletic director ($r = .881, p < .01$), and coaches' trust in student-athletes ($r = .352, p < .01$). Furthermore, coaches' trust in colleagues and trust in athletic director had large effect sizes. A deeper exploration of the relationship revealed that coaching staff's trust in colleagues, athletic director, and student-athlete did form a linear combination that accounted for a significant portion of the variance in organizational mindfulness ($R = .922, p < .001, \text{adjusted } R^2 = .843$). It is interesting to note, however, that university endowment, athletic department budget size, and NACDA Cup rankings did not have a statistically significant relationship with or impact on organizational mindfulness.

As detailed in chapter three, five highly successful NCAA D-III athletic directors identified those three variables as being important contributors to their department's success. The findings from this study imply those three variables, while reportedly important to athletic department success, are not directly related to organizational decision-making processes. Perhaps the findings are a result of the small sample size, but to be sure further investigation into the nature of those variables is warranted. Additionally, coaches' trust in student-athletes, despite a positive, statistically significant correlation, did not account for a significant independent contribution to the variance in organizational mindfulness, after accounting for coaches' trust in colleagues and athletic director. This finding, however, should not be cause for alarm. In a similar study, though conducted in a different setting, Hoy, Gage, and Tarter (2006) also found

that faculty trust in clients (analogous to the student-athletes in this study) had limited influence on school mindfulness.

In sum, the results of this study suggest that coaches who perceive high level of trust in their workplace are more likely to perceive their athletic departments to be operating in a manner consistent with principles associated with organizational mindfulness. That is, coaches who believe that both their colleagues and their athletic director are benevolent, competent, honest, open, and reliable are more likely to perceive the organization as making mindful decisions. They perceive members of the organization: do not over rely on routines, are constantly scanning the environment for weak signals of failure, and ensure that decisions are made by experts, not necessarily those at the top of the organizational chart.

Athletic Department Mindfulness and Trust Scales

This study was the first to explore the relationship between organizational trust and mindfulness using two new research instruments: the Athletic Department Trust Scale (ADTS) and the Athletic Department Mindfulness Scale (ADMS). The study findings support the reliability and validity of both scales. Both instruments appear to be useful tools for university administrators and athletic directors interested in assessing specific organizational processes, i.e. trust and mindfulness, in the athletic department.

Confirmatory factor analysis verified the results from the pilot study described in chapter three. The Athletic Department Mindfulness Scale had 14-items load into two factors labeled mindfulness of coaching staff (MCS) and mindfulness of athletic director (MAD). The alpha coefficients for both were strong (MCS = .833 and MAD = .841). Furthermore, because the correlation between MAD and MCS was significant with a large effect size ($r = .509$, $p < .01$) it is conceptually sound to use organizational (athletic department) mindfulness as the combined

measure of mindfulness of coaching staff and mindfulness of athletic director for analytical purposes (Hoy, Gage, & Tarter, 2006). Similarly, the Cronbach alpha coefficients for the three subsets of the 28-item Athletic Department Trust Scale were also high: trust in athletic director = .966, trust in coaching staff = .944, and trust in student-athlete = .864.

In sum, the Athletic Department Mindfulness and Trust Scales were both found to be valid and reliable measures of two important organizational processes at work in intercollegiate athletic departments. As such, the scales represent an easy method for *street level* practitioners to explore two important workplace concepts. Since athletic departments are likely to face pressures impacted by trust and mindfulness, e.g., performance, recruitment, and budgeting, the study of intercollegiate athletic departments should continue. Both the Athletic Department Mindfulness and Trust scales offer valid and reliable research tools which may assist both researchers and practitioners develop a more nuanced understanding of these two organizational practices.

Implications

The findings of this study provide suggestions for both practitioners and researchers. In athletic departments, the three dimensions of organizational trust appear to influence one another as they combine and contribute to an environment which enhances organizational mindfulness. The results of this investigation indicate that when coaches perceive their colleagues and their athletic director as being trustworthy, they are more likely to believe members of the athletic department operate using the principles of mindfulness. Seeking to expand into a new arena, the organizational literature that previously revealed a strong relationship between trust and mindfulness, this study adds to that growing body of research by exploring these two organizational processes using similar methodology. In sum, it is hoped that the practical and

research implications discussed in the following section will aid both practitioners and scholars as they seek to improve the organizational milieu of intercollegiate athletic departments.

Practical Implications

Both the Athletic Department Mindfulness Scale and the Athletic Department Trust Scales are valid and reliable research instruments, which are user friendly, and take less than 10-minutes (combined) to complete. As such, they appear to be useful instruments for university administrators and athletic directors interested in evaluating the organizational trust and mindfulness operating in their athletic department. The scales present, for either a university administrator or an athletic director, an anonymous and confidential approach to gathering information about two organizational processes that may have a relationship with positive workplace outcomes.

The data, however, do not indicate a statistically significant relationship between organizational mindfulness and on the field performance (as measured by the NACDA Cup rankings). Nor do the data reveal a significant relationship between trust in colleagues or trust in athletic director and on the field performance. As such, athletic directors and university administrators should take care to use the tool for its intended purpose i.e., to explore behaviors and attitudes which impact organizational trust and decision-making, not to determine who is more likely to win games or not. The data, though, did reveal a statistically significant correlation, with a medium effect size, between trust in student-athlete and NACDA Cup rankings ($r = .309, p < .05$). Future study should explore that relationship in greater detail and depending upon what is uncovered, athletic directors may in fact be able to use the student-athlete dimension of the Athletic Department Trust Scale as a means to assess the potential for

on field success. Without further exploration, however, it would be inappropriate to use the tool in such a manner.

