Trust, leadership, and communication satisfaction in higher education: 
Faculty perceptions of their department and division chairs

By

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Trust, leadership, and communication satisfaction in higher education:
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ABSTRACT

The formalized study of leadership dates back to the early 20th century and has continued to evolve since that time. Contemporary leadership theories emphasize morals and values with an interest in how followers are treated; in opposition to the early and more traditional approaches to leadership, contemporary leadership theories view leadership not as an assigned position of authority or responsibility but rather a collaborative process where followers are recognized as essential co-contributors. Guided by this approach, the current study examined authentic leadership as a predictor of interpersonal trust within the context of higher education. The current study operationalized authentic leadership as faculty perceptions of their chairs’ self-awareness, relational transparency, balanced processing, and internalized moral perspective. Self-awareness comes from continual self-reflection and results in an understanding of one’s strengths and weaknesses as well the effects those strengths and weaknesses have on others. Relational transparency refers to presenting one’s true or real self, through the open sharing of thoughts, feelings, and beliefs. Balanced processing occurs when one solicits multiple perspectives, including those that contradict each other as well one’s initial point of view; not only is that input solicited, but also it is given objective consideration before decisions and/or recommendations are made. Internalized moral perspective references the existence and use of one’s moral compass; actions are consistent with this compass and not influenced by organizational or societal pressures. Communication satisfaction was tested as a mediating variable, and organizational trust was tested as a moderating variable. Faculty perceptions of their department and division chairs exhibiting authentic leadership as well as self-reports of interpersonal trust, communication satisfaction, and organizational trust were used. Ninety-eight surveys were collected and provided the data used for the analyses.
Significant positive correlations between authentic leadership and interpersonal trust, authentic leadership and communication satisfaction, and communication satisfaction and interpersonal trust were found. Additionally, the data supported authentic leadership as a strong predictor of interpersonal trust. Communication satisfaction was found to mediate this relationship, with communication with supervisors (one of the communication satisfaction subscales) serving as the main contributor driving the effect. While the indirect effect was significant, the direct effect was much stronger. Organizational trust was found to moderate the direct effect; the relationship between authentic leadership and interpersonal trust was strongest when organizational trust was low. Support for organizational trust as a moderator of the indirect effect was not found.

This study highlighted the value of how authentic leadership, perceived by faculty through their chairs’ use of self-awareness, relational transparency, balanced processing, and internalized moral perspective, effects interpersonal trust. This study also emphasized the importance of organizational trust when trying to understand the effect of authentic leadership on interpersonal trust. This research can be used by scholars, department and division chairs and other leaders in higher education to better understand how faculty perceptions of their chairs exhibiting authentic leadership characteristics predict interpersonal trust in those chairs.
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CHAPTER I

Rationale

The Role of the Researcher

Three years ago I interviewed for and was offered the position of division chair at a community college. When I initially accepted the position I was concerned with taking a formal leadership role because I did not know whether the division faculty would trust me regarding my abilities and intentions. I worried that getting faculty to trust me might be difficult because I work at an institution where faculty had little organizational trust; I am employed at a college where faculty, in general, lack trust in how the institution’s policies, procedures, rules, and regulations will be applied. My professional position and experience have led to a genuine interest in wanting to better understand leadership as a predictor of interpersonal trust. As a communication studies scholar, I am also interested in studying communication satisfaction and determining whether it mediates the indirect effect of leadership on interpersonal trust. Additionally, because of the organizational climate where I work, I am interested in knowing whether organizational trust serves to moderate both the direct effect and indirect mediated effects.

It is my hope that this study will provide insight useful not only to me but also to others interested in leadership, interpersonal trust, communication satisfaction, and organizational trust within the context of higher education.

Context

The organizational model of community colleges (and institutions of higher education in general) has long been built on two principles: academic freedom and shared governance. Academic freedom refers to the rights faculty have earned, based on their scholarly expertise, to
express ideas (including those that are critical), question established beliefs, and pursue new areas of scholarly inquiry. Intellectual creativity is allowed and even encouraged in the classroom, laboratory, and campus community in general. With this freedom comes responsibility, including “the obligation to adhere to professional norms and to discipline those who fail to do so” (Bowen & Tobin, 2015, p. 201). The second principle, shared governance, is defined as “the regular exchange of information, opinion, consultation, reflection, mediation, and compromise” (Orozco & Allison, 2008, p. 66). It involves the sharing of perspectives and an eagerness to support good ideas, regardless of their source (Bowen & Tobin, 2015). The principles of academic freedom and shared governance result in an organizational structure and culture unique to colleges and universities.

While the organizational structure and culture of colleges and universities are unique and different from other more prototypical organizations, so too are a handful of leadership positions in higher education. These positions include hybrid roles that combine teaching and administrative responsibilities; department and division chair positions are examples of hybrid roles. This study looks at faculty members leading as department or division chairs.

Focus of the Study

Leadership in organizations has long been a topic of interest and the focus of much research (e.g., Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Borg & Tuples, 1958; Greenleaf, 1977; Heifetz & Laurie, 1997). The result is a growing number of leadership paradigms, theories, and styles. Authentic (AUTH) leadership is an emerging leadership style growing in popularity (Neider & Schriesheim, 2011; Peus, Wesche, Streicher, Braun, & Frey, 2012) and specific to leaders who exemplify four behavioral characteristics: self-awareness, relational transparency, balanced processing, and an internalized moral perspective. Rooted in
social psychology theory, AUTH leadership comes from integrating the research on authenticity, leadership studies, and ethics (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). This study focuses specifically on AUTH leadership and the four behavioral characteristics associated with this leadership style.

Another area of focus for this study is trust. Scholars have not reached consensus on whether trust is an individual attribute, a behavioral approach, or an organizational climate—or all of the above (Lau, 2010). Most do agree, however, that trust is related to “confidence,” “dependability,” “hope,” and “moral duty” (Ferrin, Bligh, & Kohls, 2007; Giffen, 1967; Hosmer, 1995). This study focuses specifically on the interpersonal trust faculty have—or do not have—in their department and division chairs. Interpersonal trust refers to employees’ beliefs about the integrity and dependability of their assigned leaders (Lau, 2010; Shamir & Lapidot, 2003). Two principal dimensions of interpersonal trust include cognitive-based trust and affect-based trust. Cognitive-based trust correlates with employee perceptions of a leader’s abilities, while affect-based trust correlates with employee perceptions of a leader’s intentions (McAllister, 1995).

The focus of this study is on the relationships between faculty perceptions of their chairs exhibiting the AUTH leadership characteristics and their interpersonal trust, including cognitive-based and affect-based, in those chairs. The study also examined whether faculty perceptions of their chairs as AUTH leaders are associated with their reported interpersonal trust in those chairs.

Additional Variables

In addition to AUTH leadership and interpersonal trust, communication satisfaction is another variable of interest. Communication satisfaction is an indication of the level of satisfaction employees have with an organization’s communication systems, operationalized as communication climate, organizational integration, personal feedback, horizontal informal
communication, superiors’ communication, media quality, and general organizational perspective (Downs & Hazen, 1977). In the context of this study, communication satisfaction refers to the level of satisfaction faculty have with their institution’s communication systems. This study explores whether faculty members’ communication satisfaction mediates the relationship between their perceptions of their chairs as AUTH leaders and their interpersonal trust in those chairs.

Organizational trust is the final variable of interest in this study. Moye (2003) explains that organizational trust refers to employees’ confidence in and support for the implementation of their organization’s systems, rules, and regulations. According to Tyler and Bies (1990), this confidence and support are linked less to actual outcomes and more to the ways in which organizations take and carry out actions. Specific to this study, organizational trust refers to faculty members’ perceptions of how their institution’s policies, procedures, rules, and regulations are followed and/or enacted. The design of this study examines whether and to what degree organizational trust is a moderating variable. This includes looking at the extent to which organizational trust moderates the direct relationship between faculty perceptions of AUTH leadership in their chairs and their interpersonal trust in those chairs. This also includes looking at the extent to which organizational trust moderates the indirect effect of AUTH leadership on interpersonal trust through communication satisfaction.

Higher Education

The culture of higher education has traditionally valued academic freedom and shared governance. The ideas of academic freedom and shared governance were the very foundation upon which colleges and universities were built (Orozco & Allison, 2008). However, the landscape of higher education is changing. Colleges and universities “face continual challenges
to their identity as a result of changing social, economic, and political environments” (Collier & Esteben, 2000, p. 207). Financial constraints coupled with increasing accountability have leadership responding with changes to how institutions of higher education are being run (Natale & Doran, 2012; Randall & Coakley, 2007). Academic freedom and shared governance are no longer being honored in the same ways; with leaders acting more like managers, the result is something that seems very business-like—and very foreign—to many faculty (Natale & Doran, 2012).

Understanding the relationships between faculty perceptions of their chairs exhibiting the characteristics of AUTH leadership, their interpersonal trust in those chairs, communication satisfaction, and organizational trust is particularly important when change threatens the identity and culture of an organization; this is certainly relevant to the context of higher education. The results of this study are of value to anybody interested in the effective functioning of higher education institutions. More specifically, the results of this study are of value to department and division chairs wanting to better understand how AUTH leadership predicts faculty trust as well as the variables that mediate and moderate that trust. The results of this study are also of value to administrators wanting to better understand the importance of organizational trust and how faculty members’ trust in the organization conditionally affects the relationship between AUTH leadership and interpersonal trust. Finally, the results of this study are of value to scholars wanting to better understand the role communication satisfaction plays with regard to interpersonal trust in leaders who adopt an AUTH leadership style.
CHAPTER II

Literature Review

This chapter reviews the higher education literature focusing on faculty leadership positions in higher education. The development and evolution of leadership approaches is then detailed with a focus on authentic (AUTH) leadership. Following AUTH leadership is an overview of the literature on trust specific to interpersonal trust, namely, cognitive-based and affect-based trust. Communication satisfaction and seven subscales are then defined as is the concept of organizational trust. The chapter concludes with an overview of the changing landscape of higher education.

Higher Education

Institutions of higher education are in many ways different from other types of organizations (Orozco & Allison, 2008; Qian & Daniels, 2008). “Unlike the average workplace, the university environment has long represented democratic ideals of free speech, unbridled and creative research in the search for truth, and a distinctly independent autonomy directed by faculty as they exercise two sacred academic principles” (Orozco & Allison, 2008, p. 66). Those two principles include academic freedom and shared governance. The first of these principles, academic freedom, refers to the rights faculty have earned, based on their scholarly expertise, to express ideas (including those that are critical), question established beliefs, and pursue new areas of scholarly inquiry—intellectual creativity is allowed and even encouraged in the classroom, laboratory, and campus community in general. The second principle, shared governance, is defined as “the regular exchange of information, opinion, consultation, reflection, mediation, and compromise” (Orozco & Allison, 2008, p. 66). Through shared governance, “faculty members…maintain a powerful voice in significant institutional decisions” (Smith &
Wolverton, 2010, p. 61). Jenkins and Jensen (2010) list four key principles of shared governance at community colleges: faculty authority, inclusiveness, a commitment to tenure, and a commitment to the process. Early and open communication, transparency, tolerance, and civility are all necessary for shared governance to be effective. These differences result in a unique context— institutions of higher education are quite different from other prototypical organizations (Jones, Harvey, LeFoe, & Ryland, 2014; Smith & Wolverton, 2010). Additionally, these differences make it difficult to generalize with any confidence the vast amount of research conducted on leadership, trust, and communication satisfaction in other organizational settings (Smith & Wolverton, 2010).

Faculty leaders in higher education. According to Rowley and Sherman (2003), the differences previously highlighted between institutions of higher education and other organizations may help to make sense of the inconsistencies found when comparing faculty in positions of leadership (i.e., department and division chairs) to higher education administrators in positions of leadership. These inconsistencies likely come from faculty background (being content-experts) as well as the temporary nature of their leadership positions (coupled with the idea of returning to the ranks of the very people faculty leaders are supposed to be leading) (Ladyshewsky & Flavell, 2012; Rowley & Sherman, 2003). With reference to department and division chairs, “the leader is not only the leader, but also an immediate peer” (Rowley & Sherman, 2003, p. 1061). Faculty leaders must redefine their relationships with other faculty in ways that administrative leaders do not. The result is a unique dynamic not present when administrators serve in leadership roles. Additionally, faculty leaders’ management activities are less formalized than those of administrative leaders (Rowley & Sherman, 2003), and they often lack the training afforded to administrators (Ladyshewsky & Flavell, 2011). As stated by
Rowley and Sherman (2003), another difference is that most administrators seek positions of leadership with supervisory responsibilities; leadership opportunities hold a high level of satisfaction for them, and many administrators climb the leadership ladder with enthusiasm and excitement. Most faculty, on the other hand, do not aspire to hold such positions of leadership and those who do take on such responsibilities often do so out of a sense of obligation to the department or division (Rowley & Sherman, 2003). Finally, the specific combination of roles fulfilled by chairs is unique to position and includes faculty serving as developers, managers, leaders, and scholars (Gmelch & Miskin, 1993; Wolverton, Gmelch, Wolverton, & Sarros, 1999). Wolverton et al. (1999) explain that as developers, chairs recruit, select, and evaluate faculty, work to increase faculty morale, and encourage professional development. Acting as managers, chairs prepare budgets, keep records, delegate tasks to others, and maintain finances, equipment, and facilities (Wolverton et al., 1999). When chairs serve as leaders, they provide long-term direction and vision for the department or division, solicit input for making improvements to the department or division, support curriculum development and evaluation, and advocate for the department or division (Wolverton et al., 1999). According to Wolverton et al. (1999), chairs serving as scholars work to remain current in their discipline with reference to teaching and research. For these reasons it is difficult and even unwise to generalize the results from previous research focused on leadership, trust, and communication satisfaction in the context of higher education when that research doesn’t differentiate between administrators and faculty leaders.

**Leadership**

For many decades, leadership in organizations has been the focus of much research (e.g., Avolio et al., 2004; Borg & Tuples, 1958; Greenleaf, 1977; Heifetz & Laurie, 1997). With time,
organizational structures have become more complex, and theories employed for studying organizational leadership have evolved. The result is a growing number of leadership paradigms, theories, and styles. Further, organizations are “expending an increasing amount of effort to understand, quantify, and to measure differentiators among leadership development approaches” (Fuqua & Newman, 2004, p. 148-9). Following is a topical overview of the development and evolution of leadership approaches.

