

ASSESSING THE RELATIONSHIP BETWEEN HIGHER EDUCATION LEADERSHIP
BEHAVIORS AND PROFESSIONAL SOCIAL MEDIA USE

A Dissertation

by

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This dissertation meets the standards of scope and quality of
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ABSTRACT

The purpose of the study was to examine the relationship between professional social media use and leadership frames among higher education leaders. The study is important because social media provides one of the most powerful communication tools of the current era through which higher education can increase public understanding and support of its mission, yet scholarship on higher education leaders' professional social media use is scarce. To examine the relationship between professional social media use and leadership frames among higher education leaders, data on specific leadership frames and social media use were collected and analyzed.

The study employed Bolman and Deal's (1997) Four-Frame Model (FFM), an analysis technique that consolidates major schools of thought about leadership into four perspectives: human resource, structural, political, and symbolic. The non-probability sample consisted of 122 administrators and faculty members employed at a federally-designated Hispanic-serving institution of higher education in South Texas. The study was correlational and retrospective in nature. An online survey instrument was used to collect the data.

The study findings show that participants were most likely to align with the human resource frame and least likely to align with the political frame. The human resource frame was a statistically significant predictor of social media use in support of professional and/or institutional goals among faculty and administrators combined, as well as among faculty members alone. Among administrators alone, however, none of the frames was a statistically significant predictor of social media use. Among the eight social media services studied, Facebook was most commonly used on a daily basis in support of professional and/or

institutional goals, followed by YouTube, LinkedIn, and Twitter. Participants' most frequent purpose of using social media was to consume content created by others. The next most frequent purpose was to share content created by others. The least frequent purpose was to post original content created by the participant.

Results indicated that at the study's site, the majority of higher education leaders' professional use of social media is passive, meaning that they consume information but are less likely to engage in active use such as posting original content. Increasing social media activity by higher education leaders in support of professional and/or institutional goals can have the positive effects of personalizing higher education and improving the industry's reputation to members of the public.

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CHAPTER I

INTRODUCTION

Background and Setting

On November 8, 2015, a higher education story began making national headlines. The University of Missouri's football players vowed to boycott football, including the upcoming weekend's high-stakes game against Brigham Young University, until University of Missouri system president Tim Wolfe resigned or was removed from his position. The players had announced this intention the previous evening on the social media service Twitter, citing dissatisfaction with Wolfe's "negligence toward marginalized students' experience" (Sherrils, 2015). Although racial tension had simmered at the university for months and had generations-deep roots, its elevation from a campus issue to one of national consciousness began with that single tweet. Within hours, football head coach Gary Pinkel tweeted his support of the players' decision with a photo of the team gathered in unity (Pinkel, 2015). The posts gained tens of thousands of likes and shares, the Twitter currency of approval and support that helps a message reach an ever-broadening audience.

While racial tensions at the University of Missouri are longstanding, Twitter was the catalyst that propelled the issue into the nation's leading headlines, capturing the attention of the Associated Press, NPR, the *New York Times*, CNN, ESPN, and other major news entities. The Twitter communication began with students. As their boycotts, protests, and a hunger strike were discussed publicly using Twitter hashtags, the university's top-level administrators did not take part in the electronic conversation. Momentum swelled, and #Mizzou began trending on Twitter, meaning the University of Missouri was one of the top discussed topics at that time among the social media service's worldwide users. On November 9, a day after the story gained

national prominence, Wolfe conceded to the students' request by announcing his resignation (Fougere, 2015). The University of Missouri System Board of Curators simultaneously announced a set of initiatives aimed at reviewing existing policies, cultivating respect on campus, and increasing diversity (Fougere, 2015); quite a real-world milestone for a movement that gained momentum in online posts of 140 characters or less.

The issues of the University of Missouri's racial tension and institutional organization are complex and remain a subject of debate, but one thing is clear. Social media networks can be leveraged by and toward higher education leaders for reasons of institutional change. The University of Missouri case also highlighted a division that often exists between the familiarity, extent, and purpose of social media use by students and the general public versus that of higher education leaders. Electronic conversations have power, and those who fail to leverage the power of social media risk seeming out-of-touch at best, or inept and uncaring at worst. At a time in which higher education is facing communications challenges of its own, failing to adequately understand and leverage one of the era's largest communication tools (Perrin, 2015) is a path the industry can ill afford to take.

As of 2016, 65% of American adults use social media, and the number is still rapidly growing (Perrin, 2015). Studies such as those by Perrin (2015) and Moran, Seaman, and Tinti-Kane (2011) suggest that social media are adept at reaching higher education audiences ranging from students to those in decision-making roles. However, higher education leaders as a whole are not maximizing the potential of social media technology (Ng'ambi & Bozalek, 2013). One telling sign is that, while more than 90% of faculty members are aware of social media's communication and networking capabilities (Moran, Seaman & Tinti-Kane, 2011), most educators' professional use of social media is relegated to passively receiving content, rather

than actively creating it (Charleson & Lyall, 2014). According to Moran, Seaman, and Tinti-Kane (2011), “online video is by far the most common type of social media used in class, posted outside class, or assigned to students to view, with 80% of faculty reporting some form of class use of online video” (p. 3). In contrast, only 40% of faculty report using social media in professional contexts at least weekly, while 20% use it for those purposes monthly and the remaining 40% use it rarely or never (Moran, Seaman, & Tinti-Kane, 2011, p. 3). Scant data exists on the use of social media in professional contexts by other higher education leaders, such as non-faculty administrators.

Statement of the Problem

As one of the primary communication tools of the current era, social media has repeatedly proven its power to reach broad and diverse audiences and to serve as a catalyst for change (Perrin, 2015; Moran, Seaman & Tinti-Kane, 2011). Similarly, society looks to higher education as a force for change (Astin & Astin, 2000), yet organizational structures at institutions of higher education are often not conducive to leaders’ abilities to effect change (Capra, 2002; Mitchell & Sackney, 2015).

Social media can serve as a backchannel format of communication for leaders to quickly and cost-effectively connect with diverse audiences, broadening the ability of higher education leaders to act as opinion leaders in their fields (DePietro, 2013) and to respond to crises. However, research shows that many higher education leaders either do not use social media or do not leverage it to its full communication potential, despite data that highly educated audiences are among the most familiar and frequent users of social media (Ng’ambi & Bozalek, 2013). During an era in which the higher education industry is facing frequent economic and political pressure, it is more important than ever that higher education adequately communicates its

mission and purpose in society to those it serves and those it relies upon for support (Altbach, 2011; Bogue & Aper, 2000).

Approximately three quarters of adults using the Internet use social networking sites (Social networking fact sheet, 2015), adding up to hundreds of millions of people and countless daily posts. The far-reaching and unfettered online discussion enabled by social media means that “corporate reputation is a valuable intangible asset for companies, yet is increasingly difficult to manage in an era with hard-to-control online conversations” (Dijkmans, Kirkhof, & Beukeboom, 2014, p. 58). The conversation will happen whether higher education leaders participate or not. However, it is in their interest to participate. It is also in institutions’ interest to understand more thoroughly the issue of social media communication by its leaders. Few studies exist on higher education leaders’ use of social media to advance professional and institutional goals, and no studies seem to focus specifically on the relationship between higher education leadership behaviors and social media use, which indicates a need for further study (Kimmons & Veletsianos, 2016).

Theoretical Framework

This study was situated within the theoretical framework of Bolman and Deal’s (1997) Four-Frame Model (FFM), an analysis technique for understanding leadership and organizations. The FFM consolidates major schools of thought about leadership into four perspectives that Bolman and Deal (1997) called frames. The FFM is rooted in the social sciences and designed to be broadly applicable in the public and private sectors to a wide variety of cultures and organizations (Bolman & Deal, 1997). Table 1 presents the FFM, as well as the origin, organizational metaphor, and characteristics connected with each frame. The FFM will be discussed in further detail in Chapter II.

Table 1

Characteristics of the Four Frames

Frame	Origin	Organizational Metaphor	Characteristics
Structural	Sociology	Factory or machine	Rules, goals, policies, technology
Human resource	Psychology	Family	Needs, relationships, skills
Political	Political science	Jungle	Power, conflict, competition
Symbolic	Anthropology	Temple	Culture, ritual, ceremony

(Bolman & Deal, 1997)

Purpose of the Study and Research Questions

The purpose of the study was to assess the relationship between professional social media use and leadership frames among higher education leaders. As part of this, the study examined the leadership frames that higher education leaders were most likely to use. The following research questions guided the study:

1. Which leadership frames do higher education leaders use?
2. To what extent do higher education leaders use social media in their professional roles?
3. For what reasons do higher education leaders use social media in their professional roles?
4. What is the relationship between leadership frames and the extent of social media use?

Operational Definitions

For the purpose of the study, the following operational definitions were adopted:

The four frames of leadership, which represent four perspectives of understanding leadership characteristics, namely, structural frame, human resource frame, political frame, and symbolic frame, were measured by participants' responses to the study's survey questionnaire.

Social media were operationally defined as Internet-based applications that allow users to create and share content, either publicly or with a selected group of other users (Kaplan & Haenlein, 2010). The social media examined in this study were Facebook, Instagram, LinkedIn, Pinterest, Reddit, Snapchat, Twitter, and YouTube.

Professional social media use was operationally defined as the usage of social media by a higher education faculty member and/or administrator acting in his or her official capacity in support of professional and/or institutional objectives.

Extent was measured by the frequency with which participants reported using social media within a given time period.

A higher education leader was operationally defined as any person whose employment at an institution of higher education involved influencing others toward an outcome, which might include faculty, department chairs, directors, provosts, presidents, vice presidents, managers, and other employees who serve in leadership roles (DuBrin, 1990). For the purposes of this study, higher education leaders were grouped into two segments, faculty members and administrators.

Glossary of Terms

- Active use of social media – To use social media actively is to engage in “posting messages, videos, pictures, etc. on a social media site” (Weber Shandwick, 2013, p. 2).
- Consumers – Users of social media who are not creating or curating. Consumers’ usage may include browsing, reading, searching, watching, or listening (Kaplan & Haenlein, 2010; Ping Yu, 2016).
- Content – Material created and published electronically (Kaplan & Haenlein, 2010); for the purposes of this study, examples of this material are text, images, videos, and music.

- Creators – Users who post original content that they have created (Ping Yu, 2016; Romero, Galuba, Asur, & Huberman, 2011; Social networking fact sheet, 2015).
- Curators – Users who share content they have found online that was created by others (Social networking fact sheet, 2015).
- Frames of leadership – The four perspectives (structural, human resource, political and symbolic) described by Bolman and Deal (1997) in understanding approaches and characteristics of managers in leading organizations.
- Leadership – Although the term “leadership” itself has no universal definition (Ng’ambi & Bozalek, 2013), for the purposes of the study, leadership was considered as “persuading people to set aside, for a time, their individual concerns and pursuits and work in support of the communal interest” (Siewiorek, Gegenfurtner, Lainema, Saarinen, & Lehtinen, 2013, p. 1014).
- Passive use of social media – Passive social media users act as information consumers through reading and/or viewing, but they do not engage in active use (Moran, Seaman, & Tinti-Kane, 2011; Ping Yu, 2016; Romero, et al., 2011).

Delimitations, Limitations, and Assumptions

The study was delimited to higher education leaders at a South Texas institution of higher education who responded to the study’s survey, the independent variables of structural frame, human resource frame, political frame, and symbolic frame, and the outcome measures of extent and purpose of social media use. Due to non-probability nature of sampling, external validity was limited to the study’s participants. Due to non-experimental nature of the study, no causal inferences were drawn. It was assumed that all variables of interest were measurable; that the participants were truthful in their survey responses, providing accurate quantitative data; and that

the researcher approached the study in an unbiased manner and followed standards of academic rigor for objectivity.

Significance of the Study

As a rapidly growing and developing communications tool, the use of social media in education is receiving increased research attention (Tess, 2013). However, the vast majority of studies to date on the topic of social media in education have focused on the role of the technology in teaching and learning (Tess, 2013). Scholarship on higher education leaders is lacking on the extent to which they use social media in professional capacities, their purposes for using social media, and the relationships of their leadership approaches to social media use.

Additionally, Ng’ambi and Bozalek (2013) wrote that “there is a paucity of research on the role that informal leaders, and more particularly opinion leaders and change agents, can play in enabling wide-scale adoption of innovations in higher education institutions” (p. 940), and Astin and Astin (2000) added that “the concept of leadership and the educational goals of leadership development have been given very little attention by most of our institutions of higher learning” (p. 98). Implications of further study of social media use by higher education leaders are broad and go far beyond the realm of the industry itself, because higher education is a driver of change.

As Astin and Astin (2000) noted, “... colleges and universities not only educate each new generation of leaders in government, business, science, law, medicine, the clergy, and other advanced professions, but are also responsible for setting the curriculum standards and training the personnel who will educate the entire citizenry at the pre-collegiate level (p. 1).

Beyond educating the professionals of other fields, higher education produces research and scholarship that advances a broad variety of fields (Astin & Astin, 2000). The studies conducted so far on social media use in higher education are “only the tip of the iceberg” (Tess,

2013, p. A65). Furthermore, according to Bolman and Deal (1997), there is always a need to study leadership and organizations, as “our ability to understand and predict human behavior is still limited” (p. 22). This study aimed to contribute to the understanding of social media use and higher education leadership through an angle that had not yet been studied.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

A systematic review of the literature was conducted. In reviewing the literature, the following databases, facilities, and search engines were used: EBSCO's Discovery Service, Communication Source, the university library, WorldCat, interlibrary loan, Google Scholar, and Google. The chapter includes a discussion of background research related to this study, with a focus on leadership, history, and social media in the context of higher education. Bolman and Deal's (1997) leadership frameworks are also discussed.

This chapter is divided into five sections. The first section presents social and political contexts of higher education relevant to this study. The second section addresses the communication problem of higher education, including a discussion of higher education leadership and organizational styles. The third section provides an overview of social media at the time of the study, including discussion of each of the six social media platforms examined. The fourth section addresses the communication potential of social media for higher education, drawing insight from scholarship on higher education as well as the corporate world. The final section presents the structural, political, human resource, and symbolic frames of leadership used in the four-frame model by Bolman and Deal (1997) that provided the theoretical framework for this study.

Social and Political Context of Higher Education

To better understand the communication problem facing higher education today, it is helpful to consider the higher education industry's social and political context in the United

States. Higher education identifies a number of purposes within its core mission, including research, scholarship, and service, the nourishment of democratic ideals, the preparation of future thinkers, workers, and leaders, the stewardship of information and resources, and the fostering of culture and diversity (Altbach, 2011; Bogue & Aper, 2000). At its best, higher education supports “academic freedom, commitments to both inquiry and teaching, engagement with ideas and critiques, and preserving an independence of mind and spirit in the face of external pressure” (Altbach, Gumpert, & Johnstone, 2001, p. 1). As an industry with the business of public service and often the benefit of public funding, higher education is accountable to the citizens and taxpayers of cities, states, and the nation.

Higher education’s responsibility for students and employees alike means that the industry has an extra layer of accountability beyond that of many traditional businesses (Booker, 2014), and “higher education is integrated into the social, political, and economic fabric of American society” (Birnbaum & Shushok, p. 61). Yet, akin to the undergraduate who may not appreciate the value of liberal arts core courses until years later (Johansson & Felten, 2014), higher education stakeholders may not realize or care that they are doing damage when, in the name of efficiency and immediate results, they fail to support the broad and diverse scope of higher education missions (Lears, 2015).

