CHARACTERISTICS OF EFFECTIVE LEADERSHIP OF COMMUNITY COLLEGE PRESIDENTS

by

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Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Weatherhead School of Management

Designing Sustainable Systems

CASE WESTERN RESERVE UNIVERSITY

May, 2016
CASE WESTERN RESERVE UNIVERSITY
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Dedication

The following work is dedicated to my children, Anthony, Sonya, Reya, and Michael.

You are and always will be my true inspiration.

“Soar with eagles, children, even if others believe flight to be impossible.”

Thank you also to so many who carried me in times of my own doubt.
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Acknowledgements

This thesis represents a portion of the journey that I started at Case Western Reserve University in Cleveland, Ohio. I can easily fill up this entire volume with names of individuals who have supported me throughout this endeavor and have gone out of their way to show support and guidance. Please know that each and every one of you is held in my heart, and I call upon our moments in life often for inspiration.

I would like first to thank God for the blessings and for presenting opportunities in my life.

I would also like to thank my dissertation committee, Dr. Diana Bilimoria, Dr. Ellen Van Oosten, and Dr. Christopher Burant. I would especially like to thank my committee chair, Dr. Richard E. Boyatzis. Richard, thank you for your patience, guidance, and knowledge, not only on my thesis, dissertation, and defense, but also in my life as you have gone out of your way to guide me on personal matters as well. I cannot thank the committee enough. Thank you.

I would like to thank the faculty and staff at Case Western Reserve University. This is an amazing system of knowledge and comraderies that creates a system of support and success for students. Special thanks to Marilyn Chorman, Sue Nartker, and Dr. Kalle Lyytinen; thank you so much for the guidance and dedication to help me be a better person.

Special thanks to my classmates at Case Western during this journey. All of you made the residencies fun and intriguing. The many, many laughs, tears, and moments of frustration were all par for the course. You will always have a home wherever I am, and I am proud to call all of you my friends. Thank you for everything and for your
encouragement. Please let me know if ever you need anything. Thank you to the DM/Ph.D. CWRU class of 2016.

Much gratitude to all my colleagues at work for listening to my daily challenges and for providing me with ideas and resources. Special thanks to Ray Koukari, Campus Dean and Dean of Business & IT, and our college president, Dr. Bryan Albrecht for the constant support, contacts needed for the research data, and the warm words of encouragement during much needed times of research unknowns. You provide the practical application of exemplary community college leadership of which this research is based upon.

I would also like to thank my friends who have shared in this journey with me. The weekly basketball leagues, the social dinners with business friends, and the new friends I have met. I apologize for the events that I had to miss due to research obligations and hope you can share in this achievement with me.

Finally, and never last in my life, I would like to thank my family. My children, Anthony, Sonya, Reya, and Michael. You have been my inspiration from the first day Mom and I welcomed you into this world. Don’t ever give up! Look and find a way; often times, it’s the simplest solution right there in front of you.

I would also like to thank my own parents and my wife’s parents. I would not be here without your support and confidence in my growth as a man. I do not say it enough, but I greatly appreciate all of you.

The last on this list is first always on every other list and in my life—Dr. Sheryn Abraham, my partner, confidant, and friend. In you, I find peace and resolution, dreams and unwavering support. Your gentle touch has taken me through the dark times of
confusion and despair. Thank you Sheryn, for putting up with me, for listening to my struggles, and for being the very breath I take. There is not a day that goes by when I do not thank God for bringing you into my life and for allowing me to love you. I look forward to many more moments of happiness. Thank you Sheryn!
Characteristics of Effective Leadership of Community College Presidents

Abstract

by

MANOJ BABU

The performance measures facing Community College Presidents (CCP) in the United States is reaching a level of scrutiny that is unprecedented. The social needs of the community, in an effort to create a true learning environment, become dependent on the effectiveness of CCP. Community Colleges play a vital role in the upward mobility and social access to higher education in the U.S. while the upcoming changes in the educational system reveal a new set of skills that is mandatory for a successful presidential tenure. The presidents of these educational post-secondary institutions are becoming more aware of their leadership roles and expectations from groups such as students, community, and their respective board of trustees. This study delves into the core leadership competencies that lay the foundation and groundwork for a successful CCP. The key findings of this research include essential areas of leadership effectiveness such as emotional and social intelligence, shared vision, and community engagement.

Ultimately, this research attempts to answer the question: “What does it take to become an effective community college president?” This research also provides a compelling argument into the emotional and social leadership skills set needed to be successful as a CCP using comparative analysis, statistical evidence, and a multi-rater
system of analysis. The major theme categories, as found by this research, needed to be an effective CCP are emotional intelligence, sense of purpose, social intelligence, involving external stakeholders, and cognitive intelligence. It is the intent of this research to identify competency markers as indicators for an effective CCP.

In an attempt to identify core competencies relevant to the success of CCPs, this research focuses on three completed studies, each one building on the next in succession. The first study is a qualitative approach using critical incident behavior analysis during formal interviews with CCPs. The second is a quantitative approach to the insights and expectations of community college faculty. Finally, the third study is a quantitative focus on the competencies of effectiveness and engagement of CCPs. In addition, the third study is a multi-rater design analysis with a 360 feedback survey from direct reports of the presidents of community colleges. These three studies create a mixed-method network of evidence and logic formulated to lay a foundation for CCPs.

Ideally, the information compiled from this research can be used by current and future community college administration. The competencies that once led to a successful CCP tenure have changed and have been replaced with new expectations from the community college board of directors, students, and communities. This research outlines what is required to have a successful tenure as a CCP in today’s post-secondary education system.
CHAPTER I: INTRODUCTION

Personal Research Motivation

It has been said that every generation improves on the one before, creating areas of efficiency and information where, at one time, were daunting obstacles and a plethora of ignorance. This research seeks to eliminate some obstacles and clear areas of confusion with respect to post-secondary administrative leadership. Post-secondary education—continued formal education after high school (12th grade)—includes a large array of organizations who are dedicated to providing degrees, diplomas, certificates, licenses, etc., to interested and ambitious students who look to better themselves through educational accomplishments. It is through this dedication and conviction to the purity of education that this research is born and nourished.

My goal in this research was to find out how leadership is evaluated and enacted in community colleges and in effect how the administrative leadership is evaluated to produce optimum results at both the organizational and the student levels. Theories on leadership have always been interesting to me, and I wanted to find out how some of those theories applied to post-secondary leadership. This research takes various tested leadership and personal identity theories and integrates them into community college leadership answering questions that encircle sustainability and proliferation of leadership practices and pedagogy.

Furthermore, another motivation for this research is personal. I am currently a mid-level community college administrator with goals of being promoted to presidency. I wanted to explore the significance of leadership theories and application of practice at this level. Designing a study on this topic enables me to have a more intimate view of
community college leadership as well as construct and validate testing systems that justify effectiveness and engagement at the highest level in community colleges. Ultimately, I would be able to use the research design, results, and theoretical foundations as a template for effective community college leadership. Ideally, I would be able to employ many, if not all, of the research findings toward any post-secondary system, traditional four-year university, profit and non-profit education organization.

Finally, there is a desire for the output and findings of this research to be formally written and accepted by post-secondary systems as a “guide” or “template” to being a successful administrative leader. I believe the results and findings of this research can be utilized, adapted, and expanded for all potential education administrators who serve in a leadership position. The art of engaging the workforce, being engaged in the mission of the school, and being effective is the foundation for success for any leader. It is my intention and belief that this research design and results can be used to motivate, inspire, and guide existing and future community college presidents.

As a side note, an unrelated motivation for this research is to show my children that leadership is a passion with a dedicated art form and to teach them to follow their passion and love the journey of life. I hope that one day, in the not-so-distant future, my children, who are relatively young at this writing date, can use this research as a model for their own leadership virtue and societal contribution. It is my firm belief that this act would complete the circle of life. The act of passing knowledge from one generation to the next is ethereal in form and perfect in practice.
Problem of Practice

Upon visiting major higher education job posting sites, it is not uncommon to find a plethora of inquiries for applications for the role of President/Chancellor/CEO of post-secondary education institutions. I belong to one such an organization that shows posting on a weekly basis:

Figure 1. HigherEd.com Job Search for Community College President

For the week of 12/10/15, the following shows the open positions that are inviting applicants to consider:

This is a random search for one week. Extrapolate this search further and one finds a trove of open vacancies in the position of President/Chancellor. In talking to colleagues, this has not been the “norm” and has recently (within the past five years) seen a drastic
rise in the most top-level positions in community colleges being vacated. After further inquiries on various positions, here are the specific requirements that follow a common theme to all the job descriptions of President, per the specific job description:

**Figure 2. Posting from Higher Education Jobs website:**
(www.higheredjobs.com/president)

This higher education job posting is one of many that are on this website, and there are many more websites dedicated to post-secondary position availability. In looking through the qualification requirements, there are often words such as “visionary”, “Inspirational”, “articulate”, “understand”, “communicator”, “leader”, etc. We concluded
that this should not be set aside as a coincidence, but rather a change in the competencies of post-secondary leadership.

Post-Secondary leadership is in a drastic state of flux and upheaval. Generational differences and cultural norms are promoting a different, non-traditional, style of succession planning. This specific planning model is based on a lack of qualified individuals to take the helm of leadership at these learning institutions (Drew, 2010; Shults, 2001). There are some basic assumptions being made that need to be delineated:

a. What is the root cause of the drought in leadership in various post-secondary institutions?

b. Why is succession planning not outlined in administrative leadership?

c. How is the education system still surviving even though there is a pending gap in leadership?

These antecedent questions play an important role in the configuration of beliefs held at post-secondary institutions. They lay out a misrepresented idea of succession planning at the leadership level and show a flawed system of succession where the void is clear at the executive level, particularly the presidency (Shults, 2001; Vaughan & Weisman, 1998).

There are many stipulations and disagreements over the root cause of the void in leadership succession. Many discuss ideas such as the need for stronger leaders, government restrictions and sanctions, and the actual role of administrative leaders changing to a degree that potential leaders are not well equipped to take the helm. There is truth and validity to all these claims, and this research is dedicated to providing some insight into the reason for the shortfall in potential leaders at the community college level.
American Association of Community Colleges (2016) enrolls approximately 7.3 million students in the community college system per 2003 reports. These 7.3 million students depend on the administrative leadership of the community college system to secure their education endeavors and provide them with all the opportunities of a post-secondary degree, diploma, and/or certificate will afford each student. Many students throughout the U.S. use a community college education and then leverage the degree towards the attainment of a Bachelor’s degree at a four-year university setting (AACC, 2013). This natural pathway is conducive to growth and cost effectiveness on incoming students (Vaughan & Weisman, 1998). In order for this and many more pathways to progress and succeed, competent and aware leadership at the administrative level all the way up to the highest level, the community college president.

Earlier studies have shown the effects of community college presidents upon enrollment, programming, and community relationships (Townsend & Bassoppo-Moyo, 1997). These studies delve into the role of a community college presidents and the value of the associate’s degree. However, literature is sparse on the engagement and effectiveness of the president. In addition, the bond between the community college president and the faculty who serve the school is void of comparison and analysis. This research study investigates the art of leadership at the community college level and incorporates the study of faculty and their expectation out of the presidency level.

In addition, from earlier literature, we find the relevance of the presidential position at the community college level (Desjardins, 2001; Wallin, 2002). The president was the “figurehead” that rarely interacted with the community, the faculty, and the students. These three contributors determine the level of success for the community
college president. They form the constituency of the community college enterprise and all three, the community, faculty, and students, are necessary for the success of the president. In addition, the literature is not clear on what drives the effectiveness and engagement of community college presidents. Questions such as, *What drives a community college president to be successful? What are the competencies needed to be a successful community college president?, and What are the factors that drive community college faculty to believe in the president?* These are the challenges of this research study and the following chapters attempt to answer these questions in entirety while creating a network of answers to identify desired competencies needed for a community college president to be successful.

Several identified characteristics must be garnered or acquired to be successful in the tenure as a community college president. Among these are significant relationships between peers, community, and College Board members. These relationships need to be cultured and developed to a very sophisticated level as they determine the success of the community college president. We outlined these critical factors in the independent studies contained in the chapters following. In addition, this information becomes a guidebook for prospective individuals who have aspirations of moving onto the presidential level.

To explain this phenomenon of leadership at the community college level, this research thesis attempts to answer the following research questions:

1. What factors contribute to the success of community college presidents with respect to effectiveness and engagement factors?
2. What competencies of community college presidents drive the organization to succeed and motivate employees?
3. Given the effectiveness of community college presidents, what are the factors that positively affect engagement in administration?
These research questions delineate the sample size from each study and proactively look for seminal themes in the analysis and results. In addition, these questions focus on the essential factors needed to be an effective community college president. By addressing these questions, we seek to understand what challenges incoming and sitting presidents face and what factors influence the future of the community college system. By addressing these questions, we hope to begin to identify capabilities and competencies that individuals must possess to become successful and can be accentuated to influence others in the learning organization.

**Research Gaps and Hypothesis Questions**

Most of the academic literature relative to community college presidents focuses on the power and history of these individuals and their role in the community college. Few, if any, studies discuss how individuals can channel their innate leadership abilities to take community colleges to the future of education. The practitioner literature is very anecdotal in nature, just offering checklists and recommendations on what is required and how to enhance the monetary aspect of the organization.

**Gaps in the Research**

The overarching gap in the previous literature on the effectiveness of community college presidents lies in the areas of specific competencies needed to be successful. These competencies are essential to future prospective community college presidents. None of the studies in the body of work on community college presidents identifies characteristic attributes that aid in being successful in the top most role of the administration. There are studies that focus on the needs of a community college president to ensure a positive tenure; however, very few studies focus on the internal
capabilities that drive areas such as emotional and social needs as well as team involvement and positive affection.

**Study Goals and Research Questions**

This study has three questions which guided our direction and provided us boundaries to adhere to be parsimonious and succinct in our research. Our goals in developing these questions were to (1) identify key factors that the community college presidents effectiveness; (2) identify core competencies that impact the success of presidents; and (3) explore what factors accentuate a community college presidents successful tenure. The three specific research questions guided the research are as follows:

1. *What factors contribute to the success of community college presidents with respect to effectiveness and engagement competencies?*

2. *What competencies of community college presidents drive the organization to succeed and motivate employees?*

3. *Given the effectiveness of community college presidents, what are the factors that positively affect engagement in administration?*

Research questions addressed in each study are shown in Figure 3.

These questions are built on one another to create a network of areas that are dedicated to the success of community college presidents. Each of the questions shows a different facet of approach to competencies needed for a successful tenure. Essential, the qualitative study formed the foundations that the Quantitative-1 study needed for impact. Finally, Quantitative-2 study built on the results and expanded on both Qualitative and Quantitative-1 studies provided.
Many theories were considered for this approach to the research, and although many did outline specific areas of interest to community college presidents and the educational organization, we focused on eight theories to explain our study. The following chart below is a synopsis of our theory selection and other pertinent information that is a quick view and can identify with the research.

There is a specific path from each of the selected theories to the study of community college presidents. Each theory explains a construct that the community college presidents adhere to while making themselves to be ideal leaders in the post-secondary system. In addition, these theories outlined below, also create a valid network of academic rigidity to justify our claims and stance throughout this research.
<table>
<thead>
<tr>
<th>Theory</th>
<th>Author</th>
<th>Title</th>
<th>Informed by or relevance</th>
<th>Pro</th>
<th>Con</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intentional Change Theory</td>
<td>Boyatzis (2006); Boyatzis, Stubbs, and Taylor (2002); Goleman et al. (2004); Boyatzis and Van Oosten (2006)</td>
<td>Intentional Change Theory at the Organizational Level</td>
<td>Contingency Theory, Emotional Intelligence, Stages of Discovery, Direct Link between CCP and the organization. Flows in with SDT</td>
<td>Stages of Discovery, Direct Link between CCP and the organization. Flows in with SDT</td>
<td>Does not account for the organization. Needs more information on direct feedback loop. Halo Effect and Bias in self-reporting</td>
</tr>
<tr>
<td>Resonant Leadership Theory</td>
<td>Boyatzis &amp; McKee (2005)</td>
<td>Resonant Leadership, Renewing Yourself and Connecting with Others</td>
<td>CCP approach to Leadership, ICT, EI</td>
<td>Defines the style of leadership and working with teams</td>
<td>Halo effects, bias, accuracy in assessing expectations. Bias and unrealistic expectations for CCPs</td>
</tr>
<tr>
<td>Self-Determination Theory</td>
<td>Deci &amp; Ryan (2008)</td>
<td>SDT</td>
<td>Vroom Expectancy Theory</td>
<td>Focus on the relationship between manager and employee, CCP, CCF, and DR</td>
<td>SDT might not work for all CCPs as the situation changes. CCP’s need self-regulation, autonomy, competence, and self-regulation</td>
</tr>
<tr>
<td>Transformational Leadership Theory</td>
<td>Burns (1978); Kotter (1999)</td>
<td>Leadership, Effective Manager</td>
<td></td>
<td>Allows flexibility in defining an individual leadership style. There’s no single best way to do things.</td>
<td>The leader of the organization may not know what works best. This model is not flexible.</td>
</tr>
<tr>
<td>Emotional Intelligence Theory</td>
<td>Salovey &amp; Mayer (1990); Goleman et al. (2004)</td>
<td>Primal Leadership, Emotional Intelligence, Working with Emotional Intelligence</td>
<td>Transformational Leadership</td>
<td>The heart of CCP Leadership. Explains a great deal on post-secondary leadership style</td>
<td>Evaluation is difficult and could be a biased approach. CCF and DR would need some measure of validation from CCP</td>
</tr>
<tr>
<td>Positive and Negative Emotional Attractors</td>
<td>Mahon, Taylor, and Boyatzis (2015); Jack, Boyatzis, Khawaja, Passarelli, &amp; Leckie (2013)</td>
<td>When Pulling Negative Emotional is too much and not enough to Inspire and Sustain Outstanding Leadership, PEA, NEA; The role of PEA in Shared Vision</td>
<td>Thoroughly researched and document criteria for system success including a significant model update</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity Theory</td>
<td>Stryker (1980); Stets and Burke (2000)</td>
<td>Social Identity and SDT</td>
<td>CCP’s know their role in the organization and identify with the mission and vision</td>
<td>Does not give the broad view of the organization and how one addressed the value of change in roles and expectations</td>
<td></td>
</tr>
<tr>
<td>Agency theory</td>
<td>Eisenhardt (1989)</td>
<td>Agency theory: An Assessment and Review.</td>
<td>Contributes to organizational IS theories through perspectives on risk, outcome uncertainty, and incentives.</td>
<td>Too much emphasis is placed on economic incentives which may drive poor behavior. CCF and DR relationship me not be adequately explained</td>
<td></td>
</tr>
</tbody>
</table>

- CCP = Community College President
- CCF = Community College Faculty
- DR = Direct Report for CCP
Emotional Intelligence Theory (EI)

EI theory brings to light the concept of “monitoring one's own emotions and the emotions of others” (Salovey & Mayer, 1990: 25). With the thought of leaders and the ability to maintain one’s composure in times of stress and confusion. EI also brings in a leader’s ability to communicate effectively (Goleman, Boyatzis, & McKee, 2002), and the ability to transform into the democratic leader (p. 69). In the education field, the ability to navigate and build consensus through using principles of EI become important to all levels of leadership.

Emotional Intelligence encompasses four main areas (Boyatzis, Goleman, and McKee, 2002). These areas are as follows:

1. **Self-Awareness:** Understanding one’s strengths, weaknesses, limitations, values, and motives. Individuals who are self-aware are honest about themselves and realistic about accomplishments.

2. **Self-Management:** This is needed to control feelings, facilitate mental clarity, and provide controlled energy.

3. **Social Awareness:** This includes empathy and understanding of others, organizational awareness and ability to serve others’ needs. This also includes being attuned to others feelings and being approachable to others.

4. **Relationship Management:** This area includes influencing and developing others. This also includes change and conflict management and creates cohesiveness within teams.

**Resonant Leadership Theory**

According to McKee, Boyatzis, and Goleman, resonant leadership is defined as individuals who have built resonant relationship around themselves. With emotional intelligence being a key indicator, leaders are aware of their emotions and how these emotions lead to a contagious state (Boyatzis & McKee, 2005). There is a contagious nature of resonance that leaders project using this theory. They are self-aware of
themselves and their environment and they understand stress factors and how that contributes into the performance of individuals (Boyatzis & McKee, 2005; Goleman et al., 2004). Resonant leadership creates intangibles (Boyatzis & McKee, 2005: 26) such as business, happiness, and being comfortable. A resonant leader would understand that these intangibles contribute directly to individual performance and organizational success. The ability to “read” one another (Boyatzis & McKee, 2005: 23) and convey emotions properly is a direct link with Resonant Leadership Theory. Shared vision becomes essential in resonant leadership creating a culture of change and positive difference bringing independent and organizational growth.

Individuals who are passionate about what they are doing, send out messages that others around can intuitively sense and process. Actions such as excitement, hard work, and dedication become a template that leaders can use to build resonance with those around them. Resonance becomes a way of life as opposed to an abstract goal; people demonstrate obvious, tangible care and concern for one another and at the same time, they are direct and hold each other accountable for getting the job done (Boyatzis & McKee, 2005: 32). This style of leadership becomes necessary in organizations where leaders promote growth and change. Expectations become high for both the leader and the follower and eventually, this contributes to the success of the organization.

**Intentional Change Theory (ICT)**

ICT is the theory based on the individual view where “change occurs at one’s behavior, thought, feelings and perceptions” (Boyatzis, 2006: 78). This framework becomes crucial when taken in the context of modern day leadership. Boyatzis’ (2006) self-directed learning model also explains what the ideal self and real self are and what
are the “gaps” between both paradigms. The relationship is further explored through various stages of the discovery process. In leadership, how one closes the gap between the ideal and real self, determines the success of the leader.

According to Boyatzis’ ICT (Goleman et al., 2004), there are five discoveries that lead to intentional change. Refer to Figure 4 for a pictorial view.

1. Discovery 1: The ideal self
2. Discovery 2: The real self
3. Discovery 3: The learning agenda
4. Discovery 4: The practice of being a leader
5. Discovery 5: Trusting relationships that facilitate openness

**Figure 4. Boyatzis’ Intentional Change Theory (2006: 610)**
The five discoveries of ICT form a foundation on leadership and how to enact an individual’s personal vision. In complex systems, the positive and negative emotional attractors serve as viable explanations for the success of individuals in leadership positions. Also, according to Boyatzis et al., “when individuals focus on the future possibilities and filling them with hope, it arouses the parasympathetic nervous system (PSNS)” (Boyatzis, 2006: 26). The interaction of PEA and NEA, when it comes to desired change, is crucial in leadership, and it explains why there is a positivity and negativity in individual change efforts (Boyatzis, 2006).

**Self-Determination Theory (SDT)**

Initially proposed by Deci and Ryan (1985), self-determination comes out of Vroom’s Expectancy Theory. Intrinsic motivation factors such as autonomy and self-regulation become the foundation of human achievement. This theory focuses on the extent to which the relationship between manager and subordinate becomes productive and sustainable based on the interpersonal work climate created by both groups (Deci, Connell, & Ryan, 1989). In addition, SDT focuses on how the manager’s interpersonal orientations tend to support subordinates’ choice and personal initiatives (Deci et al., 1989: 580).

SDT is a theory of human motivation to help understand how individuals are motivated intrinsically to develop themselves and learn to self-regulate. Deci and Ryan (1989) propose that intrinsic behavior is contingent on three main areas of human motivation:

a. Autonomy – the universal desire to be one’s own agent in life
b. Competence – seek to control the outcome and experience mastery
c. Relatedness – universal want to be connected and experience caring from others.

Studies have also revealed variables that increase self-determination would include dependent variables such as intrinsic motivation, positive emotional tone, creativity, interest in the activity, conceptual learning, perceived competence, and self-esteem (Deci et al., 1989).

With respect to leadership in organizations, SDT becomes relevant in defining characteristics needed for effective leadership. The intrinsic factors that drive successful leaders become integral to an organization. As SDT theory expands, researchers find the common bond between culture and organizational success and focus on the variance in relationships between the manager and the subordinates.

**Transformational Leadership Theory**

Transformational Leadership Theory discusses the implications of leaders acting on the group demands and the organization as a whole (Burns, 1978). Burns (1978) describes the need for meaning and finding purpose in all that man does (p. 18). The orientation of long-term goals, the ability to see through the minutia of daily obstacles, and the focus on missions and strategies enable transformational leaders to generate a following and an area of effectiveness. These leaders also align internal structures and systems to “reinforce overarching values and goals” (Kotter & Heskett, 1992).

Leadership has several implications, and work has been completed to describe and explain the existing theories. Transformational Leadership Theory delves into the unique ways that a leader inspires those around him (Burns, 1978). Through this inspiration, the leader enhances motivation and performance of his followers. Burns (1978) discusses the need for meaning in a leader (p. 23) as the primal force driving the theory and model.
“Transformational leadership occurs when leaders and followers raise one another to higher levels of motivation and morality” (Burns, 1978: 65). Transformational leadership theory is indicative of the ways in which followers see leaders. This theory deals with followers being inspired to do more through motivation, morale, and performance. With respect to the community college leadership ranks, transformational leadership theory inspires positive change in the followers, taking care of the interest of the entire group. (Kotter, 1999). The ability of leaders to “appeal to the values of their followers” (Burns, 1978), creates a more effective leadership scenario.

**Identity Theory**

Identity theory gives light to role identification in an organization and how this interaction causes self and others to feel (Stryker & Burke, 2000). Individuals become aware of broader frames of reference in organizations where they have a direct impact and are able to relate to roles other than their own. Stryker and Burke (2000) posits that identities are larger frames of reference for self and thus identify self-designations that individuals identify within various social contexts. The idea of social order and structure as defined by Stryker (1994) shows the relationship and contextual compartments of commitment and the link between social structure and self. Self-esteem is directly correlated to the successful execution of identity, and this is established by reference to societal norms, standards, and values. The identity theory model is outlined (Burke, 1980) in Figure 5:
Integration of Literature Review and Theory Application to Research

Our research is governed by the interaction and integration of the above-mentioned theories and their relationship to each other and eventually, how they drive the research surrounding community college presidents. Figure 6 shows the relationship of our theories and how they are ordered with respect to the central theme of the community college president. As can be seen, our overarching theme is Intentional Change, Emotional Intelligence, and Self-Determination Theory. The other outlined theories are auxiliary and assist in explaining the phenomenon experienced by the central focus, the community college president.

These theories, when combined, explain the underpinnings of this research creating a structure that allows us to highlight areas that pertain directly to community college presidents.
The following thesis report takes on an efficient “storytelling” process. Our goal was to illuminate our stance of community college presidents by informing the reader of three critical areas:

a. A self-study view of Community College Presidents (Chapter 2)

b. An analysis on Community College Faculty and their expectations (Chapter 3)

c. An analysis on Community College Presidents (self-reported) in comparison to their direct reports view.

These areas are integrated into the final chapter (Chapter 5) to show unison and highlight our expectations and research goals. Figure 7 shows our direction and outline for each of the chapters. Chapter 1 is the introduction to the study which focuses on the global issue
of community college presidents and the reason for the study as well objective. Chapter 5 is the final integration chapter dedicated to bringing all three studies together, explaining the reasoning, and defining the new parameters of the community college president.

