

**Leaving So Soon? Applying a Fit Perspective
to College Presidential Tenure**

by

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ABSTRACT

Over the last century, the tenure of college president's has been continually decreasing, leaving scholars to question why president's leave so soon despite the increasing benefits to stay. While some scholars have approached this issue by studying individual characteristics of presidents and others have studied the characteristics of the institution, few have focused on the interaction of the individual and institution together, or "fit." This study uses the person-organization framework to enhance understanding of the effect of fit between presidents and their associated institution on turnover to benefit both researchers and practitioners. For researchers, this study presents a new way to conceptualize the turnover challenge in higher education. For practitioners this study offers foundational scaffolding for defining and utilizing fit to select and retain presidents.

The study includes previously identified relationships such as age-at-appointment, sex, race, and institutional control, while utilizing the Competing Values Framework to code altitudinal responses from the College President's Survey, conducted by the American Council on Education, to create fit constructs for presidents and their respective institutions. The new conceptual framework is tested using two methodological approaches. First, through a cross sectional analyses of college presidents from 2001, 2006, and 2011, this study utilized negative binomial regression to identify relationships between select presidential/organizational characteristics, fit constructs, and presidential tenure. The results reveal a number of statistically significant relationships including age-at-appointment, sex, and career pathway. High supplementary fit and complementary fit between presidential attributes and organizational attributes were associated with longer presidential tenure.

The second application utilized event history analysis to measure how presidential/organizational characteristics and fit constructs were associated with presidential departure to another presidency. In this analysis, age-at-appointment, career pathway, proportion of revenues that were garnered by tuition, and low supplementary/complementary fit had meaningful relationships with the likelihood of presidential departure. These two analyses provide evidence that fit matters when predicting presidential tenure.

This study highlights the importance of both presidents and institutions seeking to maximize two kinds of fit in order to ensure that incoming presidents have the opportunity to be successful and that the institution will benefit from continuity in both leadership and vision. The successful tenure of presidents can be markedly enhanced if both complementary and supplementary fit is improved. This study concludes by discussing practical applications regarding selecting and evaluating presidents as well as pointing out some potential directions for future research.

CHAPTER 1

INTRODUCTION

It is common knowledge that college presidents play an integral role on their respective campuses. Overseeing fundraising activities, managing budgets, engaging the community, mediating campus conflict, strategic planning, and lobbying on behalf of their institutions to state and federal governments are among some of the responsibilities of these key leaders (Cook, 2012; Eckel & Kezar, 2011; Fisher, & Koch, 2004; Hambrick, & Mason, 1984; Ingram, 1979; Kerr, 1984; Neumann, & Neumann, 2000). Yet despite their critical role, college presidents are leaving their institutions at a steadily increasing rate and our understanding of why is surprisingly limited (Monks, 2012; Padilla & Gosh, 2000).

For decades, scholars and practitioners alike have argued that for presidents to reach their highest levels of efficiency in completing their diverse tasks and to build rapport with their many different stakeholders they should be in office around ten years (Kerr, 1970; Korschgen et al., 2001). The Association of Governing Boards (AGB) (1984) similarly argued that, "...the real test of leadership is whether the institution has been strengthened, particularly academically, and this takes time to accomplish. Short-term presidents have neither the opportunity nor the incentive to meet this test..." (p.64). Many scholars have substantiated this claim by outlining both the benefits of longer presidential tenures and the costs of short-term presidents (Davis & Davis, 1999; Howells, 2011; Kerr, 1984; Korschgen et al., 2001; Ogilvy, 1963).

Korschgen and colleagues (2001) identified one benefit, claiming that longer presidential tenures result in more innovative institutions. They found that *exceptionally* creative colleges had an average presidential tenure of 13 years, which was nearly double the national average at the

time they conducted their research. They posited that increased innovation was likely due to the increased institutional buy-in and trust accrued by presidents over their abnormally long tenure. Building on this finding, Duderstadt (2009) argued that as the landscape of higher education continues to change rapidly, college presidents would need to be more innovative to enhance the education of their students and maintain the vitality of their institutions.

In parallel to the benefits of longer presidential tenure, there are significant direct and indirect costs to institutions from frequent presidential transition (Davis & Davis, 1999; Howells, 2011; Kerr, 1984, Ogilvy, 1963). For example, colleges incur large direct costs in recruiting new presidents because of the use of expensive search firms and the resource intensive interview processes that the majority of institutions employ (Cook, 2012; Howells, 2011; Monks, 2012).¹ The indirect costs associated with presidential turnover, especially frequent turnover, include institutional instability (Lougue & Anderson, 2001; Moore, 1983; Vaughan, 1996), employee insecurity (Davis & Davis, 1999; Wolverton, Wolverton, & Gmelch, 1999), and lack of long-term vision (Neck & Manz, 1996; Martin & Samels, 2004; Ogilvy, 1963; Padilla & Ghosh, 2000; Röbbken, 2007). These known challenges of frequent presidential turnover are interconnected and limit institutional progress (Glick, 1992).