Conversely, athletic directors seeking to explore the level of trust in their department can benefit from employing the two instruments designed in this study. The Athletic Department Mindfulness Scale is useful to measure the extent to which coaches perceive mindful decision-making to be occurring. That is, do coaches believe that both peers and the athletic director to be: committed to resilience, deferential to experts, preoccupied with failure, sensitive to operations, and reluctant to oversimplify. In addition, the Athletic Department Trust Scale is valuable to determine coaches' perceptions about the openness, honesty, benevolence, competence, and reliability of their colleagues, athletic director, and student-athletes. Specifically, information derived from these two instruments can provide athletic directors with a deeper understanding of the cultural environment of their departments. Furthermore, an athletic director who is aware of this connection may choose to hire coaches who practice mindful decision-making and who have demonstrated trustworthy behaviors. Additionally, university administrators who are aware of this connection may choose to hire an athletic director more likely to create an organizational climate in which trusting behaviors are recognized and rewarded.

Moreover, university administrators can use the Athletic Department Mindfulness and Trust Scales to uncover the coaching staff's perceptions regarding the trustworthiness and mindfulness of the athletic director. In essence, by using these two measures, administrators can view key organizational processes through the eyes of athletic department personnel – a look they are not often afforded. A sketch of organizational trust and mindfulness can then be drawn and determinations be made as to whether the organizational culture is in need of attention. However, care should be given to understand that these instruments merely provide a snapshot

picture of the levels of organizational trust and mindfulness i.e., these instruments can be used for diagnosis, not to address the root cause of any uncovered issues.

Furthermore, discovering a problem as being related to mindlessness or a lack of trust is not the same as deciphering it. If, through use of these two instruments, issues with trust and mindfulness are revealed, action steps should be taken to rectify those problems. Internal or external consultants could be employed to ascertain the deep-seeded causes of the problem, develop a specific course of action, implement a plan, and assess the results (Slack & Parent, 2006). At minimum, if information gathered from these two instruments reveals problems with organizational trust and mindfulness, an administrator or athletic director could use those data to initiate a meaningful investigation into the root causes and to explore steps the department might take to address those problems. As with the individual, a more self-aware organization can be more effective. Using these two instruments to develop an understanding of trust issues, of knowing specific decision-making weaknesses, might pave the way for the application of interventions to improve team dynamics. What follows are specific suggestions which may be employed to improve organizational trust and mindfulness.

Organizational trust. Tschannen-Moran (2004) offers five practical suggestions for a school principal to improve the level of organizational trust. These suggestions are similar to the five practices of exemplary leadership developed by Kouzes and Posner (2007), which are directed to leaders in every industry. As such, applying Tschannen-Moran's trust building approach should also facilitate the development of higher levels of trust in the intercollegiate athletic department. She intimates that employing these five trust building strategies should be the focal point of any leader. The five functions of trust building include:

1. Visioning – involving those impacted by goals and decisions to be included in the vision-development phase.
2. Modeling – demonstrating the expected norms of conduct, empathy, and actions and openly encouraging others to do so.
3. Coaching – employing situational leadership strategies by expressing authentic interest in both the essential tasks and the wellbeing of those completing them.
4. Managing – understanding that planning, organizing, and controlling are all important aspects of management, but doing so in a way which is neither overly coercive nor permissive.
5. Mediating – developing strategies and creating structures which allow for the resilient restoration of trust when it has been breached or resolution to conflicts which have arisen.

An athletic director interested in building a culture of trust might specifically engage members of the department in a retreat, during which the mission, vision, and operational goals for the athletic department would be developed. Athletic departments that currently *live the mission* may need less attention to mission and vision creation, but are still advised to involve staff members in the development of annual department-wide goals. Conversely, those athletic departments experiencing a wide gap between espoused mission and mission-in-practice will find the process as potentially rewarding and, if done well, should see an increased level of organizational trust. Furthermore, it is important for athletic directors to understand the relationship between words and actions. If she values specific standards of conduct and actions, yet fails to hold herself to those same standards, her staff will recognize the inconsistency and will, in turn, *act as she acts, not as she says* (Kouzes & Posner, 2007). As such, to create a

climate of trust, the athletic director must model the behavior staff members are expected to demonstrate.

While not all athletic directors rise from the coaching ranks, many do. Successful coaches understand the difference between fairness and equality. That is, to treat each athlete equally may in fact be treating them all unfairly. Being mindful of each individual's potential, coaches understand athletes have different skill sets, different temperaments, and learn through various methods. Thus, to utilize only one strategy to teach (coach) an athlete would prevent each individual from developing to his or her full potential (Blanchard, 2010). Therefore, athletic directors are advised to remember the lessons that served them well as a coach and to apply those same situational leadership strategies to managing departmental staff.

Lastly, a successful athletic director recognizes that all organizations experience breaches of trust and understand conflicts are inevitable. For that reason, they are encouraged to prepare themselves and develop strategies to mediate when trust is breached or a conflict occurs. Failure to create and refine mediation approaches in advance, will lead to producing them in the moment, which often leads to unsuccessful resolutions. Schein (2010) indicated unsuccessful conflict resolution creates organizations "built on distrust and low commitment, leading good people to leave . . ." (p. 244).