An erosion of support for higher education has been one consequence of a political climate of neoliberalism, which has shaped higher education in the United States since the early 1970s (Saunders, 2010). While neoliberalism represents a constantly evolving set of ideals and practices, the approach “is united by three broad beliefs: the benevolence of the free market, minimal state intervention and regulation of the economy, and the individual as a rational economic actor” (Saunders, 2010, p. 45). At its core, neoliberalism favors the “economic

freedom and autonomy of the individual,” typically at the expense of social institutions (Bruce, 2015, p. 46). Impacts of neoliberalism on higher education include decreases in public funding, a growing reliance on private funding sources and revenue generation, emphasis on research commercialization, attacks on the practice of faculty tenure, increased reliance on part-time and adjunct faculty over full-time faculty, hierarchical leadership taking precedence over shared governance, and an overall focus on the “extrinsic outcomes of higher education” over the “intrinsic rewards of the college experience” (Saunders, 2010, p. 43). Attacks on higher education include accusations of “inefficiency, irresponsibility, and un-governability,” and pressure is frequent to increase accountability and contain costs while improving services and expanding access (Altbach, Gumpert, & Johnstone, 2001, p. 1). Neoliberal trends have tended to impact humanities the most significantly, as often, “market utility has become the sole criterion of worth of a college degree at the expense of arts, culture, and critical, independent thinking” (Lears, 2015, p. 16).

The Communication Problem of Higher Education

In light of a neoliberal climate, “a constant tension exists between the traditional autonomy of the academic profession and external pressures” (Altbach, 2011, p. 229). On one hand, autonomy and academic freedom are crucial because “turning resources into human values defies standardization” (Schmidt & Berdahl, 2011, p. 69). On the other hand, however, autonomy also puts institutions into a challenging position, as they must “simultaneously conserve and critique the heritage of the society of which [they are] a part” (Bogue & Aper, 2000, p. viii). The result is that higher education treads a line that “represents simultaneously a detachment from and involvement in society” (Altbach, Gumpert, & Johnstone, 2001, p. 1). Higher education is confronted with a subsequent communication problem: “the academic

profession has largely failed to explain its centrality to society and to make the case for traditional academic values” (Altbach, 2011, p. 229). Without the understanding of its stakeholders, higher education will never reach the full potential of their support. For that reason, communication is crucial to the success and future of higher education as an industry, and higher education leaders must work to leverage it effectively. However, some structural elements of higher education leadership can impede the more widespread of adoption of social media communication by leaders (Mitchell & Sackney, 2013; Ng’ambi & Bozalek, 2013; Roblyer, McDaniel, Webb, Herman, & Witty, 2010; Taylor & Machado-Taylor, 2010).

Higher Education Organizational Structure

Higher education leaders include those whose employment at an institution of higher education involves influencing others toward an outcome; this includes faculty, department chairs, directors, provosts, presidents, vice presidents, managers, and administrators (DuBrin, 1990). The trend of faculty being highly aware of social media but employing it professionally for mainly passive functions, rather than engaging discussion or forming communities of practice, pinpoints a disconnect between some dominant higher education leadership styles and the cultures of leadership and organization necessary to embrace and maximize evolving technology. This may be one reason that “higher education has a well-established trend toward non-adoption of new technologies,” or toward lagging behind other industries in technology adoption (Roblyer, et al., p. 135). The problem can manifest in faculty in particular, as “many – and perhaps most – higher education faculty remain laggards when it comes to adopting...technology innovations” (Roblyer, et al., 2010, p. 135). However, conditions do present some incentives to change, as “educators are facing challenging times, but with such challenges come opportunity for innovation, reassessment and change to traditional practices”

(Charleson & Lyle, 2014, p. 72). A key in reassessing practices can come from examination of leadership styles.

As a system with high presence of the transactional leadership style, which “maintains or incrementally improves upon existing and acceptable institutional performance in times of high certainty,” higher education is unlikely to advance its status during times of uncertainty and change (Taylor & Machado-Taylor, 2010, p. 178); however, uncertainty and change define this era (Astin & Astin, 2000). Transformative leadership, defined by Diaz-Saenz (2011) as “the process by which a leader fosters group or organizational performance beyond expectation by virtue of the strong emotional attachment with his or her followers combined with the collective commitment to a higher moral cause” (p. 299), is more conducive to change and also has representation among higher education leaders. However, shortcomings in higher education leaders’ effective use of social media may stem from a dynamic between leadership styles that Ng’ambi and Bozalek (2013) described: “emerging technologies and transformative practices have diffused into higher education social systems in ways that formal leadership styles are increasingly stretched to both keep abreast of and to manage” (p. 940).

Learning from Higher Education Crises

Another insight on higher education’s organizational approach to communication comes from examining the field of crisis communication. Controversial issues and crises are not the same thing. Birnbaum and Shushok (2001) defined a crisis in higher education as a situation that “threatens values critical to one or more constituencies, existing channels of influence are inadequate to address it, and it is claimed to require immediate action including the allocation of additional resources” (p. 61). An issue, on the other hand, is “a condition or event, either internal or external to the organization which, if it continues, will have a significant effect on the

functioning or performance of the organization or on its future interests” (as cited in Jacques, 2007, p. 147). Descriptions by experts in the field show that while issues and crises each need attention, crises carry an extra layer of immediacy that issues do not (Birnbaum & Shushok, 2001; Jacques, 2007). The implication of immediacy may be one reason that there is historical precedent and also an ongoing tendency for leaders and stakeholders to claim that higher education is facing a “crisis” for a variety of reasons (Birnbaum & Shushok, 2001, p. 61). The words of Balderston and Weathersby (1972) would not seem out of place if printed today: “Higher education in the United States and elsewhere is beset by crises: crises of public confidence, questions of continuing relevance, doubts about continuing the emphasis on doctoral instruction, and a very real financial crisis” (p. ii, as cited in Birnbaum & Shushok, 2001). Referring to a particular issue facing higher education as a “crisis” benefits the person making the claim, because the word promotes quick action: “The strong rhetoric and vivid images of crisis are useful tools with which to gain attention, power, and control of organizational and symbolic processes in a noisy world” (Birnbaum & Shushok, 2001, pp. 69–70).

The differences between issues and crises notwithstanding, crisis communication can provide insight on higher education leaders’ approaches to significant problems that need to be addressed. In the wake of crises experienced by some higher education institutions, such as rapes, natural disasters, and shootings, some higher education administrators have adopted the strategy of implementing crisis management plans (Mitroff, Diamond, & Murat Alpaslan, 2006). However, research by Booker (2014) found a disturbing trend in higher education culture: “there is a perception held by universities...that crises happen only to other institutions, and even the impact of the crisis event will be small because the institution will be protected from crisis due to their size” (p. 17). Furthermore, Booker (2014) found that “research is limited on crisis

management planning in higher education because many institutions of higher education have written their crisis management plans after a crisis event occurred; a reactive approach” (p. 17). Crisis management plans have evolved from the field of crisis communication (Mitroff, Diamond, & Murat Alpaslan, 2006), which “encompasses those messages delivered to stakeholders during an emergency event that threatens them” (Ferrante, 2010, p. 38). However, the place of higher education in society is too important to defer planning to be responsive to evolving situations (Altbach, 2011; Altbach, Gumpert, & Johnstone, 2001; Bogue & Aper, 2000). According to Booker (2014), to successfully lead higher education institutions through crises, the institutions’ leaders must be proactive. This requires commitment from leadership. “If there is no commitment by leadership or top administrators, there will be no successful planning” (Booker, 2014, p. 19).

Higher Education Leadership Structure

To better understand educational leaders’ approaches to social media, an examination of leadership behaviors relative to the use of social media is useful. Mitchell and Sackney (2015) described current higher education leadership as the product of a “modernist legacy” whose origins trace to Newtonian times and whose characteristics include an emphasis on empirical truths, maintaining stability, and “language and discourse patterns that represent an objective reality” (p. 286). Though leadership is evolving, Capra (2002) wrote that classical or “machine” views of management, which dominated organizations during the first half of the 20th century and emphasize precise lines of communication and control, remain deeply ingrained in organizational thought today. Such an approach is ill-suited in an era in which the Internet eliminates many boundaries of time and geography, and social media electronically mimics the interrelated web of non-linear relationships typical in personal and professional life. As Mitchell

and Sackney (2015) described, “in the real world … learning unfolds spontaneously and autonomously as people make sense of the ‘teaching moments’ (the compelling disturbances) that capture their attention” (p. 298). In fact, as Wheatley (2005) described, change only happens through disturbances.

The point of using social media is not to incorporate it simply because it is new and different from traditional media (DePietro, 2013). Embracing social media as a tool for change requires a shift away from linear, hierachal models of leadership and organization and toward an ecology metaphor of organizations, in which connections and relationships are prioritized over command and control. Wheatley (2005) used such a living system example of organizational function to help illustrate how localized sparks of discontent and inspiration can gain breadth and momentum, ultimately prompting widespread systemic change. In their description, “some part of the system (the system can be any size – an organization, a community, a team, a nation) notices something. It might be in a memo, a chance comment, and news report. It chooses to be disturbed by this” (p. 85). The disturbance takes root organically, Wheatley (2005) described; it cannot be forced. After that, the disturbance “circulates through the system’s networks and spreads elsewhere. The information grows, changes, becomes distorted from the original, but all the time it is accumulating more meaning. Finally, the information becomes so important that the system can’t deal with it. Then and only then will the system begin to change” (Wheatley, 2005, p. 85). Looking at systems as living organisms requires not just a particular view of organizations, but of leadership itself.

Higher education leaders do not have the option of singlehandedly changing the cultures of leadership and organization at their institutions. However, through their professional roles and communications, they do have the ability to act as opinion leaders, and social media gives

them tools to do so. Rogers (2003) defined opinion leadership as “the degree to which an individual is able to influence other individuals’ attitudes or overt behavior informally in a desired way with relative frequency” (p. 27). The change does not have to be revolutionary. Leaders generally “are members of the social system in which they exert their influence” (Rogers, 2003, p. 27), but the democratic, inclusive nature of social media can help bridge gaps between traditional institutional norms and desired changes. In earlier generations of online communication, outsiders contacting an organization typically connected with a representative designated by the institution. Today, however, any employee can engage in public discussion via social media, and the consequences can help personify an organization when employed by leaders acting in their professional roles (Macafee & Desimone, 2012). According to Macafee and Desimone (2012), “social media allow for a bottom-up or grassroots level of political participation not beholden to institutional control. Consequently, social media now represent a shift from organizational-based communication to individual and interpersonal communication” (Macafee & Desimone, 2012, p. 580). As Mitchell and Sackney (2015) described, “in living systems, the dynamic relationship between conservation and novelty supports a naturally unfolding change process” (p. 291); this helps social media support a balance between old traditions and new ideas.

Overview of Social Media

Social media is becoming ubiquitous, transforming all realms of communication, including those connected with higher education (Tess, 2013). The social media genre is considered to have begun in 1997, when a site called SixDegrees.com launched, allowing users to create profiles and connect with friends (Roblyer, et al., 2010, p. 135). As time went on, the sites MySpace, which launched in 2003, and Facebook, which launched in 2004, became integral

in boosting social media to mainstream use (Roblyer et al., 2010, p. 135). In the decade from 2005 to 2015, adults' use of social media increased by a factor of nearly 10, and 65% of American adults used social networking sites by 2015 (Perrin, 2015). Among those users, young adults age 18–29 were the most likely to use social media, at 90%, but usage was common across all age groups, with the use among those age 65 and older recently growing at the fastest rate (Perrin, 2015).

One group with significantly higher social media awareness and use than the general population is the highly educated population (Perrin, 2015; Moran, Seaman & Tinti-Kane, 2011). While social media usage rates among adults are similar by gender, race, and ethnicity, education level does have an effect; adults with some college completion and/or a college degree use social media at significantly higher rates than do those with a high school diploma or less (Perrin, 2015). The rates of use are even higher among higher education faculty, with “91% of faculty using social media for professional purposes and in the classroom,” according to a study conducted jointly by Babson College and Pearson Learning Solutions (Moran, Seaman & Tinti-Kane, 2011, p. 3). The study found no significant differences in faculty awareness of social media based on ages or faculty ranks, although it did find that younger faculty use social media most frequently (Moran, Seaman & Tinti-Kane, 2011).

Following is background on eight of the most commonly used social media platforms in the United States at the time of the study, 2016:

Facebook

Facebook remained one of the most commonly-used social media platforms in the United States at the time of this study. In March 2016, it had an average of 1.09 billion worldwide daily

active users and 1.65 billion monthly active users (Facebook, 2016). The platform allowed users to create accounts and post content such as text, photos, and videos. It has added features over the years, including the ability for users to chat, send direct messages to one another, and live stream video. Other Facebook users could share or comment on content, or they could react to it by selecting symbols intended to convey emotions. Along with Twitter, Facebook is one of the top two social media platforms used by higher education institutions to communicate (Rojas & Alburqueque, 2015).

Instagram

Instagram is a social media platform built around visual storytelling (Instagram, 2016). It allows users to create accounts, share photos and videos accompanied by text, and comment on one another's shared content. It also allows users to add hashtags, a digital method of labeling and categorizing content to make it easier for other users to sort and find (Instagram, 2011). As of 2016, the platform had more than 500 million users, and its users shared an average of more than 95 million photos per day (Instagram, 2016). The platform was launched in 2010 and Facebook purchased it in 2012, but as of 2016, it remained an independently-operating service (Shontell, 2012).

LinkedIn

LinkedIn is a social media platform that launched in 2003 and was designed for networking among working professionals (LinkedIn, 2016). It allows users to create profiles, incorporating details of their professional lives, including their resumes, education, certifications, skills, and awards. Users can build networks of other professional colleagues and acquaintances online and write each other recommendations or endorse one another's skills. Users can also

post news and discussions, directly message one another, and post and apply to job openings. As of the first quarter of 2016, LinkedIn deemed itself as operating the largest online professional network in the world, with 433 million members (LinkedIn, 2016). Its fastest-growing demographic is students and recent college graduates, with 40 million users in those categories (LinkedIn, 2016).

Pinterest

Pinterest is a social media platform that described itself as “a visual bookmarking tool that helps you discover and save creative ideas” (Pinterest, 2016, para. 1). It allows users to browse or search collections of links that are organized using visual imagery. Users can save others’ links or add their own from the Internet, creating their own visually-oriented boards of ideas. As of its most recent report on user statistics, September 2015, Pinterest announced that it had reached 100 million users (Griffith, 2015).

Reddit

Reddit is a social media platform that allows users to create, join, and participate in communities of their interest. It has an estimated 542 million worldwide visitors per month, and as of 2016, it was the 11th most visited web site in the United States (Reddit, 2016). The site allows users to post content such as text, videos, photos, or links, for other users to view (Barthel, Stocking, Holcomb, & Mitchell, 2016; Reddit, 2016). Reddit distinguishes itself from many other social media platforms in part by self-moderated discussion controlled by a voting system; users can vote on content by selecting an upward facing arrow or a downward facing arrow, and “the most interesting, funniest, impactful, or simply amazing stories rise to the top,” while unpopular content sinks lower in the list of what appears, or becomes hidden altogether.