Despite the argued benefits of long presidential tenures and the costs of frequent presidential departure, over the last 100 years presidential tenure has been in a slow and steady decline (e.g., American Council on Education, 1986, 1998, 2002, 2006, 2012; Kerr, 1970; March & Cohen, 1974; Padilla & Ghosh, 2000; Reed, 2002). In fact, the current average tenure of seven years is well below average tenures of a half century ago, which hovered around ten years (Hennessey, 2012; Padilla & Ghosh, 2000). Moreover, many predict that college presidential

¹ Twelve percent of presidential searches between 1960 and 1980 employed a search firm or consultant. Between 2007 and 2011 eighty percent of presidential searches involved a search firm or consultant (Howells, 2011).

tenures will continue to decline over the next decade (American Council on Education, 2012; Hennessey, 2012).

Purpose and Research Questions

Although we know short tenures are problematic, and the trend of declining longevity is evident, we know very little about why college presidents leave office (Alton, 1982; Jones, 1948; Kerr, 1970; Monks, 2012). Further, the information we do have is limited due to the theoretically insufficient implicit and explicit conceptual frameworks (Langbert, 2012; Tekniepe, 2013).

Specifically, research on presidential turnover and tenure has primarily focused on either the organizational (e.g. Röbbken, 2007) or individual characteristics (e.g. Padilla & Ghosh, 2000), and there have been few attempts to account for how the interaction of individual and organizational characteristics together contribute to presidential turnover (e.g. Langbert, 2012). Trachtenberg and colleagues (2013) recently argued that one of the main things leading to presidential tenure decline was the inability for presidents to adjust to the culture of their new institution. In essence, new presidents were having a difficult time fitting into their new institution. Thus, the need for a fit perspective to study presidential tenure and turnover is needed both due to the challenges created by short-term presidencies, but also to help fill a significant methodological void in this area of scholarship.

This need is even more acute when considering the premise of interaction theory, which states that neither the traits of individuals nor characteristics of organizations alone are the primary predictors of behavior such as turnover, but rather it is the interaction between those individual and organizational characteristics that best predicts such behavior (Judge & Ferris, 1992; Ostroff & Schulte, 2007; Schneider, 1983). Scholarship on presidential turnover is lacking

cohesion and is in need of a theoretically grounded conceptual framework that can frame how fit could be defined and measured.

While the interaction of organizational and individual characteristics are understudied in research on college presidents (Langbert, 2012; Padilla, 2004), the influence of this interaction on turnover has been studied in other fields (e.g., Colbert et al., 2008; Edwards & Shipp, 2007). One potentially useful conceptual framework used to study turnover in corporate leadership is the person-organization fit (POF) framework (Kristof, 1996). Informed by multiple disciplines, POF attempts to measure the congruence of an individual's values, needs, and characteristics with those of an associated organization (Kristof-Brown & Jansen, 2007). Given the utility of the POF framework in other fields, and its unique grounding in the interaction between individual and organizational characteristics, its use to study college presidential turnover would be a logical choice to address this gap in knowledge.

The purpose of this study is to codify past research on the topic and apply a new conceptual approach structured by POF, which will advance understanding of college presidential turnover. Using the POF conceptual framework, this study presents a hybrid conceptual model to be used to study presidential tenure and turnover. This model includes space for past research on presidential turnover and adds conceptual components that measure presidential fit.

In terms of a specific contribution, this study adds to the literature on college presidential turnover by addressing the following research question,² *What are the factors associated with college presidential turnover?* To answer this broad question, I focus on five sub-questions:

² Grand tour research questions are generally open ended to allow the researcher the flexibility to analyze multiple avenues given the answer to the question.

RQ1: What are the organizational and demographic factors associated with declining college presidential tenure, and how have they changed over time?

RQ2: Is fit (complementary or supplementary) associated with college presidential tenure?

RQ3: Do the factors associated with presidential turnover differ by institutional type?

RQ4: Has the relationship between organizational fit and turnover changed over time?

RQ5: Has the relationship between presidential turnover and organizational fit varied over time by institutional type?

Through focusing on these research questions, this dissertation enhances our understanding of why presidents leave office. In addition, it provides institutions with another tool for hiring a president that can help search committees conceptualize what “fit” means in their respective context. Sitting presidents could also be able to use the information provided here to understand how their roles and responsibilities, in the context of how they fit with the institution, are affecting their relationships and potential longevity in office.