Organizational mindfulness. Previous research has indicated that mindful individuals are: sensitive to their environments (Langer & Modloveanu, 2000a, 200b), open to new information and points of view (Langer, 1989), able to create new labels to group and describe information (Langer, 1989; Langer & Modloveanu, 2000a, 200b), and capable of focusing on process rather than outcome (Langer, 1997). Expanding on those findings, Knight (2004) indicated, "Collective mindfulness similarly involves a heightened state of involvement or being,

but at the unit level” (p. 10). Weick and Sutcliffe (2001, 2007) refined the concept of collective or organizational mindfulness even further and developed the following five elements to describe an organizational culture infused with mindfulness: preoccupation with failure, sensitivity to operations, reluctance to simplify, commitment to resilience, and deference to expertise. In the current financial situation (high cost of tuition, travel, etc . . .) coupled with the ever increasing belief that college athletic departments are not places where trust is regularly practiced, the university administrator or athletic director may need to focus on fostering an organizational environment which operates mindfully. Based upon suggestions posited by Hoy, Gage, and Tarter (2006), the following ideas are presented to the college athletic director:

1. Reframe organizational objectives as failures which must not occur. Doing so will shift the focus away from the premature cognitive commitment and towards disconfirming evidence. For example, coaches should be encouraged to view a last second victory as an opportunity to revamp strategies rather than viewing the close call as evidence the current approach is the most effective.
2. Emphasize the vulnerabilities in the system, be they in the form of budget constraints, admissions requirements, or something else which might negatively impact performance. Coaches need not be shocked or overwhelmed by the unforeseen. Do not let members of the coaching staff be caught off-guard by imminent university-wide changes that may significantly impact their job performance.
3. Welcome the bad day. Said another way, see problems as opportunities for learning and growth. If viewed through the mindful lens, losing an early season game can provide coaches with a terrific opportunity to make roster adjustments or change practice conditions. Both of which may have long term benefits for the team.

4. Create an environment in which the staff is free to take risks, be creative, and experiment with new approaches. While basic organizational tasks will be improved by simplification (e.g., travel schedules), other complex functions (e.g. creating game plans) require more creativity. Inventiveness often emerges through trial and error.
5. Look for occasions to inject small levels of controlled chaos. This will keep staff members alert. Avoiding complacency is important to mindful decision-making. Encourage staff members to revisit recruiting guidelines or develop department-wide academic standards. When coaches are knocked off their routine, creativity kicks in.
6. Find opportunities to reinvent the wheel. Relying on old habits and processes only invites mistakes. Relying on old game plans, even those that led to a previous championship, is an example of mindless behavior. Coaches must be willing to make strategy adjustments based on the talents their student-athletes possess; based on the current situation. An over-reliance on old processes is one reason why so few teams win multiple championships.
7. Demand incessant chatter. The old adage, *no news is good news*, does not apply in the mindful environment. Rather, no news means organizational members are either afraid to speak their minds or are not paying sufficient attention to what is occurring around them. Athletic equipment and facilities will degrade over time. If not maintained or replaced, the damage may lead to injury or tragedy. Facility maintenance staff may not spot a small crack in the gym wall. Athletes and coaches who regularly practice in that gym, however, are more likely to see the crack. As such, all athletic department personnel must be attentive to and encouraged to immediately report concerns with athletic facilities.

8. Embrace the suggestion from anyone on the organizational chart. If given the opportunity to do so, the lowest person in the hierarchy might suggest the next great idea. Have a weekly brown bag lunch and invite all staff members. Meet with the student-athlete advisory council once a month. The next great idea might never be unearthed if discussion is not encouraged.

This research demonstrated where trust is valued, mindful practices followed. As such, the intercollegiate athletic director must foster an environment which promotes high levels of collegial trust and she must also behave in a manner which promotes trust in her. Consequently, the athletic director who demonstrates benevolence, competence, honesty, openness, and reliability and who demands the same from coaches is more likely to foster an environment in which members of the organization operate using mindful guidelines. That is, athletic departments in which trust pervades are more likely to have staff members who defer to experts, voice their concerns, explore unique approaches to problem solving, and do not rely on ideas and practices simply because they brought success in the past.

Limitations and Research Implications

Limitations

Though great care was taken with sampling techniques and data analysis procedures, this study is not void of limitations. First, the survey methodology used for this study relied on perceptions of the respondents. As with all self-reported data, some caution should be used when making generalizations. There is no reason to believe that respondents were not forthright, but the perceptions expressed in their responses, may indeed not accurately reflect the nature of their workplace. Second, the three moderating variables used in this study did not reveal a significant relationship with two of the trust variables or organizational mindfulness. This finding provides

valuable information; such that there may be other moderating variables operating in the liberal arts and small university context which might impact the levels of trust and mindfulness at play in NCAA D-III athletic departments. Third, the small sample size reflects the difficulties in collecting data from this population. This issue points to a potential problem with future use of these instruments with this specific population. Additionally, the small sample size precluded the use of different data analytic techniques, which might have provided a more sophisticated analysis regarding the influence of moderating variables. Finally, unidirectional causality is not assumed. Tabachnick and Fidell (2001) indicate that bivariate correlations of .90 or higher point to multicollinearity and those variables should not be used in regression procedures. The relationship between coaches' trust in athletic director and organizational mindfulness ($r = .881$, $p < .01$) approached that threshold identified by Tabachnick and Fidell. As such, though the aspects of trust may influence organizational mindfulness, dimensions of mindfulness in turn may also influence organizational trust. The limitations of this study, however, point to opportunities for future research. Those research implications are discussed in the next section.