(Reddit, 2016). Approximately 78% of adults visiting Reddit in 2016 routinely got their news from the site (Barthel, et al., 2016).

Snapchat

Snapchat is a social media platform designed for visually-oriented communication. It allows users to send one another “snaps,” which the company described as “pictures or video messages taken and shared with friends on Snapchat in real-time” (Snapchat, n. d., para. 1). Users who receive a snap can view them for up to 10 seconds before they disappear (Snapchat, n. d.). Users can also communicate by posting “stories,” which are photos and videos that last 24 hours (Frier, 2016, para. 2). The platform launched in 2011 and grew enormously; as of April 2016, Snapchat’s approximately 1.65 billion users were watching 10 billion videos per day using the application (Frier, 2016).

Twitter

Twitter is a social media platform that began in 2006 (Twitter, 2016b) as a way for users to send and read messages called tweets, which might include photos, videos, links, or text. Twitter is considered a form of “microblogging,” limiting users to no more than 140 text characters in their posts (Menkhoff, Chay, Bengtsson, Woodard, & Gan, 2014). A user can create a profile, then like other users’ content and retweet it to share it with their own network of followers. One of Twitter’s best-known features, the hashtag, launched in August 2007 as a digital method of labeling and categorizing that facilitates users’ abilities to sort and find content (Twitter, 2016b). As of March 31, 2016, Twitter had 310 million monthly active users (Twitter, 2016a). Along with Facebook, Twitter is one of the top two social media platforms used by higher education institutions to communicate (Rojas & Alburqueque, 2015). Of all social media

platforms, Twitter is the one most frequently used by higher education faculty for digital backchannel communication, a practice of speaking through unofficial channels in less formal settings than the settings traditionally used to discuss academic topics (Kimmons & Veletsianos, 2016).

YouTube

YouTube is a social media platform that launched in 2005 as a way for people to share and watch videos (YouTube, n. d.). As of 2015, it had reached one billion users who watched hundreds of millions of hours of video per day (YouTube 2015). It allows users to create accounts called channels, and also to comment or vote thumbs up or thumbs down on videos they encounter on the site.

The Communication Potential of Social Media

The advent of social media has led to broad changes in lifestyles and communication practices (Perrin, 2015). According to the Pew Research Center, “the rise of social media has affected such things as work, politics and political deliberation, communications patterns around the globe, as well as the way people get and share information about health, civic life, news consumption, communities, teenage life, parenting, dating, and even people’s level of stress” (Perrin, 2015, p. 2). Just as reality television has blurred some boundaries between experts and lay people (Thornborrow, 2014, p. 13), social media has blurred former lines of power and authority in the process of publishing and mass communication (Veil, Buehner, & Palenchar, 2011). Publishing one’s ideas and distributing them to a broad audience formerly involved navigating the gatekeepers, expenses, and time delays associated with traditional publishing processes. Today’s technology allows everyone to be publishers and access broad audiences in

an instant with a few taps of the finger (Ngai, Tao, & Moon, 2014; Veil, et al., 2011). Social media allows people to interact independent of location, time, authority level, and other boundaries.

One outcome of social media's transcendence of boundaries is that while social media mimics the web-like nature of offline human interaction, it has the power to do so more quickly and on a much larger scale (Veil, et al., 2011). Communication is not a linear act (Rogers, 2003, p. 6), and neither is communication by social media. When social media content is shared, it becomes part of a larger conversation. According to Moran, Seaman and Tinti-Kane (2011), "this is social media's most distinctive aspect: the potential to transform from a way of pushing content outward to a way of inviting conversation, of exchanging information, and of invoking unparalleled individual, industry, societal, and even global change" (p. 4). The change can stem in part from social media's ability to connect leaders in power, who typically speak representing "institutionally legitimized opinions," and lay people, who typically speak for themselves (Thornborrow, 2014, p. 14). Connecting those two groups opens lines of communication that can also open new channels for ideas and diversity (Thornborrow, 2014, p. 14). Social media has also shown its ability to bridge cultural divides and create new levels of understanding in difficult situations (Cummins, 2015). Moran, Seaman and Tinti-Kane described social media as "a medium that is by its very nature non-centralized, meaning that in both form and content, it is user created, user controlled, flexible, democratic, and both very transparent and very not so" (2011, p. 4). In some ways, the democratic nature of social media communication parallels the role of higher education in advancing democratic society.

Social Media Discussion about Higher Education

The 2015 public explosion of racial tension at the University of Missouri is just one example of an issue that focused widespread, mainstream social media discussion on higher education. Other higher education issues that have provided fodder for heated social media discussion include student loan debt (Sander & Doubleday, 2014), tuition costs (McKnight, 2014), affirmative action (Wang, 2015), and politically-motivated budget cuts such as those faced by the University of Wisconsin system (Macafee & De Simone, 2012). Controversial issues have faced higher education throughout its history and almost certainly will continue throughout its future (Altbach, Gumpert, & Johnstone, 2001). Ideological discussion related to higher education issues and politics is inevitable as well, as Birnbaum and Shushok (2001) described: “Different constituencies construct stories, or narratives, about who should go to college, what should be taught, the social obligation of institutions, and the proper way to make decisions” (p. 74). When such constituencies have an ideological slant, the narratives that they advance do as well (Birnbaum & Shushok, 2001).

A potential problem occurs for higher education when the information influencing public opinion of the industry is driven by laypeople rather than experts, because, “since these are questions of values rather than facts, perceptions of public confidence and judgments of institutional success are influenced more by ideology than data” (Birnbaum & Shushok, 2001, pp 74–75). The power of ideology cannot be underestimated. Higher education reputation stems from perceptions that individuals develop from reality, and for individuals within the most common demographics for either attending higher education or making decisions affecting higher education (Perrin, 2015), their realities are increasingly influenced by social media (Rojas & Alburqueque, 2015). Studies have found that social media discussion has power to influence

people's opinions on real-world topics as weighty as how to vote in a national election (Anstead & O'Loughlin, 2015; Barthel, et al., 2016), perceptions of the Human Papillomavirus (HPV) vaccine (Dunn, Leask, Zhou, Mandl, & Coiera, 2015), and even the type of delivery to attempt when having babies (Witteman, Fagerlin, Exe, Trottier, & Zikmund-Fisher, 2016). It is not a leap to consider that social media discussion can influence perceptions on higher education as well.

Further broadening the impact of social media is its ability to influence the news cycle (Iftikhar, Ullah, Naureen, & Ali, 2016), which itself can contribute to influencing public perceptions (Bruce, 2015). Reporters routinely monitor social media for stories and trends, and even the most respected news providers routinely juxtapose commentary from experts with commentary sourced from social media (Smith, 2015). A study of reporting during a British national election found that "reporters selectively quoted individual users of social media to create anecdotal evidence of the public's reaction," a technique that "reflects the long-established journalistic practice of taking the opinions of individuals to reflect wider strands of opinion in society" (Anstead & O'Loughlin, 2015, p. 207). Media outlets also commonly draw inferences regarding public opinion, sometimes with the help of social media analysis firms, based upon frequently used words, phrases, or trending terms mined from social media data (Anstead & O'Loughlin, 2015).

Harnessing Social Media for Higher Education

Social media has proven its ability to facilitate widespread communication and reach target audiences more than any other tool in history (Perrin, 2015), and it is in the interest of higher education to harness this technology for the industry's benefit (Rojas & Alburqueque, 2015). Social media can be instrumental in media relations, reputation control, and self-

promotion for higher education institutions (Rojas & Alburqueque, 2015). As a publishing method that is widely used and freely available to anyone with a smart phone or computer, social media can provide agency for leaders to advocate for change. Social media platforms such as Twitter are useful, fast channels for transmitting information, they are easy to use, and they offer capability to efficiently reach a broad audience (Rojas & Alburqueque, 2015). Social media accounts are also generally free, a bonus for tight institutional budgets.

While practically all higher education marketing and communications departments were operating official social media accounts by around 2012, with many of those having launched years earlier (Barnes, 2012), individual academic leaders lag far behind their counterparts in the business world in maintaining social media presences in their professional roles (Kimmons & Veletsianos, 2015). However, research conducted on other industries indicates unique benefits that can stem from employees in leadership positions serving as brand ambassadors on their own social media accounts apart from the official corporate accounts (Holmes, 2015). The technique not only multiplies the number of voices communicating messages that align with institutional goals, it personifies the communication, because “word-of-mouth messages from friends and colleagues are almost always better received than blasts from corporate accounts” (Holmes, 2015). However, one of the largest barriers to higher education’s further development of its leaders’ social media presences may be overcoming an institutional culture oriented against backchannel communication and the adoption of newer technology (Mitchell & Sackney, 2013; Ng’ambi & Bozalek, 2013; Roblyer, et al., 2010; Taylor & Machado-Taylor, 2010).

As higher education leaders lag behind businesses leaders in their use of social media (Rojas & Alburqueque, 2015), examining corporate leaders’ forays into social media activity can provide some context for comparison. According to a 2013 study that focused on social media

use by business employees in leadership roles, “on average 60% of a firm’s market value is attributable to its reputation,” and “the majority of companies in all regions and of all types enjoy reputational payoffs from their CEO’s sociability” (Weber Shandwick, 2013, p. 9). When leaders within a company were active in social media as part of their professional roles, their employees surveyed in the study were more likely to describe the leaders using positive adjectives such as “forward-looking,” “effective,” “a good communicator,” “open and accessible,” “in-touch,” “a good listener,” “inspiring,” and “technologically savvy,” (Weber Shandwick, 2013, p. 8). Furthermore, “sociability shows that a leader is listening, open to engaging in two-way dialogue with stakeholders, and comfortable with change,” an organizational reputation boost that can also help attract talented new employees (Gaines-Ross, 2015, para. 3). A separate study of social media in the airline industry found that company leaders’ engagement in social media “is positively related to corporate reputation, especially among non-customers” (Dijkmans, Kerkhof, & Beukeboom, 2015, p. 58).

As research and experience continue showing benefits of leaders’ use of social media in their professional roles, business leaders’ online social involvement has grown (Gaines-Ross, 2015). A study of corporate industry found that the number of socially-engaged corporate CEOs more than doubled from 2010 to 2015 (Gaines-Ross, 2015). Attitudes toward social media use by employees in leadership positions have also evolved. As Gaines-Ross (2015) described, “being social was once considered too risky, because CEOs feared that saying the wrong thing online would ignite a firestorm of antagonists, dissatisfied customers, and disgruntled employees, who could threaten the company’s reputation” (para. 3). By speaking out on social media as individuals, leaders are more free to state opinions and display personality than corporate accounts. Such attributes are now increasingly recognized as benefits, as leaders’ use of social

media has shown an ability to help neutralize criticism, enhance transparency, and join the broader conversation happening relative to the industry (Gaines-Ross, 2015). Some companies, including Zappo's, Southwest Airlines, and Starbucks, have made it corporate policy to encourage employees to tweet about their brands on their personal social media accounts (Holmes, 2015). Under the notion of situated expertise developed by Thornborrow (2014), everyone has expertise from his or her own perspectives and life experiences to share, and companies have found that increasing the number of team members talking about a brand online also increases the diversity and personality of the positive brand message (Holmes, 2015). The democratic nature of social media can also make it invaluable in connecting leaders quickly, effectively, and personally with the various constituencies they hope to serve and impact.

Holmes (2015) cautioned that leaders' social media use cannot be forced; "employees have to want to share updates," a desire that stems from genuine positive feelings about the company (para. 10). Mitchell and Sackney (2015) also found that leaders would work to make changes in their organizations and professions if they had the ability to do so, but their participation must be genuine. A leader's social media presence needs to be maintained or very closely overseen by the leader him- or herself (Gaines-Ross, 2015). According to Gaines-Ross (2015), "outsourcing sociability might save time, but employees can sniff out inauthenticity in a nanosecond," and leaders "can get assistance, but it is always best to be the editor-in-chief" (para. 13). Developing a public social media presence can benefit the leaders in return, by helping them develop professional networks or communities of practice and set themselves apart in their fields (Holmes, 2015; Mewburn & Thompson, 2013).

An examination of social media benefits is not intended to suggest that higher education leaders switch away from other forms of communication when adopting social media for

professional purposes. Social media communications have the ability to serve as backchannels, or secondary forms of communication, to reach new audiences and reinforce points that may also be communicated using more non-digital forms of communication (DePietro, 2013; Kimmons & Veletsianos, 2016). Digital backchannels are online spaces for interaction that parallel more formal methods of communication, but that typically offer participants an atmosphere to converse in less formal and more authentic ways (Carpenter, 2015; Kimmons & Veletsianos, 2015).

Leadership Frames

The study was grounded in Bolman and Deal's (1997) four-frame model of leadership, an analysis technique for understanding leadership and organizations that the authors began developing in 1984 and have updated and revised in the years since. The model consolidates major schools of thought about leadership into four perspectives that Bolman and Deal (1997) called "frames" (Buono, 1998, p. 508). The model is rooted in the social sciences and designed to be broadly applicable in the public and private sectors to a wide variety of cultures and organizations (Bolman & Deal, 1997). Though the model has received much of its attention in the business world, its applications have included academic research (Bolman & Deal, 1997) and education (Shook, 2000). The four frames are as follows:

Structural Frame

Bolman and Deal's (1997) structural frame of leadership is rooted in two main sources: industrial analysts such as Frederick W. Taylor, Henri Fayol, Lyndall Urwick, and Luther Gulick, whose 20th century studies on leadership emphasized efficiency and scientific management, and the work of economist and sociologist Max Weber, who pioneered the rational

ideal of “monocratic bureaucracy” in contrast to the patriarchal leadership forms that dominated late 19th century Europe (p. 38). Weber’s monocratic bureaucracy focused on six principles: (1) A fixed division of labor, (2) A hierarchy of offices, (3) A set of rules governing performance, (4) Separation of personal from official property and rights, (5) Technical qualifications for selecting personnel (not family ties or friendship), and (6) Employment as a primary occupation and long-term career (Bolman & Deal, 1997, p. 38).

Bolman and Deal (1997) likened the structural frame to the framework of a building or the skeleton of an animal – it is a blueprint-type pattern that “both enhances and constrains what human beings can accomplish” (p. 39). Key elements of the structural frame in organizations include vertical coordination, encompassing hierarchies of authority, rules and policies, and lateral coordination, encompassing meetings, task forces, and networks.

Human Resource Frame

The human resource frame focuses on people and their role in organizations. It has origins in the theories of Douglas McGregor, who was a management professor at MIT in the mid-20th century and a pioneering scholar in management theory (Bolman & Deal, 1997). The frame “regards people’s skills, attitudes, energy, and commitment as vital resources capable of either making or breaking an enterprise” (Bolman & Deal, 1997, p. 101). Fundamentally, it holds that people genuinely want to be productive and that quality work can be mutually rewarding for employees and organizations alike.

In the decade before McGregor rose to prominence, existential psychologist, Abraham Maslow, developed what to this day remains one of the most influential theories of human needs (Elias & Merriam, 2005). Maslow’s hierarchy holds that humans are motivated, in order, by the

following needs: physiological, safety, belongingness and love, esteem, and self-actualization (Bolman & Deal, 1997, p. 105). Thus, according to this theory, humans can only truly focus on the higher needs once the lower ones are met. Though researchers have had trouble scientifically validating this theory, it nonetheless has proven hugely influential in organizational management (Bolman & Deal, 1997).