As mentioned, scholars and practitioners alike have expressed fear that increasingly shortened tenures in college’s highest office is both costly (Cook, 2012; Davis & Davis, 1999; Howells, 2011) and leads to institutional instability (Ogilvy, 1963; Korschgen et al., 2001). Although the majority of studies on this topic have found that turnover continues to increase (e.g., ACE, 1986, 1998, 2002, 2006, 2012; Kerr, 1970; Padilla & Ghosh, 2000; Reed, 2002), there has not been an attempt to synthesize current research on this topic. In addition, there is a lack of theoretically-grounded and well-developed conceptual frameworks that can be used to account for both organizational (e.g. Robken, 2007) and individual characteristics (e.g. Padilla & Ghosh, 2000).

Terms

There are a few terms in need of clarification that are integral to this dissertation. They are being clarified for different reasons. Specifically, terms like tenure and turnover are being defined because in the literature there are multiple meanings and uses for these words (e.g., Alton, 1971; Huddleston, Kowalski, & Cangemi, 1984; March & Cohen, 1974). Whereas terms like president and college are not as complex, there are multiple words used to describe the same person/position or organization. At the conclusion of each definition, I provide a synthesized definition as well as how the term is used throughout this dissertation.

Turnover. *Turnover* refers to the rate at which employee's leave an organization. There are two broad reasons behind a president leaving office: voluntary turnover (i.e., leaving on their own because of better opportunities, retirement, etc.) and involuntary turnover (i.e., being dismissed by boards, students, community, or faculty) (Huddleston et al., 1984). Some scholars focus their analysis on either voluntary or involuntary turnover (e.g., Alton, 1971, 1982; Tekniepe, 2013), while others do not differentiate between whether the president voluntarily left or if they were involuntarily relieved of their position (e.g., Glen & March, 1975; Monks, 2012).

Within the literature on turnover, the lack of consistency is problematic because the factors leading to each reason for turnover are different, and thus the interventions will be different (Tekniepe, 2013). However, scholars have long argued that determining whether departure is voluntarily or involuntarily is difficult to differentiate because of all the possible reasons for leaving (Tekniepe, 2013). In addition, the majority of the data used to study presidential turnover does not specify why the president leaves the organization. Due to the complexity and lack of consistency in the current literature, *turnover*, in this dissertation generally, will take the broad definition of the act of an employee (in this case a president) leaving their position, whether voluntarily or involuntarily. In Chapter five, turnover will refer

to presidents leaving their institutions for another presidency and will also be discussed as “departure.”

Tenure. For the purposes of this dissertation, the term *tenure* refers to the amount of time the president(s) was/were in office. As simple as the premise appears, March and Cohen (1974) outlined five distinct ways that scholars could measure the length of presidential service, or tenure.

The first measurement of tenure is the *backward cohort* method, which refers to the average tenure of a group of presidents who leave in the same year. For example, if fifteen presidents leave office in 2013 we would calculate the average tenure for 2013 by taking the average years of service for only those fifteen presidents who left office in 2013, to calculate the average presidential tenure for the year 2013.

The second method to calculate tenure is the *forward cohort* approach, which calculates the average tenure using only the presidents who start in a specific year. Thus if there are 15 presidents who start their presidency in 2013 the average would be calculated using the length of service of those 15 presidents and exclude all others who started in any year but 2013. March and Cohen argue that this measure for tenure is most accurate if the calculations are made 35 years after the year of interest, to allow for presidents to complete their time in office.

A third measure of tenure is *additional tenure*, which instead of measuring how long a cohort of presidents serve like the backward and forward cohort methods, measures the number of years presidents are expected to remain in office from any given year. For example, if using the additional tenure method to calculate tenure, a researcher would take the average additional tenure of all presidents in office for a given year and calculate the average years left for those presidents.

Similar to the forward cohort method, additional tenure is not knowable in the current year but is knowable over time. In fact, additional tenure needs to be predicted and the variables used to predict additional tenure could lead to varying calculations of tenure. This method is especially susceptible to the age of presidents in a given year, because the older the president is when calculating additional tenure the shorter that person's tenure is likely to be (March & Cohen, 1974). In addition, the number of years a president has served previously is a variable needed to calculate an accurate additional tenure.

The fourth measure is *completed tenure*, which is the average length of time that a group of presidents have been in office in a given year, or set of years in some cases (Padilla & Ghosh, 2000). For example, if we were interested in the completed tenure of California Community College presidents for 2013 we calculate number of years of completed presidential service for all 112 presidents to arrive at the average completed tenure. March and Cohen (1974) note that backward cohort tenure and completed tenure are the only measurements of tenure that are knowable for the current year.