**The development and evolution of leadership approaches.** In the early 20th century when the academic study of leadership was first formalized, scholars gave their attention to identifying the specific characteristics or traits common to those considered to be leaders. Leader-centric approaches to defining and studying leadership were the norm (Dugan & Komives, 2010). This approach to studying leadership was referred to as “traditional,” “conventional,” and “classical.” Great man theories and trait-based leadership models followed the traditional approach and identified intelligence, verbal ability, self-confidence, persistence, drive, an awareness of the needs of others, insights into situations, and a sense of personal identity as characteristics necessary for effective leaders (Bass & Bass, 2008; Borg & Tupes, 1958).

Because a focus on only the characteristics and traits of those considered to be leaders left too many questions unanswered, scholars acknowledged the role followers play in the leadership process (Komives & Dugan, 2010). Outcome achievement was explored, and researchers examined whether and how people wanting to lead could “mobilize, motivate, and otherwise influence the commitment and productivity of followers” (Komives & Dugan, 2010, pg. 112). Scholars shifted from focusing only on “what a leader is” to also considering “what a leader does.” One such leadership approach was servant leadership. This approach looked not
only at the characteristics and traits of those in leadership positions but also the development of and relationship with followers; Greenleaf (1977) explains that servant leaders worked to turn their followers into people who lead. Path-goal theory is another lens through which leadership was studied. Path-goal theory explained that leaders were responsible for improving the mindset of their followers in ways that resulted in increased job satisfaction or the desire and motivation to perform better (House, 1971, p. 3). This suggested that leaders should help subordinates understand their goals as well as possible methods useful for achieving those goals.

The study of leadership continued to evolve, and soon researchers looked beyond a general interest in what a leader does, specifically, to how a leader supported followers through a process of development. This was considered to be, at the time, the most dramatic shift in the evolution of leadership theory (Komives & Dugan, 2010). This reframing identified the growth and progress of followers as being just as important as the end goal, and this paradigm shift was quite different from the earlier and more traditional approaches that focused only on the person in a position of leadership. Leader-member exchange (LMX) illustrated this shift with an emphasis on the quality of the relationship between the leader and follower; this relationship developed as the leader and follower worked together. Collaborative leadership also emphasized the relationship between leader and follower. According to Heck and Hallinger (2010), the leader and follower worked together in making decisions, and both were accountable for the outcomes. Collaborative leadership was based on a team approach (Rawlings, 2000). A systemic approach also acknowledged the value of collaborative processes and included sharing authority and responsibilities (Fuqua & Newman, 2004). Through sharing, people took turns delegating and shouldering responsibilities according to their strengths and the organization’s needs (Collier & Esteban, 2000). Goals and objectives were achieved from working together.
Additionally, people in positions of leadership and their followers collaborated to identify and achieve goals and objectives rather than have them externally imposed by any sort of hierarchy (Fuqua & Newman, 2004).

We are now at a time when nuclear disasters, corporate scandals, and financial crises have “led to a loss of confidence in corporate leaders and cynicism with regard to their role” (Peus et al., 2012, p. 331). The result is a demand for responsible leaders who care about more than just the bottom-line (Avolio et al., 2004). An emphasis on improving the common good brings us to what is referred to as a contemporary approach to leadership. Grounded in social responsibility, a contemporary approach to leadership allows scholars to better understand and study leadership in today’s organizations. Those who adopt the contemporary approach view leadership not as an assigned position of authority or responsibility but rather a collaborative process where everyone involved is a valued contributor, and followers are recognized as essential co-contributors with the ability to influence the course of their collective futures; contemporary leadership theories emphasize morals and values with a focus on how followers are treated (Spector, 2014). As a prototypical example of this contemporary approach, adaptive leadership is based on the premise that leadership is a process in which all members actively participate because each member has something of value to contribute (Albino, 1999; Heifetz & Laurie, 1997). Leaders become mobilizers with followers actively engaging in debate and creative thought to identify the challenges and rewards which they may encounter as they pursue their agreed upon goals (Raney, 2014). Adaptive leadership engages members in the process of change—rather than serving as passive or detached observers, followers champion the change process and play an instrumental role in whether it will be successful. Another contemporary approach is transformational leadership. This is a vision-based leadership style where strategic
visions are shared with followers in hopes of unifying and motivating them to adopt or achieve specific goals (Dansereau, Seitz, Chiu, Shaughnessy, & Yammarino, 2013). Leaders develop followers into leaders, helping them to achieve specific goals; “as such, it is the vision that the leader presents that allows and encourages followers to transform themselves” (Dansereau et al., 2013, p. 811). A final contemporary approach that has received a lot of recent attention (Neider & Schriesheim, 2011; Peus et al., 2012) is AUTH leadership. “In recent years, the focus on the topic of authentic leadership has gradually increased in both practical and academic fields” (Wang & Hsieh, 2013, p. 614) and has resulted in a “proliferation of practitioner and scholarly writings” (Gardner, Cogliser, Davis, & Dickens, 2011, p. 1120). AUTH leadership is the lens through which leadership will be viewed for this study; the approach is detailed below.

**Authentic leadership.** The ethical conduct of today’s leaders has resulted in a call for leaders who “do not deny responsibility, hide information, and deceive others, but rather lead with authenticity and integrity” (Peus et al., 2012, p. 331). AUTH leadership, “an emerging leadership style” (Walumbwa, Christensen, & Hailey, 2011, p. 110), is considered by many to be the answer to this call. AUTH leadership “draws upon and promotes positive psychological capacities and a positive ethical climate” (Wang & Hsieh, 2013, p. 614), and in a time of economic crisis, corporate greed and corruption, and general negativity, it is not surprising that AUTH leadership has been so well-received (Neider & Schriesheim, 2011; Peus et al., 2012). “We speculate that the reason why practitioners and scholars are interested in AUTH leadership is because…such leaders have a role to play in the greater society by tackling public policy issues and addressing organizational and societal problems” (Avolio et al., 2004, p. 801).

While AUTH leadership is considered a contemporary leadership approach, its roots date back to the ancient Greeks (Walumbwa et al., 2008). The construct itself is grounded in a history
of social psychology theory and comes from an analysis of the research on authenticity, leadership studies, ethics, and positive organizational behavior (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2015; Walumbwa et al., 2008). Scholars argue that AUTH leaders not only own their thoughts, opinions, and beliefs, but also they act in ways consistent with that ownership (Walumbwa et al., 2015); they practice self-awareness and demonstrate self-regulation. AUTH leaders also employ a “positive moral perspective characterized by high ethical standards that guide decision making and behavior” (Walumbwa et al., 2015, p. 92). This moral perspective is guided by honesty, kindness, optimism, accountability, and fairness (Yukl, 2006). From self-awareness, self-regulation, and positive moral perspective come four factors used to operationalize AUTH leadership. The identification of these highly correlated but distinct factors comes from the work of Kernis (2003), who conceptualized optimal self-esteem and then differentiated it from high self-esteem. Kernis (2003) explained that AUTH leadership is an individual difference construct delineating the adaptive features of optimal self-esteem, and he then detailed the higher order multidimensional construct of AUTH leadership to include self-awareness, unbiased processing, relational authenticity, and authentic behavior/action. In recognition of people as “inherently flawed and biased information processors” (p. 317), Avolio and Gardner replaced “unbiased processing” with “balanced processing.” The result is a set of four characteristics denoted by today’s scholars when referencing AUTH leadership (e.g., Avolio & Gardner, 2005; Joo & Nimon, 2014; Men, 2014; Neider & Schriesheim, 2011; Walumbwa et al., 2008). These four characteristics are self-awareness, relational transparency, balanced processing, and an internalized moral perspective; the demonstration of these factors is to scholars refer when they reference AUTH leadership (Walumbwa et al., 2008).
**AUTH leadership characteristics.**

*Self-awareness.* The self-awareness characteristic refers to a leader’s ability to make sense of the world including his or her place in it. It is a self-reflection process that results in an understanding of one’s strengths and weaknesses as well the “multifaceted nature of the self, which includes gaining insight into the self through exposure to others, and being cognizant of one’s impact on other people” (Neider & Schriesheim, 2011, p. 1147). This is an ongoing process resulting in continual re-assessment. While self-awareness is intuitively an invisible characteristic, Neider and Schriesheim (2011) explain that “leadership attributes are clearly perceptual and, to use an old adage, very much in the “eye of the beholder” (p. 1162). Self-awareness seems particularly important in the context of higher education where academic freedom is a foundational principle. Contributing to a climate of inquiry requires an understanding of one’s self—a recognition of what one knows and what one does not know.

*Relational transparency.* The characteristic of relational transparency refers to a leader presenting his or her true or real self (as opposed to a fake or distorted self). With an emphasis on communication, this includes the open sharing of thoughts, feelings, and beliefs while avoiding the expression of inappropriate emotions in interpersonal interactions. Shared governance, a foundational principle of higher education, requires relational transparency: “shared governance, at its best, is based on a culture of open communication…open communication requires all parties to be transparent with each other” (Bahls, 2014, p. 29).

*Balanced processing.* Balanced processing requires a leader to solicit multiple perspectives, including those that are contradictory of each other as well as the leader’s initial point of view. The differing perspectives and supporting data are objectively analyzed and considered before the leader makes a final decision. Both academic freedom and shared
governance require balanced processing. Critical thought and inquiry, components of academic freedom, can occur only when multiple perspectives are evaluated. Likewise, shared governance necessitates a “commitment to a genuine sharing of perspectives” and an “openness to good ideas from all sources” (Bowen & Tobin, 2015, p. 211).

*Internalized moral perspective.* The characteristic of internalized moral perspective is related to a leader’s internal moral standards and values. He or she acts according to these standards and values rather than group, organizational, or societal pressures. An internalized moral perspective may be demonstrated through actions guided by honesty, kindness, optimism, accountability, and fairness (Yukl, 2006). With reference to shared governance, people are encouraged to express their thoughts, feelings, and beliefs, even if those expressions are unpopular; peer pressure and intimidation tactics are not part of the shared governance structure (Bowen & Tobin, 2015).

The AUTH leadership characteristics have been studied in a variety of organizational settings including manufacturing companies (e.g., Wang & Hsieh, 2013), the health care industry (e.g., Wong & Cummings, 2009), and business, with an emphasis on Human Resources (e.g., Agote, Aramburu, & Lines, 2016). It seems quite clear, however, that each of the AUTH leadership characteristics align closely with the culture of higher education—a culture that has traditionally valued academic freedom and shared governance. Thus, AUTH leadership appears to be a uniquely appropriate lens through which to look at leaders in higher education.

It should be acknowledged that while self-awareness, relational transparency, balanced processing, and internalized moral perspective have been explained separately, AUTH leaders exhibit these characteristics through patterns of behavior. “Authentic leaders are guided by sound moral convictions and act in concordance with their deeply held values, even under
pressure. They are keenly aware of their views, strengths, and weaknesses, and strive to understand how their leadership impacts others” (Peus et al., 2012, p. 332). Said another way, AUTH leaders “have achieved high levels of authenticity in that they know who they are, what they believe and value, and they act upon those values and beliefs while transparently interacting with others” (Avolio et al., 2004, p. 802). It is the combination of self-awareness, relational transparency, balanced processing, and internalized moral perspective that comprise AUTH leadership.

“Although authentic leaders draw from their genetic endowment and life experiences, AL [authentic leadership] is considered a state-like characteristic and thus is open to development” (Joo & Nimon, 2014, p. 575). AUTH leadership is considered the result of applying the factors previously detailed, and in a positive manner (Ilies, Morgeson, & Nahrgang, 2005) and, with training, leaders at all levels can become more effective AUTH leaders (Men, 2014).

The mark of an effective AUTH leader is one who builds genuine relationships with followers—this allows the leader to better facilitate follower development (Gardner, Avolio, Luthans, May, & Walumbwa, 2005). Specifically, AUTH leaders encourage their followers to participate in decision-making processes, and they facilitate the achievement of goals (Laschinger, Wong, McMahon, & Kaufmann, 1999). Wong and Cummings (2009) explain that AUTH leaders provide followers with opportunities to realize new skills, resulting in higher levels of autonomy, competence, and satisfaction with work. However, for AUTH leaders to truly be effective—for an AUTH leader to be able to build genuine relationships with followers, their followers arguably need to perceive them as trustworthy.

Walumbwa et al. (2011) explain that “authentic leadership is founded on the notion of trust” (p. 113), and “group leaders who demonstrated authentic behavior enhanced group
members’ trust in the leader” (p. 114). Wong and Cummings (2009) also found a positive relationship between AUTH leadership and perceptions of leader trustworthiness. With a closer look at AUTH leadership, each of the four factors identified earlier have been found to have a relationship with trust. For example, Gardner et al., (2005) link leader self-awareness with follower trust in that leader, and Hughes (2005) found relational transparency to be a key predictor of follower trust in AUTH leaders. Additionally, Walumbwa et al., (2011) explain how balanced processing behaviors (e.g., soliciting feedback from followers) result in both follower trust and respect, and Gardner et al., (2005) report a relationship between leader “decision making that reflects integrity and a commitment to core ethical values” and follower trust (p. 347).

**Trust**

Most would agree that trust is an important variable in many types of relationships (Hosmer, 1995), including leaders/followers, but actually reaching consensus regarding a definition for trust has proven to be challenging. Perhaps that is because, as pointed out by Sitkin and Roth (1993), trust can be viewed as an individual attribute (relating to the judgment of another’s motives), a behavioral approach (looking at cooperation/competition), and an organizational climate (mediated by contracts and formalized procedures). In addition to there being multiple perspectives from which to define trust, Atkinson and Butcher (2003) explain that it is almost impossible to have a universally agreed upon definition of trust because it is something that is socially constructed and takes on different meanings for different people (Senjaya & Pekerti, 2010). Considering all of that, it is rather amazing that, as pointed out by Giffen (1967), dictionary definitions for trust appear to have reached some sense of agreement by consistently including terms like “confidence,” “reliance,” and “hope.” Ferrin, Bligh, and
Kohles (2007) contribute “benevolence,” “predictability,” and “dependability” to the list, and Hosmer (1995) adds “moral duty.” Giffen (1967) provides further clarification for how to define and understand what “trust” refers when writing that it generally implies some level of risk to the trusting person, and this risk results in vulnerability; a trusting person believes that this vulnerability will not be exploited. It is important to point out that trust must be offered voluntarily and is not something that can be ordered or forced. As explained by Rowley and Sherman (2003), “trust cannot be commanded…[and] must always be earned” (p. 1061). It is also important to point out that trust is not static and may be lost or revoked as quickly as it is earned or awarded. For the purposes of this study, trust is defined as “the extent to which a person is confident in, and willing to act on the basis of, [SIC] the words, actions, and decisions of another” (McAllister, 1995, p. 25).