Research Implications

The intention of this study was to explore the relationship between organizational trust and organizational mindfulness, as they function in the NCAA D-III athletic department. To that end, this research adds to the existing literature on the relationship between trust and mindfulness and it begins to extend this connection into a different context. Dee (2011), in his review of *Six Cultures of the Academy* by Bergquist and Pawlak, called for future empirical work to explore the concept of paradox and interplay in the setting of higher education's organizational cultures. Exploring the constructs of organizational trust and mindfulness in other areas of the university, be it in divisions of student affairs or in academic units, could be a way to answer Dee's request

for unique approaches to examining the numerous cultures which exist on our campuses. To be sure, the examination of organizational trust and organizational mindfulness provides rich soil for future research. As such, many research questions remain. Future studies may explore:

1. What is the role of coaching staff tenure on the development of organizational trust and mindfulness? Future research using the ADTS and ADMS could collect demographic information in order to explore this question.
2. The sample for the current study was limited to NCAA D-III campuses. Will the results be similar with athletic departments which offer athletic scholarships? Scholars are encouraged to replicate this study using athletic departments at NCAA D-I or D-II institutions as the population.
3. In this study, trust had an impact on mindfulness. The relationship may, however, be reciprocal. Does organizational mindfulness facilitate the development of trust in athletic departments?
4. What is the nature of the relationship between coaches' trust in student-athletes and on-the-field success, i.e. winning games? Future studies could use the trust variables as predictors and the NACDA Cup rankings an outcome variable. Additionally, scholars are encouraged to explore other metrics for winning. For example, they could consider the combined number of conference championships or combined winning percentage of all team sports.
5. Are there other informal or formal organizational factors, present on college campuses, which influence trust and mindfulness? Researchers should explore other moderating variables, which may impact the relationship between trust and

mindfulness. Examples include academic entrance requirements, student-athlete academic performance, and academic rigor.

6. How do NCAA D-III athletic directors and university administrators define success for their athletic programs? A qualitative analysis that developed a D-III specific success metric could provide context for future exploration of the relationship between mindfulness and athletic performance.
7. What is the impact of the athletic director's leadership style on organizational mindfulness? On organizational trust? Is the situational leader more likely to develop these organizational processes? A quantitative study using correlational and regression analysis could explore the dimensions of trust as outcome variables. Variables developed through data collected using the instrument developed by Kouzes and Posner (2007) or another leadership instrument could be used as predictors in the equation.
8. Are there other outcomes in NCAA D-III athletic departments which are impacted by organizational trust (e.g. student-athletes grade point averages, student-athletes graduation rates)? A quantitative study could explore the dimensions of trust as predictors for other student-athlete related outcome variables.
9. Is there a significant relationship between the three dimensions of trust and the two separate dimensions of mindfulness (coaching staff mindfulness and athletic director mindfulness)? A detailed, quantitative exploration of that connection might help develop a more nuanced understanding of these processes.
10. What is the relationship between individual levels of trust (rather than collective) and organizational mindfulness? Instead of aggregating the data collected from the ADTS

into organizational trust, future research could focus on individual respondents. The research would need to be carefully designed so that data could be stratified in other ways (e.g., years as a coach, head or assistant coach, type of sport coached – team or individual).

11. How might the use of different data analytic procedures (e.g. Hierarchical Linear Modeling) help formulate a deeper awareness of the relationship between organizational trust and mindfulness? In order to conduct more other procedures, future scholars are encouraged to expand the sample size.

Chapter Summary

This chapter presented the findings from the study, a discussion of conclusions, practical implications, limitations and suggestions for future research. Athletic directors and university administrators are encouraged to make use of the research findings and the newly developed instruments presented herein as a means to diagnose organizational trust and mindfulness. Moreover, researchers are persuaded to utilize the two new research tools as a means to explore more fully the relationship between trust, mindfulness, and other organizational processes in intercollegiate athletic departments.

This study represents an effort to explore the relationship between organizational trust and mindfulness operating in NCAA Division III athletic departments. Athletic directors and coaches who place an importance on trust are: benevolent, competent, honest, open, and reliable. Furthermore, the findings suggest that athletic departments with elevated levels of trust are more likely to have athletic directors and coaches who are: pre-occupied with failure, reluctant to oversimplify, sensitive to day-to-day operations (i.e. they sweat the small stuff), committed to resilience, and defer to experts regardless of their position. It is hoped that the findings

discovered in this study will support current trust-building and mindful strategies in order to aid athletic department stakeholders in their mission. Additionally, the practical suggestions may offer plans to establish elevated levels of trust and better incorporating mindful decision-making practices in intercollegiate athletic departments.

In this study, organizational mindfulness was linked to specific dimensions of organizational trust. Although the purpose of this study was to investigate the relationship between those two important organizational processes, it is possible that trusting and mindful athletic departments support on-the-field success. However, further research regarding the phenomena will be required to make that assertion. In sum, the results of this study indicate that athletic departments whose coaches have higher levels of trust in their colleagues and athletic director more probably have elevated organizational mindfulness. It is hoped that through facilitating trusting relationships and operating mindfully, athletic departments will be more apt to achieve their goals of on-the-field success and graduating productive, future leaders.

APPENDIX A

PILOT STUDY VERSION OF ATHLETIC DEPARTMENT TRUST SCALE

ATHLETIC DEPARTMENT TRUST SCALE (ADTS)

DIRECTIONS

- The following statements are about your athletic department.
- In this scale A.D. refers to the Athletic Director of your department.
- Please indicate the extent to which you agree with each of the following statements along a scale from STRONGLY DISAGREE (1) to STRONGLY AGREE (6).