Maslow's theory is considered a building block for McGregor's development of Theory X and Theory Y (Bolman & Deal, 1997). Under Theory X, workers are fundamentally lazy and need control and punishment to motivate them to complete tasks. Under Theory Y, workers pursue organizational rewards as a way to fulfill their higher-level needs, resulting in employees' self-direction. While management scholars have continued to evolve and fine-tune their theories, Bolman and Deal's (1997) human resource frame remains aligned with those rooted in a Theory Y approach, or an underlying premise that emphasizes the worker and his or her desire to be productive.

Political Frame

According to Bolman and Deal (1997), the political frame views organizations as living, robust political arenas that host a complex web of individual and group interests. The frame revolves around power as a key resource, and considers conflict as inevitable in the pursuit of organizational goals. Power stems from factors such as rank, expertise, and alliances. The frame includes five premises (Bolman & Deal, 1997, p. 163): Organizations are coalitions of various individuals and interest groups. There are enduring differences among coalition members in values, beliefs, information, interests, and perceptions of reality. Most important decisions involve the allocation of scarce resources—who gets what. Scarce resources and enduring

differences give conflict a central role in organizational dynamics and make power the most important resource. Goals and decisions emerge from bargaining, negotiation, and jockeying for position among different stakeholders.

Symbolic Frame

According to Bolman and Deal (1997), “symbols permeate every fiber of organizations” (p. 215). Symbols, in turn, are powerful, because humans seek to explain and interpret a complex world in ways that align with systems of meaning and belief (Bolman & Deal, 1997). The core assumptions of the symbolic frame are as follows: The most important part about an event is not what happened, but the meaning of what happened; People interpret experiences in different ways, so events have multiple meanings; Life is mysterious and uncertain because events, their meanings, and the future are puzzles; Because life is ambiguous and uncertain, rational analysis and problem solving are not typically the approaches of choice when confronting issues; Symbols are created and used to lend predictability and direction to life, while reinforcing hope and faith; The expression of a process is more important than what is produced, so therefore, myths, ceremonies, rituals and stories become guidelines for people to find purpose and passion (Bolman & Deal, 1997).

Symbols can range from the superficial, such as an impressively decorated president’s office waiting room; to the intangible, such as the golden arches logo identifying McDonald’s restaurants worldwide and calling to mind a set of emotions related to experiences with that company’s food and atmosphere; to the emotional, such as the suggestion of power conveyed by a military uniform. Symbolism can extend to corporate culture, for example, customers’ satisfaction with a generous return policy and their tendency to develop loyalty to businesses

whose perceived philosophies are similar to their own. Similarly, the theatre metaphor assumes that everyone in an organization fulfills certain roles in a particular setting to convey a message to an audience (Bolman & Deal, 1997).

Summary

In summary, the literature shows that social media has enormous potential as a communication tool, but higher education leaders do not seem to be leveraging it nearly to its potential for shaping public opinion and enhancing institutional reputation (Rojas & Alburqueque, 2015). Failing to fully take advantage of one of the most powerful communication tools of this era is a risky proposition, because higher education has a communication problem. The institution of higher education is one of the most important and central in fostering American democracy, human capital, and culture (Altbach, 2011; Altbach, Gumpert, & Johnstone, 2001; Bogue & Aper, 2000). Yet, in a predominantly neoliberal political climate, higher education has faced an erosion of public support and has sometimes struggled to justify core elements of its existence to the public (Altbach, Gumpert, & Johnstone, 2001; Lears, 2015; Saunders, 2010).

Some structural elements of higher education leadership could impede the more widespread of adoption of social media communication by leaders (Mitchell & Sackney, 2013; Ng'ambi & Bozalek, 2013; Roblyer, et al., 2010; Taylor & Machado-Taylor, 2010). Conversely, certain leadership personality types seem to lend themselves to greater openness to social media communication (Weber Shandwick, 2013). Bolman and Deal's (1997) four-frame model of leadership, an analysis technique for understanding leadership and organizations, provides a framework for investigating social media use among higher education leaders. Results of the

investigation could prove valuable as a way to reassess current practices in higher education leaders and their uses of social media in support of professional and institutional goals.

CHAPTER III

METHOD

Introduction

The study was designed to assess the relationship between professional social media use and leadership frames among higher education leaders, as well as to examine the leadership frames higher education leaders are most likely to use. The following research questions guided the study:

1. Which leadership frames do higher education leaders use?
2. To what extent do higher education leaders use social media in their professional roles?
3. For what reasons do higher education leaders use social media in their professional roles?
4. What is the relationship between leadership frames and the extent of social media use?

This chapter describes methods used to conduct the study. Sections in this chapter include: research design, subject selection, instrumentation, data collection, and data analysis.

Research Design

The study employed a correlational design. Correlational research is a non-experimental quantitative approach in which the researcher uses the correlational statistic “to describe and measure the degree or association (or relationship) between two or more variables” (Creswell, 2012, p. 12). The study was retrospective in nature, an approach in which “the researcher postdicts...antecedents of causes from known consequences and effects” (Meltzoff, 1998, p. 40). The researcher cannot manipulate the independent variable in a retrospective study, but the researcher can gain understanding by making comparisons (Meltzoff, 1998).

The study included four independent variables, namely, the leadership frames of structural frame, human resource frame, political frame, and symbolic frame. The study's dependent variable was the extent and purpose of social media use. Because the researcher did not manipulate the independent variables, causal inferences could not be drawn from the results (Meltzoff, 1998).

Subject Selection

The study took place in a public university in South Texas. The university is a Hispanic-Serving Institution (HSI) of higher learning, a federal designation given to higher education institutions at which at least 25% of the full-time undergraduate population is Hispanic (Higher Education Act of 1965). The university had a student body of nearly 12,000 bachelor's, master's, and doctoral level students at the time of the study (Texas A&M University-Corpus Christi about us, n. d.). It also had approximately 1,400 employees (Texas Tribune, 2015).

Permission to conduct the study was obtained from the Institutional Review Board (IRB) at Texas A&M University-Corpus Christi (Appendix A). All faculty members and administrators in leadership roles who could be contacted at the institution studied were invited to participate in the study. Permission was requested, but could not be obtained, to contact the entire university's faculty members and administrators at once via a centralized mailing list. Instead, permission was obtained individually from division leaders to contact personnel using the listserv of each respective division. The divisions providing permission for listserv contact included the College of Business, the College of Education and Human Development, the College of Liberal Arts, the College of Nursing and Health Sciences, the College of Science and Engineering, Institutional Advancement, Recreational Sports, Distance Education, the Coastal Bend Business Innovation Center, and the Division of Student Engagement and Success. Other

divisions either did not have centralized listservs available, or the listservs included a relatively high percentage of staff members who did not fit the study's operational definition of a higher education leader. In those cases, personnel in leadership roles were contacted individually by email with an invitation to participate in the survey. These divisions included the Office of the President, Academic Affairs (which encompassed Enrollment Management, Research, Commercialization, and Outreach, and Graduate Studies), Information Technology, Purchasing, Human Resources, Central Receiving, the University Counseling Center, the University Health Center, Career Services, Community Outreach, Mail Services, the Print Shop, and the Library. So as not to overlook any administrators, the online directory of university administration was consulted, and each administrator there who had not been previously contacted as part of another department was emailed individually with an invitation to participate (Texas A&M University-Corpus Christi university administration, n. d.). Due to the large number of employees contacted and the fact that some departmental listservs could not specifically designate faculty or administrator status, it was not always possible to specifically invite only faculty and administrators. Therefore, some staff members who were not in leadership roles also received the invitation and participated in the survey. One week after receiving the initial invitation to complete the survey, the invitees received a follow-up contact that thanked them for completing the survey, if they had already, and reminded them to complete it if they had not yet done so.

A total of 174 personnel responded to the invitation to complete the survey. Of these respondents, 88 were faculty members, 34 were administrators, and 52 were staff. Combining the faculty and administrator responses yielded 122 responses that fit the category of higher education leader, as operationally defined in this study.

Instrumentation

For the purpose of the study, the researcher developed a three-part online questionnaire, the Leadership and Social Media Use (LASMU) instrument (Appendix B). The purpose of the study and consent form were provided at the beginning of the survey. Part I was designed to collect data to answer the first research question. Part II was designed to gather information on the participants' extent and purpose of social media use to answer the second and third research questions. Part III collected background and demographic information to describe the study's participants.

Part I of the questionnaire was derived from Bolman and Deal's (1997) Leadership Orientations Inventory (LOI), which was developed to measure the four frames of leadership. The complete LOI measures leadership orientations in three parts: behaviors, leadership style, and an overall rating that includes the participant's work experience. Because this study focused on the relationship of leadership behaviors with the extent and purpose of social media use, it was delimited to the behaviors section of the LOI. The behaviors section included 32 items. The participants were provided with a 5-point Likert-type scale, with 1 indicating "never," 2 "occasionally," 3 "sometimes," 4 "often," and 5 "always," and were asked to indicate the extent by which each item applied to them. Bolman and Deal (1997) designed the 32 items to measure the four leadership frames. The first item focused on the structural frame, the second on human resource, the third on political, and the fourth on symbolic, with the sequence repeating such that the participant rotated through eight questions about each frame. Items 1, 5, 9, 13, 17, 21, 25, and 29 addressed the structural leadership frame. Items 2, 6, 10, 14, 18, 22, 26, and 30 addressed the human resource frame. Items 3, 7, 11, 15, 19, 23, 27, and 31 addressed the political frame. Items 4, 8, 12, 16, 20, 24, 28, and 32 addressed the symbolic frame. Bolman (2010) reported

reliability coefficients of the LOI as 0.92 for the structural frame, 0.93 for the human resource frame, 0.91 for the political frame, and 0.93 for the symbolic frame.

Part II of the LASMU questionnaire was designed to gather information on the participants' extent and purpose of social media use. The extent of use question was presented as a grid and asked the participants to select one of the following: daily, weekly, monthly, yearly, or never, coded as 5, 4, 3, 2, and 1, respectively. The mean of the respondents' responses was used to measure the extent of social media use.

The purpose of social media use question was also presented as a grid, providing the respondents with four options based upon the Pew Research Center's definition of social media creators and social media curators, plus descriptions from other researchers (Ping Yu, 2016; Romero, Galuba, Asur, & Huberman, 2011; Social networking fact sheet, 2015). Creators are users who post original content that they have created (Ping Yu, 2016; Romero, Galuba, Asur, & Huberman, 2011; Social networking fact sheet, 2015). Curators are users who share content they have found online that was created by others (Social networking fact sheet, 2015). The researcher added a third category, consumers, to encompass uses of social media for purposes such as to browse, read, search, watch, or listen, but not to communicate (Kaplan & Haenlein, 2010; Ping Yu, 2016). Non-users described those who do not use social media in any format. Creators, curators, consumers, and non-users were coded as 4, 3, 2, and 1, respectively. The study's description of content included material published electronically (Kaplan & Haenlein, 2010), a description that the researcher expanded to include photos, videos, text, music, or any other type of content that may be posted.

Part III of the LASMU questionnaire collected demographic information to describe the study's participants. Specifically, the demographic data included gender, ethnicity, highest level

of education attained, job classification (faculty, administrator, or staff), years working in higher education, and years working in a higher education leadership role.

Data Collection

Data collection took place in two stages. First, an email was sent to all employees who could be contacted at the study's university, informing them of the purpose of the study and including a link to its web-based survey. Survey data were collected using Qualtrics, an online survey tool. The first email invitations were sent during the period from April 4 to 8, 2016. The follow-up email invitations were sent one week after the initial ones, from April 11 to 15, 2016. One month was devoted to data collection.

The researcher's contact information was provided within the survey instrument, and the participants' voluntary consent was obtained. One week after the survey was initially distributed, a second email was sent to thank participants who had already completed the survey and remind other prospective participants to take it. All data obtained remained confidential, and participants' names and other identifying information were not gathered.

Data Analysis

The quantitative survey data were entered into the Statistical Package for the Social Sciences (SPSS) for the purposes of data manipulation and analysis. Data were checked for accuracy. Descriptive statistics were used to answer the first, second, and third research questions, as well as to describe the sample. Frequency and percentage distribution tables, as well as measures of central tendency and variability were reported for all data. For the skewed distributions, median was reported as the most appropriate measure of central tendency.

Cronbach's Coefficient Alpha was used to estimate the reliability/internal consistency) of the leadership frames (Crocker & Algina, 1986). Specifically, $\alpha = [k/k-1][1-(\sum \sigma_i^2 / \sigma_x^2)]$, where k is the number of items on the test, σ_i^2 is the variance of item i, and σ_x^2 is the total test variance (sum of the variances plus twice the sum of the co-variances of all possible pairs of its components, that is, $\sigma_x^2 = \sum \sigma_i^2 + 2\sum \sigma_{ij}$) was used to determine the internal consistency of the scale scores.

A univariate repeated measures analysis of variance was employed to test the differences among the four leadership frames. The sphericity assumption was tested, using the Huynh-Feldt Epsilon and Greenhouse-Geisser Epsilon. This assumption requires that the variances of differences for all pairs of repeated measures to be equal, If the average of the two Epsilon values is greater than .70, the sphericity assumption is met (Stevens, 2009). Modified Tukey procedure was performed for the purpose of post hoc analysis. The calculation employed the following formula: $HSD = q_{\alpha; k, (n-1)(k-1)} \sqrt{MSRES/n}$, where $(n-1)(k-1)$ is the error degrees of freedom and MSRES is the error term (Stevens, 2009).

Simple and multiple correlations, as well as hierarchical multiple regression analysis, were employed to examine the relationship between the independent and dependent variables. A series of Pearson's Product-Moment Correlation Coefficient (Field, 2013) was used to examine the direction and magnitude of simple associations between the four leadership frames and the extent of social media use in support of professional and/or institutional goals. A hierachal multiple regression analysis (HMRA) was performed to examine the unique contribution of each of the four leadership frames in explaining the variation in the extent of social media use in supporting professional and/or institutional goals. The Variance Inflation Factor (VIF) was examined to determine if multicollinearity existed. Outliers on predictor variables was examined, using the Hat Elements test; $h = 3p/n$, where $p = k + 1$, and k is the number of

predictors. Any case with greater than the critical h must be examined to determine if it could bias the results. Cook's Distance was used to locate influential cases, which is identified by the value greater than one. Standardized Residuals were examined to identify outliers on the outcome measure; any case greater than three in absolute value is considered an outlier (Pedhazur & Schmelkin, 1991). Coefficient of determination, r^2 , was used to examine the practical significance of the associations (Pedhazur & Schmelkin, 1991).

CHAPTER IV

RESULTS

The purpose of the study was to examine the relationship between professional social media use and leadership frames among higher education leaders. To do so, data on specific leadership frames and social media use were collected and analyzed to answer the study's research questions.

Profile of Subjects

The non-probability sample consisted of 122 administrators and faculty members employed at a federally-designated Hispanic-serving institution of higher education in South Texas. The respondents were predominantly white, female doctoral degree holders with primary roles as higher education faculty. Results are summarized in Table 2.