Many researchers have found employee trust to be a critical variable influencing the overall performance, effectiveness, and efficiency of organizations (Dirks & Ferrin, 2002; Kramer & Tyler, 1996; Lewicki, McAllister, & Bies, 1998; Mayer & Davis, 1999; Mayer, Davis, & Schoorman, 1995). This is perhaps because employees who self-report high levels of trust also report high levels of morale (Tarter & Hoy, 1988), job satisfaction (Bartram & Casimir, 2007; Gould-Williams, 2003), organizational commitment (Cook & Wall, 1980), and organizational citizenship (Kovovsky & Pugh, 1994). According to Nikandrou, Papalexandris, and Bourantas (2000), broken trust leads to employees choosing self-serving behaviors; employees take longer breaks, miss more days of work, deny responsibilities, engage in reactive behaviors, and illustrate low levels of creativity when working at organizations with low trust (Laschinger, Labatt, Finegan, & Wilk, 2011). It appears that employee trust is good for both the
employee and the organization and is of obvious interest to organizations (as well as researchers).

**Interpersonal trust.** Researchers have identified different types of trust; Ferrin, Dirks, and Shah (2006) define interpersonal trust as “an individual’s belief about the integrity and dependability of another” (pg. 871). Interpersonal trust is specific to the relationships between individuals and concerns the development and maintenance of those relationships (Lau, 2010; Shamir & Lapidot, 2003). When applied to the context of organizational communication and people in supervisory/subordinate positions, the definition of interpersonal trust refers to an employee’s beliefs about the integrity and dependability of his or her assigned leader.

As already acknowledged, there are many definitions for and interpretations of trust. However, Sherwood and DePaolo (2005) point out that there are “generally accepted elements of the definition applicable to the worker-manager relationship…[and they] include trust as a psychological state of the worker…[and a] willingness to be vulnerable to the manager” (p. 67). According to Dirks and Ferrin (2002), “one factor that seems to influence the leader-follower relationship and is relatively universal to leadership theories is trust” (as cited by Dansereau et al., 2013, pg. 800). McAllister (1995) explains that evidence of interpersonal trust within an organization includes the confidence and willingness of employees to act on the basis of the words, actions, and decisions made by supervisors, even when those actions result in employee vulnerability.

To more fully understand the definition of interpersonal trust, it is necessary to acknowledge the different dimensions of the concept. Sherwood and DePaolo (2005) recognize several dimensional definitions of interpersonal trust as they relate to different contexts, suggesting that somebody’s trustworthiness may vary depending on the context. According to
McAllister (1995), two principal dimensions of interpersonal trust include cognitive-based trust and affect-based trust.

**Cognitive-based trust.** Cognitive-based trust “relies on a rational evaluation of another’s ability to carry out obligations” (Jeffries & Reed, 2000, p. 874); it comes from a manager’s ability to plan, execute, and coordinate tasks (McAllister, 1995). Employees consider a manager’s competency when determining whether he or she is worthy of cognitive-based trust. Twyman, Harvey, and Harries (2008) explain that competency refers to an employee’s perception of his or her supervisor’s knowledge, ability, and expertise. Sharkie (2009) echoes the attention employees give to their managers’ levels of competence and understanding when making determinations of trustworthiness. In addition to competency, Sherwood and DePaolo (2005) found that employees consider a manager’s consistency when determining whether he or she is worthy of cognitive-based trust.

**Affect-based trust.** According to McAllister (1995), affect-based trust is “grounded in reciprocated interpersonal care and concern” (pg. 25); evidence of concern includes keeping open the lines of communication so as to easily discuss personal concerns and provide socio-emotional support. Moye and Henkin (2006) explain that “emotional ties between individuals…provide the basis for affective trust” (p. 103). According to Twyman, Harvey, and Harries (2008), employees also consider their managers’ motivational intentions as reflections of the interpersonal nature of the work relationship with thought given to specific characteristics including honesty and integrity. Sherwood and DePaolo (2005) explain that employees may categorize those intentions as either benevolent or exploitive. According to Deutsch (1960) and Whitener, Brodt, Korsgaard, and Werner (1998), “benevolent leaders” are motivated by the
desire to do good for trusting followers while “exploitive leaders” manipulate others for their own advantage.

The previously referenced literature provides an overview of AUTH leadership as well as interpersonal trust and even indicates a possible relationship between the two; it is uncertain, however, to what degree AUTH leadership predicts interpersonal trust. The following hypothesis and research question are proposed:

H1: There will be a positive relationship between reported perceptions of AUTH leadership and interpersonal trust.

RQ1: To what extent will faculty perceptions of their department/division chairs as AUTH leaders predict their reported interpersonal trust in those chairs?

For the purpose of this study, AUTH leadership is operationalized by Neider and Schrieshmeim’s (2011) Authentic Leadership Inventory (ALI) to include the following factors: perceptions of self-awareness, relational transparency, balanced processing, and internalized moral perspective. The ALI includes items designed to measure each of the factors and, when averaged, yields an overall AUTH leadership score; this score serves as the predictor variable in a regression equation.

Interpersonal trust is operationalized using two measures, cognitive-based trust and affect-based trust. When “interpersonal trust” is used in this study, reference to both cognitive-based trust and affect-based trust is implied, and the analysis is run twice. For example, when examining faculty perceptions of their chairs as authentic leaders and whether those perceptions relate to and predict faculty interpersonal trust in those chairs, a regression of AUTH leadership is run once for cognitive-based trust and once for affect-based trust.
Communication Satisfaction

Because employee trust has been linked to an organization’s success (Dirks & Ferrin, 2002; Kramer & Tyler, 1996; Lewicki et al., 1998; Mayer & Davis, 1999; Mayer et al., 1995), employers have a genuine interest in the topic; for the same reason, they also have an interest in communication satisfaction; employees who are satisfied with their communication environment perform better at work (Goris, 2007; Ouedraogo & Leclerc, 2013; Pincus, 1986). Crino and White (1981) define communication satisfaction as “an individual's satisfaction with various aspects of communication in his [SIC] organization” (p. 831-2); it is the level of satisfaction employees have with an organization’s communication systems.

Communication satisfaction subscales. At first glance, the concept of communication satisfaction may appear rather simplistic. However, it is actually a multidimensional construct that encompasses a number of subscales. These subscales include satisfaction with communication climate, organizational integration, personal feedback, horizontal informal communication, superiors’ communication, media quality, general organizational perspective, and communication with subordinates (Downs & Hazen, 1977); because this study focuses on faculty (in the role of subordinate) perceptions of their department or division chairs (in the role of superior), only the first seven subscales will be considered further.

Communication climate. According to Clampitt and Downs (1993), communication climate reflects communication at two levels including organizational and personal. Bartels, Pruyn, De Jong, and Joustra (2007) explain that communication climate at the organizational level refers to “the perception of employees with regard to the quality of the mutual relations and the communication in an organization” (p. 177). Akkerman and Harris (2005) further explain that satisfaction with the communication climate at the organizational level refers to the extent to
which employees feel encouraged and supported by their organization to meet company goals; it also refers to the extent to which employees feel encouraged and supported in identifying with the organization. As explained by Clampitt and Downs (1993), the personal level of communication climate, on the other hand, includes people’s attitudes towards communicating within the organization; positive attitudes and high morale are consistent with a positive climate. Communication climate is certainly an important factor worthy of study when exploring employees’ communication satisfaction levels, but its relationship with trust is also worthy of attention. At the organizational level of communication climate, Puusa and Tolvanen (2006) explain that employee identification and trust levels are embedded concepts and interdependent. Schaubroeck, Peng, and Hannah, (2013) found a positive relationship between employee trust (in leaders as well as the organization) and organizational identity. At the personal level of communication climate, Tarter and Hoy (1988) found a positive correlation between high morale and trust while Gardiner (1999) reported a relationship between low morale and lack of trust.

**Organizational integration.** Satisfaction with organizational integration refers to the degree to which employees are given information about their work environment as well as the organization for which they work (Mustamil, Yazdi, Syeh, & Ali, 2014). This information can include requirements of the job, departmental policies and plans, division updates, and personal news (Akkirman & Harris, 2005; Downs & Hazen, 1977). According to Gilbert and Tang (1998), the more involved employees feel with sending and receiving information about their work as well as the organization for which they work, the more likely they experience organizational trust.

**Personal feedback.** Satisfaction with personal feedback is specific to employee performance and how workers are judged (Akkirman & Harris, 2005). Downs and Hazen (1977)
explain that personal feedback includes “communication relating to personal achievement and work” (p. 68) and is based on employees’ understanding of how their work is appraised and evaluated (Clampitt & Downs, 1993). According to Hernandez (2008), supervisors who provide individualized support and foster one-on-one relationships with their employees are more likely to be trusted. Nyhan (1999) explains how the sharing of this type of support and relationship-building can occur through continuous two-way performance feedback meetings; such meetings result in overall performance improvements as well as higher levels of employee trust.

**Horizontal informal communication.** Satisfaction with horizontal informal communication includes whether and to what degree the informal communication is both free flowing and accurate (Akkirman & Harris, 2005). It also includes the “extent to which the grapevine is active in the organization” (Downs & Hazen, 1977, p. 67). Horizontal informal communication typically occurs between peers (Downs & Hazen, 1977) and is sometimes called co-worker communication (Clampitt & Downs, 1993). According to Holton (2001), horizontal communication is necessary for team building as it allows peers to build connections, but such connections and team building efforts require trust. According to Lee (2009), a group of people working together is not a team unless there is trust, and that group will achieve what might be possible for a team only if there is trust. Newell, David, and Chand (2007) add that “trust remains an important element deemed necessary to facilitate knowledge sharing and collaborative work” (p. 158).

**Superiors.** Satisfaction with superiors includes both upward and downward communication (Downs & Hazen, 1977) and according to Akkirman and Harris (2005), reflects three principal items. These items include the ability to listen effectively, remain open to new ideas, and provide guidance for solving job-related problems. Successful leaders use listening to
develop collaborative relationships and partnerships with employees (Berg, 1992). Dirks and Ferrin (2002) found that employees are more satisfied with their superiors when they see themselves not as observers but as participants in decision-making processes. Superiors who are receptive to their followers’ feedback—who remain open to new ideas and actually listen to those ideas—are also perceived as more trustworthy (Dirks & Ferrin, 2002; Gillespie & Mann, 2004).

**Media quality.** According to Mustamil et al., (2014) employee satisfaction of media quality relates to the use and effectiveness of media for communication purposes; “it reflects the degree to which employees perceive major forms of company media as functioning effectively” (Downs & Hazen, 1977, pg. 67). This perception includes an assessment of whether (and to what degree) directives and memos are clear, organizational publications are useful, and meetings are organized; attention is paid to both the quality and quantity of information (Clampitt & Downs, 1993). As recognized by Lopez-Fresno and Savolainen (2014), working meetings “play an important role in information and knowledge sharing, knowledge creation, coordination, decision making…and…build or destroy trust” (p. 137). Meetings that build trust allow for the sharing of explicit and tacit knowledge while avoiding hidden agendas (Lopez-Fresno & Savolainen, 2014). Qian and Daniels (2008) found that when faculty perceive the frequency and quality of institutional information sharing to be low, particularly when the information pertains to institutional change, a sense of distrust towards the administration results.

**General organizational perspective.** According to Mustamil et al. (2014), satisfaction with the general organizational perspective “reflects employees’ satisfaction with information associated with overall functioning of the organization” (p. 77); it “deals with the broadest kind of information about the organization as a whole” (Clampitt & Downs, 1993, p. 7). Downs and
Hazen (1977) include in this factor of communication satisfaction the employees’ perceptions of “whether or not [they] get information about government action affecting the organization, changes in the organization, company financial standings, and organizational policies and goals” (p. 67).

While employers have long been interested in communication satisfaction, so too have researchers. A number of scholars have looked specifically at communication satisfaction and leadership style. For example, Terek, Nikolić, Gligorović, Glušac, and Tasić (2015) found a positive relationship between employees’ communication satisfaction and their perceptions of specific leadership behaviors, including those that emphasize employee empowerment. Other researchers have discovered a positive relationship between communication satisfaction and employees’ perceptions of their leaders’ trustworthiness (Gardiner, 1999; Krosgaard, Brodt, & Whitener, 2002; Zeffane, 2012). There appears to be a positive relationship between both communication satisfaction and leadership behaviors consistent with AUTH leadership as well as communication satisfaction and interpersonal trust; thus, the following hypotheses are proposed:

H2: There will be a positive relationship between reported perceptions of AUTH leadership and communication satisfaction.

H3: There will be a positive relationship between communication satisfaction and reported interpersonal trust.

Because it is unclear whether communication satisfaction mediates the relationship between AUTH leadership and trust, the following question is asked:
RQ2: To what extent will faculty reports of communication satisfaction mediate the relationship between their perceptions of their department/division chairs as AUTH leaders and their interpersonal trust in those chairs?

Crino and White (1981) define communication satisfaction as “an individual's satisfaction with various aspects of communication in his [SIC] organization” (p. 831-2); it is the level of satisfaction employees have with an organization’s communication systems. The Communication Satisfaction Questionnaire (CSQ), designed by Downs and Hazen (1977), identifies eight communication satisfaction subscales; this study uses parts of the CSQ to measure seven of those eight subscales including satisfaction with communication climate, organizational integration, personal feedback, horizontal informal communication, superiors, media quality, and general organizational perspective. When “communication satisfaction” is referenced in this study, a composite of the seven previously listed subscales is implied.

After administering the CSQ twice to the same group, with one week between each administration, Downs and Hazen (1977) found re-test reliability at an acceptable reliability coefficient of .94. Zwijze-Koning and de Jong (2007) report criterion-related and convergent validity, with reference to Critical Incident Technique, an open method measure used to tap a range of communicative behaviors about which employees have strong feelings. Koning and de Jong (2007) also found the internal reliability alphas for the CSQ subscales to be high, except for Horizontal Informal Communication, which had a moderate but still acceptable alpha level (alpha = .62). “We therefore suggest that the CSQ is an appropriate instrument to use…CSQ results can provide insight into aspects of the organization’s internal communication system that significantly influences employees’ overall level of communication satisfaction” (Zwijze-Koning & de Jong, 2007, p. 279).
Organizational Trust

AUTH leadership, interpersonal trust, and communication satisfaction have been detailed, but organizational trust also warrants attention. Moye (2003) explains that organizational trust refers to employees’ confidence in and support for the application or implementation of their organization’s systems, rules, and regulations. According to Tyler and Bies (1990), this confidence and support are linked less to actual outcomes and more to the ways organizations take and carry out actions. Positive perceptions of procedural justice, or the fairness of a company’s policies and procedures used in determining employee outcomes, have been shown to predict job satisfaction, organizational commitment, and increased performance levels (Cohen-Charash & Spector, 2001; Viswesvaran & Ones, 2002); procedural justice is also linked to effective organizational change efforts (Chawla & Kelloway, 2004). Forret and Love (2008) looked at organizational policies and procedures and found a strong relationship with coworker trust and overall morale: those who think their organizations have fair policies and follow just procedures are more likely to trust their colleagues and have higher morale.