1. The coaching staff in our department has faith in the integrity of their colleagues.....	1	2	3	4	5	6
2. The student-athletes in our department talk freely about their lives outside of college...	1	2	3	4	5	6
3. The A.D. in our department does not show concern for the coaching staff.....	1	2	3	4	5	6
4. The coaching staff in our department is open with each other.....	1	2	3	4	5	6
5. The coaching staff in our department trust their A.D	1	2	3	4	5	6
6. Student-athletes in our department are reliable	1	2	3	4	5	6
7. The coaching staff in our department trusts each other	1	2	3	4	5	6
8. The coaching staff in our department believes student-athletes are competent in their ability to learn new skills.....	1	2	3	4	5	6
9. The coaching staff in our department typically looks out for each other	1	2	3	4	5	6
10. Student-athletes in our department are caring towards one another	1	2	3	4	5	6
11. The coaching staff in our department is not competent in their coaching abilities	1	2	3	4	5	6
12. The coaching staff in our department trusts their student-athlete.....	1	2	3	4	5	6
13. Student-athletes in our department cheat if they have a chance.....	1	2	3	4	5	6
14. The coaching staff in our department is suspicious of most of the A.D.'s actions.....	1	2	3	4	5	6
15. The A.D. in our department is unresponsive to the coaching staff's concerns.....	1	2	3	4	5	6
16. The A.D. in our department is competent in performing his or her job.....	1	2	3	4	5	6
17. The A.D. in our department typically acts with the best interest of the coaching staff in mind.....	1	2	3	4	5	6
18. The coaching staff in our department believes in each other.....	1	2	3	4	5	6
19. The coaching staff in our department is suspicious of each other.	1	2	3	4	5	6
20. The A.D. in our department keeps his or her word.....	1	2	3	4	5	6
21. The coaching staff in our department believes what students say.....	1	2	3	4	5	6
22. The A.D. doesn't tell the coaching staff what is really going on.....	1	2	3	4	5	6
23. Even in difficult situations, the coaching staff in our department can depend upon each other.....	1	2	3	4	5	6

24. When the coaching staff in our department tells you something you can believe what they say.....	1	2	3	4	5	6
25. Student-athletes in our department are secretive.	1	2	3	4	5	6
26. The A.D. openly shares information with the coaching staff.....	1	2	3	4	5	6
27. The student-athletes in our department have to be closely supervised.....	1	2	3	4	5	6
28. The coaching staff in our department can rely on the A.D.	1	2	3	4	5	6
29. Student-athletes in our department can be counted on to do their work.....	1	2	3	4	5	6
30. The coaching staff in our department has faith in the integrity of the A.D.....	1	2	3	4	5	6

Please complete the following information:

Is your primary assignment within the department as that of: (circle only one choice)

Head coach Full-time Assistant coach Part-time Assistant coach Volunteer coach

How long have you been coaching at this institution? (please circle your response)

1-2 years 3-5 years 6-9 years 10+ years

How long have you been a coach at the collegiate level? (please circle your response)

1-2 years 3-5 years 6-9 years 10+ years

How long did it take you to complete this survey? (Please record your time below)

APPENDIX B

PILOT STUDY VERSION OF ATHLETIC DEPARTMENT MINDFULNESS SCALE

ATHLETIC DEPARTMENT MINDFULNESS SCALE (ADMS)

DIRECTIONS

- The following statements are about your athletic department.
- In this scale A.D. refers to the Athletic Director of your department.
- Please indicate the extent to which you agree with each of the following statements along a scale from STRONGLY DISAGREE (1) to STRONGLY AGREE (6).

1. My A.D. often jumps to conclusions	1	2	3	4	5	6
2. When a crisis occurs in my sport, the A.D. deals with it so we can get back to coaching	1	2	3	4	5	6
3. Members of the coaching staff are encouraged to express different views of the world.....	1	2	3	4	5	6
4. In our department, coaches welcome feedback about ways to improve.....	1	2	3	4	5	6
5. Coaches do not trust the A.D. enough to admit their mistakes.....	1	2	3	4	5	6
6. The A.D. of our department does not value the opinions of the coaches	1	2	3	4	5	6
7. My A.D. is knowledgeable about coaching and athlete development.....	1	2	3	4	5	6
8. Coaches in this department jump to conclusions.....	1	2	3	4	5	6
9. Coaches in this department respect power more than knowledge.....	1	2	3	4	5	6
10. The A.D. in this department is actively concerned with developing the skills and knowledge of his/her staff members.....	1	2	3	4	5	6
11. Coaches in this department are familiar with operations beyond their own job.....	1	2	3	4	5	6
12. The A.D. appreciates skeptics.....	1	2	3	4	5	6
13. Coaches in this department learn from their mistakes and correct them so they do not happen again.....	1	2	3	4	5	6
14. The A.D. in this department values expertise and experience over hierarchical rank.....	1	2	3	4	5	6
15. My A.D. negotiates differences of coaching style, strategies, and decisions without destroying the diversity of opinions.....	1	2	3	4	5	6
16. Many coaches in this department give up when things go bad	1	2	3	4	5	6
17. The A.D. welcomes challenges from coaches	1	2	3	4	5	6
18. When things go badly coaches bounce back quickly	1	2	3	4	5	6