**Figure 7. Chapter Outline for Thesis Study**

![Chapter Outline Diagram]

- **Chapter 2**: Qualitative Study Community College Presidents → Coded and Thematic Interview Process
- **Chapter 3**: Quantitative Study on Community College Faculty → Survey analysis
- **Chapter 4**: Quantitative Study on Community College Presidents and Direct Reports → Survey Analysis in 360 Format
CHAPTER II: QUALITATIVE STUDY – INTERVIEWS WITH COMMUNITY COLLEGE PRESIDENTS

Introduction to the Study

The post-secondary education system in the U.S. is going through a drastic change in leadership competencies. Approximately 50,000 individuals annually will be considered for university presidents and chancellor positions as well as 20,000 being considered for similar positions on the community college level (Kerr & Gade, 1986). The individuals considered for the leadership positions at higher education institutions are in dire need of competencies and traits that drive effectiveness and successful tenures. These presidents also do not have the same personalities and behaviors (Kerr & Gade, 1986: 30), leading to reacting differently to different situations. The need for a greater research base, which lays the foundation for competencies and attributes that lead to a successful tenure on the education levels, are greatly needed. This study focuses on the factors that contribute to an effective community college president.

A similar phenomenon is facing the U.S. community college system causing competent leadership to vacate their posts, leaving a gap in the top positions. Posited by Livingston (1998), the greatest need for the 21st century will be leaders of our schools as the majority of the administrative workforce approaches retirement by the year 2000. This administrative void in the community college system brings inherent problems that are at all levels of educational institutions. These key vacancies also bring turmoil during a time when community college student population is on the rise in the U.S. (AACC, 2016). As the total community college student population, both full time and part time, reaches well over 600,000 students in the U.S. community college system (AACC, 2016).
2016), it becomes more pertinent and integral to have a stable, effective leadership in position to guide and develop the system well into the next century.

As a result of the impending vacancies in community college leadership, aspiring administrators have to identify the required skill set, characteristic factors, and leadership traits needed to be effective as they take the helm of community college systems. According to Boyatzis (1982), with respect to job competency, “underlying characteristic would result in effective and/or superior performance” (p. 192). Boyatzis goes on to define “competency” as a “set of behavior organized around an underlying construct called the ‘intent’” (Boyatzis, 2009: 750). These characteristics equilaterally translate over onto the effective competencies of community college leadership. Community colleges look for individuals who possess the necessary skill set to lead a vast cohort of the student population and the highly potential administrative group.

Shults (2001) discussed the gradual decrease in community college leadership who are qualified to lead the organizations through its many obstacles. This comes at a time when the demands for educational leadership grows exponentially bringing with it a myriad of leadership incapabilities and a decrease in formal development. Eddy (2010) states that the pathway of community college presidents indicated as below:

Faculty ➔ Department Chair ➔ Dean/Associate Dean ➔ Chief Academic Officer / Provost ➔ Vice President of Instruction / Finance / Administration ➔ President / Chancellor

With this dictated pathway to presidency, one can see the deliberate learning cycle and how that affects the growth and maturation of the presidential positions. These various steps or positions bring a wealth of knowledge and experience, which enable leaders to develop the necessary competencies required for community college leadership
positions. Formal studies, in the likes of Townsend and Bassoppo-Moyo (1997), outline characteristics and attitudes needed to succeed among the community college leadership ranks. Vaughan and Weisman (1998) conducted an extensive analysis into what they defined as Career and Lifestyle Survey (CLS) of community college presidents (Weisman & Vaughan, 2007). While this study covers areas such as demographics, education, salary, etc., there needs to be more of a focus on specific behavioral competencies that contribute to overall effectiveness. These studies also provide a framework for aspiring community college leaders to follow, identify, and obtain to become effective at various positions. Wallin (2002) outlines various skills set and how to hone these skills to create a quality leadership group within the community college arena. However, individual characteristics of leaders, especially presidents, of community colleges are fluid and dynamic. This is an area that needs to be researched more in detail to differentiate out areas needed for presidents to succeed.

This translates into areas where acquiring these skills cannot be identified through text and various readings; however, they are acquired through life experiences, through dramatic failures and emotional pinnacles of success. Leaders cannot build the much needed and relied on relationships that determine success or failure of community colleges through case studies and contextual diagrams. Studies conducted in the community college leadership level show areas of expertise needed, i.e., people skills, time management, internal motivation, and budgeting skills (Vaughan, 1990) as necessary for success in positions at the community college level. In general, the ability to lead at the community college level is a mixture of prescribed readings and
experiences gained along the way throughout tenure at positions in the pathway shown above.

At the presidential level at community colleges, studies have shown that specific competencies are required for a successful tenure. The American Association of Community Colleges (AACC) in 2005 states in a report that community college presidents need to possess specific competencies that can lead to a successful experience. AACC (2005), in *Competencies for Community College Leaders*, has outlined six basic qualities deemed necessary for the success of a community college presidency. Factors that contribute to success include organizational strategy, resource management, professionalism, community college advocacy, collaboration, and communication. In addition, Desjardins (2001) outlines competencies that drive the success of community college presidents, include areas such as leadership, culture/climate, influence and business management. As researchers, our aim is to expand on the existing body of knowledge regarding the criteria relating to the effectiveness of community college presidents.

The above-mentioned skill set is a great depiction of what is needed for aspiring community college presidents. The combination of organizational knowledge, cultural differences, and internal motivation offers individual a framework to success in the president’s position at the community colleges. These, among other viable competencies, dictated the success of presidents. This level is tasked with overcoming obstacles, building relationships, increasing enrollment, and understanding budget restraints using skills such as inclusivity, framing meaning, minding the bottom line, and systems thinking (Eddy, 2010). Hammons and Keller’s (1990) seminal article titled,
Competencies and Personal Characteristics of Future Community College Presidents

and Desjardins’ (2001) book, discusses attributes that drive the success of community college presidents. Our research findings, which delineate specific competencies, are in line with those outlined in the above-mentioned articles and book.

Along with the findings of Hammons and Keller (1990), the AACC (2005), and Desjardins (2001), there are a different set of competencies that relate to the emotional well-being of individuals and their aspiration for change and evolvement. Emotional Intelligence (Goleman et al., 2004) speaks of leaders who are able to “connect” (Goleman, 1998) with others. Goleman also posits that emotional intelligence (EQ) is the ability to motivate oneself and persist in the face of frustration; to control impulse and delay gratification; to regulate one’s moods and keep distress from swamping the ability to think; to empathize and to hope (Goleman, 1998). Emotional and social intelligence (Goleman, 1998, 2006; Salovey, Bedell, Detweiler, & Mayer, 1999; Salovey & Mayer, 1990) account for a great deal of the competencies of leadership in organizations. Emotional Intelligence as it relates to community college leadership is evident through competencies outlined by Hammons and Keller (1990). “Emotional Balance / Control” is defined as a key indicator of the success of community college presidents (Hammons & Keller, 1990). However, additional research and analysis need to be conducted to investigate specific competencies that drive success in the field of emotional and social intelligence (Goleman, 1998, 2006; Salovey & Mayer, 1990) for community college presidents. In addition, emotional competencies such as communication, sensitivity, and interpersonal skills (Thornton & Byham, 1982) are necessary for leadership in all facets. Other crucial elements such as shared vision (Allen & Allen, 1990) show areas in an
organization where a common culture creates a sense of enthusiasm and accomplishment. Integrating positive culture and a sense of community with shared vision into a connected diagram on organizational success and effective leadership becomes logical and visionary.

Problem of Practice

The effectiveness of community college presidents is in a constant state of change. As generations change, so do the needs to students, faculty, and administration. Gone are the days where “ivory tower” presidents rarely engage those they manage; the leaders of today are charged with the goal of community involvement, peer engagement, and student center focus. These are the university presidents who are tasked with navigating the waters of change (Drew, 2010). Change in higher education is a consistent force within both the university and the community college systems. This change translates to competency factors that contribute to success as the president of the educational institution.

Community college vacancies are increasing at an alarming rate. Some studies posit the vacancy to be in the order of 79% (Shults, 2001) while others point to a deficit of qualified candidates to fill the gap crisis created by community college leadership attrition, retirement, self-vacating, and other forms of positional exodus. Shults (2001) continues that community college administrative positions continue to adapt and change in unison with the demanding requirements of administrative positions. The inability to develop, find, and cultivate vital leadership positions, such as the presidents, becomes an ever increasing problem within the higher education context and framework. The end effect of such a leadership crisis phenomenon in community colleges could be that the
entire system will be depleted of talent causing a strong movement away from community colleges. Wallin (2002) states, “it is critical that current community and technical college presidents [and other administrators] have every opportunity to continue to hone their skills and to provide quality leadership” (p. 18). Consequently, the arising problem becomes a systemic thought on the reasons behind this vacancy epidemic. Where once was a steady pipeline of talent for community college presidents, now wallow in the paradox of job bid boards and interim positions.

This issue is not unlike the issues facing the business sector. Leaders are needed at all levels and those deemed qualified to take the helm of leadership, i.e., president, chief executive officer, etc., are chosen for their demonstration of leadership, ability to build relationships, and the potential to increase the overall standing of the organization. These competencies are identified and measured against goals and measures identified by a board of directors and shareholders. However, the difference between education and business comes into focus with the qualified candidates who are selected for interviews and eventually, leadership positions at the community college level.

The problem of practice of this research focuses on the factors that lead to effective and ineffective presidential tenure at the community college level. This qualitative approach then analyzes the factors that drive the success and/or failure of community college presidents. This is a problem that needs to be identified and resolved before a grander problem arises, the collapse of the community college system. This system is an integral part of the U.S. post-secondary education and consequently, without adequate leadership, there is a grave risk in the demise of the system. This study identifies the needed competencies to drive a successful career as a president of
community colleges. This is a pertinent issue that needs resolution and enlightenment; aspiring presidents of community colleges might see benefits in this analysis.

**Purpose of Study**

The purpose of this study is to determine competency factors that contribute to the effectiveness of community college presidents. The goal of this research is to identify a theoretical framework by which aspiring community college presidents can rely on as a guide to increase their effectiveness as they save the educational institution. As more community college leadership leaves their executive level posts, they form a chasm of lost talent. Community college presidents find themselves in a situational complexity. Without the proper talent level to “hand off” their presidency, and forced with the time constraints of leaving their post, a vortex of emptiness arises as the community college faces obstacles it cannot overcome.

In addition, this study will serve as a model for future community college presidents. This study will identify techniques, traits, and resources aspiring presidents can use in their pursuit of presidency. This study will also serve as a template of effective responses to issues facing current community college presidents. This qualitative approach will show areas of improvement that current and future presidents can use to hone their skill levels, face obstacles with confidence, and promote the growth of the next generation of community college presidents.

**Review of Literature**

This section will outline the theories used in this qualitative analysis. These theories are grounded in systems thinking and leadership values and validate the emotional and psychological aspects of leadership with respect to community college
presidents. This section will also serve to examine the theoretical underpinnings that emerged as salient and important factors in our research. Seminal research exists that speak to the effectiveness of community college leadership. On a grander scale, we also explore the research on a university level.

Although there is great insight and literature on organizational leadership and theories, literature is limited in scope when discussing factors that contribute to effectiveness in a higher education arena (Fisher, 1984). Research on traditional university presidents reveals the need for more of an in-depth approach to competency factors of leadership on a higher education level. Fisher (1984) posits that the need to study the factors that contribute to the success of university presidents need to be explored and analyzed on a larger scale (p. 12). Traditional university leadership is analogous to the community college level with respect to responsibilities and effectiveness factors at the presidential level. Higher education has become a true test for leadership in coping with complexity and the extent of transformation of its management structure (Bargh, Bocock, Scott, & Smith, 2000). Post-secondary leadership is different from corporate and organizational hierarchies. Leadership in academic organizations is trenching in intellectual authority and operational competencies (Bargh et al., 2000: 15). The need for further research on the emotional side of academic leadership is further highlighted with the actual title of most university presidents morphing into “Chief Executive” (Bargh et al., 2000).

The theories discussed in this section include emotional intelligence, resonant leadership theory, intentional change theory, self-determination theory, and transformational leadership theory. These theories are projected to form the foundation of
this research. Each theory has a specific reasoning and expectation in this study as we search for answers to our study purpose.

**Emotional Intelligence Theory (EI)**

EI theory brings to light the concept of “monitoring one's own emotions and the emotions of others” (Salovey & Mayer, 1990: 125). With the thought of leaders and the ability to maintain one’s composure in times of stress and confusion. EI also brings in a leader's ability to communicate effectively (Goleman et al., 2004), and the ability to transform into the democratic leader (p. 69). In the education field, the ability to navigate and build consensus through using principles of EI become important to all levels of leadership. Intelligence is defined as the global capacity of the individual to think rationally and act with purpose (Wechsler, 1958). This definition extends into theories on emotional intelligence where purpose and rationality are the foundation of maximizing one's leadership competencies.

**Resonant Leadership Theory**

According to McKee, Boyatzis, and Goleman, resonant leadership is defined as individuals who have built resonant relationship around themselves. With emotional intelligence being a key indicator, leaders are aware of their emotions and how these emotions lead to a contagious state (Boyatzis & McKee, 2005). There is a contagious nature of resonance that leaders project using this theory. They are self-aware of themselves and their environment and they understand stress factors and how that contributes to the performance of individuals (Boyatzis & McKee, 2005; Goleman et al., 2004). Resonant leadership creates intangibles (Boyatzis & McKee, 2005: 26) such as business, happiness, and being comfortable. A resonant leader would understand that
these intangibles contribute directly to individual performance and organizational success. The ability to “read” one another (Boyatzis & McKee, 2005: 23) and convey emotions properly is a direct link with Resonant Leadership Theory. Shared vision becomes essential in resonant leadership creating a culture of change and positive difference bringing independent and organizational growth.

Individuals who are passionate about what they are doing, send out messages that others around can intuitively sense and process. Actions such as excitement, hard work, and dedication become a template that leaders can use to build resonance with those around them. Resonance becomes a way of life as opposed to an abstract goal; people demonstrate obvious, tangible care and concern for one another and at the same time, they are direct and hold each other accountable for getting the job done (Boyatzis & McKee, 2005: 32). This style of leadership becomes necessary in organizations where leaders promote growth and change. Expectations become high for both the leader and the follower and eventually, this contributes to the success of the organization.

**Intentional Change Theory (ICT)**

ICT is the theory based on the individual view where “change occurs at one’s behavior, thought, feelings and perceptions” (Boyatzis, 2006: 88). This framework becomes crucial when taken in the context of modern day leadership. Boyatzis’ (2006) self-directed learning model also explains what the ideal self and real self are and what the “gaps” between both paradigms. The relationship is further explored through various stages of discovery process. In leadership, how one closes the gap between the ideal and real self, determines the success of the leader.
The five discoveries of ICT form a foundation on leadership and how to enact an individual’s personal vision. In complex systems, the positive and negative emotional attractors serve as viable explanations to the success of individuals in leadership positions. Also, according to Boyatzis et al., “when individuals focus on the future possibilities and filling them with hope, it arouses the parasympathetic nervous system (PSNS)” (Boyatzis, 2006: 112). The interaction of PEA and NEA, when it comes to desired change, is crucial in leadership, and it explains why there is a positivity and negativity in individual change efforts (Boyatzis, 2006).

**Self-Determination Theory (SDT)**

Self-Determination Theory (Deci & Ryan, 1985) originates from Vroom’s Expectancy Theory, which focuses on intrinsic motivation factors such as self-regulation and autonomy. This philosophy sets the foundation for human achievement and creates an understanding that identifies the relationship between manager and subordinate as the prime nexus of interpersonal work climate (Deci & Ryan, 1985: 67). SDT also allows and attempts to explain the characteristics of the leader in various conditions and outlines the significance of motivation factors in leadership positions.

Studies also have revealed variables that increase self-determination would include dependent variables such as intrinsic motivation, positive emotional tone, creativity, interest in the activity, conceptual learning, perceived competence, and self-esteem (Deci et al., 1989). With respect to leadership in organizations, SDT becomes relevant in defining characteristics needed for effective leadership. The intrinsic factors that drive successful leaders become integral to an organization. As SDT theory expands,
researchers find the common bond between culture and organizational success and focus on the variance in relationships between the manager and the subordinates.

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**Methodology**

This qualitative research paper is a grounded theory approach as noted by Glaser and Straus’ grounded theory method (Glaser & Strauss, 1999). This is a systematic approach to collecting and analyzing data to understand complex phenomenon such as competencies that drive a community college president. Our research methodology centered on obtaining qualitative data through person-to-person interviews with recognized “codable” moments (Boyatzis, 1998). Qualitative interviews were conducted with systematic sampling participants. The interviews were personal and face-to-face format using principles based on Critical Incident Interviewing (CII) methods as noted by Boyatzis (1998). The researcher preferred to be face to face in order to experience the entirety of the moment and the story experience of the sample group.
The sample group was divided into two categories, effective and less than effective. To be in classified in the effective category, the following (5) criterion were considered:

*Total Community College enrollment* = >20,000 full-time students – large enrollment in schools shows growth and funding for expansion – Public Information

*Tenure as President* = > 5 years at one community college system – Long tenures dictate renewal of contract and board involvement – Public Information

*Minimum of three external (non-community college related) committees involvement in local community* – Community involvement shows a propensity for social engagement – Information Verified with President.

*Direct reports* = Greater than or equal to 7 – Large teams show team management, diversity, and Coaching aspects. – Information verified with organizational chart – Public Information

*Active member of American Association of Community Colleges (AACC) or equivalent national organization* – National affiliations show an inclusion and a greater sense of purpose – Public Information

Through the art of storytelling, we were able to obtain necessary data to define the “information and themes in a way to the development of knowledge” (Creswell & Plano Clark, 2007: 11). With this qualitative approach, the “researcher seeks to establish the meaning of a phenomenon from the views of participants. This means identifying a culture sharing group…” (Creswell, Plano Clark, Gutmann, & Hanson, 2003: 22). We used structured interviews to obtain data on competencies and lived experiences for the qualitative coding sample. In addition, copious notes were taken during the interview by the researcher looking for moments of moods based on the experience. The researcher allotted 60–90 minutes total for interview length. Our Institutional Review Board (IRB) approved interview protocol guided our questions throughout the entirety of the interview process (see Appendix A).
All participants were currently serving at the presidential level of community colleges, which gave us a greater perspective on competencies that emerged from the coding samples obtained. The coding data in the field of community colleges was dependent on the theoretical sensitivity of the researcher (Strauss & Corbin, 1990).

The data, in accordance to the critical incident interviewing technique, was collected from the respondent’s perspective and in his or her own words. The stories and incidents they recall are of their own free will and in their own words. This method was effective, and the interviews proved to be rich in information. Transcriptions were created from the recordings and in-depth coding analysis was performed. We were able to understand and code for relevance and significance. Also, one of the community college systems had a protocol for human subject research by which our research had to comply and integrate with their specific IRB approval process. IRB permission was obtained in good standing with all necessary permission and allowances.

**Sample Size Analysis**

Our sample size and composition were selected using a methodical and systematic process. Community college presidents were identified and chosen based on preselected criteria; overall tenure of the individual’s presidency (at all community colleges served as president), school size, and duration of the individual’s presidency (at the community college when interviewed). Location was also identified and community colleges with a large (>3000 enrolled) student population were preferred. We also wanted to get a mixture of community colleges and technical community colleges for diversity and comparison. Technical community colleges focus more on employment after students earning an associate's degree whereas, traditional community colleges would focus on
articulation agreements with four-year universities. We were able to leverage networking opportunities in the community college system and connect directly with respective community college presidents for interviews and analysis. In discussing with other proliferate individuals within the community college system; we were able to capture relevant community college presidents that could be chosen as a sample size for analysis.

The individuals who were selected were then systematically grouped into categories for coding purposes (refer to Table 2). Names and locations were omitted for anonymity and discretion. Thirty-three community college presidents were identified and contacted. Of the thirty-three, ten had declined to be a part of the research. A total sample size of twenty-three was officially obtained. This is further segregated into twelve effective and eleven less than effective. Full saturation size was deemed necessary for ten from each category. The sample was then divided into three sections, Alpha Region, Delta Region, and Omega Region [arbitrary region names selected for anonymity]. Table 2 represents our sample size with composition data.
Table 2. Sample Composition

<table>
<thead>
<tr>
<th></th>
<th>A. Alpha Region Sample Analysis</th>
<th>B. Delta Region Sample Analysis</th>
<th>C. Omega Region Sample Analysis</th>
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<tr>
<td>Total Participants</td>
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<td>5 Community College Presidents</td>
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<td>1 Hispanic 3 Caucasian 1 Asia/Pacific Islander</td>
</tr>
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<td>&lt; 50 years old: 2 &gt; 50 Years old: 4 &gt; 55 Years old: 3</td>
<td>&lt; 50 years old: 1 &gt; 50 Years old: 3 &gt; 55 Years old: 2</td>
</tr>
<tr>
<td>Tenure as President</td>
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<td>&lt; 10 years as President: 3 &gt;10 years: 3</td>
<td>&lt; 10 years as President: 3 &gt;10 years: 2</td>
</tr>
</tbody>
</table>

Findings / Results

The findings in our study show specific competencies focused at being an effective community college president. These findings show that this is an ever-changing dynamic that guides individuals into becoming effective at the presidential level. In community colleges, the need for highly effective leadership is paramount, and the individual factors of effectiveness will translate to success during a president’s tenure.

Our findings are grouped into five main categories. These categories contain specific themes obtained from transcript analysis and coding methodology. The individual categories are labeled as Emotional Intelligence, Sense of Purpose, Social Intelligence, Cognitive Intelligence, and Involving External Stakeholders. Figure 8 shows
our categorical findings and their relationship to the effectiveness of community college presidents in a pictorial format.

**Figure 8. Categories from Qualitative Coding Analysis**

Themes from Coding Analysis

Qualitative Thematic Coding (Boyatzis, 1998) revealed five major thematic categories as expressed above. Within each category, individual themes revealed factors that contribute to the effectiveness of community college presidents. The following shows our finding theme count from each category:

1. **Emotional Intelligence**: 5 Theme subsections
   a. Emotional Self-Control
   b. Authenticity
   c. Adaptability
   d. Perseverance
   e. Take out Emotions

2. **Sense of Purpose**: 2 Theme subsections
   a. Passion
   b. Belief in Shared Vision and Direction

3. **Social Intelligence**: 4 Theme subsections
   a. Social Intelligence
b. Confidence (in self and collective)
c. Coaching and Mentoring
d. Trusting Teams (shared compassion)

4. **Cognitive Intelligence**: 4 Theme subsections
   a. Seeking truth in understanding situations and events
   b. Financial Acumen
   c. Seeking Novelty
   d. Taking Calculated Risks

5. **Involving External Stakeholders**: 4 Theme subsections
   a. Community Involvement
   b. Maximizing Buy In
   c. Expanding Diversity of Teams
   d. Building Positive Board Relations

**Finding 1**: Within the **Emotional Intelligence** category, the five listed themes are as follows:

- **Emotional Self Control** – “I always try to stay even-keeled, even when things might not be going as I had planned. As President of this college, you are always being watched and judged based on what you are doing or feeling.” This category shows the amount of control and personal balance one needs to be effective as president. The degree to which internal emotions are expressed and how they should be expressed at all times are factors of effectiveness. The effective presidential population showed great restraint, control, and composure during times of success and excitement as well as times of failure and low morale. Personal balance becomes imperative when leading a community college system.

- **Authenticity** – “I have to speak my mind in a way that does not come off as being offensive or passive. I also have to let him know how I feel about the referendum, if it is good or bad and if it is good for our students.” Credibility is a major factor that contributes to the effectiveness of community college presidents. Presidents who are able to convey dependability and authenticity have the ability to transform negative situations into positive moments. These individuals, through their thoughts, words, and actions have the skill to connect directly with their audience and constituents.

- **Adaptability** – “I had to change my approach with each member of the board. They had to see me for who I am and believe that I had the best interest of the school in my vision. This meant being able to discuss anything with them at any time, from the local weather to cattle, fiscal shortcomings to baby diapers.” The ability to adjust one's outlook and speak based on the situation
is a direct correlation of an effective president. These individuals whose transcripts had several areas of adaptation themes were able to speak to anyone at any time about anything. The skill to change, engage, and lead conversation and actions based on the condition and audience becomes important for effective community college presidents.

- **Take out emotions** – “It became an emotionally charged room, full of energy and speaking without thinking. I couldn’t let myself fall into that mix. It just wouldn’t be right as a President to show how much this was affecting me.” Another quality of an effective community college president is that ability to separate their emotions from the situation. Effective presidents are able to keep calm and collected even when those around them are irate, irrational, and/or indecisive. Another president is quoted as saying, “…. it was the right thing to do, it went against what I felt, but I knew it was the right thing to do…” The skill to go against experience and instinct, to concede to majority consensus, and to accept alternative paths, add to the “make-up” of effective community college presidents.

- **Perseverance** – “As a team, we have to stick to the decision we make and defend it all the way. That is what the community expects and that is what our student population expects out of us.” Community college presidents are constantly faced with an array of decisions. Effective presidents defend and support decisions that have been made, whether individually or on a collective basis. They rationalize responsibilities for these decisions, make the decisions, and lend full support to achieve success.

**Finding 2:** Within the **Sense of Purpose** category, the two listed themes are as follows:

- **Passion** – “I knew it was the right thing to do, and I did it because that is what I believed in. I wanted to create a true learning environment. These are the moments that we see success in our community college. This is why I am here as president.” Passion is a true indicator of an effective community college president. Presidents who are passionate about their role in the community college system make decisions that are more profound and beneficial to their college system. In addition, our research shows that there is strong indicators that suggest high degrees of passion towards student success. With passion in their role as president and a passion for student success, these individuals are more effective in their tenure as president.

- **Belief in Shared Vision and Direction** – “I knew that I wanted to be in this position [community college president] from Day 1.” Community college presidents who had a strong belief in their shared vision and life direction showed great promise and effectiveness. Their vision guides them in decisions and actions they make in their tenure as president. This congruent shared vision also creates support for the president because employees integrate shared personal goals and expectations into the organizational epithets.
embodied by the community college president. “…We all believe in the goals of the college…” This becomes especially cohesive and powerful when dealing with unexpected organizational disappointments and setbacks. For the President, personal and shared vision also becomes the foundation for success in their tenure as presidents.

**Finding 3:** Within the **Social Intelligence** category, the four listed themes are as follows:

- **Social Intelligence** – “I could just sense that the board was going to be in favor of our proposal. The look of confusion, I could just feel the tension in the room. Very uncomfortable for all of us, you know?” There is a large amount of literature based on emotional intelligence and the usage with respect to leadership. Leadership amongst community colleges is no exception. Presidents who are able to control their emotions and get a “sense” for those around them are more effective at leading community colleges. Presidents who are emotionally aware of others around them and know their own emotions are able to be more effective during their term as president.

- **Confidence** – “I was certain that we would win the referendum and all that I did, all the talks, all the meetings, I was so sure that we had the community support. Even after our proposal was defeated, I still felt like we can do this again next year.” Community college presidents who were confident in their decision-making abilities, their internal persona, and their life pathways were effective in their tenure. Their confidence helped them overcome shortcomings and be able to fulfill their aspirations. The certainty that effective presidents rely on in decision-making and job fulfillment becomes an asset when measuring effectiveness.

- **Coaching and Mentoring** – “My team could do the job, whether it be to present to the board, the community, the faculty, whatever, I knew, without a shadow of a doubt, that this team would do what was needed.” Leadership is about relying on those around you and leveraging their skill set. This research has shown that ineffective presidents of community college feel as if they cannot trust in the competency level of their direct reports. Effective presidents promote growth in their team by giving members opportunities to take leadership roles and express their unique talents.