Organizational trust and interpersonal trust are separate concepts and should not be confused; they do, however, appear to have a positive relationship (Park & Kim, 2012; Shamir & Lapidot, 2003; Tan & Tan, 2000; Zaheer, McEvily, & Perrone, 1998). Park and Kim (2012) and Shamir and Lapidot (2003) found that interpersonal trust is related to and may even be a product of organizational trust. It is, again, important to point out that interpersonal and organizational trust are empirically, theoretically, and conceptually distinct (Zaheer et al., 1998); interpersonal trust and organizational trust reference different concepts. Rather than focusing on relationships with specific individuals within the organization as with cognitive-based and affect-based
interpersonal trust, organizational trust emphasizes employee perceptions of whether the organization’s policies and procedures are fair and just (McAllister, 1995).

In addition to there being a positive relationship between interpersonal and organizational trust, Onorato and Zhu (2014) found a positive relationship between organizational trust and AUTH leadership. More specifically, they examined a number of different organizational contexts (e.g., Food and Beverage, Information Technology, and Accounting) and found AUTH leadership to be highly correlated with organizational trust; “workers who view their leaders as having stronger authentic leadership also rank high on organization trust within their organization” (Onorato & Zhu, 2014, p. 37). What isn’t known is whether and to what degree organizational trust moderates perceptions of AUTH leadership and interpersonal trust, as mediated by communication satisfaction; thus, the following question is asked:

RQ3: Is the relationship between perceptions of AUTH leadership and interpersonal trust, as mediated by communication satisfaction, moderated by organizational trust? Specifically, to what extent will perceptions of organizational trust moderate the direct relationship between people’s perceptions of AUTH leadership in their chairs on their trust in those chairs? And to what extent will the indirect relationship from communication satisfaction to interpersonal trust be moderated by perceptions of organizational trust?

Moye (2003) explains that organizational trust refers to employees’ confidence in and support for their organization’s systems, rules, and regulations. According to Tyler and Bies (1990), this confidence and support are linked less to actual outcomes and more to the ways organizations take and carry out actions. Perceptions of organizational trust are measured as a single factor by parts of Nyhan and Marlowe’s (1997) Organizational Trust Inventory.
The Current Study’s Contributions to Higher Education

The educational landscape is ever-changing (Bowen & Tobin, 2015). “Not-for-profit organizations [including public colleges and universities] face continual challenges to their identity and viability as a result of changing social, economic and political environments” (Collier & Esteben, 2000, p. 207). Institutions of higher education now face specific challenges including “shifting demographics, spiraling costs, and the rise of new ways to provide postsecondary education” (Bahls, 2014, p. 5). In an effort to address these challenges, colleges and universities are undergoing significant change (Migliore, 2012) as they adapt to the realities of today (Hazelkorn, 2012). According to Hazelkorn (2012), “colleges and universities are becoming more efficient and productive, developing new business models, adjusting their strategic ambitions and their organisational [SIC] shape,” as they react to the global economic crisis and resulting pressures put on institutions of higher education (n.p.). Leaders at these institutions are fielding increasing demands to make changes at their institutions to meet stakeholders’ expectations, but with limited resources (Randall & Coakley, 2007). Now, more than ever, institutions of higher education are dealing with ambiguity and uncertainty (Bahls, 2014). Colleges and universities are having to figure out how to do more with less as operating costs rise and government subsidies decline (Randall & Coakley, 2007), and leaders are working to “effectively navigate through potentially rough waters ahead” (Migliore, 2012, p. 33). As a result of these pressures, the university [and college] setting has become more business-like, making it difficult to obtain commitment from faculty (Randall & Coakley, 2007; Vidovich & Currie, 2011). According to Natale and Doran (2012), “business practices and principles now commonly suffuse the approach and administration of Higher Education” (p. 187). When the academic culture described in the previous section is disturbed (i.e., when an institution of higher
education adopts traditional business practices), faculty respond with low morale and cynicism (Goldspink, 2007; Natale & Doran, 2012). Kanter and Mirvis (1989) report that cynicism results when profits become more important than work ideals and according to Qian and Daniels (2008), with cynicism comes distrust.

Chancellors, presidents, deans, and chairs at institutions of higher education are being charged with “leading in an increasingly uncertain and complex environment” (Davis, Dent, & Wharff, 2015, p. 333). They are leading cynical employees who are generally dissatisfied with what they self-report as ineffective leadership (Norman, Ambrose, & Huston, 2006); faculty have low morale (Natale & Doran, 2012) and lack trust in their leaders and organizations (Kowalski & Cangemi, 2008). This is a challenging time for institutions of higher education as well as leaders and followers working at colleges and universities. Clearly, there is a need for research in the areas of leadership, trust, and communication satisfaction in the organizational context of higher learning; this study focuses on perceptions of AUTH faculty leaders, interpersonal trust, communication satisfaction, and organizational trust in the context of higher education.
CHAPTER III

Method

Participants

Eligible participants for this study included college-level faculty in departments assigned to department or division chairs (who were also college-level faculty). Limited-duration, visiting, probationary (i.e., tenure-track but not yet tenured), and non-probationary (i.e., tenured), faculty were all eligible. One hundred and twenty-five participants participated in this study, including 98 faculty members who indicated reporting to a department or division chair; surveys from only these 98 faculty were used. Fifty-five participants were full-time faculty while 41 participants were part-time faculty (two participants did not identify their employment status). Fifty-seven women and 40 men completed the survey (one participant did not identify his or her sex). With regard to years of service at their institutions, six participants reported working less than one year, 14 participants reported working one to three years, 15 participants reported working four to six years, 11 participants reported working seven to nine years, 19 participants reported working ten to 12 years, and 33 participants reported working at least 13 years.

Procedures

Eligible faculty at two midsized public Midwestern community colleges were recruited to participate in this study. Those faculty members were sent an email with a description of the study procedures and purpose as well as a link to the online survey detailed below; the online survey was designed using the Qualtrics software package. Participants viewed an information statement prior to starting the questionnaire. This statement outlined the nature of the study and the rights of the participants.
Measures

A survey consisting of questions from the Authentic Leadership Inventory, Interpersonal Trust Instrument, Communication Satisfaction Questionnaire, and Organizational Trust Inventory were used. In addition, demographic questions were asked (e.g., age, sex, years of employment, limited-duration/probationary/non-probationary status, etc.) to develop a demographic profile of the sample. A question was also included to verify that each participant was in a department assigned to a department or division chair.

**AUTH leadership.** Each participant responded to 14 modified items from the Authentic Leadership Inventory (ALI, Neider & Schriesheim, 2011) designed to measure perceptions of the four AUTH leadership characteristics. More specifically, AUTH leadership was assessed based on behaviors reflective of the characteristics of self-awareness, relational transparency, balanced processing, and moral perspective. Each factor correlates with either three or four specific items to which participants express their level of agreement using a Likert scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*). Sample items for each of the factors include “My department/division chair is clearly aware of the impact he/she has on others” (self-awareness), “My department/division chair clearly states what he/she means” (relational transparency), “My department/division chair asks for ideas that challenge his/her core beliefs” (balanced processing), and “My department/division chair shows consistency between his/her beliefs and actions” (moral perspective). Neider and Schriesheim report strong content and construct validity for the ALI. Acceptable internal consistency reliabilities have also been reported (i.e., ≥ .70; Nunnally & Bernstein, 1994) as well as concurrent validity (Neider & Schriesheim, 2011).

**Interpersonal trust.** A measure created by McAllister (1995) was used to assess cognitive-based and affect-based trust. The measure consists of 11 items total with 6 assessing
cognitive-based trust and 5 assessing affect-based trust. Sample items for addressing cognitive-based trust include, “Given this person’s track record, I see no reason to doubt his/her competence and preparation for the job,” “I can rely on this person not to make my job more difficult by careless work,” and “Most people, even those who aren’t close friends of this individual, trust and respect him/her as a coworker.” Sample items for addressing affect-based trust include, “We have a sharing relationship. We can both freely share our ideas, feelings, and hopes,” “If I shared my problems with this person, I know (s)he would respond constructively and caringly,” and “We would both feel a sense of loss if one of us was transferred and we could no longer work together.” Items were measured on a seven-point scale where 1 = Not at all and 7 = Entirely, with higher numbers indicating perceptions of increasing trustworthiness. Reliability ratings have been reported for the cognitive-based and affect-based trust measures at .91 and .89, respectively (McAllister, 1995).

**Communication satisfaction.** The degree of satisfaction faculty perceive in their communication environment was measured with parts of the Communication Satisfaction Questionnaire (CSQ; Downs & Hazen, 1977). The 40-item questionnaire measures the level of satisfaction employees have with an organization’s communication systems and consists of eight subscales including communication climate, organizational integration, personal feedback, horizontal informal communication, superiors, media quality, general organizational perspective, and communication with subordinates. Each subscale was measured with five items; the last subscale (communication with subordinates) was not relevant to this study, and the corresponding items were not included. For clarity, some items were modified so as to reference one’s “institution” rather than one’s “organization.” Sample items include, “Extent to which the institution’s communication makes me identify with it or feel a vital part of it,” “Extent to which
my supervisor is open to ideas,” and “Extent to which I receive the information needed to do my job.” Participants indicated on a Likert-scale their level of satisfaction (1 = Very Dissatisfied, and 7 = Very Satisfied) with the prompts given for each factor. The five responses assigned to each factor were averaged for a factor score; the average of the factor scores yielded a communication satisfaction score. Test-retest reliability scores are reported at .94 (Downs & Hazen, 1977), and the measure has both construct validity and concurrent validity (Downs & Hazen, 1977). According to Iyer and Israel (2012), the CSQ is “a valid instrument for measuring communication satisfaction and supports the multidimensional aspects of the communication satisfaction construct.” (p. 55).

Organizational trust. Nyhan and Marlowe’s (1997) Organizational Trust Inventory (OTI) was used to measure faculty members’ levels of organizational trust. The OTI is a 12-item scale with 4 items designed to measure an individual’s trust in his or her organization. Sample items used for measuring organizational trust include, “My level of confidence that this organization will treat me fairly is,” “The level of trust between supervisors and workers in this organization is,” and “The level of trust among the people I work with on a regular basis is.” Items were measured on a Likert scale where 0 = Nearly Zero and 7 = 100%, with higher numbers indicating perceptions of increasing trustworthiness.

In developing the instrument, Nyhan and Marlowe (1997) initially administered the OTI to three small groups. Pre-test results support the assumption that trust can be differentiated and measured according to the subcategories of interpersonal (trust in the supervisor) and organizational (trust in the organization as a whole). Nyhan and Marlowe (1997) then administered the OTI to three larger groups including 344 employees at an engineering organization, 202 employees at a county government planning department, 100 employees at a
community services organization. Internal consistency was established with high coefficient alphas (.96, .96, and .95, respectively). Nyhan and Marlowe (1997) also tested the discriminant and convergent validity of interpersonal and organizational trust through confirmatory factor analysis and comparisons to other closely related scales including Meyer and Allen's Affective Commitment Scale, Hackman and Oldham's Job Diagnostic Survey, and Drehmer and Grossman's Managing People Inventory. The OTI is a sound instrument, and researchers have and continue to use the measure to gauge interpersonal and organizational trust (i.e., Joseph & Winston, 2005; Kaneshiro, 2008).

In addition to these scales, participants also completed a series of demographic questions pertaining to age, sex, and years of service. Participants also reported their employment status (full-time or part-time).

**Analytic Strategy**

As part of preliminary analyses, Pearson product-moment correlations were used to assess the relationships among all test variables. These correlational tests were also used to test hypotheses 1, 2, and 3. Linear regressions were calculated to answer research question 1. A simple mediation model (Hayes, 2013) was used to answer research question 2, and moderated mediation models (Hayes, 2013) were used to answer research question 3.

Hypothesis 1 posited a positive correlation between reported perceptions of AUTH leadership and interpersonal trust (including cognitive-based trust and affect-based trust). Pearson correlation coefficients were obtained to confirm whether these relationships exist; \( r \) values were expected to be positive. Mean scores for AUTH leadership were expected to increase as mean scores for interpersonal trust increased, and vice versa.
Research question 1 asked whether faculty perceptions of their chairs as AUTH leaders predicted their interpersonal trust in those chairs. A linear regression was calculated to predict interpersonal trust based on faculty perceptions of AUTH leadership.

Hypothesis 2 posited a positive relationship between reported perceptions of AUTH leadership and communication satisfaction. The Pearson correlation coefficient was obtained to confirm whether this relationship exists; the $r$ value was expected to be positive. Mean scores for communication satisfaction were expected to increase as mean scores for reported AUTH leadership increased, and vice versa.

Hypothesis 3 posited a positive correlation between communication satisfaction and interpersonal trust. Pearson correlation coefficients were obtained to confirm whether these relationships exist; $r$ values were expected to be positive. Mean scores for communication satisfaction were expected to increase as mean scores for interpersonal trust increased, and vice versa.

Research question 2 examined whether communication satisfaction explains the relationship between AUTH leadership and interpersonal trust. To answer this, a simple mediation model was tested. More specifically, a bootstrapped mediation analysis using the PROCESS model 4 macro (Hayes, 2012) was utilized to investigate the indirect effect of AUTH leadership ($X$) on interpersonal trust ($Y$) through communication satisfaction ($M$). “In mediation analysis, bootstrapping is used to generate an empirically derived representation of the sampling distribution of the indirect effect,” according to Hayes (2013, p. 106). It is a repeated resampling process in which the sample is treated as a representation of the broader population from which it was pulled (Preacher, Rucker, & Hayes, 2007). Bootstrapping results in a larger $n$ and a test with higher power (Hayes, 2013). While confidence intervals used with bootstrapping are
percentile-based and may be “asymmetric in accordance with the skewness of the sampling
distribution,” there are methods for addressing this (Preacher et al., 2007, p.191). For example,
bias-correction or bias-correction with acceleration can improve percentile-based confidence
intervals; these methods work by adjusting the ordinal positions used with identifying the upper
and lower thresholds of the confidence interval (Preacher et al., 2007). This study utilized a bias-
corrected bootstrapping procedure to generate 95% confidence intervals around the indirect
effects. A confidence interval that excludes zero denotes significance.