19. Most coaches in this department are reluctant to change	1	2	3	4	5	6
20. The A.D. seeks out and encourages the reporting of bad news.....	1	2	3	4	5	6
21. During an average day, the A.D. comes into enough contact with the coaching staff to build a clear picture of the current situation.....	1	2	3	4	5	6
22. Coaches in this department treat errors as healthy information and try to learn from them.....	1	2	3	4	5	6
23. If something out of the ordinary happens, the coaching staff knows who has the expertise to respond.....	1	2	3	4	5	6
24. The A.D. in this department respects power more than knowledge	1	2	3	4	5	6

APPENDIX C

INTRODUCTORY LETTER TO COACHES (PILOT STUDY VERSION)

INTRODUCTORY LETTER TO COACHES (PILOT STUDY VERSION)

Dear Coach,

I write this letter as a doctoral candidate in educational leadership at the University of Texas at San Antonio. I am specifically requesting your assistance in completing a survey examining your perceptions of organizational trust and decision-making at your institution. Head coaches, assistant coaches, and volunteer coaches from 98 NCAA Division III (D-III) athletic departments are being asked to participate in this study.

Your participation in this study is crucial to its success.

Please follow the link to the Athletic Department Trust and Mindfulness scales at http://www.surveymonkey.com/s.aspx?sm=_2fmxUREy6nAzYau_2f5tsXFQg_3d_3d. You will be directed to an electronic survey which should take no longer than 10-minutes to complete. Accessing the survey web-site will take you to a secure location where you will find instructions for completing and submitting the survey.

The password for the survey is **coach**. It would be greatly appreciated if you completed the survey prior to December 2.

There are no right or wrong answers and the risk to you is minimal. Your individual responses will not be shared with your institution or with your fellow coaches. Your open and honest responses are critical to the success of this project. Your responses and those of other study participants will lead to a better understanding of how trust affects decision-making at D-III institutions.

I know this is a busy time of year for you, but I hope you will find the time (about 10-minutes) to participate in this important research. If you have any questions, comments, or concerns, feel free to contact me at the number below. You may also contact my dissertation committee chair, Dr. Alan Shoho at _____.

Thank you for your consideration.

Sincerely,

Jacob K. Tingle

APPENDIX D

ATHLETIC DIRECTOR PERMISSION LETTER (PILOT STUDY)

ATHLETIC DIRECTOR PERMISSION LETTER (PILOT STUDY)

John Doe
XYZ University
100 University Blvd.
Anytown, USA 99999

Dear Mr. Doe,

I am writing this letter as a graduate student in educational leadership at the University of Texas at San Antonio. I seek your consent to contact coaches at your institution to participate in a survey for my dissertation research.

I am examining organizational trust and its impact on decision-making in NCAA Division III athletic departments. I am requesting permission to solicit responses from members of your coaching staff (head coaches, assistant coaches, and volunteers). Institution and individual coaching staff member's confidentiality will be strictly maintained at all times. No coach or institution will be individually referred to at any point during the study write-up or in any subsequent publications. Additionally, I am not requesting interaction with your coaching staff other than sending them an email with electronic instructions and a link to the survey.

This research study has been reviewed and approved by the Institutional Review Board at the University of Texas at San Antonio. If you have any specific questions or concerns regarding subjects' rights, contact the Institutional Review Board through Dr. Judith Grant at _____.

I know this is a busy time of year for you, but I hope you will find the time to grant me approval to send email requests to members of your coaching staff. If you have any questions, comments, or concerns, feel free to contact me at the number below. You may also contact my dissertation committee chair, Dr. Alan Shoho at _____.

If you are willing to grant approval, please respond to me via email at _____.

Thank you for your consideration.

Sincerely,

Jacob K. Tingle

APPENDIX E

ATHLETIC DEPARTMENT MINDFULNESS SCALE (FINAL VERSION)

ATHLETIC DEPARTMENT MINDFULNESS SCALE (ADMS)

DIRECTIONS

- The following statements are about your athletic department.
- In this scale A.D. refers to the Athletic Director of your department.
- Please indicate the extent to which you agree with each of the following statements along a scale from STRONGLY DISAGREE (1) to STRONGLY AGREE (6).

1. Coaches in this department learn from their mistakes and correct them so they do not happen again	1	2	3	4	5	6
2. Coaches in this department jump to conclusions	1	2	3	4	5	6
3. The A.D. of our department does not value the opinions of the coaches	1	2	3	4	5	6
4. The A.D. appreciates skeptics.....	1	2	3	4	5	6
5. Coaches in this department respect power more than knowledge	1	2	3	4	5	6
6. My A.D. negotiates differences of coaching style, strategies, and decisions without destroying the diversity of opinions.....	1	2	3	4	5	6
7. Many coaches in this department give up when things go bad	1	2	3	4	5	6
8. During an average day, the A.D. comes into enough contact with the coaching staff to build a clear picture of the current situation	1	2	3	4	5	6
9. Coaches do not trust the A.D. enough to admit their mistakes	1	2	3	4	5	6
10. Most coaches in this department are reluctant to change	1	2	3	4	5	6
11. The A.D. seeks out and encourages the reporting of bad news	1	2	3	4	5	6
12. My A.D. often jumps to conclusions	1	2	3	4	5	6
13. Coaches in this department treat errors as healthy information and try to learn from them.....	1	2	3	4	5	6
14. If something out of the ordinary happens, the coaching staff knows who has the expertise to respond	1	2	3	4	5	6

Scoring Key

Coaching Staff Mindfulness - Items 1, 2*, 5*, 7*, 10*, 13, 14

Athletic Director Mindfulness - Items 3*, 4, 6, 8, 9*, 11, 12*

*Items are reverse scored, that is, [1=6, 2=5, 3=4, 4=3, 5=2, 6=1]

Compute an average department item score for each item:

- For each item, add scores for all individuals on the item and divide by the number of individuals. Use these average item scores in the next set of computations to determine the overall department mindfulness and the mindfulness subset scores for your department.