Table 2
Profile of Subjects, Categorical Variables, n = 122

Variable		F	%
Gender	Female	71	58.20
	Male	51	41.80
Ethnicity	Asian	03	2.50
	Black	04	3.30
	Hispanic	17	13.90
	White	94	77.00
	Other	04	3.30
Education	Bachelor's Degree	01	0.80
	Master's Degree	33	27.00
	Doctoral Degree	88	72.10

Table 2, continued

Variable		F	%
Primary role in higher education	Faculty	88	72.10
	Administrator	34	27.90

On the basis of the medians, a typical participant was 55 years old and had 17.00 years of experience in higher education. Results are summarized in Table 3.

Table 3

Profile of Subjects, Continuous Variables, n = 122

Variable	Minimum	Maximum	Median
Age in years	28.00	71.00	55.00
Years of experience in higher education	1.00	45.00	17.00

Leadership Skills

The higher education employees were asked to complete a 32-item Leadership Orientations Inventory (LOI), using a 5-point Likert-type scaling: 1 = never, 2 = occasionally, 3 = sometimes, 4 = often, and 5 = always. Results are summarized in Table 4.

Table 4

Frequency and Percentage Distributions of Responses to the Leadership Orientations Inventory (LOI), n = 122

Leadership Skill	Response	F	%
Think clearly and logically	Never	0	0.00
	Occasionally	0	0.00
	Sometimes	2	1.70
	Often	86	71.40
	Always	32	26.90
Show high levels of support	Never	0	0.00
	Occasionally	1	0.80
	Sometimes	8	6.60
	Often	66	53.30
	Always	47	38.50
Ability to mobilize people and resources	Never	3	2.50
	Occasionally	2	1.60
	Sometimes	28	23.00
	Often	70	57.40
	Always	19	15.60
Inspire others	Never	1	0.80
	Occasionally	4	3.30
	Sometimes	20	16.40
	Often	73	59.80
	Always	24	19.70

Table 4, continued

Leadership Skill	Response	F	%
Emphasize planning and timeliness	Never	0	0.00
	Occasionally	5	4.10
	Sometimes	13	13.10
	Often	62	50.80
	Always	39	32.00
Build trust through open, collaborative relationships	Never	1	0.80
	Occasionally	3	2.50
	Sometimes	8	6.60
	Often	68	55.70
	Always	42	34.40
Skillful, shrewd negotiator	Never	4	3.30
	Occasionally	22	18.00
	Sometimes	53	43.40
	Often	37	30.30
	Always	6	4.90
Highly charismatic	Never	4	3.30
	Occasionally	21	17.40
	Sometimes	43	34.70
	Often	41	33.90
	Always	13	10.70
Logical analysis and careful thinking	Never	0	0.00
	Occasionally	2	1.60
	Sometimes	8	6.60
	Often	69	56.60
	Always	43	35.20

Table 4, continued

Leadership Skill	Response	F	%
Sensitivity to others' needs and feelings	Never	0	0.00
	Occasionally	2	1.60
	Sometimes	20	16.40
	Often	64	52.50
	Always	36	29.50
Unusually persuasive and influential	Never	1	0.80
	Occasionally	14	11.50
	Sometimes	42	34.40
	Often	60	49.20
	Always	5	4.10
Inspiration to others	Never	2	1.60
	Occasionally	8	6.60
	Sometimes	40	32.80
	Often	61	50.00
	Always	11	9.00
Develop and implement logical policies and procedures	Never	2	1.60
	Occasionally	2	1.60
	Sometimes	15	12.30
	Often	78	63.90
	Always	25	20.50
Foster participation and involvement	Never	1	0.80
	Occasionally	7	5.70
	Sometimes	30	24.60
	Often	67	54.90
	Always	17	13.90

Table 4, continued

Leadership Skill	Response	F	%
Deal with organizational conflict	Never	3	2.50
	Occasionally	10	8.20
	Sometimes	58	47.50
	Often	45	36.90
	Always	6	4.90
Highly imaginative and creative	Never	3	2.50
	Occasionally	12	9.80
	Sometimes	36	29.50
	Often	55	45.10
	Always	16	13.10
Approach problems with facts and logic	Never	0	0.00
	Occasionally	1	0.80
	Sometimes	6	4.90
	Often	74	60.70
	Always	41	33.60
Helpful and responsive to others	Never	0	0.00
	Occasionally	1	0.80
	Sometimes	11	9.00
	Often	70	57.40
	Always	40	32.80
Effective in getting support from influential people	Never	2	1.60
	Occasionally	7	5.70
	Sometimes	46	37.70
	Often	61	50.00
	Always	6	4.90

Table 4, continued

Leadership Skill	Response	F	%
Communicate strong sense of mission and vision	Never	1	0.80
	Occasionally	7	5.70
	Sometimes	30	24.60
	Often	66	54.10
	Always	18	14.80
Set specific goals and hold people accountable	Never	2	1.60
	Occasionally	5	4.10
	Sometimes	30	24.60
	Often	64	52.50
	Always	21	17.20
Listen well to others' ideas and input	Never	0	0.00
	Occasionally	3	2.50
	Sometimes	16	13.20
	Often	66	54.50
	Always	36	29.80
Politically sensitive and skillful	Never	3	2.50
	Occasionally	13	10.70
	Sometimes	50	40.50
	Often	48	39.70
	Always	8	6.60
See beyond current realities	Never	2	1.70
	Occasionally	6	5.00
	Sometimes	36	30.00
	Often	64	51.70
	Always	14	11.70

Table 4, continued

Leadership Skill	Response	F	%
Extraordinary attention to detail	Never	0	0.00
	Occasionally	12	9.80
	Sometimes	30	24.60
	Often	51	41.80
	Always	29	23.80
Give personal recognition for job well done	Never	0	0.00
	Occasionally	1	0.80
	Sometimes	15	12.30
	Often	67	54.90
	Always	39	32.00
Develop alliances to build support	Never	1	0.80
	Occasionally	8	6.60
	Sometimes	32	26.20
	Often	59	48.40
	Always	22	18.00
Generate loyalty and enthusiasm	Never	0	0.00
	Occasionally	5	4.10
	Sometimes	30	24.80
	Often	69	56.20
	Always	18	14.90
Strong belief in structure and chain of command	Never	0	0.00
	Occasionally	5	4.10
	Sometimes	25	20.50
	Often	53	43.40
	Always	39	32.00

Table 4, continued

Leadership Skill	Response	F	%
Highly participative manager	Never	1	0.80
	Occasionally	1	0.80
	Sometimes	24	19.70
	Often	70	57.40
	Always	26	21.30
Succeed in face of conflict and opposition	Never	2	1.60
	Occasionally	5	4.10
	Sometimes	35	28.70
	Often	69	56.60
	Always	11	9.00
Serve as model of organizational aspirations and values		3	2.50
		6	4.90
		37	30.30
		64	52.50
		12	9.80

Based on the means of the responses, the 32 LOI skills were ranked from the highest to the lowest. The top 10 most highly ranked skills were associated with the human resource frame or the structural frame. The 10 lowest ranked skills were associated with the political frame or the symbolic frame. Results are summarized in Table 5.

Table 5

Ranking of the Leadership Orientations Inventory (LOI) Skills, n = 122

Leadership Skill	Mean*
Show high levels of support	4.30
Approach problems with facts and logic	4.27
Logical analysis and careful thinking	4.25
Think clearly and logically	4.25
Helpful and responsive to others	4.22
Build trust through open, collaborative relationships	4.20
Give personal recognition for job well done	4.18
Listen well to others' ideas and input	4.12
Emphasize planning and timelines	4.11
Sensitivity to others' needs and feelings	4.10
Strong belief in structure and chain of command	4.03
Develop and implement logical policies and procedures	4.00
Highly participative manager	3.98
Inspire others	3.94
Ability to mobilize people and resources	3.82
Generate loyalty and enthusiasm	3.82
Extraordinary attention to detail	3.80
Set specific goals and hold people accountable	3.80
Develop alliances to build support	3.76
Communicate strong sense of mission and vision	3.76
Foster participation and involvement	3.75
Succeed in face of conflict and opposition	3.67
See beyond current realities	3.67
Serve as model of organizational aspirations and values	3.62
Inspiration to others	3.58
Highly imaginative and creative	3.57

Table 5, continued

Leadership Skill	Mean*
Effective in getting support from influential people	3.51
Unusually persuasive and influential	3.44
Politically sensitive and skillful	3.37
Deal with organizational conflict	3.34
Highly charismatic	3.31
Skillful, shrewd negotiator	3.16

*1 = never, 2 = occasionally, 3 = sometimes, 4 = often, 5 = always

Leadership Frames

The 32-item LOI measured four leadership frames. Each frame included eight items.

The reliability coefficients ranged from 0.81 to 0.86, indicating internal consistency of the scale scores. The human resource frame was endorsed the most, followed by the structural frame, the symbolic frame, and the political frame. Results are summarized in Table 6.

Table 6

Ranking of Leadership Frames, n = 122

Frame	# of items	Reliability Coefficient	M*	SD
Human Resource	8	0.86	4.11	0.51
Structural	8	0.82	4.06	0.49
Symbolic	8	0.84	3.66	0.60
Political	8	0.86	3.51	0.58

* 1 = never, 2 = occasionally, 3 = sometimes, 4 = often, 5 = always

A univariate repeated measures analysis of variance was performed to examine the differences among the four leadership frames. The sphericity assumption was met, because both the Greehouse-Geisser Epsilon (0.86) and Huynh-Feldt Epsilon (0.88) were greater than 0.70 (Stevens, 2009). The mean differences were statistically significant, $F(3, 363) = 95.16, p < .01$. Results are summarized in Table 7.

Table 7

Repeated Measures ANOVA Results for Leadership Frames, n = 122

Source	SS	df	MS	F*
Leadership Frame	32.15	3	10.72	95.16
Error	40.88	363	0.11	
Block	102.70	121	0.85	

* $p < .01$

A modified Tukey procedure was performed for the purpose of post hoc analysis. The results showed that all pairwise comparisons among the frames were statistically significant with the exception of human resource frame vs. structural frame. Results are summarized in Table 8.

Table 8

Post Hoc Results for Leadership Frames, n = 122

Pair-Wise Comparison	Significance*
Human Resource Frame vs. Structural Frame	NS
Human Resource Frame vs. Symbolic Frame	S
Human Resource Frame vs. Political Frame	S
Structural Frame vs. Symbolic Frame	S
Structural Frame vs. Political Frame	S
Symbolic Frame vs. Political Frame	S

* NS = not statistically significant, S = statistically significant

Social Media Use

Respondents were provided a list of eight social media services and were asked to indicate the reasons (posting, sharing, or consuming content) for which they had used those services in support of professional and/or institutional goals. More than one reason could be indicated for each service. Facebook was endorsed the most for posting, sharing, and consuming various contents. There was some evidence of using YouTube to share and consume the content that others had created. LinkedIn was typically used to consume the content that had already been created by others. Very few reported using Instagram, Pinterest, Reddit, and Snapchat in support of professional and/or institutional goals. Results are reported in Table 9.

Table 9

Reasons for Use of Social Media in Support of Professional and/or Institutional Goals
n = 122*

	To post original content that you have created	To share content that others have created	To consume (read, view, etc.) content created by others	None/don't use
Facebook	34.40%	48.40%	59.80%	30.30%
Instagram	7.40%	5.70%	10.70%	82.00%
LinkedIn	14.80%	18.90%	41.00%	47.50%
Pinterest	5.70%	9.00%	12.30%	80.30%
Reddit	0.00%	0.80%	1.60%	91.80%
Snapchat	0.00%	0.00%	0.80%	92.60%
Twitter	13.90%	16.40%	20.50%	67.20%
YouTube	14.80%	31.10%	55.70%	32.00%

*More than one reason could be indicated for each service.

Respondents were also asked to indicate how frequently they used each of the eight listed social media services in support of professional and/or institutional goals. As shown in Table 9, Facebook was the service most commonly used daily, and it also had relatively high usage compared with the other services on a weekly basis and monthly basis. YouTube was used more frequently than any other service on a weekly or monthly basis. LinkedIn was used the most on a yearly basis. The majority of the respondents reported that they had never used Instagram, Pinterest, Reddit, Snapchat, and Twitter. The responses were coded as 5 = daily, 4 = weekly, 3 = monthly, 2 = yearly, and 1 = never. The mean of the respondents' responses was used to compute the overall extent of use which served as the study's outcome measure. The score ranged from 1.00 to 3.50 ($M = 1.76$, $SD = 0.58$), suggesting that the use of the eight social media services in support of professional and/or institutional goals was not high in the sample of higher education faculty members and administrators. Results are summarized in Table 10.

Table 10

Extent of Use of Social Media in Support of Professional and/or Institutional Goals, n = 122

	Daily	Weekly	Monthly	Yearly	Never	No response
Facebook	23.80%	19.70%	16.40%	9.80%	30.30%	0.00%
Instagram	2.50%	0.80%	7.40%	1.60%	86.90%	0.80%
LinkedIn	1.60%	16.40%	23.00%	12.30%	46.70%	0.00%
Pinterest	1.60%	2.50%	7.40%	4.10%	83.60%	0.80%
Reddit	0.80%	0.00%	1.60%	0.00%	96.70%	0.00%
Snapchat	0.00%	0.00%	0.00%	1.60%	96.70%	1.60%
Twitter	4.10%	5.70%	12.30%	5.70%	71.30%	0.80%
YouTube	2.50%	22.10%	36.90%	4.90%	33.60%	0.00%

Correlational and Regression Analyses

A series of Pearson's Product-Moment Correlation coefficients was used to examine the direction and magnitude of simple associations between the four leadership frames and the extent of social media use in support of professional and/or institutional goals. The correlations between the human resource frame and use, $r = 0.24, p < 0.01$; symbolic frame and use, $r = 0.23, p < 0.05$; and political frame and use, $r = 0.22, p < 0.05$; were statistically significant. The correlation between the structural frame and use was not statistically significant, $r = 0.13, p = 0.14$. Results are summarized in Table 11.

Table 11

Simple Associations between Leadership Frames and Extent of Social Media Use, All, $n = 122$

Leadership Frame	r	p
Structural Frame	0.13	0.14
Human Resource Frame	0.24	< 0.01
Political Frame	0.22	< 0.05
Symbolic Frame	0.23	< 0.05

A hierachal multiple regression analysis (HMRA) was performed to examine the unique contribution of each of the four leadership frames in explaining the variation in the extent of social media use in supporting professional and/or institutional goals. The average variance inflation factor (VIF), $[1.87 + 4.15 + 3.48 + 1.56] / 4 = 2.77$, was greater than 1.00, indicating multicollinearity. The critical hat element, h , was calculated to be $h = 3(5/122) = 0.12$, and was used to look for outliers on independent variables; there were two outliers. Cook's Distance

measures ranged from 0.00 to 0.35, suggesting that there were no influential cases. Standard residuals ranged from -1.89 to 3.79 and showed that there was one outlier on the basis of the dependent variable. In the sample of 122, a total of three outliers were not problematic, and the data were included in the HMRA.

The human resource frame was entered into the regression equation first and accounted for 5.90% of the variation, which was statistically significant, $F(1, 120) = 7.47, p < 0.01$. The contributions of the symbolic frame, political frame, and structural frame were negligible and not statistically significant. The prediction equation was $\text{Use} = 0.63 + .28(\text{human resource})$.