- **Trusting Team (shared compassion)** – “When the board started to go behind my back, and I found out about this, my trust in my VP was diminishing. I did not know if the information we were sharing at my President’s meeting was being shared with the board. It is so very important to be able to trust those around you.” Effective presidents of community colleges laud their employees with trust and support. They understand that being effective as a leader means trusting their teams to carry out the mission of the organization. This theme is important as presidents strive for success in their community colleges while believing and trusting in their team members.
Finding 4: Within the **Cognitive Intelligence** category, the four listed themes are as follows:

- **Seeking Truth in understanding situations and events** – “The board wanted the truth, and frankly, I did too! But our VP was just beating around the bush, and he was stalling. I stepped in to save some face, but you can bet your last dollar that I sat in with him in private to find out what exactly happened.” Seeking truth during times of confusion appears to be a common trait for effective presidents. They have a specific ability to, not only to know that they have information that is false, but also the skill set to find out the truth of the matter. These presidents hold off on judgment until further, validated information can be gathered.

- **Financial Acumen** – “You have to know how to read budget reports, financial statements, and be able to make rational decisions based on dollar values, or you are going to get in trouble with everyone. The knowledge and ability to say ‘no’ to financial request, is mandatory for this job.” Knowledge of financial matters is crucial to the success of any community college presidents. Most of the president who were interviewed had spent some time (6 months minimum) in some financial capacity. It becomes important to their success to know what the financial standing is with the community college, how much the school has incurred in debt, and know how to be creative with financial solutions to accomplish financial goals.

- **Seeking Novelty** – “It became imperative that we had to look at this a different way; the old way didn’t work, and it was up to the team to be creative about which direction to go in now.” Change is evident in the community college system. The effective presidents are welcoming of change and use it to their advantage in every facet of their tenure. They are able to accept the change readily and see the effects of it transpiring. In addition, community college presidents are able to adjust themselves to fit the changing times of the educational system.

- **Calculated Risks** - “...as president, I have to weigh all options and choose the one that benefits our students and communities.” In the community college president’s life, there are always choices and risks to take on a daily basis. However, the presidents who are able to rely on their intuition, experiences, and team, make calculated decisions and eventually, reduce the overall risks associated. This improves the degree of success as president.
Finding 5: Within the **Involving External Stakeholder** category, the four listed themes are as follows:

- **Community Involvement** – “You have to be involved in the community if you are going to lead a community college.” Being involved in the community is a hallmark to the success of a community college president. An effective president is immersed in community activities, community boards, and community engagement activities. The degree to which many of the presidents are accepted by their respective communities lead to whether they are effective as a community college president.

- **Maximizing Buy In** – “You have to include everyone and get them to buy into the decision.” All decisions that leaders make need the support of their constituents. Effective community college presidents are inclusive; they take pride in hearing everyone’s voice, whether positive or negative, they crave democracy and team decision-making. “I often make the decision and then get my team to buy in on it…” When it comes to success as president of a community college, getting others around you to support and buy into your vision is essential to success.

- **Expanding the diversity of the team** – “It is not just diversity of color that I need on my team, it is diversity of thought. I don’t need everyone to think alike and be the same, I need some differences.” Effective community college presidents believe in diversity and differences in people. They see variation in ideas, experiences, and decisions as a benefit to their position. Presidents also understand that change is essential for success and the diversity of their team composition makes each team member a change agent.

- **Building Positive Board Relations** – “My board and I have a very positive relationship, I know each one of them personally. We are able to speak very candidly about topics that might be sensitive for others...” The presidents and chancellors of community college system report directly to their boards. These relationships become the foundation of effectiveness and success in their presidential tenure. Community college boards set the expectations, goals, and compensation for their presidents. Effective presidents maintain their individual relationships with their board of directors. They overcome informalities and create relationships where topics are discussed informally and garnered support before formal board hearings. Transcript records show that ineffective presidents are terminated by the board, as quoted by a community college president, “My board and I have agreed to part ways. We just do not see eye to eye and rather than prolong this battle with them, I have decided to go another direction...” The relationship between community college boards and their respective presidents are essential for both parties and for the success of the organization.
The themes identified in this research are powerful indicators of what is necessary to be an effective community college president. Table 3 shows the systematic breakdown of the themes found in the qualitative coding for both the effective and less than effective sample groups. This analysis is a clear depiction of identifying strong characteristics that are needed to be an effective community college president.

**Table 3. Theme Findings for Sample Groups**

<table>
<thead>
<tr>
<th>(Minimum of 3 Codable moments) Occurrences of Themes Present</th>
<th>Effective</th>
<th>-</th>
<th>Less than effective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample Size</strong></td>
<td>n=10</td>
<td></td>
<td>n=13</td>
</tr>
<tr>
<td><strong>Emotional Intelligence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Emotional Self Control</td>
<td>8/10 = 80 %</td>
<td>5/13 = 38 %</td>
<td></td>
</tr>
<tr>
<td>* Authenticity</td>
<td>9/10 = 90 %</td>
<td>8/13 = 62 %</td>
<td></td>
</tr>
<tr>
<td>* Adaptability</td>
<td>8/10 = 80%</td>
<td>8/13 = 62 %</td>
<td></td>
</tr>
<tr>
<td>* Perseverance</td>
<td>8/10 = 80 %</td>
<td>6/13 = 46 %</td>
<td></td>
</tr>
<tr>
<td>* Take out Emotions</td>
<td>9/10 = 90 %</td>
<td>8/13 = 62 %</td>
<td></td>
</tr>
<tr>
<td><strong>Sense of Purpose</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Passion</td>
<td>10/10 = 100 %</td>
<td>8/13 = 62 %</td>
<td></td>
</tr>
<tr>
<td>* Belief in Vision and Direction</td>
<td>9/10 = 90 %</td>
<td>7/13 = 54 %</td>
<td></td>
</tr>
<tr>
<td><strong>Social Intelligence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Social Intelligence</td>
<td>9/10 = 90 %</td>
<td>7/13 = 54 %</td>
<td></td>
</tr>
<tr>
<td>* Confidence (in self and others)</td>
<td>10/10 = 100 %</td>
<td>7/13 = 54 %</td>
<td></td>
</tr>
<tr>
<td>* Coaching and Mentoring</td>
<td>10/10 = 100 %</td>
<td>7/13 = 54 %</td>
<td></td>
</tr>
<tr>
<td>* Trusting Teams (shared compassion)</td>
<td>9/10 = 90 %</td>
<td>6/13 = 46 %</td>
<td></td>
</tr>
<tr>
<td><strong>Cognitive Intelligence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Seeking Truth in Understanding situations and events</td>
<td>7/10 = 70 %</td>
<td>11/13 = 85 %</td>
<td></td>
</tr>
<tr>
<td>* Financial Acumen</td>
<td>9/10 = 90 %</td>
<td>11/13 = 85 %</td>
<td></td>
</tr>
<tr>
<td>* Seeking Novelty</td>
<td>9/10 = 90 %</td>
<td>4/13 = 46 %</td>
<td></td>
</tr>
<tr>
<td>* Taking Calculated Risks</td>
<td>8/10 = 80 %</td>
<td>11/13 = 85 %</td>
<td></td>
</tr>
<tr>
<td><strong>Involving External Stakeholders</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Community Involvement</td>
<td>9/10 = 90 %</td>
<td>6/13 = 46 %</td>
<td></td>
</tr>
<tr>
<td>* Maximizing Buy In</td>
<td>9/10 = 90 %</td>
<td>8/13 = 62 %</td>
<td></td>
</tr>
<tr>
<td>* Expanding Diversity of Teams</td>
<td>8/10 = 80 %</td>
<td>10/13 = 77 %</td>
<td></td>
</tr>
<tr>
<td>* Building Positive Board Relationships</td>
<td>10/10 = 100 %</td>
<td>11/13 = 85 %</td>
<td></td>
</tr>
</tbody>
</table>
Coding Reliability

A third party was contracted to verify coding themes and increase the research’s “inter-coder reliability” (Boyatzis, 1998). Codes were shared and themes were constructed to verify an unbiased approach to the researcher’s thematic coding method. Between the researcher and the third party contractor, there was a 78% similarity in coding themes that we used in this research. The 22% difference primarily had to do with the researcher terminology and bias; however, the basic themes were consistent for both our thematic analysis and the contracted party’s conclusion. Through discussion and compromise, both groups came to a 100% agreement on the coding themes analyzed.

Discussion

Our research was based on the need to define competencies that lead to the effectiveness of community college presidents. In addition, this study illuminates the necessity for additional research on community college leadership requirements. Our interviews were structured in a manner to elicit the greatest amount of data possible with a total saturation study rate of a sample size of twenty community college presidents. Our in-depth interviews with twenty-three presidents provided insight on what is deemed to be important with respect to being effective in this high-level position. Our interview subjects were selected for their success in their tenure as presidents and their correlating stories and code analysis indicated the various linkages needed to thrive in this position. The presidents selected were from a range of ethnic backgrounds, gender, and professional experience and thus, their recount and stories show a difference in perception on what is deemed to be needed to be successful as president of a community college.
From our research and analysis, we were able to identify five key thematic categories, which would lead to effectiveness as a community college president. The conceptual framework shown in Figure 2 shows the areas outlined by our research. Within these five key thematic categories, we found nineteen distinct themes counts that presidents need to be successful in their position. The themes defined represent codable moments (Boyatzis, 1998) that were delineated throughout each transcription. From the transcriptions, we were able to develop a codebook (Boyatzis, 1998) in which themes were grouped and classified. In addition, a code tree (pictorial arrival of emergent themes) was developed to show the methodical process of finding emergent themes for consideration throughout this research.

Our framework is informed by two distinct theories that we believe complement each other and build the foundation for this research; Emotional and Social Intelligence (EI/Sl) competencies of leadership and Resonant leadership theory. Both theories guide individuals into an introspective view of themselves as leaders and as human beings. As evident in our findings, to be an effective community college president, one must first understand their own personal vision of leadership as well as gauge their own strengths and weaknesses. These theories were also strongly present among effective community college presidents and absent in those who were ineffective during their presidential tenure.

Emotional and social intelligence competencies were evident in our sample group of effective community college presidents. Areas such as self-management, self-awareness, social awareness, and relationship management (Goleman, Boyatzis, & McKee, 2002) were evident throughout our transcription of the effective group. Likewise,
these themes were remarkably absent with the ineffective group. While the themes of EI/SI competencies are extremely important for leaders of any organizational environment (Boyatzis & McKee, 2005; Goleman et al., 2002), our study indicates that they become critical for leadership at the community college level. Examples of EI/SI competencies that were evident in our coding thematic were *Emotional Self Control, Authenticity, Adaptability, Perseverance, and removing emotions from decision-making*. In addition, *Confidence, Coaching and Mentoring, Trusting Teams (shared compassion), and Social Intelligence* were also evident among the effective leaders.

Hammons and Keller (1990) state that leadership qualities on the community college president level are divided into three categories divided according to Stogdill’s *Handbook of Leadership* (1974). This article divides the competencies into leadership, group related, and personal characteristics. Under the personal characteristics category, Hammons & Keller group Emotional Balance/Control defined as “The ability to control one’s emotions and convey a sense of control even under extreme pressure” (1990: 34). While this is a linkage to Emotional Intelligence (Goleman et al., 2002), it does not cover the needed areas of EI/SI traits and skill level. Our research investigates this area in depth and integrates EI/SI characteristics with prescribed success factors of community college presidents. While this approach does shed light on what is needed to be effective at this level, there needs to be more of an in-depth analysis of the EI/SI factors that contribute to the effectiveness of presidents.

Resonant leadership creates a positive framework that effective community college presidents abide by in an effort to create a productive and sustainable post-secondary education system. Posited by Boyatzis and McKee (2005), resonant leaders are
in tune with those around them creating an atmosphere of mental clarity and well thought out actions. Resonant leaders are masters in empathy, “reading people, organizations, and cultures accurately and they build lasting relationships” (Boyatzis & McKee, 2005: 4). As president, individuals are tasked with leading a diverse and talented community college system. As they strive for effectiveness in their organizations, presidents must “engage the power of all the people who work in and around the organization” (Boyatzis & McKee, 2005: 5). The true test of a leader is the degree of engagement they have with their direct and indirect reports. Resonant leaders are able to leverage their in-depth skills, such as mindfulness, hope, and compassion (Boyatzis & McKee, 2005). These skills enable community college presidents to be “in tune” (Boyatzis & McKee, 2005: 4) with others in the organization and use those skills to provide a framework for optimum development and high results. It is evident throughout our research that leadership in the education sector requires a true form of resonant leadership. Effective presidents are able to ward off the effects of dissonance and Sacrifice Syndrome, sacrificing too much to their organization (Boyatzis & McKee, 2005).

Avolio and Gardner (2005) describe leaders being authentic in their actions and desires with themselves and those around them. Dating back to roots in Greek philosophy, “to thy own self be true”, authenticity in leadership is concerned with self-actualization and seeing their lives as they are; furthermore, as how they should be (Avolio & Gardner, 2005: 319). Maslow (1965) describes self-actualization and how vital this concept and goal is to leadership. He continues to describe how self-actualization means being involved in a cause external to the individual. Self-actualization means “experiencing fully, vividly, selflessly, with full concentration and total absorption”
At the community college level, authenticity is mandatory for an effective tenure as president. As one president said, “My credibility is all that I have…” and another said it best, “…good or bad, you have to be able to live with the [personal] decision yourself.” Being authentic to yourself, being true to those around you, and being motivated by personal convictions (Avolio & Gardner, 2005: 321), describe methods to being effective for a community college president. According to Kernis (2003), one product of authenticity is optimum self-esteem characterized as “genuine, true, stable and congruent high self-esteem…” (p. 12). In our research, it was also evident that confidence and high self-esteem were critical factors of effectiveness in community college presidents. According to one our research participants, “I am confident in my leadership skills.” Confidence and authenticity become integral qualities when describing effectiveness at the community college presidency level.

This research delineates how leaders in the community college system use specific skill set, emotional intelligence, resonant leadership, authenticity and confidence to name a few, to overcome obstacles, accept failure, and celebrate victories. Throughout our research, we had the opportunity to witness the themes discussed in the prior sections and as researchers, we acknowledge personal growth and maturity throughout this entire process. It is the hope and intent of this research to provide community college presidents, past, present, and future, with seminal data to ensure success throughout their tenure.

This research extends the literature of authors who have written extensively on the subject of community college presidents and the competencies needed to be effective. Hammons and Keller (1990) and Desjardins (2001) describe areas of importance in
competencies for community college presidents. The goal of this research is to add to the body of knowledge proposed by authors and organizations before who have focused on this level of education. Reports by organizations, such as AACC, have brought more of the social side in competencies of community college leadership to prominence. Our research shows that there is more to discover with respect to competencies in community college leadership. Areas such as emotional and social intelligence, purpose, and external stakeholders have high values within our sample group. Our research shows the value of emotional and social competencies that affect community college presidents.

**Limitations**

There are limitations to this research that has to be considered. Limitations of this method include (Corbin & Strauss, 1990), incidents that are based on factual references from memory. This area was minimized with the request that all responses be from an adequate time frame for increased memory clarity. The question protocol referenced events that occurred within the past two years. In addition, another limitation could be the unwillingness of the respondents to take the needed time to tell the entire story when describing critical incidents. Finally, there is an inherent bias towards incidents that occurred recently as those are easier to recall, identify, and elaborate. Patterns were then identified using the qualitative information coding process as outlined by Boyatzis (1998).

Researching this subject matter did produce areas of internal bias. The community college presidents sample was chosen specifically for this study. A random approach, for future reference, might have yielded more seminal data and in effect, creating a more value-added results. Presidents were chosen based on school size,
financial overview, and presidential tenure. Although our research yielded valuable and insightful data, a random approach to the selection process would have alleviated bias that existed in the interview and the selection phase.

As discussed by Corbin and Strauss (2008), there is an inherent risk of interviewer bias. This research did not employ random sampling methodology. The researcher main contact source was through networking systems and finding targeted community colleges to include in the sampling quantity. Although every effort was made by the interviewer to remain unbiased during the data gathering, it became difficult to discuss effectiveness with presidents of community colleges that were deemed effective based on the interviewer’s community college scale. This research has to acknowledge the influence of the investigator and going forward, the next phase of this study should concentrate on removing these biases.

Another limitation of this study is the methodology and retrieval of data from interviewees. Our research was focused on critical incident interviewing, which is confined to stories and depictions, based on memories and recollections. Some of this data might be incomplete as the incidents were confined to the last year preceding the interview. Although our subjects were asked to provide clear, concise, and complete data based on memory, human thought patterns would dictate voids in the data and a focus on details retained by the respective presidents. In addition, relevance of information, importance of subject, and sensitivity of the topic may bias responders to answer according to what he or she believe needs to be said and not the factual recount of the situation.
Implications for Practice and Future Research

Our research offers insight into factors that contribute to the success of community college presidents. There is a crisis developing at the leadership levels of the American community college level. Wallin (2002) states, “as retirements loom, particularly in the ranks of senior leadership [of community colleges], there is genuine concern about the quality, the experience, and the preparation of those who will follow” (p. 28). This research focuses on dampening the effects of this predicted leadership gap and supplying much-needed information on competency factors that contribute to effectiveness at the highest level of community colleges. Our study suggests that effectiveness of community college presidents resides in five basic categories, emotional intelligence, sense of purpose, social intelligence, involving external stakeholders, and cognitive intelligence. While there are nineteen themes that are grouped under the five categories listed above, there are some themes that are more evident based on relevance and occurrence. Themes such as confidence in self and others, adaptability, and passion are more prevalent throughout the coding transcripts of the presidents. This is an area for future research to focus and delve into with greater clarity and detail.

Suggestions for future research include the need for a larger sample size. Our sample size of thirty-three was restricted as the limitations are discussed above. A larger sample size would ensure that data bias (Corbin & Strauss, 1990) would be minimized, and a more robust data could be gathered. In addition, a larger sample size would yield more parsimonious data revealing consistent themes on a higher order. Our sample size was developed out of location, student population, tenure, and financial stability. A larger
sample could have fewer restrictions and potentially yield the sample of presidents where emergent themes would be more coherent.

In addition, future qualitative research on the effectiveness of community college presidents should concentrate more on the emergent themes discussed in our research. An added benefit would be to focus more on the themes identified and probe into those areas using a different questioning protocol than the one used for this research (see Appendix A). This would give more specific and clear data that explores the specific themes identified. This would be beneficial when in analysis stage and correlating themes to our coding analysis (Boyatzis, 1998).

The implications and benefit of this research are far-reaching and full of potential. It is believed that the future research in combination with existing and new literature offers readers a view into competencies required for effectiveness as a community college president. Our goal, as researchers and practitioners, is to offer as much clarity as possible with respect to this relevant topic. The competencies outlined in our research are predicted to be used on the quantitative model for analysis. The goal of the researchers is to cross validate our findings on the quantitative scale with the intention of creating a system for targeted development and focus for community college presidents. Our expectation for this research is that aspiring community college presidents will see the benefit in this endeavor and facilitate growth through this analysis.
CHAPTER III: QUANTITATIVE STUDY 1 – COMMUNITY COLLEGE FACULTY AND THEIR EXPECTATIONS FROM ADMINISTRATIVE LEADERSHIP

Introduction

The post-secondary education system in the U.S. is going through a drastic change in faculty expectations and markers for predicted success. The gap in leadership at the community college level is apparent and being felt by community college institutions all across the U.S. (Shults, 2001). The individuals considered for the leadership positions at higher education institutions are in dire need of competencies and traits that drive effectiveness and successful tenures. Faculty groups are creating known normative behaviors that determine their success in the field of education. The need for a greater research base, which lays the foundation for competencies and attributes that lead to a successful faculty member on the education levels, are greatly needed. This study focuses on the engagement factors that contribute to an effective community college faculty.

A similar phenomenon is facing the U.S. community college system causing competent leadership to vacate their posts, leaving a gap in the top positions. Posited by Livingston (1998), the greatest need for the 21st century “will be leaders of our schools as the majority of the administrative workforce approaches retirement by the year 2000” (p. 45). This administrative void in the community college system brings inherent problems that are at all levels of educational institutions. These key vacancies also bring turmoil during a time when community college student population is on the rise in the U.S. (AACC, 2016). As total community college student population, both full time and part time, reaches well over 600,000 students in the U.S. community college system (AACC,
2016), it becomes more pertinent and integral to have a stable, effective leadership in position to guide and develop the system well into the next century.

The leadership gap has transpired onto community college faculty levels. What once was a stable path to leadership positions in the community college sector, has now become a dry pipeline with sparse individuals who have no desire to take leadership positions (Wallin, 2002). We posit that these areas of vacancies in leadership succession planning are directly related to the engagement factors in community college faculty. The leadership gap is evident in the community college system leaving a void in leadership positions that dictate the success of these higher education institutions (Desjardins, 2001). Without resolution, Desjardins (2001) posits a breakdown in the institution of the community college system, which is critical to the success of many students who use community colleges as a starting point for their higher education career (p. 26).

Shults (2001) discusses the path to presidency and the importance of experience in each of the various stages culminating in the President/Chancellor role in a community college. There is credibility in presidents who have started their education career with teaching and, over time, have taken on more responsibility in different roles of increasing leadership. This is shown pictorially in Figure 9 and was a traditional path that most community college presidents followed.
The goal of this research report is to show how engagement, both cognitive and emotional, and how this is related to the success and well-being of community college faculty. This research report is outlined as follows. We begin with an overview and a review of pertinent theoretical foundations of employee engagement, emotional and social competencies, and the organizational environment. These theories are used to validate and predict a research model and related hypothesis of faculty engagement in community colleges. We then follow this with a description of research methods and report on relevant data analysis to support our claim and original hypothesis. Our goal is to report the findings and validate the model to show direct correlations and express the hypothesis to show relevance in the model. We then conclude with a section on limitations and implications for future research and practice in the field of community college faculty engagement.
Theoretical Foundation, Hypothesis Development, and Conceptual Model

Human capital becomes the foundation of any organization, and this leads to various issues on behavior and implementation of strategic goals and vision (Becker & Huselid, 2006). As community colleges become the post-secondary institutions of choice (Wallin, 2002), there is an underlying bastion of talent that drives student success and institutional prominence. Even more challenging to this situation is the factors that drive faculty to become more engaged in the process of the community college and ultimately take on leadership roles that define faculty group success. Recent figures show that the majority of workers in the U.S. are either not fully engaged or at extremes, fully disengaged. This phenomenon within the U.S. working class has become to be known as the “engagement gap,” which is estimated to cost in excess of over $300 billion annually (Bates, 2004; Johnson, 2004; Kowalski, 2003). In the community college setting, faculty engagement drives the success of the learning institution (Hammons & Keller, 1990).

The literature on community college faculty engagement has been concentrated on student success and faculty personal growth. However, when looking into leadership positions taken on by community college faculty, information is sparse and in need of more robust research. The crisis in community college leadership is not new information (Cooper & Pagotto, 2003); however, the engagement gap leading to the decline in leadership ranks in community colleges focuses on central questions of engagement as a mediating variable for success. It goes without saying that new community college leaders are drawn from the faculty ranks (Cooper & Pagotto, 2003: 28). These individuals are familiar with the community college system, the teaching infrastructure, and social and emotional skills needed to navigate the leadership arena. To avoid the engagement
gap in community colleges, engaged faculty become an essential force in ensuring proper leadership positions are valued and optimized.

**Employee Engagement**

Faculty engagement in community colleges has garnered a great deal of support in recent years (Shults, 2001; Wallin, 2002). In post-secondary systems, faculty engagement predicts organizational and student success. Logically speaking, as faculty become more engaged in the process of teaching, leading, and growing, there is a greater residual effect for students who are also motivated to excel in classrooms and on-line teaching systems. In 2006, Towers Perrin in *Global Workforce Survey* found that engaged workers have confidence in the knowledge, skills, and abilities they possess, and this is a powerful predictor of effective behaviors and strong job performance. This confidence and skills are mirrored in the community college faculty ranks as they engage in classrooms, with students, as well as engage with other faculty to create a system of support and success leading to leadership positions, i.e. Department Chair, Divisional Associate Dean, and Vice President, among many more. The Global Workforce Survey also showed that 84% of highly engaged employees believe that they can positively impact the quality of their organization compared with 31% of the disengaged group surveyed. In addition, the survey also reveals that 72% of highly engaged employees believe they can positively affect customer service, versus 27% of the disengaged group. This is critical in the community college setting when relating to student success and leadership potential among faculty personnel.

Employee engagement has been a topic of evaluation, concern, and measure for organizational studies (Crawford, LePine, & Rich, 2010). Schaufeli (2006) posits the
philosophy of “positive psychology: the scientific study of human strength and optimal functioning” (Seligman & Csikszentmihalyi, 2000: 40). The notion of positive psychology is directly related to human engagement and in effect organizational evolution. Luthans (2002) discusses the “study of positively oriented human resource strengths and psychological capacities that can be developed, measured, and effectively managed for performance improvement in today’s workplace” (p. 698). In addition, work engagement becomes the “antipode of burnout” (Crawford et al., 2010: 702). Burnout is the one factor that gauges the health of organization and employee engagement. Engagement and Disengagement are also very different between genders. The Gallup poll’s *State of the American Workplace* (2012) results show that women are slightly higher in engagement than their counterparts. Women were polled to have 33% engaged and 17% actively disengaged while men were shown to have 28% engaged and 19% disengaged. Figure 10 shows these numbers pictorially.

**Figure 10. Gallup Poll (2012)**
Engagement has been defined by many in organization development and psychology fields as an employee’s positive engagement attitude towards and organization (Robinson, Perryman, & Hayday, 2004). One major focus of this study is to add to the study of employee engagement and find contribution factors that add to the value of engagement with respect to the community college setting. Saks (2006) shows that more research has to be conducted on employee engagement citing that there is “little empirical research on the factors that predict employee engagement” (p. 604). This study attempts to illuminate the area of engagement in post-secondary education and posits to find engagement factors that directly correlate to community college faculty taking on leadership positions within the higher education system. Finally, engagement is tied to one’s self-image and how individuals employ themselves in a work environment which includes job performance and job involvement which also activates the use of emotions and positive behaviors.

Theories of Organizational Environment

For this study, we focused on various theories that supported our claim and validated our concerns regarding the leadership gap in the community college sector. Theories that help us explain our foundational claim are Emotional Intelligence Theory (Salovey & Mayer, 1990; Goleman, Boyatzis, & McKee, 2002), Resonant Leadership Theory (Boyatzis & McKee, 2005), Positive and Negative Emotional Attractors (PNEA) (Boyatzis, 2006), Intentional Change Theory (Boyatzis, 2006), and Self-Determination Theory (Deci & Ryan, 1985). These theories ground our framework and give credibility to our claim of cognitive and emotional engagement with community college faculty.
These theories also provide the network for our quantitative study and focus our approach on the development of faculty in the community college system.

**Theoretical Framework**

**Emotional Intelligence Theory (EI)**

EI theory brings to light the concept of “monitoring one’s own emotions and the emotions of others” (Salovey & Mayer, 1990: 12). EI also brings in a leader's ability to communicate effectively (Goleman, Boyatzis, & McKee, 2001), and the ability to transform into the democratic leader (p. 69). In the education field, the ability to navigate and build consensus through using principles of EI become important to all levels of leadership.

Emotional Intelligence encompasses four main areas (Goleman et al., 2002). These areas are as follows:

1. **Self-Awareness**: Understanding one’s strengths, weaknesses, limitations, values, and motives. Individuals who are self-aware are honest about themselves and realistic about accomplishments. One competency defined as emotional self-awareness.

2. **Self-Management**: This is needed to control feelings, facilitate mental clarity, and provide controlled energy. Four competencies defined as emotional self-control, adaptability, achievement orientation, and positive outlook.

3. **Social Awareness**: This includes empathy and understanding of others, organizational awareness and ability to serve other’s needs. This also includes being attuned to others feelings and being approachable to others. Two competencies defined as empathy and organizational awareness.