Compute the overall department mindfulness score:

- Add the 14 average department item scores and divide by 14 (number of items).
- The higher the score, the greater the departmental mindfulness.

Compute the level of Athletic Director Mindfulness:

- Add the 7 average department item scores that correspond to Athletic Director Mindfulness and divide by 7 (number of items).
- The higher the score, the greater the level of Athletic Director Mindfulness.

Compute the level of Coaching Staff Mindfulness:

- Add the 7 average department item scores that correspond to Coaching Staff Mindfulness and divide by 7 (number of items).
- The higher the score, the greater the level of Coaching Staff Mindfulness.

APPENDIX F

ATHLETIC DEPARTMENT TRUST SCALE (FINAL VERSION)

ATHLETIC DEPARTMENT TRUST SCALE(ADTS)

DIRECTIONS

- The following statements are about your athletic department.
- In this scale A.D. refers to the Athletic Director of your department.
- Please indicate the extent to which you agree with each of the following statements along a scale from STRONGLY DISAGREE (1) to STRONGLY AGREE (6).

1. The coaching staff in our department has faith in the integrity of their colleagues.....	1	2	3	4	5	6
2. The A.D. in our department does not show concern for the coaching staff.....	1	2	3	4	5	6
3. The coaching staff in our department is open with each other.	1	2	3	4	5	6
4. The coaching staff in our department trust their A.D.	1	2	3	4	5	6
5. Student-athletes in our department are reliable	1	2	3	4	5	6
6. The coaching staff in our department trusts each other	1	2	3	4	5	6
7. The coaching staff in our department believes student-athletes are competent in their ability to learn new skills.....	1	2	3	4	5	6
8. The coaching staff in our department typically looks out for each other	1	2	3	4	5	6
9. Student-athletes in our department are caring towards one another	1	2	3	4	5	6
10. The coaching staff in our department is not competent in their coaching abilities	1	2	3	4	5	6
11. The coaching staff in our department trusts their student-athlete.....	1	2	3	4	5	6
12. The coaching staff in our department is suspicious of most of the A.D.'s actions.....	1	2	3	4	5	6
13. The A.D. in our department is unresponsive to the coaching staff's concerns.....	1	2	3	4	5	6
14. The A.D. in our department is competent in performing his or her job.....	1	2	3	4	5	6
15. The A.D. in our department typically acts with the best interest of the coaching staff in mind.....	1	2	3	4	5	6
16. The coaching staff in our department believes in each other.....	1	2	3	4	5	6
17. The coaching staff in our department is suspicious of each other.....	1	2	3	4	5	6
18. The A.D. in our department keeps his or her word.....	1	2	3	4	5	6
19. The coaching staff in our department believes what students say.....	1	2	3	4	5	6
20. The A.D. doesn't tell the coaching staff what is really going on.....	1	2	3	4	5	6
21. Even in difficult situations, the coaching staff in our department can depend upon each other.....	1	2	3	4	5	6
22. When the coaching staff in our department tells you something you can believe what they say.....	1	2	3	4	5	6
23. Student-athletes in our department are secretive.	1	2	3	4	5	6

24. The A.D. openly shares information with the coaching staff.....	1	2	3	4	5	6
25. The student-athletes in our department have to be closely supervised.....	1	2	3	4	5	6
26. The coaching staff in our department can rely on the A.D.....	1	2	3	4	5	6
27. Student-athletes in our department can be counted on to do their work.	1	2	3	4	5	6
28. The coaching staff in our department has faith in the integrity of the A.D.....	1	2	3	4	5	6

Please complete the following information:

Is your primary assignment within the department as that of: (circle only one choice)

Head coach Full-time Assistant coach Part-time Assistant coach Volunteer coach

How long have you been coaching at this institution? (please circle your response)

1-2 years 3-5 years 6-9 years 10+ years

How long have you been a coach at the collegiate level? (please circle your response)

1-2 years 3-5 years 6-9 years 10+ years

Scoring Key

Coaching staff Trust in Ath. Director – Items 2*, 4, 12*, 13*, 14, 15, 18, 20*, 24, 26, 28

Coaching staff Trust in Student-Athletes – Items 5, 7, 9, 11, 19, 23*, 25*, 27

Coaching staff Trust in Colleagues – Items 1, 3, 6, 8, 10*, 16, 17*, 21, 22

*Items are reverse scored: [1=6, 2=5, 3=4, 4=3, 5=2, 6=1]

- For each athletic department, first compute the average score for every item. Do this by adding scores for all individuals on the item and divide by the number of individuals. Use these average item scores in the next set of computations to determine the coaching staff trust subset scores.
- For each of the three subsets, compute the athletic department score by adding the values for the items composing that scale and dividing by the number of items.

Coaching staff Trust in Athletic Director – Sum items listed above and divide by 11.

Coaching staff Trust in Student-Athletes – Sum items listed above and divide by 8.

Coaching staff Trust in Colleagues – Sum items listed above and divide by 9.

APPENDIX G

INTRODUCTORY LETTER TO COACHES (FINAL STUDY)

INTRODUCTORY LETTER TO COACHES (FINAL STUDY)

Dear Coach,

I write this letter as a doctoral candidate in educational leadership at the University of Texas at San Antonio. I am specifically requesting your assistance in completing a survey examining your perceptions of trust and decision-making at your institution. Head coaches, assistant coaches, and volunteer coaches from 62 NCAA Division III (D-III) athletic departments are being asked to participate in this study. You are receiving this request because your institution was randomly selected to participate in this research study.