To better understand the nature of the associations, the analysis was replicated separately for faculty members and administrators. As can be seen in Table 11, results for faculty members were similar to those reported for all participants, and the HMRA showed that the human resource frame was the only statistically significant predictor of the outcome measures, which accounted for 1.16% of the variation, $F(1, 86) = 11.29, p < 0.01$. Results are summarized in

Table 12.

Table 12

Simple Associations between Leadership Frames and Extent of Social Media Use, Faculty, $n = 88$

Leadership Frame	r	p
Structural Frame	0.07	0.54
Human Resource Frame	0.34	< 0.01
Political Frame	0.22	< 0.05
Symbolic Frame	0.29	< 0.05

Among the administrators, none of the leadership frames was useful in explaining the variation in the extent of use of various social media services in support of professional and/or institutional goals. Results are summarized in Table 13.

Table 13

Simple Associations between Leadership Frames and Extent of Social Media Use,
Administrator, n = 34

Leadership Frame	r	p
Structural Frame	0.24	0.18
Human Resource Frame	0.01	0.97
Political Frame	0.19	0.28
Symbolic Frame	0.07	0.68

There were no statistically significant differences between the faculty members and administrators on the leadership frames of structural, human resource, or symbolic. The administrators endorsed the use of political frame more than did the faculty members, and the difference was statistically significant, $t(120) = 2.73, p < 0.01$.

Summary

Participants in this study were most likely to align with the human resource frame and least likely to align with the political frame. The human resource frame was a statistically significant predictor of social media use in support of professional and/or institutional goals among faculty and administrators combined, as well as among faculty members. Among administrators alone, however, none of the frames was a statistically significant predictor of the extent of social media use.

Among participants, Facebook was the social media service most commonly used on a daily basis in support of professional and/or institutional goals, followed by YouTube, LinkedIn, and Twitter. YouTube was most commonly used on a weekly basis, and YouTube and LinkedIn, respectively, were most commonly used on a monthly basis. Participants reported relatively little professionally-related use of Instagram, Pinterest, Reddit, or Snapchat. In addition to reporting their extent of social media use, participants also indicated their purposes of use. For each of the eight services, the most frequent purpose of use was to consume content created by others. The next most frequent purpose was to share content created by others. The least frequent purpose of use was to post original content created by the participant.

CHAPTER V

SUMMARY, CONCLUSIONS, AND DISCUSSION

Introduction

The study assessed the relationship between professional social media use and leadership frames among higher education leaders. As part of this, the study examined the leadership frames that higher education leaders were most likely to use. Data on specific leadership frames and social media use were collected and analyzed from a non-probability sample of 122 administrators and faculty members employed at a federally-designated Hispanic-serving institution of higher education in South Texas. The following research questions guided the study:

1. Which leadership frames do higher education leaders use?
2. To what extent do higher education leaders use social media in their professional roles?
3. For what reasons do higher education leaders use social media in their professional roles?
4. What is the relationship between leadership frames and the extent of social media use?

The study was significant because social media services are powerful communication tools for reaching higher education audiences (Moran, Seaman, & Tinti-Kane, 2011; Perrin, 2015), and higher education faces communication problems regarding image and politics (Altbach, 2011, Bogue & Aper, 2000), yet, higher education leaders are generally not maximizing the potential of social media to communicate their perspectives (Ng'ambi & Bozalek, 2013). By studying ways in which leaders at a South Texas institution of higher education use social media, and by correlating the leaders' usage with their leadership orientations, the study offered insight on potential facilitators or impediments to the leaders' use of social media as a communication tool in support of professional and institutional goals.

Summary of the Results

The study surveyed a non-probability sample of 122 administrators and faculty members at a South Texas institution of higher education. Analysis of the quantitative data revealed that participants were most likely to align with the human resource frame and least likely to align with the political or symbolic frames. The study found that the human resource frame was a statistically significant predictor of social media use in support of professional and/or institutional goals among the faculty and administrators combined, as well as among the faculty members alone. Among the administrators alone, however, none of the frames were statistically significant predictors of social media use.

The quantitative data measured the overall familiarity of participants with eight of the most commonly used social media services in the United States, as well as the extent to which participants used those services. The greatest number of participants by far reported having used Facebook, with YouTube and LinkedIn coming in second and third, respectively. Participants also reported using Facebook more frequently than any of the other services on a daily, weekly, and monthly basis. The majority of the participants reported never having used Instagram, Pinterest, Reddit, Snapchat, or Twitter. The participants were asked to indicate the reasons (posting, sharing, or consuming content) for which they used the eight social media services in support of professional and/or institutional goals. Universally, the participants' most frequent purpose for using any of the services was to consume content created by others. For each service but Instagram, the participants' least frequent purpose for using social media was to post original content they had created.

Conclusions

Based upon the results, the researcher concluded that the leaders at the South Texas institution of higher education who participated in the study were mostly likely to associate with the human resource frame and least likely to associate with the political frame. Association with the human resource frame was most likely to positively influence the extent of social media use among the higher education leaders who participated in the study. Results also showed that the majority of higher education leaders who took part in the study and who used social media did so passively by consuming content that others had posted. Relatively few participants used social media actively by posting and sharing content. These findings aligned with research discussed in the literature review, which showed that while many educators were familiar with social media and used it regularly, most of their professional use of social media was relegated to passively viewing content or to activities such as playing videos for their classes (Charleson & Lyall, 2014; Moran, Seaman & Tinti-Kane, 2011).

Discussion

Responses of the 122 leaders at a South Texas institution of higher education who participated in this study indicated that the vast majority did not use some of today's most popular social media services, namely, Twitter, Instagram, and Snapchat, at all in their professional lives. The majority also did not professionally use Reddit or Pinterest, social media services with powerful influential abilities among more niche followings. The participants who did use social media in support of professional or institutional goals most frequently used Facebook and YouTube, and to a lesser extent, LinkedIn. However, responses indicated that even those uses were overwhelmingly for passive activities such as reading, browsing, or playing videos for classes of students.

Responses of the study participants indicated that the leaders aligned most frequently with the human resource frame. The human resource frame was also the only one of the four frames whose unique contribution was found to be statistically significant in explaining the variation in the extent of social media use in supporting professional and/or institutional goals. The finding of only one statistically significant predictor among the four leadership frames could be attributed to multicollinearity. However, the prominence of the human resource frame also makes sense, given that the frame focuses on people and their role in organizations (Bolman & Deal, 1997), and higher education is a people-focused industry.

More significant than the expected prevalence of the human resource frame is what it means in relation to professional social media use, the focus of the study. The human resource frame “regards people’s skills, attitudes, energy, and commitment as vital resources capable of either making or breaking an enterprise” (Bolman & Deal, 1997, p. 101). Fundamentally, it holds that people genuinely want to be productive and that quality work can be mutually rewarding for employees and organizations alike. The human resource frame aligns with McGregor’s Theory Y of leadership, under which employees are self-directed on behalf of their organizations due to a desire to fulfill their personal higher-level needs (Bolman & Deal, 1997).

The study was conducted after the researcher had spent years noticing social media posts containing views on negative aspects of higher education, such as tuition increases, unsatisfactory course availability, struggles with student loans, criticism of employee salaries, worthless-seeming course requirements, negativity about faculty tenure, worse than expected job opportunities and salaries for graduates, and the lack of utility of a college degree. Frequently, the posts attributed the problems using incorrect or unsubstantiated information. The information posted made it evident that the author often lacked understanding of the political,

legal, practical, and financial constraints faced by higher education, and of the diverse benefits of higher education institutions to society that cannot be measured simply by the dollar values of graduates' salaries. Often, the posts gained traction through positive interaction from other users, such as agreeing comments, shares, and gestures of approval, sometimes spreading on a massive scale. Such posts can influence a growing group of people with information that may not accurately portray certain situations involving higher education. However, even in public social media conversations in which a variety of opinions were shared, the researcher almost never saw a higher education employee join the conversation to discuss the institutions' approaches to the subject at hand. The silence was glaring.

No institution is perfect, and higher education undoubtedly fails certain constituents. Those constituents have the constitutional right to speak their minds, a right that the researcher enthusiastically supports. Social media has provided the valuable consumer benefit of empowering everyday people to reach broad audiences and facilitating the ability to communicate and connect instantly, regardless of time and place. Such powers give social media a democratic ability to amplify the voices of those who otherwise might not be heard. This is a positive tool for society. The effects of a strong communication tool become less positive, however, when discussions gain traction and influence others with information that is poorly sourced or misunderstood. As is the case in all parts of a democratic society, the answer is not to curtail the conversation. It is to add additional perspectives. This is where higher education leaders have potentially invaluable roles as brand ambassadors. However, research from this study and others show that largely, higher education leaders have passive or absent roles in the social media discussions surrounding their industry. Passive social media use is a valuable source of learning, but it does not contribute to the exchange of information through which

higher education has carved its place of value in society. Passive activity does little to promote the research with which leaders are currently engaged, to advance public opinion of higher education, or to promote understanding and goals that align with higher education needs. It does nothing to empower others to learn.

At this point, questions may arise, such as, whose job is this, anyway? Why should higher education faculty and administrators help pick up slack for their industry's reputational shortcomings? Faculty members often feel overloaded to begin with by teaching responsibilities, research quotas, service obligations, and the additional administrative duties that increasingly fall to them as a result of tightening institutional budgets. Administrators face their own stresses due to ever-increasing pressure to do more with less. However, as other industry leaders, such as Southwest Airlines and Starbucks, have concluded, the real question is, whose job *isn't* it to advance institutional reputation? (Holmes, 2015). Business is not always an ideal model for higher education, but in this case, given the tendency of higher education to lag in areas of social media usage (Kimmons & Veletsianos, 2015) and in technology adoption in general (Ng'ambi & Bozalek, 2013; Taylor & Machado-Taylor, 2010), looking to institutions with more experience can prove instructive. Private institutions are increasingly deciding that managing reputation is every team member's job (Holmes, 2015). Under the notion of situated expertise developed by Thornborrow (2014), everyone has expertise from his or her own perspectives and life experiences to share, and companies have found that increasing the number of team members talking about a brand online also increases the diversity and personality of the positive brand message (Holmes, 2015). Using such a model, communications are not limited to the boundaries of a single office and the formalities of official accounts. Every leader has something valuable to

say, and every leader is a potential brand ambassador. Leaders can foster such cultures of communications throughout their respective areas, as well.

Implications

The higher education leaders who participated in this study demonstrated relatively limited and passive social media involvement, which highlights an area in need of improvement. However, the statistically significant contribution of the human resource frame relative to social media use presents a positive sign for the leaders' abilities to increase their impact using social media. The human resource frame is associated with McGregor's Theory Y of leadership, under which employees are self-directed on behalf of their organizations due to a desire to fulfill their personal higher-level needs (Bolman & Deal, 1997). Theory Y, in turn, lends itself to supporting Wheatley's (2005) living system model of organizational function. Under their model, localized sparks of inspiration can gain breadth and momentum, ultimately prompting widespread systemic change (Wheatley, 2005). Social media provides leaders agency they may not have in their traditional roles, in the form of ability to communicate with broad audiences and thereby contribute to changing views of their industry. According to Macafee and Desimone (2012), "social media allow for a bottom-up or grassroots level of political participation not beholden to institutional control. Consequently, social media now represent a shift from organizational-based communication to individual and interpersonal communication" (Macafee & Desimone, 2012, p. 580). The practice of higher education leaders taking increasingly active social media roles can put a personal face on an industry that can too easily become a target for unconstructive criticism and political action.

If leaders do not set the tone for an institution, their subordinates, constituents, and customers cannot be expected to propel the charge of public enthusiasm entirely on their own. The nature of education is to get involved when an issue arises, rather than turn the other way. The nature of leadership impels the same. The study operationally defined a higher education leader as any person whose employment at an institution of higher education involves influencing others toward an outcome (DuBrin, 1990), and leadership itself involves “persuading people to set aside, for a time, their individual concerns and pursuits and work in support of the communal interest” (Siewiorek, et al., 2013, p. 1014). Higher education leaders have both the knowledge and the platform to join the larger conversation surrounding their industry. They are accustomed to doing so via scholastic endeavors, such as published research, conference presentations, guest speaker appearances, and panel discussions. Most leaders have a finger on the pulse of their industry and are willing and able to contribute. Their contributions should include social media activity.

One key to increasing leaders’ abilities and desires to participate in social media in their professional roles is increased institutional support. For faculty, this may mean that provosts, deans, and department chairs encourage and accept portfolios showing active professional social media participation as a component of service to the faculty member’s institution of employment, a factor taken into account during tenure and promotion decisions. A social media portfolio need not come at the expense of any other components of a faculty dossier, but it should be legitimized as another valid example of service to the institution. For staff leaders, support may mean supervisors encouraging a daily period of time, even if relatively brief, devoted to participating actively in social media. From an institutional perspective, supporting active social media engagement could mean making technical support available to those with

questions about using the various services, and also using internal channels of communication to support and encourage a culture of active professional social media use. Another key is users' comfort with the media. Employees may understandably wish to keep personal and professional business separate, and in many cases it would make sense to create separate accounts for professional use. Institutions could offer optional training so that those unfamiliar with social media services could learn tips and best practices for effective use, as well as becoming familiar with institutional policies regarding communication.

As with any emerging practice, leaders' social media activity should be phased in gradually, and it should be encouraged, but optional. Forcing communication creates an outcome that is neither genuine nor effective. Social media participation should be approached as a positive, efficient tool for advancing professional and institutional goals. Increasing social media activity may sound daunting to leaders with full schedules, but social media engagement need not take large chunks of time. Engagement can start as simply as a 140-character tweet containing a sentence and photo or link about a faculty member's latest research or service project. It could also entail a thoughtful response that contributes relevant information to a discussion. Other valuable examples of active use could include posting or sharing things such as institutional achievements, ways in which the industry is working to improve, information on opportunities offered, photos of activities in progress, and success stories of students, employees, or alumni. Information does not have to be universally positive. What matters is that it is genuine. Well-informed critical discussion can prove as valuable as complimentary discussion in advancing an industry for the good of all involved. Constructive details of working through challenges and learning from past issues help personify an institution and show its efforts to meet changing needs. Improved communication can enhance understanding on all sides, and

understanding is at the core of everything higher education leaders are employed to support and promote. Leaders cannot ignore one of the most important communications tools of this era as a vehicle for supporting their missions. When small actions such as active contributions to social media content are multiplied by hundreds of leaders at thousands of institutions, the implications can become quite large.

Recommendations for further research

The quantitative nature of the study offers the possibility to delve into the subject in greater depth through a qualitative study of leaders at the same institution. A follow-up qualitative study could help explain the quantitative findings by exploring participants' reasons for their social media habits, their barriers to active use, and their perspectives on social media as a communication tool within their profession. Grounded theory would be a strong qualitative methodology for addressing this topic, because it involves interaction with a relatively large number of participants and the ability to generate theory in the course of data collection and analysis (Peshkin, 1993). Grounded theory has roots in symbolic interactionism, which developed during the middle of the 20th century and assumes that humans develop, evolve, and interpret the meanings of things based on their social interactions (Crotty, 1998). Those roots make grounded theory an appropriate methodology for studying social communication habits related to a human-resources-oriented institution such as higher education.

The researcher also suggests replicating the quantitative study in a different setting. The Hispanic-serving South Texas higher education institution that served as the setting for the study had not been the direct subject of any large-scale recent controversy discussed widely on social media, so the topic of social media use in professional contexts was likely not one at the

forefront of the participants' minds. It would be interesting to conduct the study at a higher education institution with similar characteristics that had recently been the subject of widespread, heated discussion on social media, then to compare perspectives.