4. **Relationship Management**: This area includes influencing and developing others. This also includes change and conflict management and creates cohesiveness within teams. Five competencies defined as coach and mentor, inspirational leadership, influence, conflict management, and teamwork.
Emotional and Social Competencies

Competencies are defined as a “capability or ability organized around an underlying construct called ‘intent’” (Boyatzis, 2009: 750). A competency is also an ability (Boyatzis, 1982, 2008; McClelland, 1973, 1985) to alternate intent depending on the situation or circumstance. Most organizations within the U.S. have employed some degree of competency-based human resource management and various independent consulting firms, such as The Hay Group, have become renowned practitioners of competency assessment and development. In competency based evaluation, the goal is to understand intent, demonstrate empathy, display influence and empathy (Boyatzis, 2009).

Competencies described by Boyatzis (2009) fall into three main categories: Cognitive competencies, Emotional Intelligence Competency, and Social Intelligence Competency (Boyatzis, Hopkins, & Bilimoria, 2008; Boyatzis, 2008, 2009). Exploring further, the cognitive competency dimension includes areas such as systems thinking and pattern recognition. Emotional intelligence also credits the ability to handle one's emotions, control frustrations, and the skill in getting along with others (Snarey & Vaillant, 1985). The emotional intelligence competency factors include five distinct constructs namely emotional self-awareness and emotional self-control, adaptability, positive outlook, and achievement orientation.

Boyatzis (2009) describes the individual competencies (constructs) for emotional intelligence as:

1. Emotional self-awareness: recognizing one’s emotions and their effects
2. Emotional self-control: keeping disruptive emotions and impulses in check
3. Adaptability: flexibility in handling changes
4. Achievement Orientation: striving to improve or meeting a standard of excellence

5. Positive Outlook: Persistence in pursuing goals despite obstacles and setbacks

Positive and Negative Emotional Attractors (PNEA)

Boyatzis (2006) describe the phenomenon of positive and negative emotional attractors which determine the context of the self-organizing process and how this becomes an adaptation to existing conditions or to new, emergent conditions. The positive emotional attractor (PEA) explains situations where one is to have positive thoughts and optimistic views of the future, joy, passion, and excitement about one’s calling, purpose, and values (Akrivou, Boyatzis, & McLeod, 2006) by arousing the parasympathetic nervous system as explained by (Boyatzis, 2006, 2008). This arousal state excites individuals causing a greater sense of being and generating positive feelings and thought process. The altruistic and good behavior engages people in a self-perpetuating loop which in effect causes more release of PEA (Boyatzis, 2011).

Conversely, the negative emotional attractor (NEA) has the dysfunctional aspects of emotional attractors (Boyatzis, 2011) creating a focus on stressors from the current and social environment that interfere with a person’s effectiveness (Boyatzis & Sala, 2004). In effect, the NEA helps basic instincts of self-preservation and dealing with threat situations. Boyatzis (2008) describe the NEA as behaviors that are defensive, protectionist, and seclusion resulting in a decrease in cognitive performance. Thus, as Boyatzis (2011) explains, the NEA focuses on the arousal of the sympathetic nervous system which is likely to lead to cognitive, perceptual, and emotional impairment.

Shared Vision becomes the essential factor in defining areas of leadership with respect to PNEA. In an effort to better understand the organizational climate, vision
becomes essential in determining the success of the organization. In general, with the existence of vision, people are positive and have higher levels of engagement, both cognitive and emotional.

**Emotional and Cognitive Engagement**

Emotions have a direct link to engagement in employees (Kular, Gatenby, Rees, Soane, & Truss, 2008). In effect, emotions can also be related to well-being and positive emotions for engagement (Robinson et al., 2004). The Towers Perrin (2007) study of engagement showed a verifiable relationship between emotions and rationality as core engagement components. Cooper and Kagel (2005) posits that research shows if emotions are properly managed, trust, loyalty, and commitment are core to teams and organizations. Overall, the feeling of emotional engagement has been shown and described as fulfilling, positive work-related, and positive state of mind (Schaufeli & Bakker, 2004). Thus, emotional engagement becomes a strong marker for organizational success and employee commitment. Kular et al. (2008) go on to argue the point that culture and climate of an organization are expected to influence the levels of emotional engagement. When taken in the context of post-secondary organizations, we find a strong correlation between leadership and faculty engagement. Schaufeli, Salanova, González-Romá, and Bakker (2002) define engagement as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (p. 23).

**Hypothesis Statements**

Our hypothesis for this research is divided into the two categories of engagement, emotional and cognitive. These are our hypothesis statements as mediated through Vision.
Cognitive Engagement Group Hypothesis Statements

Hypothesis 1a. Emotional Self-Control positively affects Cognitive Engagement when mediated by Vision

Hypothesis 1b. Emotional Self-Awareness positively affects Cognitive Engagement when mediated by Vision

Hypothesis 1c. Adaptability positively affects Cognitive Engagement when mediated by Vision

Hypothesis 1d. Positive Outlook positively affects Cognitive Engagement when mediated by Vision

Hypothesis 1e. Achievement Orientation positively affects Cognitive Engagement when mediated by Vision

Emotional Engagement Group Hypothesis Statements

Hypothesis 2a. Emotional Self-Control positively affects Emotional Engagement when mediated by Vision

Hypothesis 2b. Emotional Self-Awareness positively affects Emotional Engagement when mediated by Vision

Hypothesis 2c. Adaptability positively affects Emotional Engagement when mediated by Vision

Hypothesis 2d. Positive Outlook positively affects Emotional Engagement when mediated by Vision

Hypothesis 2e. Achievement Orientation positively affects Emotional Engagement when mediated by Vision

For this study purposes, we use Kahn’s (1990) definition of employee engagement which is described as “the harnessing of organization members’ selves to their work roles” (p. 694). More recently, the definition of engagement has been altered to show the emotional and intellectual impact to an organization (Saks, 2006). Mahon et al. (2015) describe the antecedents to engagement and employee success. Perceived organizational support, reward, recognition, procedural justice and distributed justice were possible antecedents to engagement (Boyatzis, Rochford, & Jack, 2014).
Engagement is, therefore, tied into the emotional, social, and cognitive analogies, constructs and theories describing effects and measures in community colleges. Schaufeli et al. (2002) describe engagement as the positive opposite of burnout while Maslach, Schaufeli, and Leiter (2001) describe burnout as it involves the erosion of engagement with one’s job. In various organizations, this can be simultaneously tied into organizational demise and employee disengagement (Robinson et al., 2004). When this is taken into the context of community colleges, we find that faculty disengagement results in organizational leadership gap (Wallin, 2002) which can further be attributed to the breakdown of the American community college system.

Research Model

Figure 11 is our hypothetical outline of our findings and direction of research. As can be seen, our goal is to evaluate engagement factors with respect to Emotional Intelligence and mediated through Vision. Figure 11 also shows a hypothetical outline of our findings and direction of research. As can be seen, our goal is to evaluate engagement factors as impacted by five constructs associated with Emotional Intelligence as mediated through Vision. Our overall approach is to test each of the constructs individually in order to ascertain which factor has greater and lesser influence in the community college faculty environment.
Variable Definition

Our research seeks to understand and answer the following questions:

1. *Is there a causal relationship between behavioral competencies and emotional and cognitive engagement while mediated with vision?* The emotional and social constructs as defined by the Emotional and Social Competency Indicator influences the function of individuals within an organization. Our goal is to gain a better understanding of Community College Faculty and what drives them to succeed in a Community College setting.
2. *Is there a causal relationship between the constructs of emotional engagement and cognitive engagement and the various sub-constructs of emotional intelligence?* Given that community college faculty are inclined to increase their self-efficacy through various modes of contribution through engagement, both emotional and cognitive, the ultimate goal of the organization becomes paramount in an educational setting. To better inform our inquiry and our hypothesis, we identified factors that impact engagement in the broader context of work, education, and education engagement. Our survey is designed to validate our theoretical hypothesis and research model.

**Hypothesis Structure and Variables**

**Operationalization of Constructs**

This study focused on engagement factors for community college full-time faculty; this became our basis and context for the research study. In optimizing this research and finding various, validated scales for use, our goal has always been to be as simple and straightforward as possible through the adaptation and duplication of scale reliability and usage. We wanted to measure the organizational environment, the
individual intent and motives, and the engagement factors in our sample size. We have always believed that this study could have great potential and a vast reaching impact on post-secondary faculty. To measure engagement we used Kahn’s (1990, 1992) definition of engagement. The emotional (6 items) and the cognitive (6 items) and both factors were on a 5-point Likert scale.

**Survey Instruments and Alpha**

Organizational environment was measured by using the Positive and Negative Emotional Attractor (PNEA) instrument, Boyatzis (2006) is reliable and contains valid measures that measure emergent conditions. The PNEA comprises of three separate constructs, and we identified only one construct to use for our research, Vision. We used only one factor, Vision (8 items) to mediate between five exogenous variables and engagement factors. The PNEA items are scored on a five-point Likert scale (Strongly Agree, Somewhat Agree, Neither, Somewhat Disagree, and Strongly Disagree). These choices gave the participant an easily understandable view for each of the questions on the PNEA survey instrument.

The Emotional Social Competency Inventory (ESCI-U) (Boyatzis & Goleman, 1996) is our independent variable markers. This survey instrument is focused on measuring various dimensions of emotional, cognitive, and social intelligence. These valuable dimensions of the scale emotional intelligence competency cluster (5 dimensions with 25 items total), gave us the constructs needed to measure engagement factors. For this research, we focused on the Emotional Intelligence Grouping alone with five Dimensions and a twenty-five item survey. Responses for participants were arranged on a 6-point Likert-style response format (Don’t Know, Never, Rarely, Sometimes,
Often, and Consistently). With the aid of research and predictions on engagement, we decided to omit the Cognitive Intelligence Competency cluster leaving our ESCI-U survey instrument to only survey using Emotional and Social Competencies. For the emotional intelligence competency cluster, the tested five factors were *Adaptability, Positive Outlook, Emotional Self-Awareness, Achievement Orientation, and Emotional Self-Control*. These five dimensions become the basis for our research and how engagement is measured through these items.

We used two dimensions of the engagement scale compiled to reflect Kahn’s (1990, 1992) definition of engagement (Rich, Lepine, & Crawford, 2010). The two dimensions were emotional (6 items) and cognitive (6 items). We chose not to utilize the physical engagement scale given that our intent was to compare the positive affect of the emotional measures with the intellectual aspects of the cognitive construct, which focused on levels of attention and absorption on the job. The question pertained to the extent of agreement/disagreement with the items relative to the respondent’s job on a 5-point Likert scale. The alpha reliability of the overall scale was 0.95.

Between these three scale instruments, ESCI-U (*only emotional intelligence*), PNEA (*only vision*), and Engagement (*only Cognitive and Emotional*), all were adapted for our purpose of measuring engagement in community college faculty. The survey instrument was developed from a review of relevant literature from both the organizational behavior and the workplace environment domains. We adapted existing scales. We assessed reliability and construct validity using Q-sort (Thomas & Watson, 2002), and pre-testing talk-aloud exercises (Bolton, 1993) among office workers in our professional network. First, we updated the terminology of the questions to fit the current
definition of workspace types and technological advances in office environments. We solicited consensus from the test subjects that each construct was uniquely defined, and all the questions were specific to that construct. The final survey instrument consisted of 51 items covering the constructs described below. None of the items were modified from its original version and used directly throughout the survey. This is a valid ratio per Hair et al. (2010) for our research purposes.

In following the guidelines of Hair, Black, Babin, and Anderson (2010), the alpha reliability for all the dimensions of the scale ranged from 0.76 to 0.90. Referring to Figure 1, our hypothesized model, the entire survey instrument is aimed at measuring self-perception view of the engagement of faculty. In addition, we added a social desirability scale, 5 items, to measure social index (Hays & Ware Jr, 1986) and validate our responses. The total survey equaled 48 items, and the “pilot” test survey took approximately 12–16 minutes per respondent to complete. All items were quantitative in nature and control variables were elicited to measure demographic components to help explain the data analysis.

Causal effects of Emotional Competencies on the Organizational Environment with respect to mediating factors such as Vision becomes a method to identifying engagement characteristics. Figure 11 (above) shows our Hypothesized Conceptual model and correlated individual hypothesis. Our end goal is to measure cognitive and emotional engagement is a sample, community college faculty throughout the U.S. As the Figure 11 diagram shows, our model uses emotional competency indicators to define engagement as mediated through vision and compassion constructs. Our intent is that this model will show valid quantitative results that validate our hypothesized research model.
**Independent Variables: Emotional Competencies**

Competencies are human-based indicators that describe intent and purpose. (Boyatzis, 2009). Boyatzis (2009) describes a competency as “defined as a capability or ability” (Boyatzis, 1982, 2008; McClelland, 1973, 1985). This then becomes extrapolated into related sets of behaviors encompassing “intent” which are different for various situations or times (Boyatzis, 2009). Competencies are also different depending on the environment, associated individuals, and internal being of individuals. According to Boyatzis (2009), the underlying intent leads to more subtle competencies that have varying factors which are differentiated through action and intent for measurement methods.

Emotional and Social Competencies are markers for success amongst those in managerial levels (Boyatzis, 1982). In addition, Boyatzis also posits “contingency theory of job action and performance” by showing individual, cultural, and structural factors that develop and show an employee’s effectiveness. The behavioral competencies as described by Boyatzis (1982) show them to be in regions such as knowledge, motivations, traits, skills, and attributes. These are related causally and can be related to superior performance in roles that are described through intent and action.

Emotional intelligence competency is built on McClelland’s (1973) theories on intelligence competency which shows multiple levels of intelligence and behavioral indicators (Gardner, 2011). Competencies are measurable and learned (Intagliata, Ulrich, & Smallwood, 2000) and these measures are often distributed on indexes to show a numeral scaled approach. According to Saks (2006), engagement factors are highlighted and correlated to emotional and social competencies as differentiators of employee
engagement. Saks also states that engagement and individual job competencies may have a direct effect on employees’ individual characteristics. In addition, these individual competencies lead to high engagement factors and create a sense of well-being, and that validates theories built on emotional and social intelligence.

Even though all the five competencies define emotional intelligence, they measure distinct characteristics in community college faculty. We were interested in assessing each impact separately, thus, the five constructs are considered first order factors, as shown in our model. This will allow us to assess the magnitude of each factor and in order to prioritize their importance in assessing the faculty potential and engagement.

The Emotional Intelligence Competency Cluster is grouped and identified as such:

Emotional Intelligence Dimensions

a. Emotional Self Control - emocontrol
b. Emotional Self Awareness - emoaware
c. Adaptability - adapt
d. Achievement Orientation - achievmt
e. Positive Outlook – posoutlook

Mediating Variables: Shared Vision

Eisenberger, Fasolo, and Davis-LaMastro (1990) describe organizational awareness and support as direct links to employee commitment and organizational effectiveness. Our goal was to understand the environment of the organization using Boyatzis’ (2008) Positive and Negative Emotional Attractor (PNEA) Survey. The PNEA
survey created the mediation by which the organizational environment and culture could best be captured through quantitative analytics.

For this research, we focused on shared vision as it becomes critical to individual engagement factors that determine the various dimensions of relational climate in any environment (Boyatzis & Soler, 2012). It becomes apparent in any organization that success is a determinant founded by shared vision of both leadership and all employees. Without shared vision, there is mass confusion, loss of hope, and loss of identity (Boyatzis, 2011; Boyatzis & Soler, 2012) and shared vision becomes “the most powerful variable predicting championing behavior…and they stimulate increased organizational engagement” (p. 9). Job engagement becomes critical as an antecedent of leadership and effectiveness as measured through shared vision. Shared vision becomes the essential mediating construct for this experiment and thesis analysis.

**Dependent variable: Emotional and Cognitive Engagement**

Engagement is key to success at work and the difference in finding work interesting and engaging (Schaufeli et al., 2002). Engagement in post-secondary education also follows similar lines of engagement theory as posited by Schaufeli and Taris (2005). According to Gallup polls on engagement (Gallup, 2012), Americans are more disengaged than engaged, over 54% of the workforce are disengaged creating a ripple effect which brings employee turnover and financial burden on the economy. Recent Gallup poll (Gallup, 2012) statistics show that there is an annual loss of $450–$500 billion due to employee disengagement. This study focuses on engagement factors that contribute to success as post-secondary faculty. We focused on community college faculty engagement factors. In addition, there is a great amount of literature on the
relationship between employee effectiveness and employee engagement (Schaufeli et al., 2002).

Our goal was to better understand the role that emotional and social competencies play relative to community college faculty engagement factors on both emotional and cognitive dimensions. In addition, we wanted to evaluate how these effects are mediated through vision as the overall mediating force between emotional and social intelligence and emotional and cognitive engagement. As faculty become more engaged in their respective learning environments, we find that there is a greater emphasis on individual factors of engagement. According to Kahn (1990), engagement has dimensions comprised of physical, cognitive, and emotional aspects as it pertains to employee engagement.

Dependent Constructs:

a. Emotional Engagement – emoeng

b. Cognitive Engagement – cogeng

Research Methodology

Sample

Our research model, Figure 1, dictated quantitative data analysis to verify our predictions and hypothesis statements. To obtain valuable quantitative survey data, we enlisted the services of Qualtrics Corporation to send out surveys to participants through digital e-mail approach. Our data set consisted of 420 initial complete surveys from full-time community college faculty on a nation-wide scale. All questions were on 5- and 6-point Likert-type scales. We removed 6 surveys from the sample pool due to missing data and invalid responses. These records were missing valuable data on various ESCI and
PNEA survey score items. Our final set, after data screening, ended up with 414 valid, clean data records and to complete our analysis (n=414) which, according to MacCallum, Widaman, Zhang, and Hong (1999), was sufficient to validate our approaches and substantiate our claims on community college faculty engagement.

According to previously constructed quantitative methodologies in data collection, we used online survey collection method from community college faculty throughout the U.S. We leveraged several relationships with contacts in various colleges to elicit their help and guidance. Every addition was then approved by Case Western Institutional Review Board before contacting the participating organization. There were two reminders given to each organization encouraging their respective community college faculty to complete the survey through Qualtrics. We also deployed several procedures to ensure participation to the study by making access to the survey as easy as possible, had high-ranking administration officials encourage faculty to take the survey, and ensured anonymity of each participant and organizational confidentiality.

Our cross-sectional study on community college faculty was administered starting on February 3, 2015 through April 15, 2015. There were no incentives offered for faculty participation. However, each participant was told that their data would extend the body of knowledge in the community college leadership field of study in hopes of increasing survey completion response rates. All survey completers were full-time community college faculty and the survey was contained within the United States community college system alone. We did not contact any international faculty for survey completion.

Table 4 shows the demographic information for all 414 participants and their breakdown for control variables. Percentages are out of 100% correlated with the actual
number (out of 414 total participants). This breakdown shows composition, gender, age, and tenure. One additional variable that can be seen in Table 4 is the percentage of “on-line” instruction versus face-to-face traditional teaching method.

Table 4. Community College Faculty Demographic Information

<table>
<thead>
<tr>
<th>Demographic Information for Community College Faculty Survey</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>out of 414</td>
<td>out of 100%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before 1945</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td>1946 - 1964</td>
<td>100</td>
<td>24.2</td>
</tr>
<tr>
<td>1965 - 1983</td>
<td>215</td>
<td>51.9</td>
</tr>
<tr>
<td>after 1984</td>
<td>96</td>
<td>23.2</td>
</tr>
<tr>
<td><strong>Tenure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 5 Years</td>
<td>175</td>
<td>42.3</td>
</tr>
<tr>
<td>6 - 10 Years</td>
<td>119</td>
<td>28.7</td>
</tr>
<tr>
<td>11 - 15 Years</td>
<td>65</td>
<td>15.7</td>
</tr>
<tr>
<td>16 - 20 Years</td>
<td>32</td>
<td>7.7</td>
</tr>
<tr>
<td>&gt; 21 Years</td>
<td>23</td>
<td>5.6</td>
</tr>
<tr>
<td><strong>% On-Line Teaching</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 % - 25 %</td>
<td>244</td>
<td>58.9</td>
</tr>
<tr>
<td>26 % - 50 %</td>
<td>77</td>
<td>18.6</td>
</tr>
<tr>
<td>51 % - 75 %</td>
<td>63</td>
<td>15.2</td>
</tr>
<tr>
<td>76 % - 100 %</td>
<td>30</td>
<td>7.2</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>177</td>
<td>42.8</td>
</tr>
<tr>
<td>Female</td>
<td>237</td>
<td>57.2</td>
</tr>
</tbody>
</table>

The demographic information shows a wide spread of participant data creating a more robust and valid survey results foundation. About 60% of the population were female, coinciding with historical data of the US composition of community college faculty (AACC, 2016). We controlled for non-response bias through techniques detailed by Armstrong and Overton (1977). We followed the approach recommended by Armstrong and Overton (1977) to assess the possibility of non-response bias in our sample by comparing the responses of late responders with earlier responders. We compared late responders (last 10%) for a full sample through single tail t-test constructed through
Microsoft Excel. This data showed significance for only 8.4% of the total respondents. Finally, although this trend might be changing for future community college faculty (AACC, 2016), this survey does represent an adequate population and gender size.

**Measurement Model Analysis**

**Data Screening**

Our original sample size was 420 before screening and sorting. After removing all missing data fields and data that were not in line with the rest of the set, we ended on 414 total completed respondent data set. Our data screening analysis included handling missing data and addressing outliers and aberrations. We further checked the standard deviation for each respondent to check for unengaged responses and eliminated the ones with scores less than 0.5. The test for kurtoses revealed no issues as all the items well with the range of -1 to +1. Our analysis showed that the items around the ESCI-U, PNEA, and Engagement Scale were distributed around their mean causing a more valid respondent sample base. All items indicated adequate variance. An analysis of multicollinearity exhibited tolerances and VIF values within acceptable limits (tolerances greater than 0.5 and VIF values <3.0). From this, we concluded that the statistical standards were sufficiently met for structural equation modeling (Hair et al., 2010). The following exploratory factor analysis shows items that were removed due to cross-loadings and low loadings.

**Exploratory Factor Analysis**

We utilized current theories on exploratory factor analysis (EFA) to validate how many factors would explain patterns among the interrelationships of our items and constructs with the goal to reduce the number of variables into a more manageable
system. Using Statistical Package for Social Sciences (SPSS) Version 22, we were able to identify various latent constructs described by the survey responses. We used principal axis factoring with Promax rotation to delineate possible factor models and designs. We used eigenvalues for large data sets and conducted them on an unconstrained basis with an eigenvalue of greater than 1.0 and suppressed all small coefficients less than 0.2 (Hair et al., 2010). According to the SPSS results from the EFA, our Kaiser-Meyer-Olkin measure of Sampling Adequacy of 0.920, ($\chi^2$ =11523.120, df=496, p<0.001) which is above the recommended value of 0.6 and a Bartlett’s test of Sphericity (11523.120). These were acceptable and well within range indicating that our data correlation is significantly different from an identity matrix (Kaiser & Rice, 1974). After examining the communalities of the item scalar results, we found that all data sets were over the 0.4 threshold confirming that each of the remaining items shared some degree of common variance with other items in the EFA. Our pattern matrix is attached in Appendix B which shows the even distribution of each item on its specific construct.

The initial EFA revealed several cases of cross loading and 1 case of Haywood (Fabrigar, Wegener, MacCallum, & Strahan, 1999). We eliminated these items from the analysis which resulted in an even distribution of loadings with each loading factor group primary loading average greater than 0.6. In addition, all factors had a minimum of three items per loading causing more validity to the Alpha and variance. According to Fabrigar et al. (1999), low inter-factor correlation allows for orthogonality, thus, we used Varimax for analysis. Many correlations were greater than 0.30 which we concluded the system having non-orthogonality, and we continued our observation and analysis with an oblique
rotation using Principle Axis Factoring (PAF). Non-redundant residuals were at 3%, well below the 5% cut-off (Hair et al., 2010).

All items indicated adequate variance. An analysis of multi-collinearity exhibited tolerances and VIF values within acceptable limits (tolerances greater than 0.5 and VIF values <3.0). From this, we concluded that the statistical standards were sufficiently met for structural equation modeling (Hair et al., 2010). The descriptive statistics are summarized in Table 4. The sample size of 414 was determined to be adequate given the high factor loadings per item constructs which were greater than 3 (MacCallum et al., 1999). The 9-factor analysis can be seen on the eigenvalues and the “leveling off” of the factors. Our total variance explained was 58.96% as noted on the scree-plot print out from SPSS. This can be seen in Appendix C. Ultimately, our EFA is appropriate for the data set and analysis we are conducting for this sample group. The pattern matrix in Appendix B shows our results, with corresponding values. It is our belief that our, given the remainder of items and constructs from the EFA, our theoretical model, from Figure 1, has changed incorporating the constructs that did not hold in the EFA analysis. Table 2 shows correlation and reliability during the EFA.

Convergent validity was achieved as all the factor loadings were above 0.5. We decided to keep the item as the average loadings on the factor were above 0.7. Discriminant validity was evident as no cross loading were above 0.2. In addition, correlations between the factors were all below 0.7. Reliability was examined using Cronbach’s alpha for each factor (Fornell & Larcker, 1981). All the results were well above the designated cut-off of 0.7 (Hair et al., 2010) as shown on the diagonal in Table 5. We originally had 51 items, and our EFA converged on nine factors totaling forty-nine
items. Our goal was to use compassion as a mediator, but we decided to focus solely on vision being the only mediation element. The only two items that we had to trim from the original scale were item number 3 and 4 from Achievement Orientation (2 items dropped). Our model consists of 8 constructs. We had scales for nine factors in our original survey and our EFA converged on nine factors. We decided to eliminate compassion from our model, which was reinforced by our EFA results due to weak loading on the results table.

**Table 5. Means, Standard Deviation, & Correlation Reliability between Constructs**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>S.D.</th>
<th>emoeng</th>
<th>vision</th>
<th>cogeng</th>
<th>emoaware</th>
<th>posoutlook</th>
<th>emocontrol</th>
<th>comp</th>
<th>adapt</th>
<th>achievmt</th>
</tr>
</thead>
<tbody>
<tr>
<td>emoeng</td>
<td>3.72</td>
<td>0.541</td>
<td>0.894*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vision</td>
<td>3.33</td>
<td>0.612</td>
<td>0.448</td>
<td>0.917*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cogeng</td>
<td>4.47</td>
<td>0.624</td>
<td>.265</td>
<td>.286</td>
<td>0.916*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>emoaware</td>
<td>3.80</td>
<td>0.485</td>
<td>.468</td>
<td>.391</td>
<td>.307</td>
<td>0.846*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>posoutlook</td>
<td>4.14</td>
<td>0.617</td>
<td>.313</td>
<td>.349</td>
<td>.365</td>
<td>.488</td>
<td>0.878*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>emocontrol</td>
<td>3.17</td>
<td>0.407</td>
<td>.268</td>
<td>.289</td>
<td>.125</td>
<td>.242</td>
<td>.185</td>
<td>.826*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>comp</td>
<td>3.47</td>
<td>0.847</td>
<td>.218</td>
<td>.325</td>
<td>.444</td>
<td>.462</td>
<td>.493</td>
<td>.144</td>
<td>.884*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>adapt</td>
<td>3.90</td>
<td>0.473</td>
<td>.579</td>
<td>.658</td>
<td>.263</td>
<td>.473</td>
<td>.294</td>
<td>.390</td>
<td>.240</td>
<td>.825*</td>
<td></td>
</tr>
<tr>
<td>achievmt</td>
<td>3.67</td>
<td>0.482</td>
<td>.362</td>
<td>.264</td>
<td>.452</td>
<td>.483</td>
<td>.431</td>
<td>.036</td>
<td>.375</td>
<td>.355</td>
<td>0.731*</td>
</tr>
</tbody>
</table>

*=Cronbach Alpha from SPSS output

**Confirmatory Factor Analysis**

Our next step was to conduct a Confirmatory Factor Analysis (CFA) in Analysis of Moment Structures (AMOS) version 22.0 and maximum likelihood estimation. From the results of the EFA, we were able to create the CFA as our measurement model. The causal factors identified in our earlier EFA analysis were used to assess the strength of the measurement between items and related constructs. We estimated a 9-factor model identified in the EFA and converted over to the CFA analysis using AMOS plugin for ease and efficiency. The psychometric properties of our 9 latent constructs with 47 associated items were evaluated simultaneously in the CFA analysis. Our final CFA
model showed good discriminant validity statistics with all covariance values under 0.85. Tables 6 and 7 show the data acquired from each of the constructs to show factor validity. Convergent validity was acceptable for all latent constructs being over the 0.4 threshold and item average per loading over the 0.7 limit as stated by Hair, Black, Babin, Anderson, and Tatham (2006). Appendix D shows our complete CFA model with regression weights and relationships between items and constructs. As can be seen from the model in Appendix D, we co-varied 4 item level error term data to reduce the model fit indices. Our final model has acceptable statistics which we can further explain.