Your participation in this study is crucial to its success.

Please follow the link to the survey at:

http://www.surveymonkey.com/s.aspx?sm=PFUUaxtWAlg17ZDozuttXw_3d_3d.

You will be directed to an electronic survey which should take approximately 10-minutes to complete. Accessing the survey web-site will take you to a secure location where you will find instructions for completing and submitting the survey.

The password for the survey is **coach**. It would be greatly appreciated if you completed the survey prior to December 10.

There are no right or wrong answers and the risk to you is minimal. Your individual responses will not be shared with your institution or with your fellow coaches. Your open and honest responses are critical to the success of this project. Your responses and those of other study participants will lead to a better understanding of how trust affects decision-making at D-III institutions.

I know this is a busy time of year for you, but I hope you will find the time (about 10-minutes) to participate in this important research. If you have any questions, comments, or concerns, feel free to contact me at the number below. You may also contact my dissertation committee chair, Dr. Alan Shoho at _____. Additionally, you can contact the Institutional Review Board at XYX College (irb@XYZ.edu) if you have additional questions or concerns.

Thank you for your consideration.

Sincerely,

Jacob K. Tingle

APPENDIX H

FOLLOW UP EMAILS TO COACHES (FINAL STUDY)

FOLLOW UP EMAILS TO COACHES (FINAL STUDY)
EMAIL ONE

Dear Coach,

I'm sending this back out. If you've completed the survey, please delete.

To those of you have already completed the survey – THANK YOU! Since your responses are 100% anonymous, however, there is no way for me to remove you from the list. So, I'm sorry that you're receiving this again.

All you need to do is click on the link to the survey:

http://www.surveymonkey.com/s.aspx?sm=PFUUaxtWAlg17ZDozuttXw_3d_3d
and enter the password – **coach**.

To those who haven't completed the survey, it will take you about 10-minutes to complete. As this is an important first step for me to complete my dissertation research project – every response really matters.

Thanks again!

FOLLOW UP EMAILS TO COACHES (FINAL STUDY)
EMAIL TWO

Dear Coach,

My research aims to better understand how you perceive your work environment. Your responses will be kept anonymous and cannot be connected with your name or e-mail address. Additionally, your institution cannot be identified by name, so I encourage you to be honest. Your response is very important.

To those of you have already completed the survey – THANK YOU! Since your responses are 100% anonymous, however, there is no way for me to remove you from the list. So, I'm sorry that you're receiving this again.

All you need to do is click on the link to the survey:

http://www.surveymonkey.com/s.aspx?sm=PFUUaxtWAlg17ZDozuttXw_3d_3d
and enter the password – **coach**.

To those who haven't completed the survey, it will take you about 10-minutes to complete. As this is an important first step for me to complete my dissertation research project – every response really matters.

Thanks again!

APPENDIX I

ATHLETIC DIRECTOR COURTESY LETTER (FINAL STUDY)

ATHLETIC DIRECTOR COURTESY LETTER (FINAL STUDY)

Dear Colleague,

I am writing as a graduate student in educational leadership at the University of Texas at San Antonio. I send this letter to inform you that members of the coaching staff at your university were randomly selected from the entire NCAA Division III (D-III) population to participate in a survey for my dissertation research.

I am examining trust and its impact on decision-making in D-III athletic departments. I will be soliciting responses from members of your coaching staff (head coaches, assistant coaches, and volunteers). Please note the confidentiality of the institution and individual coaching staff member's will be strictly maintained at all times. No coach or institution will be individually referred to at any point during the study write-up or in any subsequent publications. Additionally, I will not be interacting with your coaching staff other than to send them an email with instructions, electronic consent, and a link to the survey.

This research study has been reviewed and approved by the Institutional Review Board at the University of Texas at San Antonio. If you have any specific questions or concerns regarding subjects' rights, contact the Institutional Review Board at _____.

You can contact the Institutional Review Board at XYZ College if you have additional questions or concerns.

I know this is a busy time of year for you and your staff and wish you the best of luck during the upcoming year. This survey takes approximately 10-minutes to complete, so it will not be overly burdensome for your staff members. If you have any questions, comments, or concerns, feel free to contact me at _____. You may also contact my dissertation committee chair, Dr. Alan Shoho at _____.

Sincerely,

Jacob K. Tingle

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VITA

Jacob Keith Tingle was born on August 16, 1973 in Austin, Texas. After graduating from Dripping Springs High School, Dripping Springs, Texas in 1991, he matriculated at Trinity University in San Antonio, Texas. He received his Bachelor of Arts degree in Communication and Religion in 1995. After an extended trip through Europe, he entered the Graduate School at the University of Maryland, College Park. During the following five years he took course work in Sport Management and worked for the department of Campus Recreation Services. In 2000, he accepted a position as an Assistant Athletic Director at Trinity University. Jacob received his Master of Arts degree in Administration with a concentration in Sports Management from University of the Incarnate Word in San Antonio, Texas in 2002. In 2004 he was promoted to Associate Athletic Director at Trinity University and in 2005 he began his doctoral studies at The University of Texas at San Antonio. After a semester as the interim Physical Education department chairman at Trinity University, Jacob was hired in 2009 as the program chair for the Physical Education minor. He helped design a Sport Management curriculum and currently serves as an Instructor in Business Administration and the Sport Management program chair at Trinity University.