The final measure is *full tenure*, which is measured by calculating the additional tenure and the complete tenure for all presidents for a given year. Then the additional tenure is added to the completed tenure for each president and an average is calculated for the group. The full tenure method, like forward cohort tenure and additional tenure can be estimated from the current year, but it is not known until a later date.

The vast majority of studies on presidential tenure before and after the work of March and Cohen (1974) use the completed tenure method. While this is helpful because it is consistent, March and Cohen argue that it also varies significantly year to year, whereas if we were to use other measures of tenure, like full tenure, we would have a more accurate picture of how long

presidents could be expected to stay in office. However, full tenure does require a prediction to calculate the additional tenure for all presidents.

While tenure will be defined in this paper as the amount of time the president(s) was/were in office, while reading the literature review chapter of this dissertation the reader can assume that the calculated tenure being used is completed tenure, unless otherwise specified. However, for the analysis completed in this dissertation I use completed tenure and full tenure, which I clarify in Chapter Three of this dissertation.

College. The term college can refer to either a certain type of institution, a part of an institution, or be used as a general term for any higher education institution. The higher education system in the United States has several different types of institutions, which are typically differentiated by the educational credentials they offer. Institutions that offer a range of associate degrees to doctoral degrees are typically called universities. Institutions that only offer up to masters degrees are typically also called universities, but are usually not as prestigious and focus less on research. Institutions that offer a baccalaureate degree as their highest credential are called colleges. Similarly, institutions that offer associates as their highest degree, usually referred to as community college, are also called colleges. In this dissertation, I use the term *college* to refer to all types of institutions for convenience, unless otherwise specified.

President. A president is the highest ranking official of a college or university who oversees institutional budgets, community relations, institutional vision, and governance issues (Kerr, 1984). Similar to the term college, there are number of titles that are used to describe institutional presidents (e.g., president, CEO, chancellor, vice chancellor, etc.). Titles vary depending on institutional type, but in some situations the same title is not even consistently used within the same higher education system. For the purposes of this dissertation I use the generic

term of *president* to refer to the institutional leader who holds the highest office in an individual institution regardless if that is the title the institution itself uses.

Significance of this Study

Given the economic state of higher education institutions and the uncertainty of the future of the university, effective leadership has never been so critical, and understanding how to increase continuity in leadership is important. This study provides insight into the role of fit between presidents and their respective institutions, which could lower costs (Davis & Davis, 1999; Monks, 2012), encourage innovation in higher education (Duderstadt, 2009; Korschgen et al., 2001; Skinner, 2010) , and decrease turnover (Howells, 2011; Korschgen et al., 2001; Langbert, 2012). In a recent study on the presidential selection process, Howells (2011) argued for the importance of fit when she stated that “ institution(s) should select the person best fitted for their particular mission and culture in order to maximize the chances of contentedly keeping them for an optimal number of years” (p. 6). Howells (2001) continued that presidents should be equally concerned with “trying to discover a way to find an institution that satisfies his or her expectations and empowers him or her to fulfill its vision” (p.6). Thus, enhancing our knowledge of the role of fit and its potential relationship with presidential tenure could lead to positive individual and organizational outcomes (Korschgen et al., 2001; Kristof, 2006; Edwards & Shipp, 2007).

As presidential tenure continues to decline, stories of student unrest (Lisker, 2015; McLaughlin, 2015), lack of faculty confidence (Meckley & Arnold, 2015; Solomon, 2015), and poor relationships with governing boards are increasingly prevalent (Woodhouse, 2015). In addition, as the number of presidential searches continues to increase and the role of presidents remains an integral component of the university, researchers will need to expand the current understanding of college presidential turnover to offer better information to college leaders

across the country. This study seeks to understand the role of fit between the president and the institution on presidential tenure and turnover. Understanding how president-institutional fit is associated with tenure will provide both rich theoretical ground to further study the college presidency and significant implications for how we select and evaluate college presidents. In this dissertation, I create a cohesive framework that includes past research and fills a significant gap in the literature that fails to account for fit and how the interaction between presidents and their respective institutions are associated with turnover.

Organization of the Dissertation

This dissertation is organized into six chapters. In Chapter one, I introduced the topic of presidential turnover, discussed the consequences of premature presidential departure, and presented some of the unanswered questions about presidential turnover. I then discussed the purpose of the dissertation and introduced the POF framework as the conceptual tool for this study. I then defined some of the more complex terms that will help prevent reader confusion. I concluded this chapter by discussing the significance of this dissertation as a way to strengthen scholarship in this area, and provided ideas for how to best select and evaluate presidents.