Research question 3 examined whether the relationship between faculty perceptions of
AUTH leadership and interpersonal trust, as mediated by communication satisfaction, were
moderated by organizational trust. According to Hayes (2013), moderated mediation is used to
test whether the effects of X on Y through M “operate to varying degrees (or not at all) for certain
people or in certain contexts” (p. 358); moderated mediation is used to test conditional effects.
In this study, a bootstrapped moderated mediation using the PROCESS Model 5 macro (Hayes,
2013) tested the extent to which organizational trust moderated the direct effect of faculty
perceptions of their chairs as AUTH leaders on their trust in those chairs. Answering Research
Question 3 also required an analysis of the extent to which the indirect effect of AUTH
leadership on interpersonal trust through communication satisfaction was moderated by
organizational communication. A moderated mediation model was run using the PROCESS 14
macro (Hayes, 2013) and, again, a bias-corrected bootstrapping analysis was utilized.
CHAPTER IV

Results

Table 1 contains the means, standard deviations, scale reliabilities, and theoretical ranges for the study variables. Scale reliabilities refer to the consistency of the measures. Reliability tests are an important step in instrument validation to help ensure the accuracy of a measure. Cronbach’s alpha ($\alpha$) is typically calculated to assess reliability, with a commonly used threshold value for acceptable reliability to be .70 or higher (Nunnally & Bernstein, 1994).

This study proposed three hypotheses and asked three research questions. Results of each hypothesis testing and answers to the research questions are presented as follows.

The first hypothesis posited a positive relationship between perceptions of AUTH leadership and interpersonal trust. Table 2 contains the correlations between AUTH leadership and interpersonal trust, including cognitive-based trust and affect-based trust; the results show support for Hypothesis 1, indicating positive associations between AUTH leadership and both cognitive-based trust, $r (98) = .82, p < .01$, and affect-based trust, $r (98) = .79, p < .01$.

Because of the similarly high correlations found between AUTH leadership and cognitive-based trust and between AUTH leadership and affect-based trust, an additional correlation analysis was run. Table 3 contains the correlation between cognitive-based trust and affect-based trust; the two types of trust were found to be highly correlated, $r (98) = .81, p < .01$. While the literature recognizes these types of trust as unique and different from each other, looking at them as separate and distinct from each other could not be justified for the current study. Moving forward with testing the study’s hypotheses and answering the research questions, the items used to measure cognitive-based trust and affect-based trust were combined and averaged resulting in a single interpersonal trust variable. As indicated in Table 2, AUTH
leadership and interpersonal trust (including both cognitive-based trust and affect-based trust) are positively correlated, $r (98) = .84, p < .01$, and show further support for H1. The results support the prediction that as perceptions of AUTH leadership increase, so do interpersonal trust levels.

The first research question asked to what extent faculty perceptions of their department and division chairs as AUTH leaders will predict their interpersonal trust in those chairs. A simple linear regression analysis was calculated to predict interpersonal trust based on AUTH leadership. Table 4 shows the coefficients of the regression model and their significance. A significant regression equation was found ($F (1, 96) = 227.07, p < .001$); furthermore, AUTH leadership accounted for 70% of the variance of interpersonal trust. In sum, AUTH leadership was found to be a large predictor of interpersonal trust. These findings suggest that faculty are more likely to trust their chairs when they believe their chairs exhibit AUTH leadership characteristics.

The second hypothesis posited a positive relationship between perceptions of AUTH leadership and communication satisfaction. Table 5 contains the correlation between AUTH leadership and communication satisfaction, indicating a positive association between AUTH leadership and communication satisfaction, $r (98) = .61, p < .01$, and showing support for H2.

The third hypothesis posited a positive relationship between communication satisfaction and interpersonal trust. Table 6 contains the correlation between communication satisfaction and interpersonal trust, indicating a positive association the two, $r (98) = .68, p < .01$, and showing support for H3. Consistent with the prediction, as communication satisfaction increases, so does interpersonal trust, and as communication satisfaction decreases, so too does interpersonal trust.

The second research question asked to what extent faculty reports of communication satisfaction mediate the relationship between their perceptions of their chairs as exhibiting
AUTH leadership characteristics and their interpersonal trust in those chairs. A mediating variable accounts, or at least partially accounts, for a relationship between an independent and dependent variable. Figure 1 provides a conceptual example of the simple mediation model. This model is labeled “simple” because it includes only one mediating variable (Preacher & Hayes, 2008). This mediation model allows researchers to examine the indirect effect that variable X has on variable Y through variable M. A formal test of indirect effects using a bootstrapping procedure (N = 5,000 samples) utilizing the PROCESS model 4 macro (Hayes, 2013) was conducted to answer RQ2. As seen in Table 7, results show that the indirect effect from AUTH leadership on interpersonal trust through communication satisfaction was significant, B = .25 (95% CI: .13 to .41); coefficients are reported as unstandardized Beta weights. Communication satisfaction mediated the effect of AUTH leadership on interpersonal trust. With reference to the mediation model, as X increased so did M, and as M increased so did Y. These findings suggest that as perceptions of AUTH leadership increase, so does communication satisfaction, and as communication satisfaction increases, so does interpersonal trust. More specifically, these findings suggest that faculty perceptions of their chairs as AUTH leaders will positively relate to their communication satisfaction which will then positively relate to their trust in their chairs.

The third research question asked whether the relationship between perceptions of AUTH leadership and interpersonal trust, as mediated by communication satisfaction, would be moderated by organizational trust. It asked, specifically, to what extent perceptions of organizational trust moderate the direct relationship between people’s perceptions of AUTH leadership in their chairs on their trust in those chairs, and to what extent the perceptions of organizational trust moderate the indirect effect of AUTH leadership on interpersonal trust.
through communication satisfaction. According to Hayes (2015), “questions about the contingencies of an effect are often answered statistically through moderation analysis” (p. 1). Testing the effects of a moderating variable helps to explain under what conditions a relationship does or does not exist. Testing the effects of a moderated mediation is simply the examination of conditional effects: it looks at whether and to what degree the indirect effect is dependent on varying levels of another (moderating) variable. Figures 2 and 3 provide conceptual examples of the moderated mediation models used in this study.

A formal test of direct effects using a bootstrapping procedure (N = 5,000 samples) was conducted to answer the first part of RQ3. Results from a moderated mediation analysis, using the PROCESS model 5 macro (Hayes, 2013), show that the moderated direct effect of AUTH leadership on interpersonal trust was significant, B = -0.17 (95% CI: -.32 to -.02). Organizational trust did moderate or help define the conditions, under which AUTH leadership predicted interpersonal trust. As seen in Table 8, AUTH leadership has a larger direct effect on interpersonal trust as organizational trust scores get smaller. These findings suggest that when faculty perceive their chairs as exhibiting behaviors consistent with AUTH leadership, they are more likely to trust their chairs, particularly so when those faculty have low organizational trust.

A formal test of indirect effects using a bootstrapping procedure (N = 5,000 samples) was conducted to answer the second part of RQ3. As seen in Table 9, results from a moderated mediation analysis, using the PROCESS model 14 macro (Hayes, 2013), show that the mediated indirect effect is not statistically significant, B = .12 (95% CI: -.44 to .69). This means that the effect of AUTH leadership on interpersonal trust through communication satisfaction was not moderated by organizational trust.
Post Hoc Analysis

With an interest in looking more closely at the results found regarding RQ2, a post hoc analysis looked at the different subscales comprising communication satisfaction. Those subscales include satisfaction with communication climate \((M = 4.53, SD = 1.46)\), organizational integration \((M = 5.06, SD = 1.23)\), personal feedback \((M = 4.50, SD = 1.51)\), horizontal informal communication \((M = 4.69, SD = 1.14)\), superiors \((M = 5.10, SD = 1.48)\), media quality \((M = 4.81, SD = 1.33)\), and general organizational perspective \((M = 4.21, SD = 1.56)\). A formal test of indirect effects was again run looking at the effect of AUTH leadership on interpersonal trust as mediated by communication satisfaction, but this time each communication satisfaction subscale score was loaded into a parallel multiple mediation model. Parallel multiple mediation allows researchers to test for the direct effect of \(X\) on \(Y\) as well as the indirect effects through multiple mediators; no causal ordering of the mediators is assumed with parallel multiple mediation (Hayes, 2013). The PROCESS model 4 macro (Hayes, 2013) was used with this analysis. As seen in Table 10, results of the parallel multiple mediation show satisfaction with superiors as a significant mediator \(B = .42\), (95% CI: .14 to .77); the effect of AUTH leadership on interpersonal trust was mediated by satisfaction with superiors. This single subscale was the driving force of all the communication satisfaction subscales, and these findings suggest that faculty members’ satisfaction with their chairs’ ability to listen effectively, remain open to new ideas, and provide guidance for solving job-related problems, can help explain the relationship between perceptions of AUTH leadership and interpersonal trust.
CHAPTER V

Discussion

The preceding chapter reported the results of the data analysis and hypotheses tests for this study; results of the data analysis used to answer the research questions and post hoc analysis were also detailed. The discussion in this chapter includes an interpretation of the results. This interpretation is divided into three parts: interpretation and implications of the main findings are addressed, limitations of the study are presented, and future research is suggested.

Interpretation and Implications of the Main Findings

This study sought to investigate the relationship between faculty perceptions of department and division chairs in terms of behaviors associated with AUTH leaders and their interpersonal trust in those chairs. Attention was given to communication satisfaction as a mediating variable and organizational trust as a moderating variable.

Hypothesis 1. Previous research shows support for a positive relationship between AUTH leadership characteristics and interpersonal trust. For example, Wong and Cummings (2009) surveyed health care employees and found perceived trustworthiness of one’s leader to be correlated with self-awareness, relational transparency, balanced processing, and ethical behavior. Additionally et al. (2016) surveyed Human Resources managers and found perceptions of their leaders demonstrating AUTH leadership to be correlated with their trust in those leaders. Finally, Wang and Hsieh (2013) surveyed people working in manufacturing companies and found employee trust to be highly correlated with perceptions of their leaders demonstrating AUTH leadership behaviors. Subsequently, it was not surprising to find a high correlation in the current study; faculty perceptions of chairs demonstrating AUTH leadership,
including self-awareness, relational transparency, balanced processing, and internalized moral perspective, are positively related to their interpersonal trust in those chairs.

Two characteristics of AUTH leadership, relational transparency and internalized moral perspective, can best explain this relationship. Relational transparency refers to a leader’s presentation of his or her true or real self. Internalized moral perspective references a leader’s moral standards and asks whether his or her actions are consistent with those standards and values. In general, people perceived as genuinely moral and just are more likely to be trusted as compared to people who are perceived as fake or phony (Michie & Gooty, 2005; Wang & Hsieh, 2013) as well as people perceived as genuinely immoral or corrupt (Dimitrova-Grajzl, 2012). Support for H1 provided the foundation needed for pursuing an answer to the first research question.

**Research Question 1.** While previous research supports a positive relationship between AUTH leadership and interpersonal trust, the extent to which AUTH leadership would predict faculty trust levels in their chairs was not known. Results from the current study found that for each unit increase on the ALI, the Interpersonal Trust Measures scores increased by 1.26 units. These findings suggest that the degree to which faculty perceive their chairs to exhibit AUTH leadership predicts their interpersonal trust in those chairs at a nearly one-to-one correspondence. As AUTH leadership scores increase, interpersonal trust scores increase in similar increments; as AUTH leadership scores decrease, interpersonal trust scores decrease in similar increments.

After some consideration, the extent to which AUTH leadership predicts interpersonal trust in the current study seems appropriate as the general public has called for leaders who are transparent, accept responsibility, and lead with integrity (Peus et al., 2012). We are at a time when nuclear disasters, corporate scandals, and financial crises have “led to a loss of confidence
in corporate leaders and cynicism with regard to their role” (Peus et al., 2021, p. 331). The context of higher education is not immune as changes to academic freedom and shared governance have faculty reporting ineffective leadership (Norman, Ambrose, & Huston, 2006) and a lack trust in their leaders and organizations (Kowalski & Cangemi, 2008). 

AUTH leadership, an approach characterized by self-awareness, relational transparency, balanced processing, and internalized moral perspective, is an answer to the call for leaders who are transparent, accept social responsibility, and lead with integrity. As such, it is not surprising to find that faculty perceptions of their chairs exhibiting AUTH leadership characteristics are a strong predictor of their interpersonal trust in those chairs.

**Hypothesis 2.** Previous research supports a positive relationship between leadership behaviors consistent with AUTH leadership and communication satisfaction. For example, Terek, Nikolić, Gligorović, Glušac, and Tasić (2015) surveyed teachers at primary schools and found positive correlations between perceptions of behaviors consistent with AUTH leadership and communication satisfaction. Specifically, they found positive moderate to large correlations between fostering acceptance of group goals, providing individualized support, and supportive leader behavior with each of the different communication satisfaction subscales. Results from the current study support H2 and are consistent with what Terek et al. (2015) found. The positive relationship between AUTH leadership characteristics and communication satisfaction makes intuitive sense, particularly when the individual characteristics and subscales are examined.

The behaviors consistent with self-awareness, one of the AUTH leadership characteristics, align nicely with the communication satisfaction personal feedback subscale. Self-aware leaders engage in self-reflection, resulting in a better understanding of their own
strengths and weaknesses. Self-aware leaders also perspective-shift, leading to a better understanding of the effects they may have on others. It would seem that leaders with this understanding would be better at recognizing not only the type of support needed by their followers, but also they would know their own abilities and deficiencies with regard to providing that type of support. Department and division chairs who are self-aware (and engage in self-reflection) should be better equipped to provide the individualized support needed by their faculty. And if that individualized support is provided, faculty would likely report higher levels of communication satisfaction in relation to the personal feedback subscale.