Table 6. Factor Validity Table

<table>
<thead>
<tr>
<th></th>
<th>emoeng</th>
<th>vision</th>
<th>cogeng</th>
<th>emoaware</th>
<th>posoutlook</th>
<th>emocontrol</th>
<th>comp</th>
<th>adapt</th>
<th>achievmt</th>
</tr>
</thead>
<tbody>
<tr>
<td>emoeng</td>
<td>0.804</td>
<td>0.759</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vision</td>
<td>0.631</td>
<td>0.771</td>
<td>0.725</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cogeng</td>
<td>0.501</td>
<td>0.489</td>
<td>0.344</td>
<td>0.690</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>emoaware</td>
<td>0.320</td>
<td>0.324</td>
<td>0.370</td>
<td>0.530</td>
<td>0.758</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>posoutlook</td>
<td>0.406</td>
<td>0.406</td>
<td>0.367</td>
<td>0.530</td>
<td>0.758</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>emocontrol</td>
<td>0.287</td>
<td>0.122</td>
<td>0.242</td>
<td>0.199</td>
<td>0.852</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>comp</td>
<td>0.355</td>
<td>0.276</td>
<td>0.631</td>
<td>0.594</td>
<td>0.512</td>
<td>0.701</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>adapt</td>
<td>0.399</td>
<td>0.304</td>
<td>0.287</td>
<td>0.122</td>
<td>0.199</td>
<td>0.852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>achievmt</td>
<td>0.412</td>
<td>0.426</td>
<td>0.393</td>
<td>0.473</td>
<td>0.473</td>
<td>0.112</td>
<td>0.582</td>
<td>0.698</td>
<td></td>
</tr>
</tbody>
</table>

Table 7. Convergent and Divergent Validity Table

<table>
<thead>
<tr>
<th></th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>ASV</th>
</tr>
</thead>
<tbody>
<tr>
<td>emoeng</td>
<td>0.916</td>
<td>0.647</td>
<td>0.587</td>
<td>0.233</td>
</tr>
<tr>
<td>vision</td>
<td>0.916</td>
<td>0.576</td>
<td>0.398</td>
<td>0.174</td>
</tr>
<tr>
<td>cogeng</td>
<td>0.897</td>
<td>0.594</td>
<td>0.587</td>
<td>0.196</td>
</tr>
<tr>
<td>emoaware</td>
<td>0.847</td>
<td>0.526</td>
<td>0.398</td>
<td>0.142</td>
</tr>
<tr>
<td>posoutlook</td>
<td>0.871</td>
<td>0.575</td>
<td>0.318</td>
<td>0.212</td>
</tr>
<tr>
<td>emocontrol</td>
<td>0.818</td>
<td>0.476</td>
<td>0.353</td>
<td>0.172</td>
</tr>
<tr>
<td>comp</td>
<td>0.887</td>
<td>0.725</td>
<td>0.159</td>
<td>0.060</td>
</tr>
<tr>
<td>adapt</td>
<td>0.828</td>
<td>0.492</td>
<td>0.398</td>
<td>0.213</td>
</tr>
<tr>
<td>achievmt</td>
<td>0.739</td>
<td>0.487</td>
<td>0.339</td>
<td>0.203</td>
</tr>
</tbody>
</table>

In accordance to model fit standards and acceptance as posited by Hu and Bentler (1999), our CFA model is acceptable according to generally accepted standards. For calculation
and analysis, we selected Chi-Square ($\chi^2$/df), the comparative fix index (CFI), the increment fix index (IFI), and the root mean squared error of approximation (RMSEA) based on their relative stability, robustness, uniqueness of information provided and sample size.

For our results, we followed the following threshold parameters (Hu & Bentler, 1999): $\chi^2$/df < 3.0; CFI & IFI > 0.90; and RMSEA < 0.05 our CFA statistics compared as follows: $\chi^2$/df = 1.716; CFI = 0.94; RMSEA = 0.042; PCLOSE = 1.000. All statistic results are within specifications, expectations, and threholds. Our CMIN ($\chi^2$) = 1628.360, df = 949, p<0.001 and RMR = 0.031. Table 8 shows the actual raw result along with parameters defined by Hair et al. (2010) and Hu and Bentler (1999). Figure 3 is a summary of the model fit statistics from the AMOS tool.

**Table 8. CFA Model Fit Statistics - I**

<table>
<thead>
<tr>
<th>Model</th>
<th>Statistical Fit</th>
<th>Relative Fit</th>
<th>Absolute Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\chi^2$</td>
<td>df</td>
<td>P &gt;.05 rejects independent model</td>
</tr>
<tr>
<td>CFA model with covaried error terms</td>
<td>1628.36</td>
<td>949</td>
<td>0.000</td>
</tr>
</tbody>
</table>

We validated our results and increased the reliability scores of our constructs; we grouped constructs together to form “mega” constructs which would explain more of the variance experienced by the many different constructs. Our goal was to assimilate like constructs from the afore-mentioned ESCI scale. We grouped all the constructs into the Emotional Intelligence Competency Cluster comprising of a 5 dimension scale (PNEA scale, Boyatzis, 2006) Due to non-significance, our new constructs are grouped better into categories of the Independent Variable, Emotional Intelligence Cluster. This cluster
is then mediated through Vision to measure Emotional and Cognitive Engagement. The remaining 8-factor analysis shows the five dimension Emotional Intelligence competency mediated through vision. According to our data, we have found significance on all paths formed ($P$-Value significance = ***).

**Common Method Bias (CMB)**

To further validate our results and identify our conclusions, we ran a common method bias test for internal variance. Surveys taken from one source of respondents (community college faculty), can introduce CMB into our results. Although we accounted for any variance and mitigated for CMB, our test was used to provide useful insight into the extent at which CMB was present in our data set (Huber, 1985). In order to evaluate this possibility, we first conducted the Harman’s single factor test to ensure that a single factor did not explain the majority of the variance. The results indicated less than 50% of variance explained by a single factor indicating no evidence of CMB. According to Podsakoff, MacKenzie, Lee, and Podsakoff (2003), we were able to run a Harmon Single Factor test where all items were entered into an un-rotated principal component factor to determine the number of factors necessary to account for the variance in all the variables.

Appendix E shows the CMB results which shows that our data had no bias issues and total variance explained was 66.8%. In order to evaluate the possibility of CMB, after conducting the Harmon single factor test to ensure the one single factor does not explain the largest amount of variance explained (Podsakoff et al., 2003). These results show that there were no concerns for response bias (Podsakoff & Organ, 1986). All potential factors had eigenvalues greater than 1 and all factors are explained by the total variance.
Both the Eigenvalue Scree Plot and the Total Variance Explained output from SPSS are shown in Appendix C. Using Harmon’s single factor test, the CMB paths were free floating and the CMB paths were equal to zero. By adding a CLF (common latent factor) (Appendix B). Table 9 shows the results of the CLF model fit statistics. CMIN/DF = 1.786 which are acceptable ranges per Hair et al. (2010). Appendix E shows the graphical representation of CLF as it relates to all other variables. Table 9 shows the Model Fit statistics for this method of CLF evaluation.

In effect, this analysis of data shows that all of our independent variables (Emotional Intelligence Cluster – 5 Dimension) are independent of each other with no evidential signs of multi-colinearity issues. We conducted the Chi-square test between the model with CLF against the model without CLF to see if the CLF model is statistically significantly different.

<table>
<thead>
<tr>
<th>Table 9. Model Fit Summary for CLF Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Default model</td>
</tr>
<tr>
<td>Saturated model</td>
</tr>
<tr>
<td>Independence model</td>
</tr>
</tbody>
</table>

**Correlation, Validity, and Reliability**

Another measure of significance and quantitative data analysis is the test for model reliability and validity. The Cronbach alpha values for our model constructs were all greater than 0.7 (Cronbach alpha values on the diagonal of Table 5) (Hair et al., 2010). This is validation that our model has good composite reliability (Fornell & Larcker, 1981). Convergent validity was achieved as all factor loadings were greater than 0.5. Discriminant validity was achieved as there were no instances of 0.2 on any of the cross
loadings. The square root of the average variance extracted (AVE), Table 6, for all constructs are greater than 0.5. Table 6 also shows the variance between constructs and the convergent and divergent validity. The composite reliability, CR, from the table, is above 0.7; this indicates good and acceptable reliability. Per MacCallum et al. (1999), these measures ensure and indicate acceptable convergent and discriminant validity. Based on these values and scores, the CFA has validated the factor structures identified in the EFA per our hypothesized statements.

The Emotional Intelligence Competency is grouped and identified with 5 dimensions as such:

**Emotional Intelligence 5 Dimension Constructs:**

- a. Emotional Self Control - emocontrol
- b. Emotional Self Awareness - emoaware
- c. Adaptability - adapt
- d. Achievement Orientation - achievmt
- e. Positive Outlook – posoutlook

Mediation Constructs:

- Vision – vision

Dependent Constructs:

- Emotional Engagement – emoeng
- Cognitive Engagement - cogeng

**Structural Equation Modeling**

Our goal was to identify strengths and weaknesses in our model using all available tools of analysis. Structural Equation Modeling (SEM) is used to examine and
extrapolate our hypothesis statements graphically, visually, and numerically to evaluate causal models and test our mediation hypothesis. SEM helps us test and mediate hypothesized statements and validate relationships between various co-varied latent constructs (Judge, Hurst, & Simon, 2009). Figure 1, earlier in this paper, shows our hypothesized relationships between constructs and our identified variables. Prior to testing for mediation through SEM analysis, model fit and best fit was achieved in earlier testing.

We tested for significance and interaction effects using path analysis and structure modeling variables identified in SPSS. Our initial model had to be modified by eliminating one of our mediating constructs and with the “compassion” construct dropping out (Model fit exceeded limitation per Hair et al. (2006) (1-3 = acceptable); CMIN/df = 9.427) due to poor model fit, we are left with 8 identified constructs and latent variables. Shared Vision becomes the sole mediating factor for the new model. Using the “cluster” format, we are able to identify and group constructs accordingly to test each of the prescribed hypothesis. In testing, there were no significant interactions between the remaining constructs of ESCI, Emotional Self Control, Emotional Self-Awareness, Adaptability, Achievement Orientation, and Positive Outlook. All of these variables and constructs fall under the Emotional Intelligence Competency Cluster (Boyatzis, 2009; Boyatzis & Goleman, 1996). Table 10 shows the actual raw result along with parameters defined by Hair et al. (2010) and Hu and Bentler (1999). Table 10 is a summary of the model fit statistics from the AMOS tool for the SEM analysis and results.
Table 10. CFA Model Fit statistics II

<table>
<thead>
<tr>
<th>Model</th>
<th>Statistical Fit</th>
<th>Relative Fit</th>
<th>Absolute Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure Equation Model</td>
<td>$X^2$ df P</td>
<td>CMIN/df CFI SRMR RMSEA $P_{close}$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.948 5 0.111 1.790 0.998 0.006 0.044 0.524</td>
<td>1.05 1.79 0.998 0.006 0.044 0.524</td>
<td></td>
</tr>
</tbody>
</table>

Test for Mediation

We tested moderation effects using our mediation constructs for the Emotional Intelligence Competency cluster. Using vision as the mediating construct for the Emotional Intelligence Competency cluster, we used the common bootstrapping method as prescribed by Preacher and Hayes (2008). Using direct and indirect effect, working through the bootstrapping technique (Preacher & Hayes, 2008), we are able to identify paths of significance using various parameters of full mediation, partial mediation, and no mediation. Table 11 shows the results in a condensed format with the lines of mediation (Vision) and the relational effects between the Independent Variable (Emotional Intelligence Competency cluster: Emotional Self Control, Emotional Self-Awareness, Adaptability, Achievement Orientation, and Positive Outlook) and the Dependent Variable (Emotional Engagement and Cognitive Engagement).

We also tested every path between all 5 dimensions of the constructs of Emotional Intelligence Competency, Emotional Self Control, Emotional Self-Awareness, Adaptability, Achievement Orientation, and Positive Outlook, and found that models with significance are limited to these direct effects:
Emotional Self Control → Cognitive Engagement;
Emotional Self-Awareness → Cognitive Engagement;

Adaptability → Emotional Engagement;
Achievement Orientation → Emotional Engagement;
Positive Outlook → Emotional Engagement.

Table 11 shows the paths, direct and indirect, tested for this model. We tested for mediation by using Mathieu and Taylor’s (2006) recommended bootstrap method using 2,000 bias-corrected bootstrapping samples at 95 BC confidence level, while applying the Preacher and Hayes (2008) approach for determining the chain mediation effects.

As can be seen, Emotional Self Control to Cognitive Engagement and Emotional Self-Control to Emotional Engagement shows no mediation effects per our bootstrapping technique (Preacher & Hayes, 2008) while all other paths show either full or partial mediation. β = 0.205 (with mediator) and β = -0.804 (without mediator) for Emotional Self Control with direct and indirect paths to Cognitive and Emotional Engagement.

Table 11. Mediation table for Direct and Indirect Paths

<table>
<thead>
<tr>
<th>Tested Path</th>
<th>without mediator</th>
<th>with mediator</th>
<th>Mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct Effect</td>
<td>Indirect Effect</td>
<td>Direct Effect</td>
</tr>
<tr>
<td>emotional control → VISION → cognitive engagement</td>
<td>0.251 (0.019)</td>
<td>0.205 (0.132)</td>
<td>0.205 (0.045)</td>
</tr>
<tr>
<td>emotional awareness → VISION → cognitive engagement</td>
<td>0.167 (0.642)</td>
<td>0.090 (0.005)</td>
<td>0.090 (0.09)</td>
</tr>
<tr>
<td>adaptability → VISION → cognitive engagement</td>
<td>-0.082 (0.895)</td>
<td>0.030 (0.007)</td>
<td>0.030 (0.65)</td>
</tr>
<tr>
<td>achievement → VISION → cognitive engagement</td>
<td>0.256 (0.07)</td>
<td>0.131 (0.009)</td>
<td>0.131 (0.79)</td>
</tr>
<tr>
<td>positive outlook → VISION → cognitive engagement</td>
<td>0.216 (0.002)</td>
<td>0.073 (0.001)</td>
<td>0.073 (0.39)</td>
</tr>
<tr>
<td>emotional control → VISION → emotional engagement</td>
<td>-0.021 (0.063)</td>
<td>-0.064 (0.195)</td>
<td>-0.064 (0.196)</td>
</tr>
<tr>
<td>emotional awareness → VISION → emotional engagement</td>
<td>0.025 (0.663)</td>
<td>-0.000 (0.602)</td>
<td>-0.000 (1.01)</td>
</tr>
<tr>
<td>adaptability → VISION → emotional engagement</td>
<td>0.023 (0.819)</td>
<td>0.269 (0.002)</td>
<td>0.269 (0.09)</td>
</tr>
<tr>
<td>achievement → VISION → emotional engagement</td>
<td>0.214 (0.005)</td>
<td>0.042 (0.001)</td>
<td>0.042 (0.57)</td>
</tr>
<tr>
<td>positive outlook → VISION → emotional engagement</td>
<td>0.367 (0.001)</td>
<td>0.171 (0.001)</td>
<td>0.171 (0.001)</td>
</tr>
</tbody>
</table>
Our current model shows the different constructs of Emotional Intelligence Competency group. Emotional Intelligence Competency cluster is divided into its identified 5 dimension constructs (Boyatzis, 2009). The constructs to the Emotional Intelligence Competency cluster is as follows: Adaptability, Achievement Orientation, Positive Outlook, Emotional Self-Control, and Emotional Self-Awareness. Based on the outcomes of our hypothesis testing, mediation analysis, and model validity and reliability, our final conceptual model showing Independent Variables, Mediation Variable, and Dependent Variables is shown in Figure 13 with all regression weights and P-values which show all significance. As can be seen from the diagram, Emotional Self-Control and Emotional Self-Awareness Constructs show insignificance when mediated through Vision; however, the direct path into Cognitive Engagement does show significance (p-value < 0.001).

Figure 13 shows our final Hypothesized model with all the predicted paths and their respective values of significance.
Results and Findings

Of the 10 hypothesis, 8 were found to be statistically significant. Two hypothesis were not supported. These were kept in and noted for future reference and statistical findings. We found that the Emotional Intelligence Competency cluster (Boyatzis, 2009) were found to be statistically significant with two specific constructs showing insignificance (p>0.001). In addition, during the SEM analysis portion, PNEA construct, Compassion, was eliminated due to out of range model fit, CMIN/df = 9.427 (acceptable range 1.0-3.0, per Hair et al. (2006).
With respect to the new hypothesized statements, we focus on the Emotional Intelligence Competency cluster and the individual constructs which comprise the EI Competency cluster.

We observed that Emotional Self-Control and Emotional Self-Awareness were found to have acceptable r-squared values with only the Emotional Engagement Dependent variable. \( H_3 \) shows \( \beta=0.214 \) (***) while \( H_4 \) shows \( \beta=0.155 \) (***), for both Emotional Self-Control and Emotional Self-Awareness when directly affecting Cognitive Engagement. However, there are no mediation effects for \( H_{1a} \) and \( H_{1b} \). This shows \( \beta=0.087 \) and \( \beta=0.183 \) respectively. Interestingly, direct effects from Emotional Self-Awareness and Emotional Self-Control were positive and mediated with direct effects into Cognitive Engagement. All other hypothesis statements, \( H_{1c}, H_{1d}, H_{1e} \), were fully mediated through Cognitive Engagement. Likewise, \( H_{2a}, H_{2b}, H_{2c}, H_{2d}, \) and \( H_{2e} \) were significant and had full mediation with Emotional Engagement. \( H_{2a} \) shows Adaptability having a strongly related construct to Emotional Engagement with \( \beta=0.138 \) with significance of path. Adaptability to Emotional Engagement shows partial mediation through Vision. Values for this path is noted as \( \beta=0.138 \) and \( p=*** \) showing significance.

Table 12 shows our expected hypothesis and results analysis. As can be seen, nine out of ten of our hypotheses are supported through a bootstrapping method as explained by Hayes and Preacher (2010).
<table>
<thead>
<tr>
<th></th>
<th>Hypothesis</th>
<th>Evidence (Preacher &amp; Hayes, 2008)</th>
<th>Supported / Not Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><em>H1a</em>: Emotional Self Control positively affects Cognitive Engagement when mediated by Vision</td>
<td>Bootstrapping Method: Indirect Effect = 0.087 (0.133)  Direct Effect = 0.183 (***), Not Supported</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><em>H1b</em>: Emotional Self-Awareness positively affects Cognitive Engagement when mediated by Vision</td>
<td>Bootstrapping Method: Indirect Effect = 0.173 (0.008)  Direct Effect = 0.155 (**), Not Supported</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><em>H1c</em>: Adaptability positively affects Cognitive Engagement when mediated by Vision</td>
<td>Bootstrapping Method:  Indirect Effect = -0.304 (*<strong>), Direct Effect = 0.138 (</strong>), Supported</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td><em>H1d</em>: Positive Outlook positively affects Cognitive Engagement when mediated by Vision</td>
<td>Bootstrapping Method:  Indirect Effect = 0.411 (<strong>), Direct Effect = 0.151 (</strong>), Supported</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td><em>H1e</em>: Achievement Orientation positively affects Cognitive Engagement when mediated by Vision</td>
<td>Bootstrapping Method:  Indirect Effect = 0.411 (<strong>), Direct Effect = 0.151 (</strong>), Supported</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td><em>H2a</em>: Emotional Self Control positively affects Cognitive Engagement when mediated by Vision</td>
<td>Bootstrapping Method:  Indirect Effect = 0.283 (<strong>), Direct Effect = -0.032 (</strong>), Supported</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td><em>H2b</em>: Emotional Self-Awareness positively affects Emotional Engagement when mediated by Vision</td>
<td>Bootstrapping Method:  Indirect Effect = 0.571 (**), Direct Effect = 0.205 (0.201), Supported</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td><em>H2c</em>: Adaptability positively affects Emotional Engagement when mediated by Vision</td>
<td>Bootstrapping Method:  Indirect Effect = 0.090 (0.229), Direct Effect = 0.155 (**), Supported</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td><em>H2d</em>: Positive Outlook positively affects Emotional Engagement when mediated by Vision</td>
<td>Bootstrapping Method:  Indirect Effect = 0.138 (<strong>), Direct Effect = 0.209 (</strong>), Supported</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td><em>H2e</em>: Achievement Orientation positively affects Emotional Engagement when mediated by Vision</td>
<td>Bootstrapping Method:  Indirect Effect = 0.044 (<strong>), Direct Effect = 0.042 (</strong>), Supported</td>
<td></td>
</tr>
</tbody>
</table>
Discussion

Our research went into areas with scarce information on engagement factors that contribute to success for community college faculty. As community colleges prepare for the upcoming changes in expectations, from students, administration, and leadership (Eddy, 2010), there is a greater emphasis on what drives engagement factors of faculty. This research shows that emotional intelligence competencies, as outlined by Boyatzis (2009), is critical to the success of community college faculty and the long range goals of the community college system. The research data also shows how valuable some of the constructs of the EI competencies are to the overall schematic of faculty engagement. Breaking the entire competency cluster into its individual item constructs, we found some remarkable areas of particular interest. Items that we thought would hold throughout the analysis were eliminated early creating a more efficient system of analysis through emotional intelligence competencies.

Our research also highlighted the fact that shared vision is crucial to the engagement of community college faculty. Both cognitive and emotional engagement shows valid and reproducible evidence that shared vision is imperative for engagement. Ideally, an individual, community college faculty, needs an organization’s shared vision, by the leader, other team members, or personal to be engaged on both the cognitive and emotional dimensions. Shared vision becomes essential for faculty to engage on a daily basis creating a momentum of change and excellence in the community college system.

Seminal studies have shown the valued importance of the task mode positive (TMP) and default mode networks (DMN) and their impact on neural activation (Boyatzis et al., 2014). These paradigms can transfer over into emotional intelligence
competencies that we found in the research dedicated to emotional and cognitive engagement. The TPN is a part of the neural network system that deals with attention-demanding tasks (Boyatzis et al., 2014) while the DMN correlates to the scenario where individuals are not focused on specific tasks and the brain is essentially at “rest”. In essence, “neural activity of TPN inhibits activity in the DMN” (Boyatzis et al., 2014: 1). With respect to this research, we found that the TPN and DMN clearly tracks and correlates the findings of the research amongst community college faculty. The DMN is also linked to the emotional epicenter which governs and prescribes areas such as emotional self-awareness and control and social cognition. Boyatzis et al. (2014) also found that as TPN becomes activated, the DMN would be deactivated in a simultaneous manner causing efficiency in the network systems. While the direct effect of an individual’s emotional intelligence competencies, when mediated by shared vision, becomes significant ($\beta=0.442$ and $p<0.001$) as predicted by our hypothesis models.

Within Emotional Intelligence Competencies, the five dimensions are as follows, adaptability, achievement orientation, positive outlook, emotional self-awareness, and emotional self-control, showed significance relationship ($\beta=0.214$, $\beta=0.087$, $\beta=-0.384$, $\beta=0.283$, $\beta=0.411$, and $\beta=0.411$) with significance $p<0.001$ for all paths. This is logical in the realms of community college faculty when it comes to cognitive and emotional engagement. Emotional self-awareness and emotional self-control have a direct relationship with cognitive engagement with significance ($\beta=0.214$ and $\beta=0.155$ with $p<0.001$ for both paths) while adaptability ($\beta=0.138$), achievement orientation ($\beta=-0.032$), and positive outlook ($\beta=0.151$) also with significant paths ($p<0.001$). Faculty, in
various educational settings, rely on shared vision to create emotional and cognitive engagement.

**Limitations**

The main limitations of this study involve the community college faculty and their perception of leadership, engagement, and vision. The survey instruments chosen were tested with high Cronbach alpha and supported by major academic systems; however, the questions are skewed towards corporate work environments. The leap into post-secondary systems, and especially community colleges, is not a fluid transition. The survey items may not be able to capture the entire essence of the social constructs which are in community college environments.

Also, engagement amongst post-secondary faculty is difficult to narrow down and measure accurately. The surveys that we administered do an adequate job of attempting to measure the various constructs; however, engagement is elusive to many teachers. We have found that teachers are extremely principle-oriented, and thus engagement becomes an abstract term defined in various ways and methods. Although our study focuses on the traditional concepts and definitions of engagement, teachers (post-secondary and others), often measure and define engagement depending on the situation(s).

Finally, a third limitation is the subset sample group. We surveyed and measured engagement from the U.S. perspective. In reality, community colleges thrive and serve students across the world. They are the starter post-secondary schools in many countries and are seen as the precursor to more rigid and known educational systems. Our research could be enhanced more if we surveyed a broader group, multi-national, to gain a better
understanding of engagement factors and taking into account the various cultural norms that surround the concept of engagement.

Conclusion

In conclusion, this engagement study has been very descriptive when it comes to community college faculty. We feel that this subset of individuals, the community college faculty, are often disregarded and not accounted for during discussions of student success and faculty engagement. This study hopes to remedy a portion of that stigma and delves into the inner motivations of community college faculty. Through this study, we are able to identify more clearly what engages community college faculty to reach beyond their expectations, believe in their student population, and create a system of prosperity for the future community college faculty and associated leaders.
CHAPTER IV: QUANTITATIVE STUDY 2 – THE COMMUNITY COLLEGE PRESIDENTS AND THEIR DIRECT REPORTS

Introduction

There are well over 8.5 Million students in the community college system in the United States and along with it, over 3,500 community college presidents and over 20,000 Direct Reports to those presidents (AACC, 2016). With such a large network of students and administrators, the future of community colleges has to be guarded and sustained to accommodate the growing student population looking towards community colleges as viable post-secondary education options.

With such an intricate human capital system as U.S. Community College system, this study focuses on the presidential level and addresses issues in competency and behavioral attributes to being an effective and engaging president. Shults (2001) posits that community college presidents are “critical to the success of the organization” (p. 43) and it becomes even more important that the focus on competencies of the president also be identified to predict highly effective individuals. The basis of this study is to investigate competencies that are seen to be effective and engaging using verified scales of measure.

In addition, a growing body of research encompasses the plight of the community college and the success of the student population (Eddy, 2010). The dexterity of the administrative group in dealing with issues of student success and organizational flux can be in the gap in administrative leadership pipeline (Vaughan, 1990; Vaughan & Weisman, 1998). More pressure is placed on the innate abilities of community college administration than in previous times. At various times throughout the history of the community college system, roughly about 130-year-old system (AACC, 2016),
administrative leadership qualities have evolved into a more student center focus creating a sense of community and inclusion with partners around the community college.