In the second chapter, I present a review of the research on presidential turnover and outline what we know about the topic, what questions remain to be answered, and discuss prevalent implicit and explicit frameworks that have been used to study presidential turnover. The strengths and limitations of the aforementioned frameworks and their associated assumptions are also discussed in this section. I then discuss the conceptual framework, POF, for the analysis conducted in this dissertation. I provide a brief history and the associated theoretical roots of POF while also addressing the multiple conceptual components of the framework.

Chapter Three presents a detailed description of the data and sample used for this study. Then I describe the variables, and for those variables that I created to measure abstract concepts, like fit, I describe the methodology for their creation and discuss how I measure their reliability and validity. Specifically, I discuss the use of the Competing Values Framework to code responses of college presidents. I then present the analytical approach that I employ, outline how I handled the missing data in this study using multiple imputation, and conclude by discussing the limitations to this study.

The results for this study are presented in Chapters Four and Five. In Chapter four I discuss the findings from the analysis of the descriptive statistics and then I focus on the negative-binomial regression models used to analyze the relationship between my variables of interest and turnover. I also look at how this relationship differs by institutional type (i.e., two-year and four-year collages) and how my imputation model affects my results. In Chapter Five I present my findings from the longitudinal analysis I conduct on the smaller subset of data. Specifically, I utilize event history analysis to test the relationship between the same characteristics and constructs I use in the negative-binomial regression, but I measure how they are associated with presidential departure to another institution.

Chapter Six includes my summary of the key findings of this study. I then present and discuss the implications of my analysis for higher education theory, policy, and practice. I also identify additional questions raised by this study and suggest multiple directions for future research.

CHAPTER 2

REVIEW OF THE LITERATURE AND CONCEPTUAL FRAMEWORK

This chapter introduces, synthesizes, and critiques the body of research on college presidential turnover. Beginning with the earliest attempts to understand when and why college presidents leave office, there is a methodological pattern of researchers focusing their work on either the characteristics of presidents or organizational attributes, with very few attempts to account for both conceptual components. Given the pattern, this chapter first discusses how early work set the stage for this methodological approach and then organizes the literature by focus area (e.g., individual, organizational, or integrated). The strengths and limitations of the research are outlined, and then a conceptual framework used in management literature is introduced as a way to amalgamate past research and advance understanding by adding a fit component. In my discussion of the conceptual framework, I provide both the theoretical roots of that framework and discuss its utility for studying college president turnover. I conclude by presenting my hypotheses for this study.

Defining the Problem and Setting the Stage

The average tenure of college presidents and reasons for presidential turnover has been studied in tandem since the late 1940's (Jones, 1948, Kerr, 1970, March & Cohen, 1974). Jones (1948) used college catalogs, institutional newspapers, and volumes of *Who's Who in America* to gather descriptive information on 146 state teacher-colleges' incumbent presidents and their immediate predecessors. He found that incumbent presidents had an average tenure of 7.63 years, which was well below the median 12.14 years of their immediate predecessors. Further, it

was also below the median service of 9.27 years for all previous presidents of state-supported teacher colleges (Jones, 1948).³ Jones's work provided early evidence of declining tenure and sparked discourse on the subject and the reasons for premature turnover. However, research on the topic was scant, and many scholars argued that there was a need to better understand the phenomenon of college presidential turnover (Kerr, 1970; March & Cohen, 1974).

For the last half century researchers have continued to calculate tenure and study presidential departure believing that turnover was increasing (e.g., American Council on Education, 1986, 1998, 2002, 2006, 2012; Kerr, 1970; March & Cohen, 1974; Padilla & Ghosh, 2000; Reed, 2002). In many cases, the main purpose of their work was to present an average tenure of college presidents (e.g., American Council on Education, 1986, 1998, 2002, 2006, 2012). However, scholars differed in their tenure calculations because of sample differences, inconsistent methods for calculating tenure, and conflicting research frameworks. Table 2.1 provides a glimpse at the often conflicting calculated tenures from various scholars and organizations from 1899-2012.

It is apparent from Table 2.1, that despite volatility in college presidential tenure over time, the current average tenure of seven years is below the overall average of eight years. Further, if the calculations for community college presidential tenure were removed, the average current tenure is a full two years below the overall average tenure.⁴ Evidence that tenure is declining provides an impetus for investigating why presidents are leaving office at a seemingly increased rate (Davis & Davis, 1999; March & Cohen, 1974; Monks, 2012; Reed, 2002).

³ This study illustrates how the measurement of tenure can be problematic. Jones (1948) is calculating the *full tenure* for all prior presidents and the *completed tenure* for all the incumbent presidents. Given the difference in measurements one would expect to see shorter tenures for incumbent presidents because the full tenure measurement for prior presidents would be the entire length of those presidents service, while the complete tenure for the current presidents would be shorter because they would likely still have years left to serve.