The behaviors consistent with relational transparency, another AUTH leadership characteristic, align well with the communication satisfaction communication climate subscale. Leaders who exhibit relational transparency openly share their true or real selves (rather than fake or distorted selves), including their thoughts, feelings, and beliefs. It would seem that leaders exhibiting genuine disclosure would be more likely to build and maintain relationships of higher quality—relationships built on trust and respect—with followers. Department and division chairs who exhibit relational transparency should be better able to foster quality relationships with their faculty, resulting in higher levels of faculty communication satisfaction in relation to the communication climate subscale.

The behaviors consistent with balanced processing, another AUTH leadership characteristic, align well with the communication satisfaction superiors subscale. Leaders who demonstrate balanced processing engage others by soliciting multiple perspectives, including perspectives that may be different from or even conflict with their own. It would seem that leaders who demonstrate balanced processing behaviors would be more likely to be perceived as open to new ideas with the ability (or at the very least the intention) to listen effectively.
Department and division chairs who encourage faculty to provide input, and then give consideration to that input, should be perceived by those faculty as open to new ideas, resulting in higher levels of their communication satisfaction in relation to the superiors subscale.

**Hypothesis 3.** Previous research supports a positive relationship between communication satisfaction and interpersonal trust. For example, Rezaeian, Tehrani, and Foroushani (2013) found a positive correlation between communication satisfaction (determined by measuring communication satisfaction with superiors, top management, interdepartmental, feedback, media quality, and informal interactions) and trust with 36% of the variance in common; they operationalized trust as competence, openness and honesty, concern for employees, reliability, and identification as communicated by peers, supervisors, and the organization in general. Results from the current study support H3 and are consistent with what Rezaeian et al. (2013) found; as faculty report increasing levels of communication satisfaction, they report increasing levels of interpersonal trust in their chairs. This suggests that as faculty are more satisfied with the communication climate, organizational integration, personal feedback, horizontal informal communication, communication with superiors, media quality, and general moral perspective, they will evaluate their chairs as more trustworthy.

Communication satisfaction levels serve as the vehicle through which AUTH leadership influences interpersonal trust, so it is important to monitor and maintain that vehicle; leaders in higher education should pay close attention to faculty communication satisfaction levels and take steps to improve or increase those levels. To do otherwise may put interpersonal trust at risk. Considering the positive relationships between trust and morale (Tarter & Hoy, 1988), trust and job satisfaction (Bartram & Casimir, 2007; Gould-Williams 2003), trust and organizational commitment (Cook & Wall, 1980), and trust and organizational citizenship (Konovsky & Pugh,
department and division chairs as well as other institutional leaders would be wise to invest resources (i.e., time, money, and effort) towards increasing both faculty communication satisfaction and faculty trust.

**Research question 2.** Previous research supports a positive relationship between behaviors consistent with AUTH leadership and interpersonal trust (e.g., Gardiner, 1999; Krosgaard, Brodt, & Whitener, 2002; Zeffane, 2012). However, it was not known whether communication satisfaction would mediate that relationship. Results from the current study indicate that communication satisfaction does serve as a mediator through which AUTH leadership influences interpersonal trust. The direct effect of AUTH leadership on interpersonal trust was also significant and approximately four times as large as the indirect effect. With each unit increase on the ALI, scores on the Interpersonal Trust Measures increased by 1.26. This means that a 25% increase on the ALI predicted a total effect equivalent of a 21% increase on the Interpersonal Trust Measures score; together, the indirect and direct effect (or the total effect) of AUTH leadership on interpersonal trust is quite large.

The strength of this relationship is not surprising as other researchers have acknowledged the strong relationship between AUTH leadership and trust (e.g., Wang & Hsieh, 2013). The current study adds to this understanding by identifying communication satisfaction as a vehicle through which AUTH leadership influences interpersonal trust. However, with consideration to the size of the direct effect, there may very well be other vehicles through which AUTH leadership influences interpersonal trust. Department and division chairs will want to recognize the role that communication satisfaction plays as a mediator, but they should also understand that communication satisfaction plays a relatively small (although not unimportant) role in that process.
**Research question 3.** While AUTH leadership was found to predict interpersonal trust both directly and indirectly through communication satisfaction, RQ3 asked whether organizational trust would moderate this relationship. More specifically, the current study looked at whether organizational trust would influence the conditions under which AUTH leadership influences interpersonal trust. Two separate analyses were run to answer RQ3.

The first part of RQ3 looked at the extent to which organizational trust moderated the direct effect of AUTH leadership on interpersonal trust. The moderation was significant. This qualifies the predictive value of AUTH leadership; faculty perceptions of their chairs exhibiting AUTH leadership do predict their interpersonal trust in those chairs, but the strength of that prediction depends on the degree to which those faculty trust their institutions’ systems, rules, and regulations. More specifically, low levels of organizational trust have the largest effect while middle and high levels show smaller effects. This suggests that chairs who demonstrate AUTH leadership behaviors are more likely to increase faculty interpersonal trust levels when their faculty have little organizational trust. In other words, chairs’ use of AUTH leadership may be a useful strategy for increasing faculty interpersonal trust, particularly when those faculty have low organizational trust. The reasons for this relationship are not known, but one can speculate: it is possible that a lack of organizational trust creates some sort of deficiency with regard to interpersonal trust—a deficiency that AUTH leadership serves to fill. It is also possible that both organizational trust and AUTH leadership support interpersonal trust in the same way; perhaps the presence of organizational trust negates the need for the support provided to interpersonal trust by AUTH leadership. Finally, it is possible that when faculty do not trust the implementation of their institutions’ systems, rules, and regulations, they pay more attention to
their leaders, including department and division chairs; perhaps the influence of their chairs is stronger when faculty lack organizational trust.

The current study provides support for the use of AUTH leadership as a predictor of interpersonal trust, but the predictive value of that relationship depends on organizational trust. It is not known exactly how and why organizational trust serves as a moderator, but it is clear that the use of AUTH leadership does not appear to in any way threaten or jeopardize interpersonal trust; there may even be other benefits from the use of AUTH leadership beyond being able to predict interpersonal trust. In other words, the use of AUTH leadership as a leadership style should not be dismissed by department or division chairs who lead faculty with high levels of organizational trust.

The second part of RQ3 asked to what extent organizational trust moderates the indirect effect of AUTH leadership from communication satisfaction to interpersonal trust. Results do not show support for organizational trust as a moderator of the indirect effect. However, as already mentioned, moderation of the direct effect was significant. Organizational trust as a moderator remains important and worthy of attention. Communication satisfaction is also important, as a mediator, but it explains only a small portion of interpersonal trust as compared to the direct effect. Perhaps organizational trust has a small effect on communication satisfaction’s indirect effect, and as both are small, the result fails to be significant, especially with consideration given to the strength of the moderated direct effect. Results from this study indicate that while organizational trust is a very powerful moderator, it does not serve as an important linear moderator of the effect of AUTH leadership mediated through communication satisfaction on interpersonal trust.
**Post hoc analysis.** While communication satisfaction as a composite was found to be a statistically significant mediator of AUTH leadership on interpersonal trust, a post hoc analysis explored the subscales to identify which were the main contributors driving the effect.

Communication satisfaction with superiors was the only subscale found to be statistically significant as a mediator through which AUTH leadership affects interpersonal trust. This suggests that chairs should work to better understand how faculty perceptions of their upward and downward communication, including three principle items identified by Akkerman and Harris (2005) affect interpersonal trust; the three principle items include a chair’s ability to listen effectively, remain open to new ideas, and provide guidance for solving job-related problems. Chairs concerned with whether their faculty trust them should work to understand faculty perceptions of the three previously listed principle items. Understanding faculty perceptions of these items can help chairs to focus on which areas are in need of improvement and then seek professional development so as to become (and be perceived as) more effective listeners, and/or more receptive to new ideas, and/or able to provide guidance for solving job-related problems.

**Theoretical implications.** The concept of leadership continues to evolve, and many now view it as a collaborative process rather than an assigned position of authority or responsibility. Results from the current study lend support for the value of AUTH leadership as a lens through which to examine leader/follower relationships—a lens and style that is consistent with a general contemporary approach that emphasizes morals and values with a focus on how followers are treated as well as what they contribute (Spector, 2014).

The current study also provides an understanding of the interaction effects that help explain how and under what conditions AUTH leadership predicts interpersonal trust. Communication satisfaction (and, specifically, communication satisfaction with superiors), is a
vehicle through which AUTH leadership influences interpersonal trust. Organizational trust does not moderate this effect, but it does moderate the direct effect of AUTH leadership on interpersonal trust.

The distinction between cognitive-based and affect-based trust could not be justified in the current study. Because the two were so highly correlated, it would not have been possible to make meaningful distinctions between the two. Therefore, cognitive-based trust and affect-based trust were collapsed to make a single interpersonal trust variable. As pointed out by Sherwood and DePaolo (2005), there are multiple dimensional definitions of interpersonal trust, but the current study adds no clarity to these differences nor does it provide any understanding of when it is important to recognize said differences.

**Practical implications.** Department and division chairs interested in being perceived as interpersonally trustworthy by their faculty should consider developing or honing leadership skills consistent with AUTH leadership. Seminars, workshops, and other professional development opportunities designed for chairs (e.g., The Chair Academy) could focus on teaching the characteristics of self-awareness, relational transparency, balanced processing, and internalized moral perspective; lectures, assigned reading, and group discussions could aid in the understanding of the different AUTH leadership characteristics while goal-setting, case studies, and journaling could encourage application of the characteristics. Additionally, chairs should consider pursuing a better understanding of the communication satisfaction with superiors subscale as it is a vehicle through which AUTH leadership influences interpersonal trust. Finally, the recognition of organizational trust as a moderator of the direct effect of AUTH leadership on interpersonal trust is important. Chairs working at institutions where faculty have low organizational trust may be more effective with trying to increase faculty interpersonal trust
levels through their use of AUTH leadership. As mentioned previously, it may be the case that a lack of organizational trust creates some sort of deficiency with regard to interpersonal trust, and AUTH leadership somehow addresses that deficiency. It is also possible that both organizational trust and AUTH leadership support interpersonal trust in the same way, and the presence of organizational trust negates the need for the support provided by AUTH leadership. And, of course, it is possible that when faculty do not trust the implementation of their institutions’ systems, rules, and regulations, they pay more attention to their leaders, including department and division chairs; perhaps the influence of their chairs is stronger when faculty lack organizational trust.

**Limitations**

Even though the results from this study yield insight into the relationships between AUTH leadership, interpersonal trust, communication satisfaction, and organizational trust, it is not without limitations. The following paragraphs detail some of those limitations.

One limitation of the study is the reliance on self-report data. Whether participants accurately self-report must be considered any time such data is collected. In the current study, faculty were asked to respond to a number of prompts, including some that were evaluative of department and division chairs. The survey design allowed for participant anonymity, but whether faculty felt completely comfortable and provided honest evaluations of their chairs is something to question. Satisficing can also occur when self-report data is collected. Instead of giving thoughtful answers, participants may instead provide responses that require minimal cognitive effort. According to Heerwegh and Loosveldt (2008), satisficing is more likely to occur when data is collected online as compared to the use of face-to-face interviews.
With consideration to the use of an online platform to collect data, a second limitation of the current study may be the use of the internet to administer the survey. A survey link was emailed to faculty, but not all faculty completed the survey. It is possible that some faculty do not regularly check their email or, even more likely, some faculty members’ spam filters captured the survey invitation, filing it in folders not often opened. It is also possible that some faculty may simply be uncomfortable with taking any sort of survey through the World Wide Web, and only those willing to self-report online would be willing to complete the survey; biased sampling procedures will result in a sample not representative of the whole. A final concern with the method in which the survey was administered is the lack of control with regard to when and where participants completed the survey. This lack of control invites the possibility of confounding variables.

An additional limitation of this study is the sample size. Because a very specific sample was targeted, surveying a large number of readily available undergraduate students was not an option. Participation was limited to faculty members who report to department or division chairs, and this restricted the number of subjects able to participate. While there were 125 surveys completed, 27 of those surveys came from faculty who indicated that they did not report to a department or division chair. Data from those surveys is not relevant to this study and, as a result, was not used in the analyses; only 98 surveys coming from faculty reporting to department or division chairs were used in this study. Bootstrapping the data from those surveys was a strategy employed when running mediation and moderation analyses. Bootstrapping is a repeated resampling process in which the sample is treated as a representation of the broader population from which it was pulled (Preacher, Rucker, & Hayes, 2007). Bootstrapping results
in a larger $N$ and a test with higher power (Hayes, 2013) and is a strategy that can be used when a sample size is otherwise too small to run mediation and moderation analyses.

Another limitation of the study related to the sample is that only community college faculty were invited to participate. The survey was not sent to university faculty, making it difficult to generalize the results beyond the scope of community colleges.

AUTH leadership is a set of characteristics that can be employed by anybody; people not in positions of authority and without formal titles can employ self-awareness, relational transparency, balanced processing, and internalized moral perspective. The current study, however, looked at perceptions of AUTH leadership characteristics in the context of leaders in formal leadership positions only; this is a limitation.

The current study used faculty members’ scores on items from the ALI as indicators of department and division chair behaviors. More specifically, faculty members’ subjective perceptions were used to determine whether chairs demonstrated self-awareness, presented relational transparency, showed balanced processing, and followed an internalized moral perspective. Some might argue that one’s use of self-awareness and internalized moral perspective are behavioral characteristics not necessarily visible to others. More specifically, leaders may practice but not necessarily demonstrate self-awareness, and they may follow an internalized moral compass but not deliberately communicate that compass to others. The assumption that faculty are able to accurately perceive and report their chairs’ use of the AUTH leadership characteristics, including self-awareness and internalized moral perspective, is another limitation.

A final limitation is that the data is cross-sectional, meaning the measurement happened once and in the same period of time. Because neither an experimental nor time series approach
were used, assertions regarding causality cannot be claimed, and results of this study are limited to predictive value. AUTH leadership is merely the antecedent or predictor variable while interpersonal trust is the consequent variable; the current study does not prove AUTH leadership to be a cause nor does it show interpersonal trust to be an effect.

**Future Research**

While this study explored the predictive value of AUTH leadership as it relates to interpersonal trust, future research should explore whether and to what degree AUTH leadership actually causes interpersonal trust; future research could use a time series approach and collect data at multiple points in time. Chairs interested in being perceived by their faculty as trustworthy would benefit by knowing whether a cause-effect relationship between AUTH leadership and interpersonal trust exists. If such a relationship does exist, it would be interesting to learn whether any one factor of AUTH leadership (including self-awareness, relational transparency, balanced processing, and internalized moral perspective) is more likely to cause interpersonal trust.