Changes in pedagogy dictate a change in leadership philosophy and evolution in the pedagogy of administrative leadership. Nascent administrators within various community colleges find themselves in an antiquated system of leadership where philosophies of education and student success resemble that of those of previous decades. In the past, community college administrators were very formal in dealing with students and leadership (Townsend & Bassoppo-Moyo, 1997). In addition, community colleges were often considered to be non-relevant in discussion of community partners and other affiliations (Townsend & Bassoppo-Moyo, 1997: 68). This created and nurtured a different sense of leadership; one that is dedicated to theory and procedure while creating administrative obstacles for those entering higher leadership positions.

Currently, there is a change in the leadership paradigms at the community college level (Shults, 2001; Vaughan & Weisman, 1998; Wallin, 2002). Administrative leaders from Presidents to Vice Presidents and further on the organizational hierarchy are seeing that student profiles and expectations are changing; consequently, leadership has to adjust and change accordingly (Eddy, 2010; Wallin, 2002). Previously, community college students were not focused on degree attainment but rather on specific classes offering a specific set of skills; average age was into the late 30s; with family dependents, and local to the college campus. Compare that to today’s community college student; commuting or a distant learner, in the late 20s, and looking for a full degree to leverage and move into a 4-year university traditional education (Amey, 2006). This change in student
population demographics and objectives leads to a natural change in leadership as well; creating systems of change for the administrative leadership group.

These subtle, yet drastic changes bring with it a different viewpoint in administrative and leadership styles by which community colleges are governed. With respect to the community college president, there is enormous pressure to interact and guide the organization through the various changes that are developing in the United States (Boggs, 1993; Eddy, 2010). These changes transform into the methods of management styles, character development, and personal motivation. These changes translate over into a different style of leadership where employee and manager emphasize and lead with intention in hopes of aspiring the organization to achieve its mission.

This study is dedicated to the evaluation of the community college president by their direct reports. In addition, another aspect of the study is a self-reported evaluation from the community college presidents. This is a pivotal part of the study as often times, leaders have a very different and distorted view of themselves as opposed to the view others may have of them. This, essentially, is the seminal part of this study. Our goal is to measure competencies of managers and determine the effectiveness of community college presidents. According to Boyatzis (1982), effective jobs must “maintain or be consistent with policies, procedures, and conditions of an organizational environment” (p. 13). In addition, Boyatzis (1982) also graphically identifies a model of effective action and performance. Figure 14 (Boyatzis, 1982) can be extended into the field of post-secondary education and reveal how the interactions of competencies, job demands, and organizational environment come together to form effective behavior in a community college setting.
This research is based on the foundations of emotional and social intelligence as our previous studies have shown and proved to be substantial [Chapter 2 in Thesis]. How community college presidents use and articulate the elements of emotional and social competencies are critical to a successful leadership tenure. To define competencies, an “underlying characteristic of a person which results in effective and/or superior performance in a job” (Boyatzis, 1982; Klemp, 1980). Furthermore, competencies are defined as a “capability or ability” built around a central behavior and construct known as intent (Boyatzis, 1982, 2008; McClelland, 1973, 1985). Competencies translate over into the community college administration by setting boundaries and parameters for the leadership levels.
Lastly, this research delves into the relationship between leader and follower, employee and manager, community college presidents and their direct reports. This was a crucial relationship to explore and investigate quantitatively. Eddy (2010) posits that the relationship between a current community college president and his direct reports sets the foundation for the entire organization. Essentially, the perceived relationship between administrative leadership is “mimicked” and replicated at all levels of the community college administrative system. Consequently, a positive relationship between administrative leadership and their direct reports sets the tone for other relationships between employees throughout the organization. Thus, community college relationships are determined by the relationship between the community college president and his direct reports. This study focuses on the competencies needed to be effective as a community college president, and this data is supported by evaluations from the president’s direct reports.

**Theoretical Framework and Research Hypotheses**

This section outlines the theories that we used to explain our stance on the study. Our goal is to explore various theoretical underpinnings that support our hypothesis and reinforce our premise to the quantitative study. This section explores theories of emotional intelligence, self-determination, cognitive evaluation, intentional change, and positive and negative emotional attractor theory.

**Emotional Intelligence Theory (EI)**

A common myth in the field of post-secondary leadership is that it is robotic and un-empathetic to the challenges of education. There is a common image of post-secondary leaders embellished in a comfortable office and signing edicts, void of
compassion and personality is one that has withstood changes in the culture of education. Emotional Intelligence (EI) is the thinking, planning, and pursuing of goals (Goleman, 1998). Evidence abounds showing that emotional and social competencies (ESI) are the key to success in leadership (Goleman et al., 2004; Salovey & Mayer, 1990). The concept of “monitoring one’s own emotions and the emotion of others” (Salovey & Mayer, 1990). EI is also significant in leaders who are able to identify themselves and their emotions in various situations. Communication is another key aspect in EI and the ability to transform into the democratic leader (Goleman et al., 2001).

According to Goleman et al. (2002), there are four main areas of Emotional Intelligence (EI) and these areas are the driving force for leadership with respect to the self. The four areas area as follows:

1. **Self-Awareness**: Understanding one’s strengths, weaknesses, limitations, values, and motives. Individuals who are self-aware are honest about themselves and realistic about accomplishments.

2. **Self-Management**: This is needed to control feelings, facilitate mental clarity, and provide controlled energy.

3. **Social Awareness**: This includes empathy and understanding of others, organizational awareness and ability to serve other’s needs. This also includes being attuned to others feelings and being approachable to others.

4. **Relationship Management**: This area includes influencing and developing others. This also includes change and conflict management and creates cohesiveness within teams.

Boyatzis defines emotional and social intelligence competencies as the requisite capabilities, knowledge, behaviors, and skills that are causally related to effective performance for a given role (Boyatzis, 2008). Based on this work (Boyatzis & Goleman, 1996, 1999), emotional (self-awareness and self-management clusters) competencies and social intelligence (social awareness and relationship management clusters) competencies
define a set of behaviors that can be examined individually in order to understand how specific leader behaviors influence interpersonal relationships and organizational outcomes.

In post-secondary education, EI plays a critical role in leadership and creating a true sense of self-worth. Community colleges shows the need for EI competencies on the leadership level which translates into effectiveness and engagement from the presidential level. Community college presidents are measured accordingly with EI competencies and how they manage the workforce, especially their direct reports. Community college leaders that focus on empathy, shared vision, and inspiring others (Boyatzis, Smith, & Beveridge, 2012b) are expected to be more effective than those who do not rely on emotional and social competencies.

**Self-Determination Theory (SDT)**

Deci and Ryan (1985) proposes that intrinsic behavior is contingent on three main areas of human motivation:

a. Autonomy – the universal desire to be one’s own agent in life
b. Competence – seek to control the outcome and experience mastery
c. Relatedness – universal want to be connected and experience caring from Others

Initially proposed by Deci and Ryan (1985), self-determination comes out of Vroom’s Expectancy Theory. Intrinsic motivation factors such as autonomy and self-regulation become the foundation of human achievement. This theory focuses on the extent to which the relationship between manager and subordinate becomes productive and sustainable based on the interpersonal work climate created by both groups (Deci et
al., 1989). In addition, SDT focuses on how the manager’s interpersonal orientations tend to support subordinates’ choice and personal initiatives (Deci et al., 1989: 580).

Studies also have revealed variables that increase self-determination would include dependent variables such as intrinsic motivation, positive emotional tone, creativity, interest in the activity, conceptual learning, perceived competence, and self-esteem (Deci et al., 1989).

With respect to leadership in organizations, SDT becomes relevant in defining characteristics needed for effective leadership. The intrinsic factors that drive successful leaders become integral to an organization. As SDT theory expands, researchers find the common bond between culture and organizational success and focus on the variance in relationships between the manager and the subordinates.

When translated into the relationship between community college president and her direct reports, self-determination theory plays a crucial role in identifying the motivation factors that drive the relationships. These motivations, intrinsic and/or extrinsic, provide an understanding into the relationship values between the community college president and his direct reports. SDT also explains how the relationship matures naturally between the president and those who report directly to him as this sets the tone for the entire community college administration.

**Cognitive Evaluation Theory (CET)**

The basic premise behind cognitive evaluation theory (CET) is to explain how consequences affect internal motivation by relating external factors, such as tangible rewards, deadlines, and evaluations (Amabile, DeJong, & Lepper, 1976). CET also purports that feeling of autonomy and competence are important for intrinsic motivation.
and consequently, the relationships that form for the individual. Being derived from self-determination theory, CET is an evaluation form describing the motivation and the results of each motivation factor. Recent studies alluded to the fact that intrinsic motivation and optimum challenging situations are required for feelings of competence and successful performance (Danner & Lonky, 1981).

Positive feedback is critical to the development of employees throughout the organization (Deci & Ryan, 1985). Cognitive Evaluation gives credit to positive feedback being the driving force for employee satisfaction and the intrinsic drive needed to be productive and successful in organizations. CET defines the parameters of extrinsic and intrinsic motivation factors including wage increases and bonuses per employee. Extrinsic motivation and positive feedback bring with this a sense of personal accomplishment as posited by Deci and Ryan (1975), which defines the motives of personal accomplishment on specific goals. Although tangible rewards undermine and falsify intrinsic motivation (Deci, Koestner, & Ryan, 1999), CET is accepted as a foundational theory of work motivation.

In the community college administrative setting, CET explains many of the mission and vision of high-level executives, president and vice president (direct reports). Cognitive Evaluation shows a direct link between actions laid out by the community college president and the intrinsic motivators that define the presidential level. The intrinsic motivators and positive feedback define the organizational effectiveness of community colleges.
Intentional Change Theory (ICT)

ICT is the theory based on the individual view where “change occurs at one’s behavior, thought, feelings and perceptions” (Boyatzis, 2008: 56). This framework becomes crucial when taken in the context of modern day leadership. Boyatzis’ (2006) self-directed learning model also explains what the ideal self and real self are and what the “gaps” between both paradigms. The relationship is further explored through various stages of the discovery process. In leadership, how one closes the gap between the ideal and real self, determines the success of the leader.

According to Boyatzis’ ICT (Goleman et al., 2001), there are five discoveries that lead to intentional change. These phases of discovery are listed as follows:

1. Discovery 1: the ideal self
2. Discovery 2: the real self
3. Discovery 3: the learning agenda
4. Discovery 4: the practice of being a leader
5. Discovery 5: trusting relationships that facilitate openness

The five discoveries of ICT form a foundation on leadership and how to enact an individual’s personal vision. In complex systems, the positive and negative emotional attractors serve as viable explanations for the success of individuals in leadership positions. Also, according to Boyatzis (2006), “when individuals focus on the future possibilities and filling them with hope, it arouses the parasympathetic nervous system (PSNS)” (p. 12). The interaction of PEA and NEA, when it comes to desired change, is crucial in leadership, and it explains why there is a positivity and negativity in individual change efforts (Boyatzis, 2006).
Community college presidents employ ICT on a regular basis and can explain the leadership development in “terms of behavior, thoughts, feeling and perceptions related to leadership effectiveness as a complex system” (Boyatzis, 2008: 65). Community college presidents have dreams and aspirations of success and harmony in the community and in the college setting. The intentional effort by the community college president signifies the desired change between the different discovery stages of ICT and how to sustain levels of desired change, become more optimistic, and learn how to articulate a shared vision (Boyatzis, 2006). Community college administration uses shared vision, sustainability, and self-discoveries to bring about change and positive motivations.

**Positive and Negative Emotional Attractors (PNEA)**

Boyatzis (2006) describe the phenomenon of positive and negative emotional attractors which determine the context of the self-organizing process and how this becomes an adaptation to existing conditions or to new, emergent conditions. The positive emotional attractor (PEA) explains situations where one is to have positive thoughts and optimistic views of the future, joy, passion, and excitement about one’s calling, purpose, and values (Akrivou et al., 2006) by arousing the parasympathetic nervous system as explained by Boyatzis (2006, 2008). This arousal state excites individuals causing a greater sense of being and generating positive feelings and thought process. The altruistic and good behavior engages people in a self-perpetuating loop which in effect causes more release of PEA (Boyatzis, Rochford, & Taylor, 2015).

Conversely, the negative emotional attractor (NEA) has the dysfunctional aspects of emotional attractors (Boyatzis, 2011) creating a focus on stressors from the current and social environment that interfere with a person’s effectiveness (Boyatzis & Sala, 2004).
In effect, the NEA helps basic instincts of self-preservation and dealing with threat situations. Boyatzis (2008) describe the NEA as behaviors that are defensive, protectionist, and seclusion resulting in a decrease in cognitive performance. Thus, as Boyatzis (2011) explains, the NEA focuses on the arousal of the sympathetic nervous system which is likely to lead to cognitive, perceptual, and emotional impairment.

Shared Vision becomes the essential factor in defining areas of leadership with respect to PNEA. In an effort to better understand the organizational climate, vision becomes essential in determining the success of the organization. In general, with the existence of vision, people are positive and have higher levels of engagement, both cognitive and emotional.

Community college presidents emphasize the importance and actual deliverance of a shared vision for the organization (Eddy, 2010). They are able to invoke the PEA and suppress the NEA over long periods of time creating a more altruistic, cooperative, helpful, and conciliatory behavior (Barsade & Gibson, 2007). These shared vision moments during the tenure of a community college president create a stronger bond between his direct reports and consequently, this pedagogy extends to the entire organization.

**Conceptual Model and Study Hypothesis Statements**

Our conceptual model (Figure 15) is as follows with hypothesis identification relationships:
Emotions play a significant role in leadership and affect the competencies that drive successful leaders. This study focuses on the emotions that enable community college presidents to sustain a level of success and engage their organization.

**Quality of the Relationships as Mediator**

The relationship between manager and his subordinates have been the focus of study and analysis for some time. The relationship of the community college president and their direct reports can be analogous to large CEO (chief executive officer) and his executive vice presidents and direct advisors. The relationship can be measured and analyzed using the PNEA survey with dimensions of compassion, shared vision, and overall positive mood (Boyatzis, 2004; Howard, 2006). Emotions are the central focus of Intentional Change Theory (ICT) and leaders as ICT explains essential components of behavior, thoughts, feelings, and perceptions as it relates to effectiveness (Boyatzis, 2008; Mahon et al., 2015). In this same vein, we are grouping our hypotheses based on mediator variables:
Hypothesis 1. Emotional Intelligence competencies have a direct relationship on Effectiveness when mediated by the quality of relationships.

Hypothesis 2. Social Intelligence competencies have a direct relationship on Effectiveness when mediated by the quality of the relationships.

Hypothesis 3. Emotional Intelligence competencies have a direct effect to Engagement (organizational).

Hypothesis 4. Social Intelligence competencies have a direct effect to Engagement (organizational).

Hypothesis 5. Personality affects Engagement positively when mediated by the quality of relationships

Research Methodology

Our goal was to measure the effectiveness and engagement of community college presidents through rigorous quantitative testing parameters. To this purpose, our study consisted of survey questions adapted from known and tested behavioral scales. After gathering several conditions to test, we sorted known and tested scales according to our testing objectives. To measure effectiveness and engagement at the presidential level, we wanted to be an unbiased reporting method and included direct reports also filling out surveys measuring the effectiveness and engagement of the president. Direct reports of community college presidents were defined as any individual on the tier of the organizational hierarchy directly below that of the president. Direct reports of community college president are classified as a vice president, director, and special assistant. The names of the individuals (direct reports) were given by the president as a section of the community college president’s survey.

Operationalization of Constructs

We chose instruments that were already pre-tested and validated through rigorous testing and analysis. Each of the constructs proved to show good measurement reliability
and validity. Although the testing constructs were used in non-education administration based field, i.e., management, we were confident that the results would show coherence and similarities to other fields of testing. In addition, we felt that there was also a difference in educational administration to validate the survey scales in several testing disciplines. We concluded that the scales decided would be ideal for post-secondary education administration leadership evaluation.

**Emotional and Social Intelligence**

For community college presidents, we measured emotional and social competencies using the Emotional and Social Competency Indicator (ESCI) (Boyatzis, 2007; Boyatzis, 1996, 1999, 2009; Boyatzis & Sala, 2004). Our ESCI survey measures 12 dimensional competencies with a total of 68 items on the survey. We used 44 out of 68 items from the ESCI survey (9 dimensional competencies) in an effort to measure the competencies we saw as important as a community college president.

The dimensions of ESCI that were included is as follows along with the total number of items per dimension:

1. *Achievement Orientation* – 5 scale items
2. *Teamwork* – 5 scale items
3. *Coach and Mentor* – 5 scale items
4. *Inspirational Leadership* – 5 scale items
5. *Empathy* – 5 scale items
6. *Adaptability* – 4 scale items
7. *Emotional Self Control* – 5 scale items
8. *Positive Outlook* – 5 scale items
9. *Influence* – 5 scale items
These 44 ESCI items comprised one segment of the testing given to the direct reports of the community college presidents. The ESCI adapted survey was delivered on a 6-point Likert scale with the following criteria:

1 = Don’t Know; 2 = Never; 3 = Rarely; 4 = Sometimes; 5 = Often; 6 = Consistently

Per Boyatzis (2007; 2004), these competencies are defined as 1) Adaptability: Flexible in handling change; 2) Achievement Orientation: Striving to improve or meeting a standard of excellence; 3) Teamwork: Working with others toward shared goals. Creating group synergy in pursuing collective goals; 4) Coach and Mentor: Sensing others’ development needs and bolstering their abilities; 5) Inspirational Leadership: Inspiring and guiding individuals and groups; 6) Empathy: Sensing others’ feelings and perspectives, and taking an active interest in their concerns; 7) Emotional Self-Control: Keeping disruptive emotions and impulses in check; 8) Positive Outlook: Persistence in pursuing goals despite obstacles and setbacks; 9) Influence: Wielding effective tactics for persuasion. These nine dimensions were deemed as the most essential in leading as a community college president.

**Reputational Effectiveness Survey**

Another aspect of post-secondary administrative leadership is the effectiveness aspect. As posited by Tsui and Barry (1986), reputational effectiveness stems from Role Theory which defines this as positions through the authoritative structure which leads to expected role behavior as it resonates through multiple sets of expectations. This scale sets the tone for the community college president and the way other constituents to the organization view performance. Three items (questions) set the scale and is measured on a 7-point Likert scale:
Engagement is defined by Kahn (1990) as the immersement of employment and expression of a person’s preferred self in task behaviors that promote connections to work and to others. Community college presidents are defined by their engagement abilities and the task of bringing the organization around one cause. For this study, we used the Utrecht Work and Well-Being Survey that measures Absorption, Vigor, and Dedication (Schaufeli, Bakker, & Salanova, 2006). The Cronbach’s alpha for all three are as follows: Absorption (0.88), Vigor (0.83) and Dedication (0.90) (Schaufeli et al., 2002) and determined to be suitable to our expectations. These dimensions most closely described the engagement of the presidents at the community college. From this scale, we eliminated “absorption” as this dimension did not describe the abilities of community college presidents. This left us with Vigor and Dedication as the areas for analysis with an 11 question survey. Six of the eleven questions dealt with Vigor and five of the eleven questions dealt with Dedication.

This survey is one a Likert-scale system with the following choices:

1 = Never; 2 = Almost Never (A few times a year or less); 3 = Rarely (Once a month or less); 4 = Sometimes (a few times a month); 5 = Often (Once a week); 6 = Very Often (A few times a week); 7 = Always (everyday)

Vigor, the opposite of emotional exhaustion and the high levels of mental energy while working, the willingness to expend effort in one's work and Dedication, which is characterized by a sense of significance, enthusiasm, pride, and challenge (González-
Romá, Schaufeli, Bakker, & Lloret, 2006) create the UWES Engagement scale to measure how engaging the community college president is at the organization.

Positive and Negative Emotional Attractor Scale

Positive and Negative (PNEA) emotional attractor scale was decided to be used as a measure of emotional commitment for community college presidents. Boyatzis (2008) posits that positive emotional attractor (PEA) and negative emotional attractor (NEA) represents forces of behavior, attitudes, and feelings. In studies which use the PNEA scale and analysis (Boyatzis, 2008; Boyatzis et al., 2015; Mahon et al., 2015; Pittenger, 2015) have found that PNEA is a critical factor in determining statistical significance with respect to convergent and discriminant validity. As a summation of the studies and using the PNEA scale, the quality of relationship matter when dealing with leadership and management positions. The scale is made of 20 questions and subcategorized into three dimensions, Shared Vision (8 questions), Compassion (6 questions), and Overall Positive Mood (6 questions). The scoring on the survey is as follows:

1 = Strongly Disagree; 2 = Somewhat Disagree; 3 = Neither; 4 = Somewhat Agree; 5 = Strongly Agree

The breakdown on the three dimensions is as follows with a “+” to denote [PEA] and a “-” to denote [NEA]:

Vision (8 PEA Items)

1. Management emphasizes a vision for the future. (+)
2. We often discuss possibilities for the future. (+)
3. Our future as an organization will be better than our past. (+)
6. I feel inspired by our vision and mission. (+)
7. We are encouraged by management to and build on our strengths. (+)
10. Our work is focused on our vision or mission. (+)

18. Our purpose as an organization is clear in our vision or mission. (+)

19. Management emphasizes our current strengths. (+)

**Compassion (3 PEA and 3 NEA Items)**

5. I do not feel trusted by my colleagues. (-)

8. I feel trusted by my colleagues. (+)

9. I care about my colleagues at work. (+)

15. I do not trust my colleagues. (-)

17. I do not care about my colleagues at work. (-)

20. I trust my colleagues. (+)

**Overall Positive Mood (4 PEA and 2 NEA Items)**

4. This is a great place to work. (+)

11. I enjoy working here. (+)

12. I do not like working here. (-)

13. Working here is a joy. (+)

14. If I had a choice, I would work somewhere else. (-)

16. Overall, it feels good to work here. (+)

Source: Boyatzis (2008) in conjunction with Will Oliver

The calculations for each quotient for Vision, Compassion, and Overall Positive Mood to create a PNEA score is as follows:

\[
\text{Vision} = \frac{\text{Sum Questions Q1 + Q2 + Q3 + Q6 + Q7 + Q10 + Q18 + Q19}}{8}
\]

...the sum of these questions divided by 8

\[
\text{Compassion} = \frac{\text{Sum of Q8 + Q9 + Q20 – Q5 – Q15 – Q17}}{6}
\]

\[
\text{Overall Positive Mood} = \frac{\text{Sum of Q4 + Q11 + Q13 + Q16 – Q12 – Q14}}{6}
\]

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PEANEA Score = [Vision + Compassion + OPM]/3

**Personality Testing Scale (Ten Item Personality Inventory)**

We controlled for personality in this study by utilizing a Ten Item Personality Indicator (TIPI). This specific scale is a version of the Big Five Factor Personality (Gosling, Rentfrow, & Swann, 2003). The TIPI scale was an ideal selection in that it measures personality dimensions such as Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experiences. The adapted TIPI scale had ten questions, two items per dimension and had five reverse coded items. (Romero, Villar, Gómez-Fraguela, & López-Romero, 2012).

The scale for scoring on the TIPI is as follows for participants:

**Figure 16. Ten Item Personality Indicator Questionnaire**

Scale (taken directly from Gosling et al., 2003):

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree strongly</td>
<td>Disagree moderately</td>
<td>Disagree a little</td>
<td>Neither agree nor disagree</td>
<td>Agree a little</td>
<td>Agree moderately</td>
<td>Agree strongly</td>
</tr>
</tbody>
</table>

I see myself as:

1. ___ Extraverted, enthusiastic;
2. ___ Critical, uncooperative;
3. ___ Dependable, self-disciplined;
4. ___ Anxious, easily upset;
5. ___ Open to new experiences, complex;
6. ___ Reserved, quiet;
7. ___3. Sympathetic, warm;
8. ___ Disorganized, careless;
9. ___ Calm, emotionally stable;
10. ___ Conventional, uncreative.

**Scoring:**

TIPI scale scoring ("R" denotes reverse-scored items): Extraversion: 1, 6R;
Agreeableness: 2R, 7; Conscientiousness: 3, 8R; Emotional Stability: 4R, 9;
Openness to Experiences: 5, 10R.
Multi-Rater System (360 Analysis) & Design

Our goal is to acquire pure empirical data on community college leadership competencies. We concluded that system and testing that focus on self-rated surveys needed more justification to reduce internal bias and redundancies. To this effect and outcome, our participant group, the community college presidents, were asked to not only rate themselves on leadership competencies but also to provide three to five direct reports to do an evaluation of the president. Our goal in this study was to get a minimum of three direct reports to evaluate and complete the competency model survey. Statistical significance increases greatly with multi-rater systems with three or more other raters.

With respect to our study, for every community college president, our expectation is to have a minimum of three DR evaluators with a maximum of five DR evaluators. However, we did use CCP with only two DR evaluators to increase sample size.

Pictorially, the Community College President (CCP) would provide the names of their Direct Report (DR) to complete leadership evaluations as follows:

**Figure 17. Multi-Rater Diagram for Community College Presidents**

Community college presidents were directed to take a survey consisting of the above-mentioned PNEA survey scale combined with the TIPI Personality scale for a total of 30 questions in addition to three demographic question for a total of 33 questions.

Once the CCP’s would volunteer contact information for their direct reports, a separate survey was administered to the given contact address for DRs. The DR survey
consisted of above-mentioned ESCI scale (44 items), the Reputational Effectiveness Scale (3 items), and the Utrecht Work Engagement Scale (11 items). The total DR survey consisted of 58 items and was adapted to reflect the CCP’s leadership competencies. All questions were modified to ask how the DR perceived the leadership competencies and effectiveness of their respective CCP. In this manner, common method variance and in effect, increase the reliability rigor of our statistical evidence. This is the logistic set up for the multi-rater system.

The multi-rater system has been tested and verified by test analogous to our study on community college presidents. Test of other studies (Boyatzis & Gaskin, 2010; Lindebaum & Cartwright, 2010) conclude that the multi-rater system is effective at analyzing self (Boyatzis & Akrivou, 2006) by using responses from other [direct reports] and finding areas of communalities and difference for advanced statistical analysis. Common method bias effects data analysis (Jarvis, MacKenzie, & Podsakoff, 2003) and the multi-rater system reduces this variance in increases reliability and statistical significance of the study. In an effort to reduce response bias (Baumgartner & Steenkamp, 2001) from the DR survey, we built in questions which checked if the participate is answering valid responses. We had two questions of this nature to check the validity of the responses embedded in our survey.

Pre-Testing Sequence

In an effort to create an efficient testing process, we conducted exercises that reduced redundancy and inefficient methods.

Pilot Testing: The researcher’s network group allowed pre-testing of community college presidents. A small test sample group, 12 community college presidents, were
given the survey as a pre-test to measure total time taken to complete the survey and garner any feedback on questions on the survey. In addition, we were also able to do similar pretesting procedures with direct reports of four of the community college presidents that were grouped in the pre-test phase.

Few changes were made to both the president’s survey and the direct reports survey. Both groups were satisfied with the order of questions and the length of the survey. Once approved by the dissertation committee and the pilot test group, we then approached Case Western Reserve Institutional Review Board to grant permission to proceed with our study. Our next goal was to secure Qualtrics Corporation, on-line survey platform, to administer and send out the survey to the Community College President’s survey first.