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APPENDIX A
IRB APPROVAL
IRB APPLICATION



OFFICE OF RESEARCH COMPLIANCE
Division of Research, Commercialization and Outreach

8900 Ocean Drive, Unit 5444
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O 361.885.2497 • F 361.885.2798

Human Subjects Protection Program		Institutional Review Board
APPROVAL DATE:	March 10, 2016	
TO:	Ms. Alissa Mejia	
CC:	Dr. Kamilar Kouzekanani	
FROM:	Office of Research Compliance Institutional Review Board	
SUBJECT:	Initial Approval	
Protocol Number:	IRB #15-16	
Title:	Relationships between Higher Education Leadership Behaviors and Professional Social Media Use	
Review Category:	Qualifies for Exemption	
Approval determination was based on the following Code of Federal Regulations:		
Eligible for Exemption (45 CFR 46.101)		
Criteria for exemption has been met (45 CFR 46.101) - The criteria for exemption listed in 45 CFR 46.101 have been met (or if previously met, have not changed).		
(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.		
Provisions:		
Comments:	The TAMUCC Human Subjects Protections Program has implemented a post-approval monitoring program. All protocols are subject to selection for post-approval monitoring.	

This research project has been granted the above exemption. As Principal Investigator, you assume the following responsibilities:

1. Informed Consent: Information must be presented to enable persons to voluntarily decide whether or not to participate in the research project unless otherwise waived.
 2. Amendments: Changes to the protocol must be requested by submitting an Amendment Application to the Research Compliance Office for review. The Amendment must be approved before being implemented.
 3. Completion Report: Upon completion of the research project (including data analysis and final written papers), a Completion Report must be submitted to the Research Compliance Office.
 4. Records Retention: All research related records must be retained for three years beyond the completion date of the study in a secure location. At a minimum these documents include: the research protocol, all questionnaires, survey instruments, interview questions and/or data collection instruments associated with this research protocol, recruiting or advertising materials, any consent forms or information sheets given to
-

participants, all correspondence to or from the IRB or Office of Research Compliance, and any other pertinent documents.

5. Adverse Events: Adverse events must be reported to the Research Compliance Office immediately.
6. Post-approval monitoring: Requested materials for post-approval monitoring must be provided by dates requested.

FOR COMPLIANCE OFFICE USE ONLY:	
IRB# 15-16	
Date Received:	
<input type="checkbox"/> Revision	

Application for Review of Research Involving Human Subjects Institutional Review Board (IRB)



Texas A&M University-Corpus Christi

INSTRUCTIONS

1. Complete CITI Training

CITI training is required for all researchers and faculty advisors listed on the protocol. Completion reports DO NOT need to be sent with protocol application if CITI was completed through TAMUCC.

2. Complete Form

All sections of the form are required. The protocol review will not begin if any section is incomplete.

3. Submit Application & Completed Supplemental Documents: IRB protocol application forms are ONLY accepted in electronic format. Please utilize digital signatures and email form with the IRB Protocol Application Form to IRB@tamucc.edu. Review of application will not begin until all required documentation is received.

Please contact Kassandra Brown at (361)825-2892 or kassandra.brown@tamucc.edu or Erin Sherman at (361)825-2497 or erin.sherman@tamucc.edu for questions or assistance completing this application.

INVESTIGATOR INFORMATION

	Name	Email (USE TAMUCC EMAIL ADDRESS)	College	Category	Category (Other)
PI	Alissa Mejia	alissa.mejia@tamucc.edu	Education	Graduate Student	
Co-PI (1)	Kamilar Kouzeikanani	kamilar.kouzeikanani@tamucc.edu	Education	Faculty	
Co-PI (2)					
Co-PI (3)					
Co-PI (4)					
Co-PI (5)					

PROJECT INFORMATION

A. Research Classification: Doctoral Dissertation Other: _____

Please review the Human Subject Research Categories at the end of the protocol form before completing B.

B. Review Classification: Exempt (2)

Submit copies of external funding proposal with IRB protocol application, if applicable.

C. Is the project externally funded? No Funding Start Date: _____ Funding Agency: _____

D. Project Title: Relationships between Higher Education Leadership Behaviors and Professional Social Media Use

E. The starting date CANNOT be a date before IRB approval is received. If you will start as soon as approval is received, enter "Upon IRB Approval" for the starting date.
F. The completion date is an estimated date of completion. A Completion Report is REQUIRED at the conclusion of the project noting the actual completion date.

E. Starting Date: Upon IRB Approval

F: Estimated Completion Date: May 2017

PROJECT PURPOSE & OBJECTIVES

A. Describe Project Purpose. Be specific and thorough.

The purpose of the study is to examine the relationship between professional social media use and leadership frames among higher education leaders. Leadership frames refer to Bolman and Deal's (1997) social sciences model that consolidates major schools of thought about organizational theory into four distinct perspectives, namely, structural frame, human resource frame, political frame, and symbolic frame.

Bolman, L. G. & Deal, T. E. (1997). Reframing organizations: Artistry, choice, and leadership (2nd ed.). San Francisco, CA: Jossey-Bass.

B. Describe Project Objectives and/or Research Questions. Be specific and thorough.

This study will answer the following research questions:

1. Which leadership frames do higher education leaders use?
2. To what extent do higher education leaders use social media in their professional roles?
3. How do higher education leaders use social media in their professional roles?
4. What is the relationship between leadership frames and the extent of social media use?
5. What is the relationship between leadership frames and the purpose of social media use?

RESEARCH SUBJECTS & RECRUITMENT (Description, Source and Recruitment of Research Subjects)

A. Indicate whether the following populations will be specifically targeted for inclusion in the project. Inclusion and exclusion criteria needs to be described in detail in Section B. Select Y or N for each participant category.

Adults over the age of 18 (ABLE to legally consent)	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Prisoners (adults or juveniles)	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Adults over the age of 18 (UNABLE to legally consent)	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Participants whose first language is NOT English	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Individuals under the age of 18 (minors)	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Students enrolled in a researcher's course(s)	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Pregnant Women, fetuses, and/or neonates <small>Note: Projects including this vulnerable population are generally health care/medical studies specifically targeting research of pregnant women, fetuses, and/or neonates. Pregnant women can be included in projects if all inclusion criteria is met and a specific exclusion is not part of the project design. Select "No" unless the project specifically involves the inclusion of pregnant women, fetuses, and/or neonates.</small>	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Employees under the direct supervision of a researcher	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N

B. Describe the inclusion and exclusion criteria that will be used to define who is included or excluded in the final participant population (ex. minimum age, grade range, physical characteristics, learning characteristics, professional criteria, etc.)

The study will target Texas A&M University-Corpus Christi employees, 18 years of age and older.

C. Target number of participants (Include minimum target if a specific target is not appropriate for project design.)

The study will target a minimum of 100 participants.

D. THIS SECTION MUST BE COMPLETED WHEN CONDUCTING RESEARCH AT OR RECRUITING PARTICIPANTS FROM NON-TAMUCC FACILITIES

NOTES:

1. Specifically name locations for research and/or recruitment of participants.
2. Written permission (email, letter, etc.) required for all non-TAMUCC locations. See IRB Forms website for specific permission requirements.
3. Written permission must be submitted with IRB protocol application.

N/A - Not conducting research or recruiting participants from non-TAMUCC facilities

Specify location(s) of project and/or recruitment of participants.

See notes for off-campus locations above.

Participants will be recruited by emailing faculty and staff at Texas A&M University-Corpus Christi.

E. RECRUITMENT

NOTE:

Submit copies of all recruitment materials (emails, online postings, fliers, etc.) with IRB protocol application. Written scripts are needed for any verbal recruitment materials.

E(1). Describe the methods that will be used to identify pool of potential participants.

Any employee of Texas A&M University-Corpus Christi will be considered a potential participant.

E(2). Describe when, where and how potential participants will be recruited.

Upon IRB approval, potential participants will be contacted by email (see attached).

E(3). Describe materials that will be used to recruit participants.

*See note above regarding submission of recruitment materials.

Please see the attached email script.

E(4). Describe how materials to recruit participants will be distributed/how participants will be contacted (ex. online, via email, through faculty members, through a professional association, etc.). Include description of any assistance that will be needed to distribute recruitment materials (ex. listserv owners, faculty permission for classroom recruitment, etc.)

Participants will be contacted by an email (attached) using the Outlook system. In divisions for which listservs exist, listserv owners will be asked for permission to send to their groups. If a listserv can not be located for a particular division, potential participants will be reached by group email using the university web site, including the public directory of contact information.

E(5). Describe the amount, source and timing(s) of any payment(s)/incentive(s) to participants, if applicable.

n/a

RESEARCH DESIGN, METHODS, & DATA COLLECTION/PROTECTION PROCEDURES

METHODS NOTE:

Submit copies of project materials with IRB protocol application (ex. survey, interview questions, data collection form, demographic questionnaire, etc.)

A. Select the appropriate description for data collection and project records below.

DEFINITIONS:

Anonymous: the collection of data in a manner where no one, including the researcher(s), will be able to identify the participant providing responses/data

Confidential: the collection of data in a manner where data may be linked to individual participants through the use of codes, audio/video recordings, or other identifiers

Anonymous

B. Describe the study design including methods and procedures step-by-step in common terminology. Describe each procedure in detail, including frequency, duration and location of each procedure. The methods must be described completely and in detail (ex. type of data collected, how data will be collected, who will conduct interaction/data collection, etc.).

*For projects with multiple participant classifications (ex. students and teachers, athletes and coaches, etc.): Describe the study design including methods and procedures step-by-step for each classification of participants.

The study will employ a correlational design. All employees will be invited to participate in the study. A three-part online questionnaire, Leadership and Social Media Use (LASMU), will be used for the purpose of data collection (attached). Part I is designed to collect data to answer the first research question. Part II is designed to gather information on the participants' extent and purpose of social media use to answer the second and third research questions. Part III collects background and demographic information to describe the study's participants. The data will be analyzed by the PI, which will be supervised by the co-PI, Dr. Kouzekanani.

C. Describe any equipment (including audio and video equipment) utilized during the project. Note whether the equipment is owned by the researcher(s), university, or other source. Include description of how and where equipment is stored throughout the study (including any security such as password protection on equipment).

The PI's personal computer will be used to store the data and perform data analysis. The computer is located at the PI's TAMUCC office. The computer is kept locked and password-protected when not in use.

D. Describe data protection methods including a minimum of the following: location of data storage, methods for data protection, names of individuals who will have access to data, etc.

*For projects utilizing video and/or audio recordings: Describe, at a minimum, the methods for storage or recordings, transcription of recordings, whether recordings will be erased following transcription, etc.

Consent documents and project data will be stored electronically in the password-protected Qualtrics database for a minimum of three years beyond the completion of the project.

E. Describe retention methods, including at a minimum how long project materials (including consent documents, project data, etc.) will be retained, format of storage (digital, paper, etc.), etc.

*Note: All project materials must be retained for a minimum of three years beyond the completion of the project. Completion of the project is defined as no longer collecting, using, studying or analyzing data.

*Note: Completion report must be submitted at the completion of the project. Please submit to IRB@tamucc.edu.

Consent documents and project data will be stored electronically in the password-protected Qualtrics database for a minimum of three years beyond completion of the project.

RISKS & PROTECTION MEANS

A. Select all levels of risk that apply to the project. Select Y or N for each risk category.

No risk	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Minimal risk Definition: the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Greater than minimal risk	<input type="checkbox"/>	<input checked="" type="checkbox"/>

B. Describe each potential risk and the steps taken to protect human subject participants from the risk (ex. breach of confidentiality, possibly injury, psychological distress, pressure to conform, pressure to participate/coercion, etc.). Consider physical, psychological, social, legal and economic risk.

	Risk	Protection Mechanism
1.	The research involves minimal risks to participants, no greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.	Participants will be provided an informed consent form, with adequate time to review it before deciding whether to participate. Participants will remain anonymous. Their names and/or IP addresses will not be collected. In accordance to the consent, they can withdraw at any time & stop completing the online survey questionnaire.
2.		
3.		
4.		
5.		

	Risk	Protection Mechanism
6.		
7.		
8.		
9.		
10.		

C. Describe the protection means specifically and how participants will be provided information regarding and gain access to any necessary outside assistance (ex. medical care, counseling, etc.) if available.

Participants will be provided a consent form before entering the survey, with adequate time to review it before deciding whether to participate. If they do not agree to the consent form, they will not be able to continue, and they can leave the survey. If participants choose not to participate, they can do so without any penalty. Participants' names and/or IP addresses will not be collected; thus, for all practical purposes, the participants will remain anonymous to the researcher. Results will be shared on an aggregate basis. No individual survey results will be shared.

BENEFITS

A. Describe the potential benefits individual participants may experience from taking part in the research, or note no potential benefits to individual participants. Benefits DO NOT include payments/incentives for participation. See research subjects section for payments/incentives.

No potential benefits to individual participants.

B. Describe the potential benefits to society, others and/or generalizable knowledge.

This study aims to address a gap in understanding related to professional usage of social media by higher education leaders.

INFORMED CONSENT PROCESS

CONSENT METHODS NOTE

Submit copies of all consent forms with IRB protocol application (ex. information sheet, online consent, signed consent, assent, parental consent, translated consents, etc./view questions, data collection form, demographic questionnaire, etc.)

A(1). Is a waiver of signed informed consent requested (ex. information sheet, online consent, etc.)? Y N A(2). If yes, select the appropriate criteria from description at end of IRB protocol form.
Select Y or N for waiver of signed consent. Y N

B. Describe methods for obtaining informed consent from human subject participants.

Be specific and thorough. At minimum, describe how researcher(s) will gain access to participants, how participants will be provided the consent documentation, in what format the consent will be provided, any discussion that will take place with participants, and methods of communication utilized to keep participants aware of their rights throughout the study, if applicable.

*Note:

- (1) Participants must be given time to review the consent/informational documents and ask questions.
- (2) Projects involving minors must include parental consent and a separate assent written at a level appropriate to the age group of participants. Parental consent must be available in English and Spanish when the possibility exists that English may not be the first language of parents/guardians.
- (3) Information sheets should be utilized for exempt studies in which the only record of participants would be signed consent forms.
- (4) The online consent template should be utilized as a guide for online survey consent.

The following will be in the online survey questionnaire, which the participants must read and agree to before being allowed to complete the survey (also see the attached).

CONSENT FORM

Introduction

The purpose of this form is to provide you information that may affect your decision as to whether or not to participate in this research study. If you decide to participate in this study, this form will also be used to record your consent.

You have been asked to participate in a research project studying social media use among higher education leaders. The purpose of the study is to examine the potential relationships between professional social media use and leadership behavior among higher education leaders. You were selected to be a possible participant because of your leadership role at an institution of higher education.

What will I be asked to do?

If you agree to participate in this study, you will be asked to complete an electronic survey. The survey may take approximately 10 to 15 minutes to complete.

What are the risks involved in this study?

The risks associated in this study are minimal, and are not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?

You will receive no direct benefit from participating in this study; however, the study's findings may have benefits in the field of higher education leadership.

Do I have to participate?

No. Your participation is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University-Corpus Christi being affected.

Who will know about my participation in this research study?