In this study, AUTH leadership was the lens through which the relationship between leadership and interpersonal trust was examined. Of course there are other leadership styles in practice, and future research should look at the relationship between leadership and interpersonal trust with reference to those styles including transformational leadership. Transformational leadership is another contemporary approach and one that is growing in popularity (Lian & Tui, 2012; Ryan, 2008). The current study found organizational trust to moderate the relationship between AUTH leadership and interpersonal trust, but it is not known whether organizational trust would also moderate the direct effects of transformational leadership. Additionally, the current study found communication satisfaction as a mediator of the effect of AUTH leadership.
on interpersonal trust, but it is not known whether communication satisfaction would mediate the indirect effects of transformational leadership. Researchers have examined the commonalities between AUTH leadership and transformational leadership and determined that these two approaches have much in common (Joo & Nimon, 2014); both concepts of leadership include many of the same aspects (Burris, Ayman, Che, & Min, 2013). For example, “both represent supportive leadership focusing on empowerment, personal growth and development and facilitating subordinates’ extra-role behaviors” (Joo & Nimon, 2014, p. 575). One might assume, therefore, that the results of a study examining the relationships between transformational leadership, interpersonal trust, communication satisfaction, and organizational trust would be similar to the results of the current study. However, while AUTH leadership and transformational leadership have been shown to have much in common, canonical correlational studies show that they are not substitutable (Joo & Nimon, 2014). This is perhaps because AUTH leaders may or may not be actively focused on developing their followers into leaders (Avolio & Gardner, 2005), while transformational leadership identifies this is an important goal and outcome. Additionally, leaders exhibiting the AUTH leadership characteristics lead with purpose, meaning, and values, but they are not necessarily described as charismatic, which has been labeled a core component of transformational leadership (Avolio & Gardner, 2005). Shamir and Eilam (2005) explain that AUTH leadership is focused on leaders’ personal characteristics while transformational leadership is focused on leaders’ behaviors. It is therefore difficult to speculate how similar the results from another study examining the relationships between transformational leadership, interpersonal trust, communication satisfaction, and organizational trust would be in comparison to the current study.
While faculty perceptions of their chairs exhibiting the AUTH leadership characteristics were found to predict their interpersonal trust in those chairs, future research could pursue the predictive value of AUTH leadership with regard to other variables including faculty morale, job satisfaction, organizational commitment, and organizational citizenship. The relationships between leadership style and each of these areas have been explored (e.g., Ehrhart, M., 2004; Ngambi, H., 2011; Redman, 2006; Sušanj & Jakopec; 2012), but researchers have yet to focus specifically on AUTH leadership in the context of higher education with an emphasis on faculty and department and division chairs.

Future researchers may want to also work at teasing apart cognitive-based and affect-based trust, when looking at the relationship between leadership and interpersonal trust. Schaubroeck, Peng, and Hannah (2013) used a version of McAllister’s (1995) Interpersonal Trust Measures and administered the survey at three different points over a 14-month period. At each point in time, cognitive-based trust and affect-based trust were correlated but at relatively low levels, $r(265) = .44, .26, .20, p < .01$. Additionally, McAllister (1995) found the two dimensions to be only moderately correlated ($r = .63, p < .001$) with 40% of the variance shared, and he explains that “affect-based and cognition-based trust represent distinct forms of interpersonal trust” (p. 49). However, when Wang and Hsieh (2013) used McCallister’s (1995) Interpersonal Trust Measures they found the two to be highly correlated, $r(386) = .84$, resulting in factor analysis with one factor explaining the variance. The current study also found cognitive-based trust and affect-based trust to be highly correlated ($r = .83, p < .01$) with 69% of the variance shared. This suggests that cognitive-based trust and affect-based trust may not be distinct concepts and, therefore, should not be measured separately.
The organizational focus of this study was on public community colleges. Like public community colleges, public universities share a history that recognizes academic freedom and shared governance as two sacred principles. They also often have faculty serving in limited-duration leadership positions. And, like many public community colleges, public universities are facing challenges to their identity resulting from changing social, economic, and political environments (Collier & Esteben, 2000). While the two different types of institutions have much in common, it would be naive to assume the results from the current study can be applied to public universities. Before generalizing the results of the current study beyond public community colleges, future research should examine the relationships between AUTH leadership, interpersonal trust, communication satisfaction, and organizational trust as they relate together at public universities.

Additionally, future research could explore whether sex differences exist. This may include testing department and division chair sex as a moderator of the effect of AUTH leadership on faculty reports of their interpersonal trust in those chairs. It might also be interesting to test whether either sex is perceived more often than the other as exhibiting the AUTH leadership characteristics.

Future research may want to also look at whether disciplinary differences exist both with evaluating chairs as exhibiting the AUTH leadership characteristics as well as the assessment of interpersonal trust in relation to those evaluations. It seems possible that chairs from certain disciplines could be more prepared and/or practiced with exhibiting the AUTH leadership characteristics; faculty in certain disciplines could also be more likely to perceive their chairs as exhibiting the AUTH leadership characteristics. And, of course, it is possible that faculty in
certain disciplines could be more likely to their chairs, regardless of whether those chairs exhibit self-awareness, relational transparency, balanced processing, and internalized moral perspective.

The current study found that, when loaded separately into a parallel mediation model, satisfaction with superiors was the only communication satisfaction subscales to be a significant mediator of the effect of AUTH leadership on interpersonal trust. Future research should further examine satisfaction with superiors and its relationship with AUTH leadership, interpersonal trust, and organizational trust. This raises the question of whether organizational trust might moderate the indirect effect of AUTH leadership on interpersonal trust when the mediator is satisfaction with superiors.

Future research could dissect the different AUTH leadership characteristics, interpersonal trust dimensions, and communication satisfaction subscales. This dissection would result in a richer understanding of the different relationships between the variables. For example, future research could examine each of the four AUTH leadership characteristics to see whether any single characteristic had a stronger effect on either cognitive-based interpersonal trust or affect-based interpersonal trust. Future research could also examine whether organizational trust moderates the indirect effect of AUTH leadership on interpersonal trust through each individual communication satisfaction subscale.

The current study found that the relationship between AUTH leadership and interpersonal trust was highest when faculty reported low levels of organizational trust and progressively lower when faculty reported mid and high levels of organizational trust. Any explanations for this finding are merely speculation at this time and, therefore, require additional exploration. Therefore, future research should seek an understanding of the reason(s) why the strength of
organizational trust as a moderator of AUTH leadership on interpersonal trust varies from high to low.

While organizational trust was found to moderate the effect of AUTH leadership on interpersonal trust, the existence and strength of other moderators could be explored. For example, future research could investigate whether the propensity to trust is a moderating variable. It is possible and even likely that faculty members’ general willingness to trust based on their personality, experiences, cultural background, education and other socio-economic factors might influence the conditions under which their perceptions of their chairs exhibiting AUTH leadership predicts their interpersonal trust in those chairs.

Just as other possible moderators could be explored, other possible mediators through which AUTH leadership affects interpersonal trust could be investigated. For example, the degree to which faculty experience job satisfaction could be a means through which perceptions of their chairs exhibiting characteristics of AUTH leadership affect their interpersonal trust in those chairs.
Figure 1. Conceptual simple mediation model. X represents the initial variable, M represents the mediator variable, and Y represents the outcome variable.
Figure 2. Conceptual moderated mediation of the indirect effect model. X represents the initial variable, M represents the mediator variable, Y represents the outcome variable, and V represents the variable moderating the indirect effect.
Figure 3. Conceptual moderated mediation of the direct effect model. X represents the initial variable, M represents the mediator variable, Y represents the outcome variable, and W represents the variable moderating the direct effect.
Table 1

*Means, Standard Deviations, Scale Reliabilities, and Scale Ranges for Study Variables*

<table>
<thead>
<tr>
<th>Measure</th>
<th>M</th>
<th>SD</th>
<th>(a)</th>
<th>Scale Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTH</td>
<td>3.79</td>
<td>0.97</td>
<td>0.97</td>
<td>(1-5)</td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Trust</td>
<td>5.20</td>
<td>1.45</td>
<td>0.95</td>
<td>(1-7)</td>
</tr>
<tr>
<td>Affect-based Interpersonal Trust</td>
<td>4.95</td>
<td>1.61</td>
<td>0.95</td>
<td>(1-7)</td>
</tr>
<tr>
<td>Cognitive-based Interpersonal Trust</td>
<td>5.41</td>
<td>1.45</td>
<td>0.91</td>
<td>(1-7)</td>
</tr>
<tr>
<td>Organizational Trust</td>
<td>4.54</td>
<td>1.27</td>
<td>0.84</td>
<td>(1-7)</td>
</tr>
<tr>
<td>Communication Satisfaction</td>
<td>4.70</td>
<td>1.22</td>
<td>0.97</td>
<td>(1-7)</td>
</tr>
</tbody>
</table>

*Note.* \(M = \text{mean}, \ SD = \text{standard deviation}, \ a = \text{Cronbach’s alpha}\)
Table 2

**H1: Intercorrelations Among Study Variables**

<table>
<thead>
<tr>
<th></th>
<th>Affect-based Interpersonal Trust</th>
<th>Cognitive-based Interpersonal Trust</th>
<th>Interpersonal Trust (Combined)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTH Leadership</td>
<td><strong>.78</strong></td>
<td><strong>.82</strong></td>
<td><strong>.84</strong></td>
</tr>
</tbody>
</table>

*Note. N = 98. **p < .01.*
Table 3

*Interpersonal Trust Intercorrelations*

<table>
<thead>
<tr>
<th></th>
<th>Affect-based Interpersonal Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive-based</td>
<td>.81**</td>
</tr>
<tr>
<td>Interpersonal Trust</td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 98. **p < .01.*
Table 4

*RQ1: Regression with Interpersonal Trust as the Dependent Variable*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>R²</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.43</td>
<td>0.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUTH Leadership</td>
<td>1.26***</td>
<td>0.08</td>
<td>0.70</td>
<td>0.84</td>
</tr>
</tbody>
</table>

*Note. N = 98. B = Unstandardized beta, SE = Standard error, R² = Percent of Variability Explained, β = Standardized beta. ***p < .001*
### Table 5

**H2: Study Variable Intercorrelations**

<table>
<thead>
<tr>
<th></th>
<th>Communication</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTH</td>
<td>.61**</td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 98. **p < .01.*
Table 6

**H3: Study Variable Intercorrelations**

<table>
<thead>
<tr>
<th></th>
<th>Interpersonal Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Satisfaction</td>
<td>.68**</td>
</tr>
</tbody>
</table>

*Note. N = 98. **p < .01.*
Table 7

*RQ2 Mediated Effects of AUTH Leadership on Interpersonal Trust Through Communication Satisfaction*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Interpersonal Trust</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>$t$</td>
<td>Boot low CI</td>
<td>Boot high CI</td>
</tr>
<tr>
<td>Constant</td>
<td>-.14</td>
<td>.33</td>
<td>.42</td>
<td>-.80</td>
<td>.52</td>
</tr>
<tr>
<td>Communication Satisfaction</td>
<td>.32*</td>
<td>.08</td>
<td>4.17</td>
<td>.17</td>
<td>.48</td>
</tr>
<tr>
<td>AUTH Leadership</td>
<td>1.01*</td>
<td>.10</td>
<td>10.32</td>
<td>.81</td>
<td>1.20</td>
</tr>
</tbody>
</table>

**Direct effect (X to Y) of AUTH leadership on interpersonal trust**

<table>
<thead>
<tr>
<th>Antecedent Variable</th>
<th>DE</th>
<th>SE</th>
<th>$t$</th>
<th>Lower level CI</th>
<th>Upper level CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTH leadership</td>
<td>1.01*</td>
<td>.10</td>
<td>10.32</td>
<td>.81</td>
<td>1.20</td>
</tr>
</tbody>
</table>

**Indirect (X to Y through M) effect of AUTH leadership on interpersonal trust**

<table>
<thead>
<tr>
<th>Mediator</th>
<th>IE</th>
<th>Boot SE</th>
<th>Boot low CI</th>
<th>Boot high CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Satisfaction</td>
<td>.25*</td>
<td>.07</td>
<td>.13</td>
<td>.41</td>
</tr>
</tbody>
</table>

*Note. N = 98. B = Unstandardized regression coefficient, SE = Standard error, $t = t$-test, CI = Confidence interval, DE = Direct effect, IE = Indirect effect. * = Significant effect because lower and upper bounds of 95% confidence interval excludes zero. All indirect effect regression coefficients are unstandardized.*
Table 8

**RQ3 Conditional Direct Effects of AUTH Leadership on Interpersonal Trust at Values of Organizational Trust**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Interpersonal Trust</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>t</td>
<td>Boot low CI</td>
<td>Boot high CI</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.73*</td>
<td>1.19</td>
<td>-2.30</td>
<td>-5.08</td>
<td>-0.37</td>
</tr>
<tr>
<td>Communication Satisfaction</td>
<td>.31*</td>
<td>.11</td>
<td>2.95</td>
<td>.10</td>
<td>.52</td>
</tr>
<tr>
<td>AUTH Leadership</td>
<td>1.72*</td>
<td>.33</td>
<td>5.21</td>
<td>1.06</td>
<td>2.37</td>
</tr>
<tr>
<td>Organizational Trust</td>
<td>.64*</td>
<td>.28</td>
<td>2.28</td>
<td>.08</td>
<td>1.20</td>
</tr>
<tr>
<td>AUTH Leadership X</td>
<td>-0.17*</td>
<td>.08</td>
<td>-2.20</td>
<td>-.32</td>
<td>-.02</td>
</tr>
<tr>
<td>Organizational Trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Conditional direct (X on Y) effects of AUTH leadership on interpersonal trust**

<table>
<thead>
<tr>
<th>Antecedent Variable</th>
<th>Organizational Trust</th>
<th>DE</th>
<th>SE</th>
<th>Boot low CI</th>
<th>Boot high CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTH Leadership</td>
<td>3.27</td>
<td>1.17*</td>
<td>0.12</td>
<td>0.93</td>
<td>1.40</td>
</tr>
<tr>
<td>AUTH Leadership</td>
<td>4.54</td>
<td>0.95*</td>
<td>0.11</td>
<td>0.74</td>
<td>1.16</td>
</tr>
<tr>
<td>AUTH Leadership</td>
<td>5.81</td>
<td>0.74*</td>
<td>0.17</td>
<td>0.41</td>
<td>1.07</td>
</tr>
</tbody>
</table>