Sample Demographic Information

Demographic information is essential in this study of Community College Presidents. We obtained demographic information voluntarily through the survey administered to all the participating presidents. Demographic information was assessed with three questions. We asked for information on gender, range of age, and range of tenure. A fourth demographic information, race, was obtained by re-connecting with the presidents after the survey was taken via phone, email, and public internet information. This item was deemed important after the survey was sent out and thus, we went back to each of the participants to gain this data element.

A summary of the demographic information is shown in Table 13 as an excerpt from the survey (except race information):
Race information (white or non-white) was acquired at a later date from every community college president who offered 3–5 Direct Reports. From this list, we chose the presidents who had direct reports fill out the necessary surveys for the multi-rater system. We made phone calls and talked to Human Resource department as well as use various community college website with president portfolios information. This information was kept on a separate Excel spreadsheet for reference and took approximately four months to compile and complete.

**Community College President (CCP) & Direct Report (DR) Sample**

Data gathering turned out to be a long and arduous task. For the most effective sample size, we decided that it would be optimum to set a goal for the data gathering size. Our goal at the onset of this study was 100 community college president completed
surveys with a minimum of 3 direct reports for every CCP. In essence, that would be 300 direct reports (DR) and 100 community college presidents. Setting this goal was difficult, and attempts to achieve this sample size for both CCP and DRs took several iterations and incentives.

We enlisted the help of NISOD (National Institute for Staff and Organizational Development), [www.nisod.org](http://www.nisod.org), an organization dedicated to the excellence and advancement of community and technical colleges. NISOD was able to provide us with 254 Community College Presidents on a national scale across the United States to participate in our study. However, contact information was not enough to encourage CCP’s to participate willingly and take the survey. We also requested NISOD to write an opening letter of support to help with our research aimed at the CCPs on the list. Our expectation was to get 100 CCPs out of the 254 CCP list from NISOD who can not only fill out the CCP self-reported survey, but also volunteer 3–5 direct reports. Our surveying period started in June of 2014 and ended in September of 2015. We had four separate mailings and reminders and encouraged the CCP group to complete the survey in totality with DR contact information.

Our Direct Report sample size depended on the CCP volunteering the information. Out of the 254 CCP total list, Qualtrics had sent the survey to the entire sample group upon our request. Ideally, if all 254 CCPs were to fill out the survey completely and offer a minimum of three direct reports, our total count would be 762 direct reports \((254 \times 3=762\)\). However, we could not get our entire list of CCP’s to complete the survey and get three to five DRs from those who did complete the survey. It must be noted that the DR2 and DR1 category had a full set of direct reports submitted by
the CCP; however, through several reminders and incentives, the DRs did not complete the survey for their respective CCP.

Out of 254 CCP, Qualtrics administered the survey to the entire national NISOD list. Two-hundred-thirty-four CCPs out of 254 (92% return rate) filled out the survey and returned for consideration. Acquiescence bias was avoided using two questions of validity (Baumgartner & Steenkamp, 2001). Total anonymity was accomplished using spreadsheet database management software. Once a CCP would finish he/her survey and volunteer information for their DR, the researcher would create a spreadsheet of data and monitor the response rate and full submittal. Complete anonymity was established between the CCP and his/her DR feedback. The researcher kept this information on his home storage drive.

Table 14 shows the breakdown of our data sample group. The final sample used 234 community college president surveys with a minimum of one direct report. The average number of direct reports for the entire sample group was 2.01 with a median of 2.0 and an ample range of 1–5. Of the 234 CCPs who returned the survey the breakdown is as follows:
Table 14. Survey Return information for both CCP and DR

<table>
<thead>
<tr>
<th>Total Returned Survey</th>
<th>92% Return Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>234 Total CCP completed survey: 234</td>
<td>92% Return Rate</td>
</tr>
<tr>
<td>54 CCP Completed Survey with a minimum of 3 DR</td>
<td>23% Completion Rate</td>
</tr>
<tr>
<td>76 CCP Completed Survey with 2 DR</td>
<td>32% Completion Rate</td>
</tr>
<tr>
<td>88 CCP Completed Survey with 1 DR</td>
<td>38% Completion Rate</td>
</tr>
<tr>
<td>16 CCP Completed Survey with 0 DR</td>
<td>7% Completion Rate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Returned Survey</th>
<th>92% Return Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>234 Total DR completed survey: 431</td>
<td>92% Return Rate</td>
</tr>
<tr>
<td>DR3 54 CCP Completed Survey with a minimum of 3 DR</td>
<td>23% Completion Rate</td>
</tr>
<tr>
<td><strong>191 Direct Report Completed Survey</strong></td>
<td></td>
</tr>
<tr>
<td>DR2 76 CCP Completed Survey with 2 DR</td>
<td>32% Completion Rate</td>
</tr>
<tr>
<td><strong>152 Direct Report Completed Survey</strong></td>
<td></td>
</tr>
<tr>
<td>DR1 88 CCP Completed Survey with 1 DR</td>
<td>38% Completion Rate</td>
</tr>
<tr>
<td><strong>88 Direct Report Completed Survey</strong></td>
<td></td>
</tr>
<tr>
<td>DR0 16 CCP Completed Survey with 0 DR</td>
<td>7% Completion Rate</td>
</tr>
<tr>
<td><strong>6 Direct Report Completed Survey</strong></td>
<td></td>
</tr>
</tbody>
</table>

For data analysis, we were able to stratify each of the separate categories, DR3, DR2, and DR1 and use all CCP and DR evaluations as a cumulative total to achieve significance and variance of study. The DR0 category with zero DR for CCP was excluded due to no evaluations for the 360 analysis. We used SPSS statistical software for analysis for preliminary data evaluation. We conducted a two-tailed t-test to verify that non-response bias is not a factor in our sample group for both CCP and DRs.

The sample demographics for both CCP and DR are shown in Table 15:
Table 15. Sample Demographics for both CCP and DR

<table>
<thead>
<tr>
<th>Respondent Characteristics</th>
<th>CCP</th>
<th>DR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample Size</td>
<td>%</td>
</tr>
<tr>
<td>Sample size (n)</td>
<td>234</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>154</td>
<td>66%</td>
</tr>
<tr>
<td>Female</td>
<td>80</td>
<td>34%</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 or Younger</td>
<td>9</td>
<td>4%</td>
</tr>
<tr>
<td>32 - 50</td>
<td>100</td>
<td>43%</td>
</tr>
<tr>
<td>51-69</td>
<td>124</td>
<td>53%</td>
</tr>
<tr>
<td>70+</td>
<td>1</td>
<td>0.4%</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Tenure as CCP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>10</td>
<td>4%</td>
</tr>
<tr>
<td>6 years -10 years</td>
<td>53</td>
<td>23%</td>
</tr>
<tr>
<td>11 years - 19 years</td>
<td>75</td>
<td>32%</td>
</tr>
<tr>
<td>Greater than 20 years</td>
<td>96</td>
<td>41%</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Data Screening

Once our optimum levels of data return were met (Podsakoff, MacKenzie, & Podsakoff, 2012), we conducted data screening to find missing data values using SPSS data analysis. We found four missing values and corrected this deficiency by averaging scores and supplementing raw score values. Imputation gave us ordinal values as justified by the Likert scale used. We did not drop any items as outliers were used in accordance with the principles of Podsakoff et al. (2012).
Multivariate Linearity

We tested for multivariate linearity through the use of estimated regression analysis for all of our tested items. There were no items that were above the prescribed measure of \( p \text{-values} < 0.05 \) for significance (Podsakoff et al., 2012).

Multicollinearity

We used SmartPLS to calculate Variable Inflation Factor (VIF) for all of the exogenous variable in the data group. According to Hair et al. (2010), all VIF were below 5.0 (<5.0) which were deemed to be acceptable measures.

Homoscedasticity

Our scatter plot found conducted on SPSS indicated that all direct effect relationships are homoscedastic. We tested this against our hypothesized model and found that the ESCI items showed slightly heteroskedastic according to the plot diagram. The PNEA variables, compassion, shared vision, and overall positive mood were within the parameters.

Measurement Model Analysis: (EFA, CFA, SEM)

Exploratory Factor Analysis (EFA)

We conducted EFA using criterion for smaller sample size according to Hu and Bentler (1999) using Promax Rotation for oblique testing parameters with Principle Axis Factoring for the most reliable data analysis. We were able to use SPSS for initial properties of our data set which gave us preliminary results. We relied on SPSS for discriminant validity, reliability, and unidimensionality. Our sample size required us to use SmartPLS for higher validity scores as well as accepting our smaller sample size data set. The Kaiser-Meyer-Olkin (KMP) measure of sampling adequacy (KMP= .95) and the
Barlett’s test of sphericity (approximate $\chi^2=1365.334$, df=946, p<0.001) show suitability of the data for structure detection. The significant p-value was expected due to the sample size, n=234 for the community college president group. The communalities of the study constructs were 0.5 or higher indicating that all items adequately correlate with all other items and should load on a factor. In addition, all items were suppressed with a loading of absolute value <0.3.

The communalities of the study were 0.5 or greater and thus acceptable for our sample parameters. The individual item loading did not respond as desired. Uneven loadings on the EFA showed high cross loading per item level for out scales. The nine-factor structure explained 81.45% of variance extracted with the first factor explaining the most variance at 45.28%. The number of factors was confirmed by examining the scree plot. Upon completion of the EFA, the nine-factor structure representing the conceptual model consisted of 58 total items. Due to both low- and cross-loading several items associated with the reputational effectiveness with emotional and social competencies scale, as well as, the engagement construct were sequentially deleted from the analysis until an acceptable model emerged where each item reliably measured their intended construct. All items were adequately correlated with causality flowing from construct to measure; thus, it can be concluded that the constructs are normative. All analysis were completed using Promax loading sequence as the oblique rotation factor (Hu & Bentler, 1999).

Figure 18 shows our 9-factor eigenvalue and variance charts from SPSS for our data sample set:
Convergent Validity

Convergent validity of the items was achieved as the combined loadings on their respective factors were above 0.7 (Straub et al., 2004). All items were significant with a factor loading greater than 0.5 (Hair, 2010). Discriminant validity was evident as no cross-loadings were above 0.2. In addition, correlations between the factors were all below 0.7. Reliability was examined using Cronbach’s alpha for each factor (Cronbach, 1951; Fornell & Larcker, 1981).

ESCI and Two-Factor Approach

To create a greater efficiency in data analysis and reporting and the erratic state of EFA loadings from the ESCI scales, we decided to group items with similar factor loadings of average less than 0.7 (Hu & Bentler, 1999). The two groups we created are as follows:

1. **Factor 1: Strategic Leadership**
   a. Adaptability (4 Items)
   b. Teamwork (5 Items)
2. **Factor 2: Achieving Goals**
   a. Achievement Orientation (Items 3, 4, 5)
   b. Coach and Mentor (Items 2,3,4,5)
   c. Positive Outlook (Items 2,4)

### Table 16. Construct Loading and Item Clustering

<table>
<thead>
<tr>
<th>Constructs</th>
<th>No. of Items</th>
<th>Loadings</th>
<th>Eigenvalues</th>
<th>Percent of Variance Explained</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Leadership</td>
<td>25</td>
<td>.674; .853; .486; .737; .633; .756; .476; .880; .863; .860; .826; .840; .786; .745; .570; .878; .698; .696</td>
<td>12.675</td>
<td>48.748%</td>
<td>0.948</td>
</tr>
<tr>
<td>Achieving Goals</td>
<td>9</td>
<td>.810; .989; .618; .626; .632; .533; .675</td>
<td>2.272</td>
<td>8.740%</td>
<td>0.854</td>
</tr>
</tbody>
</table>

The above clustering is a function of the restricted sample and the unequal loadings as per EFA results on SPSS. The term of restriction stems from the area of discipline for all sample size participants. Both the Community College President and his/her direct reports are all part of a unidimensional system with views which may be shared and transferred. In reference to the Boyatzis and Sala (2004) study, diversity of area can control the scores and EFA loadings per scale.

**Factor ONE**: Strategic Leadership: This factor is about inspiring others (i.e., IL), influencing others (i.e., INF), but rooted in a caring for them (i.e., empathy) and working with them (i.e., Teamwork).
**Factor TWO:** Achieving Goals: this cluster is about focusing on results and developing people to move toward them with Achievement Orientation and Coach and Mentor and Positive Outlook.

These two clusters (factors) are what we used to complete the SEM analysis and all preceding output will show this pedagogy of analysis. The regression analysis will show the two-factor groups, and it is expected to normalize given our lower sample size. (Boyatzis, Good, & Massa, 2012a).

The following table shows the results for the EFA for the items used in our study. In addition, correlations between the factors were all below 0.7. Reliability was examined using Cronbach’s alpha for each factor (Cronbach, 1951; Fornell & Larcker, 1981). The results were greater than the recommended level of 0.70 (Nunnally, 1978).

Our pattern matrix is as follows for our items on the ESCI scale, PNEA scale, and the Reputational Effectiveness scale.
Table 17. Pattern Matrix for ESI Loading

<table>
<thead>
<tr>
<th>EFA ESI Pattern Matrix</th>
<th>Pattern Matrix ¹</th>
<th>Pattern Matrix ²</th>
<th>Pattern Matrix ³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Component</td>
<td>Component</td>
<td>Factor</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>ad3</td>
<td>0.674</td>
<td>0.092</td>
<td>vig3</td>
</tr>
<tr>
<td>ad4</td>
<td>0.853</td>
<td>-0.195</td>
<td>vis4</td>
</tr>
<tr>
<td>emp1</td>
<td>0.486</td>
<td>0.071</td>
<td>vis5</td>
</tr>
<tr>
<td>emp2</td>
<td>0.737</td>
<td>-0.174</td>
<td>vis6</td>
</tr>
<tr>
<td>emp5</td>
<td>0.633</td>
<td>0.162</td>
<td>vis7</td>
</tr>
<tr>
<td>influ1</td>
<td>0.756</td>
<td>0.677</td>
<td>res2</td>
</tr>
<tr>
<td>influ2</td>
<td>0.476</td>
<td>0.464</td>
<td>comp1</td>
</tr>
<tr>
<td>team1</td>
<td>0.880</td>
<td>0.616</td>
<td>comp3</td>
</tr>
<tr>
<td>team2</td>
<td>0.863</td>
<td>-0.051</td>
<td>comp6</td>
</tr>
<tr>
<td>team3</td>
<td>0.860</td>
<td>0.086</td>
<td>Extraction Method: Principal Component Analysis.</td>
</tr>
<tr>
<td>team4</td>
<td>0.826</td>
<td>-0.160</td>
<td>Rotation Method: Promax with Kaiser Normalization.</td>
</tr>
<tr>
<td>team5</td>
<td>0.840</td>
<td>0.112</td>
<td>Rotation converged in 3 iterations.</td>
</tr>
<tr>
<td>inspldr3</td>
<td>0.786</td>
<td></td>
<td></td>
</tr>
<tr>
<td>inspldr5</td>
<td>0.745</td>
<td>0.100</td>
<td></td>
</tr>
<tr>
<td>esc1</td>
<td>0.570</td>
<td>0.116</td>
<td></td>
</tr>
<tr>
<td>esc2</td>
<td>0.878</td>
<td>-0.113</td>
<td></td>
</tr>
<tr>
<td>esc4</td>
<td>0.698</td>
<td>0.194</td>
<td></td>
</tr>
<tr>
<td>esc5</td>
<td>0.496</td>
<td>0.103</td>
<td></td>
</tr>
<tr>
<td>ao3</td>
<td>-0.188</td>
<td>0.810</td>
<td></td>
</tr>
<tr>
<td>ao4</td>
<td>-0.343</td>
<td>0.989</td>
<td></td>
</tr>
<tr>
<td>ao5</td>
<td>-0.139</td>
<td>0.618</td>
<td></td>
</tr>
<tr>
<td>cam2</td>
<td>0.218</td>
<td>0.626</td>
<td></td>
</tr>
<tr>
<td>cam3</td>
<td>0.154</td>
<td>0.632</td>
<td></td>
</tr>
<tr>
<td>cam4</td>
<td>0.419</td>
<td>0.533</td>
<td></td>
</tr>
<tr>
<td>cam5</td>
<td>0.085</td>
<td>0.675</td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.
Rotation converged in 3 iterations.
Primary loadings in **bold**
### Table 18. Exploratory Factor Analysis Measurement Model Results

<table>
<thead>
<tr>
<th>Constructs</th>
<th>No. of Items</th>
<th>Loadings</th>
<th>Eigenvalues</th>
<th>Percent of Variance Explained</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td>6</td>
<td>.660; .789; .570; .835; .818; .677</td>
<td>3.759</td>
<td>41.768%</td>
<td>0.833</td>
</tr>
<tr>
<td>Compassion</td>
<td>3</td>
<td>.923; .616; .649</td>
<td>1.502</td>
<td>16.693%</td>
<td>0.636</td>
</tr>
<tr>
<td>Vigor</td>
<td>3</td>
<td>.970; .636; .569</td>
<td>4.764</td>
<td>47.640%</td>
<td>0.924</td>
</tr>
<tr>
<td>Reputational Effectiveness</td>
<td>2</td>
<td>.827; .779</td>
<td>2.376</td>
<td>23.759%</td>
<td>0.907</td>
</tr>
<tr>
<td>Dedication</td>
<td>2</td>
<td>.821; .757</td>
<td>0.983</td>
<td>9.832%</td>
<td>0.838</td>
</tr>
<tr>
<td>Strategic Leadership</td>
<td>18</td>
<td>.674; .853; .486; .737; .633; .756; .476; .880; .863; .860; .826; .840; .786; .745; .570; .878; .698; .698</td>
<td>12.675</td>
<td>48.748%</td>
<td>0.948</td>
</tr>
<tr>
<td>Achieving Goals</td>
<td>7</td>
<td>.810; .989; .618; .626; .632; .533; .675</td>
<td>2.272</td>
<td>8.740%</td>
<td>0.854</td>
</tr>
</tbody>
</table>

**Confirmatory Factor Analysis (CFA)**

To further validate our results and refine our EFA results from the previous section, we conducted a confirmatory factor analysis (CFA) to evaluate our theoretical model and our dataset results (Hair et al., 2010). We attempted to account for model fit, invariance, and common method bias through SmartPLS software. We tested all required paths to partial least square model (Hair et al., 2010; Hu & Bentler, 1999) to find paths of significance and non-significance. We created paths as predicted by our conceptual model by using each construct and its associated items identified by the EFA output in the previous EFA section. The model was then further refined using the appropriate covariance relationships through modification indices.

The results were greater than the recommended level of 0.70 (Nunnally, 1978). Correlations between the factors and Cronbach’s alpha are shown in Table 19.
Table 19. Means, Standard Deviation, and Reliability Table results for CFA Analysis

<table>
<thead>
<tr>
<th>No. of Items</th>
<th>Mean</th>
<th>SD</th>
<th>CR</th>
<th>Cronbach's Alpha</th>
<th>AVE</th>
<th>CCP-Experience Control</th>
<th>Compassion</th>
<th>Dedication</th>
<th>Strat Leader</th>
<th>Achieve Goals</th>
<th>Rep Effect</th>
<th>Personality</th>
<th>Vision</th>
<th>Vigor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP Experience_C</td>
<td>1</td>
<td>2.33</td>
<td>1.12</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>0.746</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compassion</td>
<td>3</td>
<td>4.698</td>
<td>0.509</td>
<td>0.780</td>
<td>0.636</td>
<td>0.554</td>
<td>0.04</td>
<td>0.744</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dedication</td>
<td>2</td>
<td>6.018</td>
<td>0.689</td>
<td>0.903</td>
<td>0.786</td>
<td>0.823</td>
<td>0.12</td>
<td>0.012</td>
<td>0.907</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic Leadership - Cluster</td>
<td>18</td>
<td>5.215</td>
<td>0.606</td>
<td>0.954</td>
<td>0.948</td>
<td>0.568</td>
<td>-0.05</td>
<td>-0.041</td>
<td>0.177</td>
<td>0.754</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieving Goals - Cluster</td>
<td>7</td>
<td>5.006</td>
<td>0.587</td>
<td>0.889</td>
<td>0.854</td>
<td>0.539</td>
<td>-0.02</td>
<td>-0.083</td>
<td>0.361</td>
<td>0.638</td>
<td>0.754</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reputational Effectiveness</td>
<td>2</td>
<td>5.737</td>
<td>0.911</td>
<td>0.908</td>
<td>0.798</td>
<td>0.832</td>
<td>0.05</td>
<td>-0.103</td>
<td>0.361</td>
<td>0.728</td>
<td>0.716</td>
<td>0.912</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personality Traits</td>
<td>4</td>
<td>5.873</td>
<td>0.961</td>
<td>0.742</td>
<td>0.673</td>
<td>0.426</td>
<td>0.14</td>
<td>0.362</td>
<td>-0.016</td>
<td>-0.085</td>
<td>-0.098</td>
<td>-0.066</td>
<td>0.653</td>
<td></td>
</tr>
<tr>
<td>Vision</td>
<td>6</td>
<td>4.536</td>
<td>0.463</td>
<td>0.877</td>
<td>0.833</td>
<td>0.545</td>
<td>0.07</td>
<td>0.485</td>
<td>0.042</td>
<td>-0.060</td>
<td>-0.014</td>
<td>-0.083</td>
<td>0.510</td>
<td>0.738</td>
</tr>
<tr>
<td>Vigor</td>
<td>3</td>
<td>5.967</td>
<td>0.606</td>
<td>0.874</td>
<td>0.782</td>
<td>0.699</td>
<td>0.09</td>
<td>0.129</td>
<td>0.593</td>
<td>0.249</td>
<td>0.513</td>
<td>0.35</td>
<td>0.113</td>
<td>0.192</td>
</tr>
</tbody>
</table>

We conducted the HTMT (heterotrait-monotrait) test for Discriminant Validity using Mono-trait ratio.

Table 20. HTMT Table for CFA Analysis

| HTMT Test for Structural Model Discriminant Validity (Heterotrait-Monotrait Ratio) |
|-----------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
|                                   | Achieving Goals                | CCP Experience Control          | Compassion                      | Personality Traits              | Reputational Effectiveness      | Strategic Leadership            | Vision                  | Work Engagement |
| Achieving Goals                   | CCP                             | Compass                         | Personality Traits              | Reputational Effectiveness      | Strategic Leadership            | Vision                  | Work Engagement |
| CCP Experience Control            | 0.072                          |                                 |                                 |                                 |                                 |                                 |                        |                  |
| Compass                           | 0.207                          | 0.044                           |                                 |                                 |                                 |                                 |                        |                  |
| Personality Traits                | 0.17                           | 0.395                           | 0.599                           |                                 |                                 |                                 |                        |                  |
| Reputational Effectiveness        | 0.853                          | 0.054                           | 0.149                           | 0.087                           |                                 |                                 |                        |                  |
| Strategic Leadership              | 0.683                          | 0.078                           | 0.136                           | 0.148                           | 0.816                           |                                 |                        |                  |
| Vision                             | 0.165                          | 0.249                           | 0.525                           | 0.436                           | 0.112                           | 0.137                           |                        |                  |
| Work Engagement                   | 0.164                          | 0.037                           | 0.095                           | 0.152                           | 0.188                           | 0.138                           | 0.092                   |                  |

Heterotrait-monotrait (HTMT) ratio of correlations shows thresholds with limits of less than 0.9. MacCallum et al. (1999) suggests a more conservative value of less than 0.85.

This data showed us the discriminant validity tables, and we deemed them to be satisfactory as loadings are higher than the cross loadings with other constructs. We also
used the measure of the square root of AVE on each of the constructs which are higher than the correlation constructs.

Next, we looked at the multi-method approach to testing for CMB (Doty & Glick, 1998; Podsakoff et al., 2003) by adding an unmeasured Common Latent Factor (CLF). We compared the standardized regression weights before and after adding the CLF to the CFA model and calculated the difference. None of the deltas were above the limit (>.20). Thus, our logical conclusion was that no method bias was present.

Composite variables were created using regression imputation without the CMB adjusted latent factor.

Multivariate data screening assumptions were completed prior to creating the structural model. An analysis of multi-collinearity between the three exogenous variables and the three mediating variables exhibited tolerance and VIF values within acceptable limits (tolerances greater than 0.5 and VIF less than 3.0). Finally, we concluded that the statistical standards were sufficiently met for structural equation modeling (Hair et al., 2010).

**Results and Findings**

In this section, we identify and reason our significant realizations to the study and the impact that these findings have on aspects of the community college system. This study contributes to the conversation regarding leadership competencies involved in all post-secondary leadership with specific emphasis on the community college executive leadership level. Historically, competencies of community college presidents were espoused only through academics (Eddy, 2010) and institutional focus which translated into projected enrollment and student retention statistics. Our studies (Babu, 2013, 2015)
have shown that the role of community college leadership is changing as the demands of society, students, and constituents evolve into all-encompassing institutions of higher learning. In addition, historically, community college presidents were more concerned with the academics; creating a position of respect and reverence. This study shows the significant relationship of the “human” side to the community college president. Statistical evidence shows the need to develop skills that are not solely academic focused and process driven, but rather explore the internal working of relationships, mentoring, and being leaders focused on organizational and employee growth.

The purpose of this study is to show the underlying competencies that are required to be a successful community college president. The new paradigm in leadership is aimed at establishing credibility as a leader and foster a culture of change and progress amongst the school’s employees. Our hypothesis table (Table 21) shows the predicted relationships and the evidence or the lack thereof (supported versus unsupported). In addition, this table gave us a guideline and reference to validate our assumptions to results obtained from the data.
Table 21. Mediating and Moderation Table for Study Hypothesis

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Direct Beta w/o Mediation</th>
<th>Direct Beta w/ Mediation</th>
<th>Indirect Beta</th>
<th>Mediation Type</th>
<th>Hypothesis Supported?</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: Achieve Goals --&gt; Work Engagement</td>
<td>0.137*</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b: Achieve Goals --&gt; Vision --&gt; Work Engagement</td>
<td>0.137*</td>
<td>0.120 (ns)</td>
<td>0.000 (ns)</td>
<td>No mediation</td>
<td>Unsupported</td>
</tr>
<tr>
<td>H1c: Achieve Goals --&gt; Vision --&gt; Reputational Effectiveness</td>
<td>0.441***</td>
<td>0.446***</td>
<td>-0.002 (ns)</td>
<td>Direct effects only</td>
<td>Partial Support</td>
</tr>
<tr>
<td>H2a: Strategic Leadership --&gt; Reputational Effectiveness</td>
<td>0.434***</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Supported</td>
</tr>
<tr>
<td>H2b: Strategic Leadership --&gt; Vision --&gt; Work Engagement</td>
<td>0.101 (ns)</td>
<td>0.131 (ns)</td>
<td>-0.003 (ns)</td>
<td>No effects</td>
<td>Unsupported</td>
</tr>
<tr>
<td>H2c: Strategic Leadership --&gt; Work Engagement</td>
<td>0.101 (ns)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Unsupported</td>
</tr>
<tr>
<td>H3a: Personality --&gt; Compassion --&gt; Reputational Effectiveness</td>
<td>-0.022 (ns)</td>
<td>0.006 (ns)</td>
<td>-0.018 (ns)</td>
<td>No effects</td>
<td>Unsupported</td>
</tr>
<tr>
<td>H3b: Personality --&gt; Compassion --&gt; Work Engagement</td>
<td>-0.103 (ns)</td>
<td>-0.097 (ns)</td>
<td>0.004 (ns)</td>
<td>No effects</td>
<td>Unsupported</td>
</tr>
<tr>
<td>H4a: Achieve Goals --&gt; Reputational Effectiveness Moderated by Race</td>
<td>nonwhite: 0.626*** white: 0.428***</td>
<td>Moderates by race</td>
<td>Supported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H4b: Strategic Leadership --&gt; Reputational Effectiveness Moderated by Race</td>
<td>nonwhite: 0.261* white: 0.456***</td>
<td>Moderates by race</td>
<td>Supported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H4c: Achieve Goals --&gt; Reputational Effectiveness Moderated by Gender</td>
<td>female: 0.406*** male: 0.488***</td>
<td>Moderates by gender</td>
<td>Supported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H4d: Achieve Goals --&gt; Work Engagement Moderated by Gender</td>
<td>female: 0.012 (ns) male: 0.132 (ns)</td>
<td>No effects</td>
<td>Unsupported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control: CCP Experience --&gt; Work Engagement</td>
<td>-0.029 (ns)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001, ns = not significant, N/A = not applicable

To further eliminate validate the mediation results, Shared Vision and Shared Compassion (shown as Vision and Compassion), we also conducted moderation test using Vision and Compassion on both Work Engagement and Reputational Effectiveness. As shown in Table 22, moderation testing concluded as unsupportive to our hypothesis. Our goal was to eliminate moderation as a possible source for our hypothesis claim being supported even though mediation testing failed.
Table 22. Quantitative Study Moderation Table Results

<table>
<thead>
<tr>
<th>Moderation Hypothesis Test</th>
<th>t-value</th>
<th>p-value</th>
<th>Supported ?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Engagement ↑ Shared Vision and Compassion</td>
<td>0.698</td>
<td>0.485 (ns)</td>
<td>Unsupported</td>
</tr>
<tr>
<td>Reputational Effectiveness ↑ Shared Vision and Compassion</td>
<td>1.56</td>
<td>0.119 (ns)</td>
<td>Unsupported</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001, ns = not significant, N/A = not applicable
ns= non-significant

Table 23 shows the direct paths from each of the endogenous variables to the dependent variables. This single path analysis helps us explain the total SEM model (Figure 19) and analyze the path coefficients and Beta (β) variables. Furthermore, single path analysis (Hair et al., 2006; Hu & Bentler, 1999) validate the claims on direct path relationships made at the onset of the study. In addition, single path analysis also shows existing variables that exhibit significant relationships not hypothesized in the concept model of this study.