No one, and no identifiers linking you to this study will be included in any sort of report that may be published. Your name and/or IP address will not be collected.

Whom do I contact with questions about the research?

If you have questions regarding this study, you may contact the researcher, Alissa Mejia, at alissain@gmail.com or 361-549-3662.

Whom do I contact about my rights as a research participant?

This research study has been reviewed by the Research Compliance Office and the Institutional Review Board at Texas A&M University-Corpus Christi. For research-related problems or questions regarding your rights as a research participant, you can contact Caroline Lutz, Research Compliance Officer, at (361) 825-2497 or caroline.lutz@tacmucc.edu

Agreement to Participate

You agree to participate in the study by completing the following survey. Participants must be 18 years of age or older. Please do not complete the survey if you do not wish to participate in this study.

INVESTIGATOR(S) QUALIFICATIONS

A. Describe qualifications or attach CVs/resumes of ALL researchers and faculty advisors to conduct human subjects research.

Alissa Mejia is a doctoral student in the Education Leadership program at Texas A&M University-Corpus Christi. She has completed the required coursework in research methods and the CITI training in research involving human subjects.

Dr. Kamkar Kouzehkanani will be supervising the study. He is a Professor of Quantitative Methods at Texas A&M University-Corpus Christi.

SIGNATURES: INVESTIGATOR(S) RESPONSIBILITIES & CONFLICT OF INTEREST CERTIFICATION

RESPONSIBILITIES:

By complying with the policies established by the Institutional Review Board of Texas A&M University-Corpus Christi, the principal investigator(s) subscribe(s) to the principles stated in "The Belmont Report" and standards of professional ethics in all research, development, and related activities involving human subjects under the auspices of Texas A&M University-Corpus Christi. The principal investigator(s) further agree(s) that:

- A. An amendment will be filed for review and approval will be received from the Institutional Review Board before making ANY changes are made in this research project.
- B. Any adverse event will be immediately reported to the Institutional Review Board.

- C. A continuation will be approved for expedited and full review studies BEFORE the protocol approval expiration date. The study will CEASE once approval expires unless a continuation is approved.
D. Signed informed consent documents and all project records will be kept for the duration of the project and for at least three years after the completion of the project at a location approved by the Institutional Review Board and as described in the protocol.

CONFLICT OF INTEREST:

All Principal Investigators and Co-Investigators must certify the Conflict of Interest Statement below and comply with the conditions or restrictions imposed by the University to manage, reduce, or eliminate actual or potential conflicts of interest or forfeit IRB approval and possible funding. This disclosure must also be updated annually (for expedited and full board reviews) when the protocol is renewed.

Carefully read the following conflict of interest statements and check the appropriate box after considering whether you or any member of your immediate family* have any conflicts of interest.

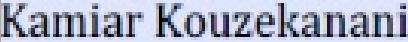
*Immediate family is considered to be a close relative by birth or marriage including spouse, siblings, parents, children, in-laws and any other financial dependents.

Financial conflicts of interest include:

- a) A financial interest in the research with value that cannot be readily determined;
- b) A financial interest in the research with value that exceeds \$5,000.00;
- c) Have received or will receive compensation with value that may be affected by the outcome of the study;
- d) A proprietary interest in the research, such as a patent, trademark, copyright, or licensing agreement;
- e) Have received or will receive payments from the sponsor that exceed \$5,000.00 in a specific period of time;
- f) Being an executive director of the agency or company sponsoring the research;
- g) A financial interests that requires disclosure to the sponsor or funding source; or
- h) Have any other financial interests that I believe may interfere with my ability to protect participants.

PROVIDE DETAILS AS ATTACHMENT FOR ANY NON-FINANCIAL CONFLICT OR FINANCIAL CONFLICT OF INTEREST RELATED TO THIS PROJECT.

ALL INVESTIGATOR(S) AND ADVISOR(S) MUST SIGN THE PROTOCOL AND IDENTIFY WHETHER A FINANCIAL CONFLICT OF INTEREST EXISTS. The Principal Investigator should save a copy of the IRB Protocol Form after emailing the form to the Office of Research Compliance for review. Type the name of each individual in the appropriate signature line. Add additional signature pages if needed for all Co-Principal Investigators, collaborating and student investigators, and faculty advisor(s).

	Typed Name	Conflict of Interest (SELECT ONE)	Date
PI	Alissa Mejia	No conflict of interest with this project	3.9.2016
PI Signature:	 <small>Digitally signed by Alissa Mejia Date: 2016.03.09 11:19:15 -06'00'</small>		
Co-PI (1)	Kamiar Kouzekanani		3.9.2016
Co-PI (1) Signature:	 <small>Digitally signed by Kamiar Kouzekanani Date: 2016.03.09 11:19:15 -06'00'</small>		
Co-PI (2)			
Co-PI (2) Signature:			
Co-PI (3)			
Co-PI (3) Signature:			
Co-PI (4)			
Co-PI (4) Signature:			
Co-PI (5)			

	Typed Name	Conflict of Interest [SELECT ONE]	Date
Co-PI (S) Signature:			

Human Subject Research Categories

Please Note:

The following types of studies do not qualify for exempt reviews and are subject to expedited or full reviews:

- 1) Studies involving a faculty member's current students
- 2) Studies involving the following and similar sensitive subject matters which can potentially cause discomfort and stress to the participant: Abortion, AIDS/HIV, Alcohol, Body Composition, Criminal Activity, Psychological Well-being, Financial Matters, Sexual Activity, Suicide, Learning Disability, Drugs, Depression

Studies involving audio taping and/or videotaping DO NOT qualify for exempt review.

Exempt Review Categories

- 1) Research conducted in established or commonly accepted educational settings, involving normal education practices, such as (i.) research on regular and special education instructional strategies, or (ii.) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
- 2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless (i.) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii.) any disclosure of human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.
- 3) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under the previous paragraph, if (i.) the human subjects are elected or appointed public officials or candidates for public office; or (ii.) federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.
- 4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.
- 5) Research and demonstration projects that are conducted by or subject to the approval of federal department or agency heads, and that are designed to study, evaluate, or otherwise examine (i.) public benefit or service programs (ii.) procedures for obtaining benefits or services under these programs (iii.) possible changes in or alternatives to those programs or procedures; or (iv.) possible changes in methods or levels of payment for benefits or services under those programs
- 6) Taste and food quality evaluation and consumer acceptance studies (i.) if wholesome foods without additives are consumed or (ii.) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture

Expedited Review Categories

- (1) Clinical studies of drugs and medical devices only when condition (a) or (b) is met.
 - a. Research on drugs for which an investigational new drug application (21 CFR Part 312) is not required. (Note: Research on marketed drugs that significantly increases the risks or decreases the acceptability of the risks associated with the use of the product is not eligible for expedited review.)
 - b. Research on medical devices for which (i) an investigational device exemption application (21 CFR Part 312) is not required; or (ii) the medical device is cleared/approved for marketing and the medical device is being used in accordance with its cleared/approved labeling.
- (2) Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows:
 - a. from healthy, nonpregnant adults who weigh at least 110 pounds. For these subjects, the amounts drawn may not exceed 550 ml in an 8 week period and collection may not occur more frequently than 2 times per week; or
 - b. from other adults and children considering the age, weight, and health of the subjects, the collection procedure, the amount of

blood to be collected, and the frequency with which it will be collected. For these subjects, the amount drawn may not exceed the lesser of 50 ml or 3 ml per kg in an 8 week period and collection may not occur more frequently than 2 times per week.

(3) Prospective collection of biological specimens for research purposes by noninvasive means.

Examples: (a) hair and nail clippings in a nondisfiguring manner; (b) deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction; (c) permanent teeth if routine patient care indicates a need for extraction; (d) excreta and external secretions (including sweat); (e) uncumulated saliva collected either in an unstimulated fashion or stimulated by chewing gumbase or wax or by applying a dilute citric solution to the tongue; (f) placenta removed at delivery; (g) amniotic fluid obtained at the time of rupture of the membrane prior to or during labor; (h) supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the process is accomplished in accordance with accepted prophylactic techniques; (i) mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings; (j) sputum collected after saline mist nebulization.

(4) Collection of data through noninvasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications.)

Examples: (a) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy; (b) weighing or testing sensory acuity; (c) magnetic resonance imaging; (d) electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography; (e) moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

(5) Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis). (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(4). This listing refers only to research that is not exempt.)

(6) Collection of data from voice, video, digital, or image recordings made for research purposes.

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt.)

(8) Continuing review of research previously approved by the convened IRB as follows:

- where (i) the research is permanently closed to the enrollment of new subjects; (ii) all subjects have completed all research-related interventions; and (iii) the research remains active only for long-term follow-up of subjects; or
- where no subjects have been enrolled and no additional risks have been identified; or
- where the remaining research activities are limited to data analysis.

(9) Continuing review of research, not conducted under an investigational new drug application or investigational device exemption where categories two (2) through eight (8) do not apply but the IRB has determined and documented at a convened meeting that the research involves no greater than minimal risk and no additional risks have been identified.

Criteria for Waiver of SIGNED Consent

(c) An IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent set forth above, or waive the requirement to obtain informed consent provided the IRB finds and documents that:

- The research or demonstration project is to be conducted by or subject to the approval of state or local government officials and is designed to study, evaluate, or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs; and
- The research could not practicably be carried out without the waiver or alteration.

(d) An IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent set forth in this section, or waive the requirements to obtain informed consent provided the IRB finds and documents that:

- The research involves no more than minimal risk to the subjects;
- The waiver or alteration will not adversely affect the rights and welfare of the subjects;

- (3) The research could not practicably be carried out without the waiver or alteration; and
- (4) Whenever appropriate, the subjects will be provided with additional pertinent information after participation.

APPENDIX B

Leadership and Social Media Use Questionnaire

Thank you for taking this survey. The data collected will be used to research relationships between higher education leadership behavior and social media use.

CONSENT FORM

Introduction

The purpose of this form is to provide you information that may affect your decision as to whether or not to participate in this research study. If you decide to participate in this study, this form will also be used to record your consent.

You have been asked to participate in a research project studying social media use among higher education leaders. The purpose of the study is to examine the potential relationships between professional social media use and leadership behavior among higher education leaders. You were selected as a possible participant because you are employed an institution of higher education.

What will I be asked to do?

If you agree to participate in this study, you will be asked to complete an electronic survey. The survey may take approximately 10 to 15 minutes to complete.

What are the risks involved in this study?

The risks associated in this study are minimal, and are not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?

You will receive no direct benefit from participating in this study; however, the study's findings may have benefits in the field of higher education leadership.

Do I have to participate?

No. Your participation is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University-Corpus Christi being affected.

Who will know about my participation in this research study?

No one, and no identifiers linking you to this study will be included in any sort of report that may be published. Your name and/or IP address will not be collected.

Whom do I contact with questions about the research?

If you have questions regarding this study, you may contact the researcher, Alissa Mejia, at alissain@gmail.com or 361-549.3662.

Whom do I contact about my rights as a research participant?

This research study has been reviewed by the Research Compliance Office and the Institutional Review Board at Texas A&M University-Corpus Christi. For research-related problems or questions regarding your rights as a research participant, you can contact Caroline Lutz, Research Compliance Officer, at (361) 825-2497 or caroline.lutz@tamucc.edu

Agreement to Participate

You agree to participate in the study by completing the following survey. Participants must be 18 years of age or older. Please do not complete the survey if you do not wish to participate in this study.

Leadership Orientation

This section asks you to describe your style when leading and managing others.

I. Behaviors

Please indicate how often each of the statements below is true of you:

1. Think clearly and logically.

Never Occasionally Sometimes Often Always

2. Show high levels of support and concern for others.

Never Occasionally Sometimes Often Always

3. Have exceptional ability to mobilize people and resources to get things done.

Never Occasionally Sometimes Often Always

4. Inspire others to do their best.

Never Occasionally Sometimes Often Always

5. Strongly emphasize careful planning and timeliness.

Never Occasionally Sometimes Often Always

6. Build trust through open and collaborative relationships.

Never Occasionally Sometimes Often Always

7. I am a very skillful and shrewd negotiator.

Never Occasionally Sometimes Often Always

8. Am highly charismatic.

Never Occasionally Sometimes Often Always

9. Approach problems through logical analysis and careful thinking.

Never Occasionally Sometimes Often Always

10. Show high sensitivity and concern for others' needs and feelings.

Never Occasionally Sometimes Often Always

11. Am unusually persuasive and influential.

Never Occasionally Sometimes Often Always

12. Am able to be an inspiration to others.

Never Occasionally Sometimes Often Always

13. Develop and implement clear, logical policies and procedures.

Never Occasionally Sometimes Often Always

14. Foster high levels of participation and involvement in decisions.

Never Occasionally Sometimes Often Always

15. Anticipate and deal adroitly with organizational conflict.

Never Occasionally Sometimes Often Always

16. Am highly imaginative and creative.

Never Occasionally Sometimes Often Always

17. Approach problems with facts and logic.

Never Occasionally Sometimes Often Always

18. Am consistently helpful and responsive to others.

Never Occasionally Sometimes Often Always

19. Am very effective in getting support from people with influence and power.

Never Occasionally Sometimes Often Always

20. Communicate a strong and challenging sense of vision and mission.

Never Occasionally Sometimes Often Always

21. Set specific, measurable goals and hold people accountable for results.

Never Occasionally Sometimes Often Always

22. Listen well and am usually receptive to other people's ideas and input.

Never Occasionally Sometimes Often Always

23. Am politically very sensitive and skillful.

Never Occasionally Sometimes Often Always

24. See beyond current realities to generate exciting new opportunities.

Never Occasionally Sometimes Often Always

25. Have extraordinary attention to detail.

Never Occasionally Sometimes Often Always

26. Give personal recognition for work well done.

Never Occasionally Sometimes Often Always

27. Develop alliances to build a strong base of support.

Never Occasionally Sometimes Often Always

28. Generate loyalty and enthusiasm.

Never Occasionally Sometimes Often Always

29. Strongly believe in clear structure and a chain of command.

Never Occasionally Sometimes Often Always

30. Am a highly participative manager.

Never Occasionally Sometimes Often Always

31. Succeed in the face of conflict and opposition.

Never Occasionally Sometimes Often Always

32. Serve as an influential model of organizational aspirations and values.

Never Occasionally Sometimes Often Always

II. Social Media Use

33. Please indicate how often you typically use the following social media *in support of professional and/or institutional goals*:

	Daily	Weekly	Monthly	Yearly	Never
Facebook					
Instagram					
LinkedIn					
Pinterest					
Reddit					
Snapchat					
Twitter					
YouTube					

34. Please indicate any reasons you use the following social media *in support of professional and/or institutional goals* (select all that apply):

	To post original content that you have created	To share content that others have created	To consume (read, view, etc.) content created by others	None/don't use
Facebook				
Instagram				
LinkedIn				
Pinterest				
Reddit				
Snapchat				
Twitter				
YouTube				

III. Background Information

35. How many total years of experience do you have working in higher education? _____

36. What is your current primary role in higher education?

Faculty Administrator Staff

37. What is your gender?

Female Male

38. What is your age? _____

39. What category best describes your ethnicity?

Asian Black Hispanic or Latino/a White Other

40. What is your highest level of education?

Bachelor's degree Master's degree Doctoral degree

Thank you for your time completing this survey.