*Note. N = 97. B = Unstandardized regression coefficient, SE = Standard error, t = t-test, CI = Confidence interval, DE = Direct effect. * = Significant direct effect because lower and upper bounds of 95% confidence interval excludes zero. Organizational trust values are presented for the mean and ±1 SD from the mean. All direct effect regression coefficients are unstandardized.*
Table 9

**RQ3 Conditional Indirect Effects of AUTH Leadership on Interpersonal Trust Through Communication Satisfaction at Values of Organizational Trust**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>Boot low CI</th>
<th>Boot high CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.35</td>
<td>1.06</td>
<td>.33</td>
<td>-1.76</td>
<td>2.47</td>
</tr>
<tr>
<td>Communication Satisfaction</td>
<td>.12</td>
<td>.29</td>
<td>.44</td>
<td>- .44</td>
<td>.69</td>
</tr>
<tr>
<td>AUTH Leadership</td>
<td>1.05*</td>
<td>.11</td>
<td>9.61</td>
<td>.83</td>
<td>1.26</td>
</tr>
<tr>
<td>Organizational Trust</td>
<td>- .09</td>
<td>.25</td>
<td>-.37</td>
<td>-.59</td>
<td>.41</td>
</tr>
<tr>
<td>Communication Satisfaction X Organizational Trust</td>
<td>.03</td>
<td>.05</td>
<td>.60</td>
<td>-.07</td>
<td>.14</td>
</tr>
</tbody>
</table>

**Conditional indirect (X to Y through M) effects of AUTH leadership on interpersonal trust**

<table>
<thead>
<tr>
<th>Mediator</th>
<th>Organizational trust</th>
<th>IE</th>
<th>SE</th>
<th>Boot low CI</th>
<th>Boot high CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Satisfaction</td>
<td>3.27</td>
<td>.18</td>
<td>.12</td>
<td>-.04</td>
<td>.43</td>
</tr>
<tr>
<td>Communication Satisfaction</td>
<td>4.54</td>
<td>.21*</td>
<td>.09</td>
<td>.06</td>
<td>.40</td>
</tr>
<tr>
<td>Communication Satisfaction</td>
<td>5.81</td>
<td>.24*</td>
<td>.09</td>
<td>.07</td>
<td>.43</td>
</tr>
</tbody>
</table>

*Note. N = 97. Moderator organizational trust values are presented for the mean and ± 1 SD from the mean. B = Unstandardized regression coefficient, SE = Standard error, t = t-test, CI = Confidence interval, IE = Indirect effect. * = Significant effect because lower and upper bounds of 95% confidence interval is entirely above zero. All indirect effect regression coefficients are unstandardized.*
Table 10

**Post Hoc Parallel Mediation Model**

Direct effect of AUTH leadership on interpersonal trust

<table>
<thead>
<tr>
<th>DE</th>
<th>SE</th>
<th>t</th>
<th>Lower level CI</th>
<th>Upper level CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.78*</td>
<td>.13</td>
<td>6.05</td>
<td>.52</td>
<td>1.03</td>
</tr>
</tbody>
</table>

Indirect effects of AUTH leadership on interpersonal trust through each communication satisfaction subscale

<table>
<thead>
<tr>
<th>Subscale</th>
<th>IE</th>
<th>SE</th>
<th>Boot low CI</th>
<th>Boot high CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>.48*</td>
<td>.13</td>
<td>.22</td>
<td>.73</td>
</tr>
<tr>
<td>Organizational Integration</td>
<td>.20</td>
<td>.11</td>
<td>.00</td>
<td>.44</td>
</tr>
<tr>
<td>Communication Climate</td>
<td>-.05</td>
<td>.06</td>
<td>-.19</td>
<td>.06</td>
</tr>
<tr>
<td>Personal Feedback</td>
<td>-.15</td>
<td>.12</td>
<td>-.38</td>
<td>.11</td>
</tr>
<tr>
<td>Generalized Moral Perspective</td>
<td>-.02</td>
<td>.10</td>
<td>-.20</td>
<td>.18</td>
</tr>
<tr>
<td>Superiors</td>
<td>.42*</td>
<td>.16</td>
<td>.14</td>
<td>.77</td>
</tr>
<tr>
<td>Media Quality</td>
<td>.05</td>
<td>.09</td>
<td>-.11</td>
<td>.25</td>
</tr>
<tr>
<td>Horizontal Communication</td>
<td>.04</td>
<td>.05</td>
<td>-.07</td>
<td>.14</td>
</tr>
</tbody>
</table>

*Note. N = 98. DE = Direct effect, SE = Standard error, t = t-test, CI = Confidence interval, IE = Indirect effect, SE = Standard error. * = Significant effect because lower and upper bounds of 95% confidence interval excludes zero. All coefficients are unstandardized.*
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APPENDIX A: IRB Approval

January 5, 2016

Lynette Jachowicz
I533j638@ku.edu

Dear Lynette Jachowicz:

On 1/5/2016, the IRB reviewed the following submission:

<table>
<thead>
<tr>
<th>Type of Review:</th>
<th>Initial Study</th>
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<tbody>
<tr>
<td>Title of Study:</td>
<td>Trust, Leadership, and Communication Satisfaction in Higher Education: Faculty perceptions of their institutions and their division/department chairs.</td>
</tr>
<tr>
<td>Investigator:</td>
<td>Lynette Jachowicz</td>
</tr>
<tr>
<td>IRB ID:</td>
<td>STUDY00003582</td>
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<tr>
<td>Funding:</td>
<td>None</td>
</tr>
<tr>
<td>Grant ID:</td>
<td>None</td>
</tr>
</tbody>
</table>

The IRB approved the study on 1/5/2016.

1. Notify HSCL about any new investigators not named in the original application. Note that new investigators must take the online tutorial at https://gps.drupal.ku.edu/human_subjects_compliance_training.
2. Any injury to a subject because of the research procedure must be reported immediately.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity.

Continuing review is not required for this project, however you are required to report any significant changes to the protocol prior to altering the project.

Please note university data security and handling requirements for your project: https://documents.ku.edu/policies/IT/DataClassificationandHandlingProceduresGuide.htm

You must use the final, watermarked version of the consent form, available under the “Documents” tab in eCompliance.

Sincerely,

Stephanie Dyson Elms, MPA
IRB Administrator, KU Lawrence Campus
APPENDIX B: Subject Consent Form

The Department of Communication Studies at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to better understand organizational and interpersonal communication in higher education. This will entail your completion of a survey. Your participation is expected to take approximately 30-45 minutes to complete. The content of the survey should cause no more discomfort than you would experience in your everyday life.

Although participation may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of the relationships between trust, leadership, and communication satisfaction. Your participation is solicited, although strictly voluntary. Your name will not be associated in any way with the research findings. Your identifiable information will not be shared unless (a) it is required by law or university policy, or (b) you give written permission. The survey will be administered online; no part of the survey will ask for your name, employee ID, or other identification unique and specific only to you. Your answers are completely confidential and will be combined into groups for reporting purposes. Data will be kept on password-protected PCs and servers. It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response.

If you would like additional information concerning this study before or after it is completed, please feel free to contact us by phone or mail.

Completion of the survey indicates your willingness to take part in this study and that you are at least 18 years old. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email irb@ku.edu.

Sincerely,

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APPENDIX C: Study Instrumentation

Participant Survey Questions

Instructions: Please answer the following demographic questions:

1. Do you report to and/or is your position assigned to a department/division chair?
   a. yes b. no

2. What is your employment status?
   a. full-time b. part-time

3. What is your gender?
   a. female b. male

4. What is the gender of your department/division chair?
   a. female b. male

5. How long have you been employed at your college/university?
   a. 1-3 years b. 4-6 years c. 7-9 years d. 10-12 years e. 13+ years

6. How long have you been assigned to your current department/division chair?
   a. 1-3 years b. 4-6 years c. 7-9 years d. 10-12 years e. 13+ years

7. The organization where you work can best be described as a:
   a. community college b. university

8. What is the highest level of education you have completed:
   a. Associate’s Degree b. Bachelor’s Degree c. Master’s Degree d. Doctoral Degree e. Other (please specify) ______________

Authentic Leadership Inventory (used for measuring AUTH leadership)
Neider and Schriesheim (2011)
The following items come from Neider and Schriesheim’s Authentic Leadership Scale.

Instructions: Please use the following scale to indicate the degree to whether you agree/disagree with the following statements: (1) Disagree Strongly; (2) Disagree; (3) Neither Agree nor Disagree; (4) Agree; and (5) Agree Strongly.

1. My department/division chair clearly states what he/she means.
2. My department/division chair shows consistency between his/her beliefs and actions.
3. My department/division chair asks for ideas that challenge his/her core beliefs.
4. My department/division chair describes accurately the way that others view his/her abilities.
5. My department/division chair uses his/her core beliefs to make decisions.
6. My department/division chair carefully listens to alternative perspectives before reaching a conclusion.
7. My department/division chair shows that he/she understands his/her strengths and weaknesses.
8. My department/division chair openly shares information with others.
9. My department/division chair resists pressures on him/her to do things contrary to his/her beliefs.
10. My department/division chair objectively analyzes relevant data before making a decision.
11. My department/division chair is clearly aware of the impact he/she has on others.
12. My department/division chair expresses his/her ideas and thoughts clearly to others.
13. My department/division chair is guided in his/her actions by internal moral standards.
14. My department/division chair encourages others to voice opposing points of view.

**Interpersonal Trust Measures** *(used for measuring affect-based and cognitive-based trust)*

McAllister (1995)

The following items come from McAllister’s (1995) Interpersonal Trust Measures.

Instructions: For each statement, consider the relationship you have with your department/division chair. Use the following scale to indicate the degree to which you agree/disagree: (1) Disagree Strongly; (2) Disagree; (3) Slightly Disagree; (4) Neither Agree nor Disagree; (5) Slightly Agree; (6) Agree; and (7) Agree Strongly.

**Affect-based trust**

15. We have a sharing relationship. We can both freely share our ideas, feelings, and hopes.
16. I can talk freely to this individual about difficulties I am having at work and know that he/she will want to listen.
17. We would both feel a sense of loss if one of us was transferred and we could no longer work together.
18. If I shared my problems with this person, I know he/she would respond constructively and caringly.
19. I would have to say that we both made considerable emotional investments in our working relationship.

**Cognitive-based trust**

20. This person approaches his/her job with professionalism and dedication.
21. Given this person’s track record, I see no reason to doubt his/her competence and preparation for the job.
22. I can rely on this person not to make my job more difficult by careless work.
23. Most people, even those who aren’t close friends of this individual, trust and respect him/her as a coworker.
24. Other work associates of mine who must interact with this individual, trust and respect him/her as a coworker.

25. If people knew more about this individual and his/her background, they would be more concerned and monitor his/her performance more closely.

**Organizational Trust Inventory** *(for measuring organizational trust)*

Nyhan and Marlowe (1997)

The following items come from Nyhan and Marlowe’s (1997) Organizational Trust Inventory.

Instructions: After reading each of the following statements, select the number from the following scale that is closest to your opinion: (1) nearly zero; (2) very low; (3) low; (4) 50-50; (5) high; (6) very high; (7) near 100%.

**Trust in one’s supervisor**

26. My level of confidence that my department/division chair is technically competent at the critical elements of his or her job is____.

27. My level of confidence that my department/division chair will make well thought out decisions about his or her job is____.

28. My level of confidence that my department/division chair will follow through on assignments is____.

29. My level of confidence that my department/division chair has an acceptable level of understanding his or her job is____.

30. My level of confidence that my department/division chair will be able to do his or her job in an acceptable manner is____.

31. When my department/division chairs tells me something, my level of confidence that I can rely on what they tell me is____.

32. My level of confidence in my department/division chair to do the job without causing other problems is____.

33. My level of confidence that my department/division chair will think through what he or she is doing on the job is____.

**Trust in one’s organization**

34. My level of confidence that this academic institution will treat me fairly is____.

35. The level of trust between supervisors and workers in this academic institution is____.

36. The level of trust among the people I work with on a regular basis is____.

37. The degree to which we can depend on each other in this academic institution is____.


**Communication Satisfaction Questionnaire** *(for measuring communication satisfaction)*

Downs and Hazen (1977)

The following items come from Downs and Hazen’s (1997) Communication Satisfaction Questionnaire.

Instructions: Following are several kinds of information often associated with a person’s job. Please indicate how satisfied you are with the *amount and/or quality* of each kind of information by selecting the appropriate number: (1) Very Dissatisfied; (2) Dissatisfied; (3) Somewhat Dissatisfied; (4) Indifferent; (5) Somewhat Satisfied; (6) Satisfied; (7) Very Satisfied.

38. Information about my progress in my job
39. Personal news
40. Information about institutional policies and goals
41. Information about how my job compares to others
42. Information about how I am being judged
43. Recognition of my efforts
44. Information about departmental policies and goals
45. Information about the requirements of the job
46. Information about government action affecting the institution
47. Information about changes in the institution
48. Reports on how problems in my job are being handled
49. Information about benefits and pay
50. Information about the institution’s financial standing
51. Information about accomplishments and/or failures of the organization

Instructions: Please indicate how satisfied you are with the following statements using the following scale: (1) Very Dissatisfied; (2) Dissatisfied; (3) Somewhat Dissatisfied; (4) Indifferent; (5) Somewhat Satisfied; (6) Satisfied; (7) Very Satisfied.

52. The extent to which my superiors know and understand the problems faced by subordinates
53. The extent to which the institution’s communication motivates and stimulates an enthusiasm for meeting its goals
54. The extent to which my supervisor listens and pays attention to me
55. The extent to which the people at my institution have great ability as communicators
56. The extent to which my supervisor offers guidance for solving job related problems
57. The extent to which the institution’s communication makes me identify with it or feel a vital part of it
58. The extent to which the institution’s communications are interesting and helpful
59. The extent to which my supervisor trusts me
60. The extent to which I receive in time the information needed to do my job
61. The extent to which conflicts are handled appropriately through proper communication channels
62. The extent to which the grapevine is active in the institution
63. The extent to which my supervisor is open to ideas
64. The extent to which horizontal communication with other institutional members is accurate and free flowing
65. The extent to which communication practices are adaptable to emergencies
66. The extent to which my work group is compatible
67. The extent to which meetings are well organized
68. The extent to which the amount of supervision given me is about right
69. The extent to which written directives and reports are clear and concise
70. The extent to which the attitudes toward communication in the institution are basically healthy
71. The extent to which informal communication is active and accurate
72. The extent to which the amount of communication in the institution is about right

You have completed the survey; thank you.