There are several findings in the results that are seminal and important to this study as well as justify the claims on leadership competencies for community college presidents. The primary finding, as predicated; emotional intelligence competencies are crucial to the success of a community college president. The evidence on the EFA, CFA, and SEM support this claim as can be seen pictorially on the SEM diagram (Figure 19). The ability to understand, empathize, work in teams, etc. are the foundational building blocks to post-secondary administrative leadership. The significant paths in our SEM diagram (Figure 19 verifies these relationships and the path tables (Table 21 and Table 23) as well as the moderation results shown above (Table 22). These results are interpreted using advanced statistical analysis package software, SmartPLS and SPSS, as well as contemporary literature to substantiate our claims.
Grouping factors that were similarly loaded and equivalent path coefficients gave us a better understanding of how the various constructs would interact with each other and the other variables, both mediating and the dependent.

Factor 1, **Strategic Leadership Cluster**, includes the following:

*Adaptability, Teamwork, Emotional Self Control, Influence, and Inspirational Leadership*

Factor 2, **Achieving Goals Cluster**, includes the following set of constructs:

*Achievement Orientation, Coach & Mentor, and Positive Outlook*
Our Hypothesis statements were modified to reflect the grouping of these clusters and the predicted relationships to the community college president’s effectiveness and engagement. Our remaining Independent variables were Personality Indicator (Ten Item Personality Indicator [TIPI]). This format gave us the best results for our testing parameters and identified the specific areas of our testing with respect to ideal competencies for community college presidents.

As can be from Table 23, several of the claims that were made were unsupported; however, some very critical claims were supported through the path analysis and Beta ($\beta$) coefficient relationships.

The Achieve Goals Factor directly impacts the work engagement of community college presidents [Achievement Goals $\rightarrow$ Work Engagement, $\beta=0.44$, $p=.001$]. In addition, the Strategic Leadership Factor directly impacts the reputational effectiveness of the presidents [Strategic Leadership $\rightarrow$ Reputational Effectiveness, $\beta=0.43$, $p=.015$]. Finally, moderating with race and gender became significant in the success of community college presidents. These relationships and the impact it has on the study will be explored and elaborated in the next section.

**Structural Equation Modeling (SEM)**

Our next step was to conduct a structural equation modeling analysis through SmartPLS as the programming platform. We used the SEM techniques given that priori testing of our hypothesis was the proven method of model testing. Using our conceptual model, we were able to utilize path efficiency estimation models simulations to validate our predicted hypothesis paths to verify significance and non-significance. Best-fit statistics were achieved prior to mediation testing to also identify direct relationships of
significance. Figure 19 shows our tested paths both direct and indirect with significance and non-significance values reported. The three conditions to obtain best-fit statistics were adhered to as follows:

a. Direct effects between independent and dependent variables were non-significant

b. Serial mediation needs to exist among the overall model set up

c. Error terms of both Factor 1 items and Factor 2 items had to co-varied to gain relevant statistics for analysis.

**Figure 19. Structural Equation Model with path coefficients identified**

According to Figure 19, we found that both Factor clusters of Emotional and Social Intelligence (Factor 1: Strategic Leadership and Factor 2: Achieving Goals) proved to show promise when dealing with shared vision and compassion with respect to significance and path coefficients. Grouping ESCI items into the two “Factor Clusters” (in preceding section) gives us insight into coefficient paths of significance.

The mediation hypotheses were tested using the Baron and Kenny (1986) step-wise approach of assessing the direct effect with and without the mediator. The results
were confirmed by obtaining the two-tailed significance values of the indirect effects using both bootstrapping at 2,000 samples and 95% bias-corrected confidence interval method, as well as, the Sobel test (Preacher & Hayes, 2004).

To show validation and results, we had three conditions that were tested for the structural equation model.

1. Hypothesized and significant: Validates our claim and proves our hypothesis statements
2. Hypothesized and non-significant: Invalidates our original claim and rebuffs our hypothesis statements
3. Non-Hypothesized and significant: Paths that could be seen as extensions of the research

Figure 19 shows these conditions outlined in bold and dashed lines from each of the variables in the analysis. For this study, we focused on the hypothesized and significant paths while also attempting to add reason to explain the hypothesized and non-significant paths. Furthermore, significant paths that were not accounted for in our conceptual model will be explained as well in the discussion and results section to follow.

The mediation hypotheses were tested using the Baron and Kenny (1986) step-wise approach of assessing the direct effect with and without the mediator. The results were confirmed by obtaining the two-tailed significance values of the indirect effects using both bootstrapping at 2,000 samples and 95% bias-corrected confidence interval method as well as the Sobel test (Preacher & Hayes, 2004).

**Discussion**

The results of our data and this study show, through conclusive empirical data, that emotional intelligence competencies are required to be a successful community college president when this skill is directly related to workplace engagement and
workplace effectiveness. This is a significant finding in suggesting a causal relationship between emotional intelligence competencies and workplace effectiveness and engagement as seen by direct reports of community college presidents. These results present a convincing argument for the usage of emotional intelligence skills when leading community colleges and the relationship etiquette that is mandatory for a successful tenure. In effect, results of this study could be used as a toolkit for aspiring community college presidents to guide them to towards a successful tenure at the helm of post-secondary learning institutions.

This study focuses on three seminal areas that were evaluated and discovered about community college presidents:

a. Emotional Intelligence competencies of community college presidents, as seen by others, predict their effectiveness, as seen by others

b. Emotional Intelligence competencies of community college presidents, as seen by others, predict engagement of their direct reports.

c. Quality of relationships of community college presidents, as assessed through shared Vision and shared Compassion, predict engagements of those working for them.

As a research team, our proposition is the full deployment of emotional and social competencies as outlined (Boyatzis, 2009) to show effectiveness and engagement of community college presidents. The emotional competencies outlined show the direct correlation to the behavioral demands of educational administration. This study confirms the importance of these competencies in leadership positions at community colleges.

There is literature that suggests that community college presidents require a specific set of skills to excel at their position (AACC, 2005; Eddy, 2010; Vaughan, 1990). However, existing literature does not show the relevance of emotional intelligence competencies as
it relates to effectiveness and engagement of community college presidents as measured by their direct reports.

Unlike other studies that revolve around self-reported analysis, this study focused on the 360 multi-rater method, as outlined in previous sections. The multi-rater system became the central focus of this study as it verified results from community college president’s surveys. In addition, using completed surveys from direct reports gave us the formative data analysis to show, with conclusive evidence, the effective competencies needed to be an effective and engaging community college president. Using survey results of the direct reports verified or falsified (depending on the situation) the desired emotional and social competencies needed to have a successful tenure as president. The outlined competencies show relationships based on our predictive model compared to actual results through logical and statistical analysis. Another added benefit to the multi-rater system (360-analysis method) is the reduction of common method bias (CMB) from the participant (community college president) and their multi-raters (direct reports).

We further reduced the effects of bias by administering different surveys for both the community college president [Ten Item Personality Indicator (TIPI) and Positive and Negative Emotional Attractor (PNEA)] and their direct report [Emotional and Social Competency Indicator (ESCI), Reputational Effectiveness Survey (RES), and Work Engagement Survey (UWES)]. We feel confident that controlling for CMB is accounted through the survey differences and in effect will control the participant and multi-rater bias.

In addition, we conducted a moderator effect test on race and gender for community college presidents. Race and gender were both control items asked on the
community college president’s survey. We chose both race and gender as current statistics to show an increase in both race and gender among community college presidents (AACC, 2016). Current statistics show a national average of 37% for female community college presidents and 22% non-white community college president according to the American Association of Community Colleges census data for 2014. The moderation effect from both race and gender aimed at verifying these statistics along with seeing if there is a difference in the overall endogenous variables when accounting for control items.

The results for the moderation test of gender and race do not show a significant relationship with the endogenous effectiveness and engagement variables. In referring to Table 21, above, although moderation does show a significant relationship for both gender and race, we believe this to be an inaccurate representation of the national scale of community college presidents. Basically, our sample population demographic, when segregated for race and gender, shows information that is skewed to show misrepresentation. Our sample group had 49% female and 71% non-white. This is an incorrect representation of the presidents group, on the national scale, who is 37% female and 22% non-white (AACC, 2016). There were more women and more non-white community college presidents in our sample group than proportionally on the national scale. The βs for Factor 1 (Strategic Leadership) and Reputational Effectiveness is high and significant (0.261*** ) when moderated by race. For Factor 2 (Achieving Goals) and Reputational Effectiveness, β’s are (0.626*** ) when moderated by race. Race and gender are definitely critical when the relationships effectiveness and engagement is being considered with emotional skills for community college presidents.
This data illuminates an important controversy in the area of emotional intelligence literature, specifically the claims of emotional intelligence is not validated and is another variation of personality. Although critics of emotional intelligence claim this pedagogy to be personality based and claim EI to be more of a salacious genre than rigorous research (Schulte, Ree, & Carretta, 2004), and earlier studies such as Boyatzis et al. (2012a) with respect to behavioral analysis. The more rigorous research delves into leadership as defined by observations from others as opposed to self-observations, which are seen to be a biased perspective on self-evaluations. Essentially, the relationship of emotional intelligence to effectiveness is not related to personality. In this study, personality has a low direct correlation to each cluster of emotional intelligence competencies (Achieving Goals, r=0.17 and Strategic Leadership, r=0.15). When adjusted and evaluated in the structural equation modeling, emotional intelligence competencies predict effectiveness while personality did not, in both direct and mediated methods. Finally, while some emotional intelligence competencies did predict engagement and effectiveness of community college presidents, personality was shown to have little to no effect.

The Emotional and Social competencies of community college presidents have a strong and significant effect on their leadership effectiveness and the engagement of their subordinates. The data is conclusive on the statements correlating relationships between Factor 1 (Strategic Leadership Cluster) and Factor 2 (Achieving Goals Cluster) and the community college president’s effectiveness and engagement of their direct reports. The quality of relationships, as perceived by the president of shared vision and shared compassion significantly affects the engagement of their subordinates in their job. In
effect, having relationships with trust and caring can help to presidents sustain their engagement at work with their direct reports. This significant finding on community college presidents’ competencies applies to the arena of community college leadership, however; we feel strongly that this could potentially apply to all levels of post-secondary administration.

**Study Limitations and Future Research Implications**

This study has shown the relationship between emotional and social competencies and the leadership fundamental of community college presidents. There has been a direct link between the two factor groups, refer to Figure 19, above, Factor 1 – Strategic Leadership Cluster comprised of Adaptability, Teamwork, Empathy, Emotional Self Control, Influence, & Inspirational Leadership and Factor 2 – Achieving Goals Cluster comprised of Achievement Orientation, Coach & Mentor, and Positive Outlook.

With the preponderance of evidence for emotional and social competencies in community college posed in this study, we can infer the direct correlation between engagement and effectiveness as seen by others being justified with the competencies clustered in Factor 1 and Factor 2. We were not able to show proper mediation with significant path coefficients between Factor 1 and Factor 2 and Effectiveness and Engagement using shared Vision and Shared Compassion as mediating variables. A future study could explore further the issue of shared vision and shared compassion being the mediating force between emotional and social competencies and employee effectiveness and engagement with respect to the community college administrative sector.
This study was limited on several fronts of which there were many obstacles to the completion of data and method analysis. One of the larger limitations is the sample group with the separated participants. We needed to get a more representative sample of the national scale for community college presidents. This, in theory, would help with the moderation effects of race and gender. In addition, the sample size would also need to be more indicative of the larger national scale demographic figures. It is our estimation that this would help promote a greater significance in the mediating variables, shared vision and shared compassion.

A final limitation that we identified in early in our statistical evidence stage is the software used to do the analysis and the pairing of the multi-rater system. The 360 direct report feedback system is not easily interpreted into SPSS and SmartPLS software packages. It would be our suggestion to find/create a system that handles Multi-rater system analysis with ease and functional ability.

Future implications of this study could be a biased view of the community college president. This study was solely focused on the presidential level of community colleges. Future studies should focus on more than one level and in different education institutions. It is our thought this study could be ongoing on traditional four-year universities. It is our strong opinion that results from the emotional and social competency indicator will be able to transferrable to administrative leadership on all levels of educational institutions.

**Conclusion**

In conclusion, this study shows a correlation between community college leadership and the competencies required to be successful as the president. It is our firm
belief that in order for community college presidents to be effective and engaging to their
direct reports, they would need to internalize and enact various emotional and social
competencies. This study also serves as a template for future and present community
college presidents. Furthermore, using skills and competencies outlined in this study,
statistically and theoretically, would ensure a successful tenure as a community college
president.
CHAPTER V: THESIS INTEGRATION AND DISCUSSION

Integrated Findings

Three separate studies were conducted; however, each study can be related to the overall goal of understanding leadership competencies at a community college setting.

The inquiry was driven by the following logic sequence:

1. Discover which, if there are any, competencies needed to be effective as a community college president
2. Discover what, if there are any, motivations and expectations for community college faculty with respect to administration and leadership.
3. Discover which behaviors are necessary for leadership in community college presidents as seen by others
4. Predict leadership capabilities to ensure a successful tenure as a community college president.
5. Focus on creating a template of leadership competencies that will assist and future and prospective community college presidents.

Figure 20. Primary Goals from Study #1, Study #2, & Study #3

Each study had related integration findings that are outlined in Table 24. The findings from the three separate studies are summarized below:
**Table 24. Findings from Thesis studies**

<table>
<thead>
<tr>
<th>Finding #</th>
<th>Findings</th>
<th>Related Study</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Community college leaders need to be able to employ skills of emotional intelligence to be effective as leaders</td>
<td>Study 1</td>
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<tr>
<td>2</td>
<td>Community college leaders need to be able to embody the power of social intelligence to be effective leaders</td>
<td>Study 1</td>
</tr>
<tr>
<td>3</td>
<td>Community college leaders need to be able to harness the power of cognitive intelligence to be effective leaders</td>
<td>Study 1</td>
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<tr>
<td>4</td>
<td>Community college faculty need shared vision to be engaged with their leaders</td>
<td>Study 2</td>
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<td>5</td>
<td>Community college presidents need shared vision to be engaging as seen by their direct reports</td>
<td>Study 3</td>
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<tr>
<td>6</td>
<td>Community college presidents need shared compassion to be effective as seen by their direct reports</td>
<td>Study 3</td>
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</table>

**Finding #1**

The first study was dedicated to the qualitative findings of competencies required to be a community college president. Through various interviews with specific protocol questions relating to past experiences and overall outlook on their style of management. Through a protocol of thematic coding questions, we were able to identify specific areas of expertise that successful community college presidents relied on to be effective. These community college presidents use emotional intelligence to establish shared compassion and shared vision. In addition, they use areas of emotional intelligence such as emotional self-control, authenticity, adaptability, and perseverance. Our study reveals that these specific competencies of emotional intelligence are the most common with respect to community college presidents. Emotional self-control, authenticity, adaptability, and perseverance represent the ideal findings that related specifically to the success of community college presidency. As a president, emotional self-control and authenticity are empirically sound as necessary tools for those in administrative leadership.
Finding #2

Social intelligence is pivotal, according to our qualitative findings, towards the competencies of community college presidents. Our findings from the qualitative study reveal that constructive and positive behaviors of community college presidents. The areas that we divided into the social intelligence cluster were confidence, coaching and mentoring, and trusting teams, which is achieved through shared vision and compassion. The areas of social intelligence prove to be essential in understanding requirements to a successful tenure and creating a system of relevant social intelligence competencies that drive community college presidents to realize the goal of success. As we probed further into the qualitative interviews of each of the presidents, we find that the social intelligence components, confidence, coach & mentor, and trusting teams, are integral to the success of the community college president.

Finding #3

Another major qualitative finding, which is essential for the success of community college presidents is the degree of cognitive intelligence (g), they are able to display amongst their direct reports and the community. Cognitive intelligence becomes the complimentary aspect of the above found integrated findings, emotional and social intelligence. There has been a great deal written on the importance of cognitive intelligence on leadership but in effect, cognitive intelligence is fully realized in conjunction with the other facets of intelligence, emotional and social. Within the qualitative community college president’s study, cognitive intelligence was further delineated into financial acumen, seeking truth and understanding situations, and taking calculated risks. Within the spectrum of community college administration, financial
intelligence is mandatory for success. Understanding the entire financial status of any organization is important to be successful a leader. This is no different from the post-secondary administrative leadership who also rely heavily on financial acumen to lead effectively.

**Finding #4**

Shared vision is essential to organizational leadership. Our integrated findings from the second study, or first quantitative study, reveals that within community colleges, faculty expect and respond to shared vision when associated with leadership (community college administration). Shared vision also sets goals for the faculty to achieve and know when that target has been achieved or missed. Amongst faculty, a vision of goals, of expectations, and organizational growth is necessary to engage them in the organization. The second study into community colleges delves into the cognitive and emotional engagement of the faculty as it relates to shared vision. This becomes an integral focal point of community college faculty as they drive towards emotional and cognitive engagement.

**Finding #5**

Shared vision is also a factor in the leadership style of community college presidents. As shared vision is mandatory for the engagement of the faculty, this also becomes a seminal theme in the competencies of the president. Our study three, although focused on the quantitative aspect, depicts the competencies needed by community college presidents as seen by their direct reports to foster engagement and effectiveness. Shared vision becomes the essential catalyst in the relationship between the presidents and those who report to him. Our study shows that shared vision is integral to the
effectiveness and engagement of community college presidents as seen by his direct reports. Shared vision, according to our study, also shows to be the largest factor on presidential engagement as seen by his direct reports.

**Finding #6**

Shared compassion is the final integration of this study based on our third study of community college presidents. The final integration, derived from the final study, shows the use of compassion as a tool for leadership within community colleges. Compassion denotes understanding through competencies of emotional and social intelligence such as empathy and adaptability. Shared compassion also gives rise to constructive teamwork where individuals depend on each other for support and guidance. Successful community college presidents find themselves creating a culture of compassion as a means of relating to those around them and, in effect, spreading that shared compassion throughout the college. Shared compassion, among community college presidents, is required to engage their direct report and prove to be effective in leadership as seen by those who support and validate the president’s position as the institutional leader.

**Contribution to Theory**

The theories of leadership that predict success as a community college administrator is sparse and often times do not account for recent advances and integration of emotional intelligence, positive and negative emotions, and emotional and social competencies. This study identifies areas of singularity where the theory and practicality converge towards the benefit of the organization. These theories on leadership and self-actualization form the foundation and underpinnings of this research while using the three separate, but connected studies, to form the story line of community college presidents.
Extrapolating these co-joined studies provides a promise for the potential benefit of community college presidents and the possibility to extend this research into four-year colleges and universities.

**Conclusion**

This thesis is an integration of three separate but crucial studies that delve into the qualities of leadership in community colleges. These studies focused on the leadership qualities of the community college president. Each study illuminates a different aspect of the community college president’s leadership competencies and abilities. This research is dedicated to excellence in the post-secondary system in an effort to sustain the success of community colleges throughout the United States. This research also creates a foundation and a framework for potential community college presidents to internalize the demands and use this integrated research as a guide to effectiveness and the competencies required to have a successful tenure. Finally, this research is a realistic view into the expectations of a community college administration leader, one who resides at a pivotal time in American history when effectiveness and competencies converge in a paradox to create and sustain a more effective education system to better nurture future generations of students.
Appendix A: Qualitative Study 1 - Interview Protocol

1. **Introduction**: “Thank you so much for taking the time to speak with me today. I know that you are busy and so want to confirm that we have about 60 minutes for the interview. Is that correct?”

2. **Effectiveness of Presidency at Community College**: “Thank you. Please tell me about time, in the last year or two, in which you felt effective as a President.

   **Possible Probes**:
   a) What led up to the situation?
   b) Who was involved?
   c) What did you say or do at that next? [This will be asked repeatedly unless they are a clear story teller.]
   d) What were you thinking or feeling at the time?
   e) What was the outcome or result of the situation?

3. “Now, please tell me about an event in the past year or two in which you felt less effective as a President.”

   **Possible Probes**:
   a) What led up to the situation?
   b) Who was involved?
   c) What did you say or do at that next? [This will be asked repeatedly unless they are a clear story teller.]
   d) What were you thinking or feeling at the time?
   e) What was the outcome or result of the situation?

4. **Effectiveness of Presidency at Community College**: “Thank you. Now let’s go back to an effective incident. Please tell me about another time, in the last year or two, in which you felt effective as a President.

   **Possible Probes**:
   a) What led up to the situation?
   b) Who was involved?
   c) What did you say or do at that next? [This will be asked repeatedly unless they are a clear story teller.]
   d) What were you thinking or feeling at the time?
   e) What was the outcome or result of the situation?

5. **Major career influences**: “Let’s talk about individuals who have influenced your career aspirations. Can you name some individuals in your life who helped you become a College President? Who have been role models in your life?”
### Appendix B: EFA Full Pattern Matrix

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*Extraction Method: Maximum Likelihood.*

a. Rotation converged in 8 iterations.
### Appendix C: Results of CFA (Item Level – 9 Construct)

<table>
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<tr>
<th>Constructs and Items</th>
<th>Standardized Estimate</th>
<th>Non-Standardized Estimate</th>
<th>S.E</th>
<th>t-Value</th>
<th>P-Value</th>
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<tbody>
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<td>1.345</td>
<td>0.083</td>
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<td>0.049</td>
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</tr>
<tr>
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<td>0.051</td>
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</table>

**Model Fit Statistics:**

\[ \chi^2 = 1628.36 \quad df = 949 \]
\[ \text{CMIN/df} = 1.716 \quad \text{CFI} = 0.938 \quad \text{TLI} = 0.932 \]
\[ \text{GFI} = 0.852 \quad \text{RMSEA} = 0.042 \quad \text{PCLOSE} = 1.000 \]
Appendix D: Eigenvalue Scree Plot & TVE - EFA – 9-Construct Model

Scree Plot

Total Variance Explained

<table>
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<tr>
<th>Factor</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings^ a</th>
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<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
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<td>9</td>
<td>1.138</td>
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Total Variance Explained
### Appendix E: Tested CFA Model for 9-Construct Model

<table>
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<th>DF</th>
<th>P</th>
<th>CMIN/DF</th>
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<tr>
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<td>11992.563</td>
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<td>.000</td>
<td>11.587</td>
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### Appendix F: CFA-CMB for 9-Construct Model

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<th>DF</th>
<th>P</th>
<th>CMIN/DF</th>
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<tbody>
<tr>
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<td>Independence model</td>
<td>46</td>
<td>11992.563</td>
<td>1035</td>
<td>.000</td>
<td>11.587</td>
</tr>
</tbody>
</table>
Appendix G: SEM Model with Mediation testing
Appendix H: SEM Model with Direct Path testing without Mediation
|                       | No. of Items | Mean | SD  | CR  | Cronbach's Alpha | AVE          | CCA-Experience Control | Compassion | Dedication | Strateg | Achieve | Rep | Perso | Vision | Vigor |
|-----------------------|--------------|------|-----|-----|------------------|--------------|-----------------------|-------------|------------| Leader  | Goals   | Effect | nality|        |       |
| CCP Experience_C      | 1            | 2.33 | 1.12| 1.00| 1.00             | 1.00         |                       |             |            |         |         |      |       |        |       |
| Compassion            | 3            | 4.69 | 0.59| 0.76| 0.62             | 0.95         |                       | 0.06        | 0.04       | 0.744   |         |      |       |        |       |
| Dedication            | 2            | 6.01 | 0.59| 0.90| 0.73             | 0.86         |                       | 0.12        | 0.012      | 0.907   |         |      |       |        |       |
| Strategic Leadership- | 18           | 5.25 | 0.50| 0.95| 0.48             | 0.56         |                       | -0.09       | 0.084      | 0.177   | 0.754   |      |       |        |       |
| Cluster               |              |      |     |     |                  |              |                       |             |            |         |         |      |       |        |       |
| Achieving Goals-      | 7            | 5.09 | 0.58| 0.89| 0.85             | 0.59         |                       | -0.08       | 0.083      | 0.161   | 0.683   |      |       |        |       |
| Cluster               |              |      |     |     |                  |              |                       |             |            |         |         |      |       |        |       |
| Reputational          | 2            | 5.73 | 0.91| 0.90| 0.79             | 0.82         |                       | -0.10       | 0.086      | 0.171   | 0.912   |      |       |        |       |
| Effectiveness         |              |      |     |     |                  |              |                       |             |            |         |         |      |       |        |       |
| Personality Traits    | 4            | 5.87 | 0.96| 0.72| 0.67             | 0.42         |                       | 0.14        | -0.016     | -0.08   | -0.098  | -0.066| 0.653|
| Vision                | 6            | 4.53 | 0.46| 0.87| 0.83             | 0.54         |                       | 0.07        | 0.042      | -0.06   | -0.014  | -0.083| 0.510| 0.738 |
| Vigor                 | 3            | 5.96 | 0.60| 0.87| 0.78             | 0.69         |                       | 0.12        | 0.583      | 0.249   | 0.513   | 0.35  | 0.113 | 0.192 | 0.836|

Notes: Low internal reliability but composite reliability and AVE are acceptable to satisfy use of this measure as a control.
Appendix J: SmartPLS - CFA Model Representations with Items
Appendix K: SmartPLS – SEM Analysis Figure
Appendix L: SmartPLS - SEM Analysis with Moderation Test with Compassion and Vision
Appendix M: SmartPLS – CFA Path Coefficients
Appendix N: Cronbach’s Alpha for all variables
Appendix O: Final SEM Figure with Beta weights

Standardized Regression Weights: ****p<.001; **p<.01; *p<.05

Significant: ➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢➢GX

CCP = Community College President
DR = Direct Report of CCP
E.S.I = Emotional and Social Intelligence
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