⁴ Community colleges historically have lower average tenures than four-year institutions and tenure at public schools is declining faster than at private colleges (Monks, 2012; Reed, 2002).

TABLE 2.1: Compiled Tenure Calculations 1890-2012

Author	Type*	1899	1929	1939	1950	1960	1965	1970	1975	1980	1985	1990	1998	2002	2006	2012
Jones (1948)	TC*				7.6											
Selden (1960)	Priv					8.1										
March & Cohen (1974)	RI	8	10	14	10	6.5	8	7								
Kerr (1970)	RI	10.9	9.5	7.7		7.4		5.9								
CLCC (1975-2010)	CC								6.4	5.5	5.3	5		3.65	3.33	
Vaughan (1986)	CC					7.2		4.2								
Davis & Davis (1999)	LG						7.2			4.6	4.5	3.5	4.1			
	Pub					7.8	9.6	11.2	9.7	7.3	7.1	5.7				
Padilla (2000)	Priv					11.7	8	6.5	13.1	11.8	11.2	8.8				
Reed (2002)	Pub												6.8	8.5		
	Pub													7.1	8.7	
Monks (2012)	Priv													7.6	10.2	
ACE (1986-2012)	Pub/ Priv										7		6.8	6.6	8.5	7
AVERAGE		9.45	9.75	10.85	8.80	8.12	8.20	6.96	9.73	7.30	7.02	5.75	5.90	6.69	7.68	7.00

Note: All calculations are calculated using completed tenure, except Padilla who use full tenure.

*CC=Community College; TC=Teachers Colleges; LG=State Universities and Land Grant Colleges;RI= Carnegie Classified Research I Institutions Pub=Public; Priv=Private

Not all scholars have believed, however, that presidential turnover has been accelerating (e.g., Glen & March, 1975; March & Cohen, 1974; Selden, 1960). Selden (1960), unlike many of his contemporaries, felt that there were still just as many long term and short term presidents as there had always been. He found that while many believed presidents were serving four-year terms on average, presidents were actually serving an average of 8.1 years in his sample. Similarly, March and Cohen (1974) found that presidents served an average of 10 years and that there was no significant difference over the prior half century. The only exception they discuss was the time period following the Great Depression where tenures were slightly longer, which will be discussed later.

Despite the controversy over whether tenures were declining, even scholars who believed presidential tenure to be stable have argued that better, more robust frameworks for studying the topic are needed to enhance the college presidency (March & Cohen, 1974). Research of this nature requires intentional theory building and complex quantitative and qualitative research to identify plausible reasons for turnover.

In an effort to understand why presidents were leaving office, Jones (1948) provided good baseline data for what presidents from the early 1900’s did when they left office (See Table 2.2). Other scholars joined the national conversation a short time later, fearing that the expectation for college presidents “to serve until death or retirement” was changing (Selden, 1960; Kerr, 1970). The discussion would focus on many different aspects of the presidency.

TABLE 2.2: Reasons for Presidential Departure (Jones 1948)

Died in Office	Requested to Resign	Accepted Another Presidency	Moved to Business/ Industry	Took Position in Secondary School	Retired	Other Career	Total
147	43	35	29	28	26	20	328

As scholars sought to identify reasons why presidents were leaving at an accelerated rate, Kerr (1970) posited that the growing complexity and subsequent stress of the position was leading to shorter tenures and increased turnover. Kerr (1970) reported how the discontent of presidents was ignored due to the quantity of other stakeholders⁵ and the belief that the president knowingly sought out their stressful and challenging role. Further, he claimed that ignoring the discontent of the president had led, and would lead, to a higher turnover.

Kerr asked 1,200 college presidents what they believed were the most significant challenges facing college presidents in the 1970’s. The majority of the challenges they identified

⁵ Kerr claimed that at the time there were 7,000,000 students, 650,000 faculty, thousands of legislators, millions of general public, and only 2,500 presidents.

were organizational problems,⁶ the most common being institutional finances. Money, Kerr argued, is not a new problem, but it is multi-faceted, causing stress to presidents and institutional stakeholders. For example, poor finances hinder the president's ability to recruit excellent faculty candidates or provide the necessary support for students. In addition, lack of financial resources can lead to cutting programs and/or lay-offs of institutional employees, thus creating tension between the president and internal stakeholders.

The second most common challenge for presidents centered on tense relationships with faculty and students. Kerr found that many presidents feared that their faculty were not supportive of the administration, and in many cases sought to undermine them. Similarly, the student "militancy" of the 1960s created division between institutional administration and the student body (Thelin, 2004). These interpersonal relationships, however, were hard to measure and it is even more difficult to identify specific challenges to these relationships.

The third most common challenge cited by Kerr was institutional control, which he argued was in jeopardy as states began to create multi-campus systems and legislators took more significant roles in the governance of the institution, thus diminishing the power of the president. This decrease in power created frustration with stakeholders when presidents tried to articulate new institutional vision or create new programs. These challenges, Kerr argued, led to presidential discontent that resulted in turnover (Kerr, 1970).

The problem with this research was that Kerr made a significant assumption in believing that presidential turnover could be tied to the challenges the presidents had been facing, and yet many scholars continue to use this assumption in their work. For example, Tekniepe (2013) investigated how increased political pressure could lead presidents to turnover, which stemmed

⁶ Kerr (1970) did not collect his own data but utilized a survey conducted by Harold Hodgkinson of the Center for Research and Development in Higher Education at the University of Berkeley in 1968. The question asked of presidents was "What major problems that you are currently facing are of most concern to you?"

from Kerr's research. While the organizational challenges of the institution are a plausible reason for presidential turnover, it is problematic to assume that presidents do not enjoy challenges, or that the challenges the presidents identified in Kerr's work were what lead to the increased turnover. Organizational concerns and challenges are only a piece of the puzzle to understanding college presidential turnover.

In contrast to Kerr's study, Alton (1971) added to this turnover puzzle when he interviewed 44 presidents who resigned in 1970 and found that reasons for presidential turnover were more personal in nature. Their disclosed reasons included employment alternatives, completion of presidential objectives, and declining physical stamina. Unlike Kerr (1970), who asked presidents what was difficult about their job, Alton asked presidents why they left office. This difference could be one of the reasons that the responses Alton received were more personal to the president.

Alton's study, however, had its own set of challenges and problematic assumptions. For example, he assumed that asking presidents why they left would lead to genuine answers and not ad hoc reasoning for why the president decided to leave the institution. In addition, the reason a president gives for why they chose to leave may be more of a symptom of the problem, rather than the actual cause for their departure. For example, presidents may say that they did not get along with the board of trustees as their reason for leaving, but it is possible that the poor relationship was caused by incongruent goals or values between the president and the board. Thus, the findings of Alton and Kerr need to be tested further through the use of robust statistical models based on well-developed theoretical frameworks in order to better understand college presidential turnover.

Alton did a follow-up on his study asking the same questions to 30 presidents who resigned in 1979. He found that presidents still felt that completion of objectives and employment alternatives were contributors to presidential turnover, but two new reasons became prevalent: relationships with governing boards and relationships with faculty were consistently mentioned (Alton, 1982). This aligned more closely with the work of Kerr (1970), which argued that if strained relationships increased tension, turnover was a plausible outcome.

Building on the work of Kerr, Alton, and Jones, other scholars tried to identify additional reasons for presidential departure, and left the testing of those reasons to other scholars (e.g., Community College League of California, 1996, 2006, 2010; Huddleston et al., 1984). For example, Huddleston and colleagues (1984) asked presidents what led to their turnover and compared those answers to what institutional trustees believed led to their corresponding president's turnover.⁷ A compilation of the reasons presidents gave for leaving and the corresponding perspective of a member of their board of trustees can be found in Appendix A. Because the answers varied so widely, this study exhibited the importance of investigating turnover from the perspective of multiple stakeholders in order to understand the institutional perspective in conjunction with that of the college president.

Focusing specifically on California's community colleges, The Community College League of California (CCLC) also conducted a study to identify why presidents were leaving at an accelerated rate (CCLC, 1996).⁸ They found that fewer community college presidents were leaving due to death or retirement and more were leaving "under fire," or because, for one reason

⁷ This study was conducted by sending a questionnaire to 100 community college presidents who had recently left their position and a correlating member of the institutions board of trustees, of which only 68 trustee's responded and 90 presidents which left the sample at 68. Given that these are community college presidents, this is likely not generalizable to all presidents.

⁸ The CCLC conducts a study on community college CEO turnover every 4 to 5 years. While this study is specific to California, the fact the California system makes up over 1/3 of the community college students in the United States gives credibility to the generalizability of their findings among community colleges.

or another, their contract was not being renewed. The CCLC argued “no one or two reasons are the sole contributors to turnover” (1996, p. 7), but rather the interaction between multiple factors.

Donnelly (1993) also focused on community college presidents, interviewing those that had served 15 or more years. He sought to find what they felt had helped them be successful and maintain their office, and found that presidents were successful when there was commitment and understanding of how they fit into long-term vision of their institution from the beginning of their tenure. Donnelly’s results, therefore, demonstrated that the fit of the president and the institution are a possible explanation for increased presidential longevity, or premature turnover.

Next steps. Research that articulates plausible reasons for presidential turnover, even when untested, has been helpful in developing frameworks to set the stage and provide evidence of the need to study the important topic of presidential turnover. However, there are two primary challenges that limit this work’s utility in research and practice, which are the lack of differentiation by institutional characteristics and the anecdotal nature of the research.

First, few scholars have differentiated reasons for presidential turnover by institutional characteristics, with the exception of some division by institution type (e.g., community college, private/public four-year university). This is odd given the evidence suggesting that presidential tenure varies by institutional characteristics, like whether an institution is religiously affiliated (Selden, 1960), the size of the institution (March & Cohen, 1974), whether the institution is public or private (ACE, 2002; Monks, 2012), and institutional wealth (March & Cohen, 1974). Reasons for turnover that are not differentiated by institutional context can lead to unanswered questions about how turnover may vary by institutional characteristics.

A second major limitation is that the research is primarily anecdotal. While qualitative work has a strong place in scholarship, the majority of the studies cited were not random nor did

they have represented samples—both of which could lead to biased results (Agresti & Finlay, 2009). As early as the 1970’s, scholars were calling for theories of presidential tenure that were more robust to further justify previous research and better understand the issue (Kerr, 1970; Langbert, 2012; March & Cohen, 1974). March and Cohen went as far as to say that frameworks were needed that were “more complicated than the implicit one(s) currently used to justify assertions about the changing average tenure” (p.157).

The early work perpetuated a trend of research in this vein where scholars focused on either individual or organizational reasons for presidential departure. The frameworks developed by scholars primarily analyzed either the individual characteristics of presidents (e.g., March & Cohen, 1974; Glen & March, 1975; Padilla & Ghosh, 2000), the organizational characteristics of colleges (e.g., Bernadin-Domougeot, 2008; Reed, 2002), and only few have attempted to account for both (e.g., Langbert, 2012; Monks, 2012). Thus, early work left researchers in need of more robust frameworks that are build on sound theoretical and practical reasoning to better understand presidential turnover.

Reviewing Research on College Presidential Turnover

While the aforementioned research demonstrates that presidential tenure is declining and identifies plausible reasons for presidential turnover, testing those reasons using statistical analysis is critical to identify the most influential factors associated with presidential turnover. In addition, early work did not present college presidential turnover as a complex interactional issue, which leaves many unanswered questions about how the interaction between the characteristics of presidents and their respective organization impact turnover. The following three subsections present research on college presidential turnover that has been focused on the

individual characteristics of the president, the characteristics of the organization, and the studies that have analyzed both.

Individual Characteristics. As the first predictive model of how long a president could expect to serve, March and Cohen (1974) created a graphical representation of tenure called a career surface. Using presidents' personal characteristics of age and years in office (i.e., completed tenure) their model predicted when a president would turnover by retiring, resigning, or being dismissed.⁹ The model is based on the assumption that tenure is correlated with the interaction between age and completed tenure.¹⁰

The career surface model illustrated that while there are likely many factors that lead to turnover, there were four previously unknown "tenure norms." First, when a president is over 60 their departure rate is more a function of their age than the number of years they have been president. Second, presidents are more likely to leave office prematurely if they start their presidency at the age of 50, and less likely to leave office if they start their presidency at the ages of 43 or 57. Third, if a president is going to be a president of two schools they are likely to enter the presidency around the age of 40 and are likely to serve two eight-year terms, which is slightly less than their calculated overall average of 10 years. Fourth, the job of a president is not a "killing job" where presidents die in office because of specific circumstances tied to the work, but rather death in office is more a function of age. The norms identified by March and Cohen have been confirmed by other scholars (Glen & March, 1975; Padilla & Ghosh, 2000), except the average starting age of a two-term president, which has not been researched further.

⁹ March and Cohen would not differentiate between resignation and dismissal because there were so few outright dismissals and they did not feel confident that they could identify resignations that were just polite dismissals. In addition, about half of the presidents in this sample left due to dismissal or resignation.

¹⁰ Before March and Cohen could use the model they differentiated presidents by mode of departure which included 1) By replacement of an "acting" or "interim" president, 2) By departure through death or retirement, after age 65, 3) By death before age 65, 4) By transfer to the presidency of another college, or 5) by resignation or dismissal. This was critical because each of these modes of departure is related to age and tenure differently.

March and Cohen (1974) posit that personal characteristics, such as age, were predictive of how long a person would serve before they would turnover. In addition, though only cursory to their framework and not part of their predictive model, March and Cohen found that tenure varied depending on the size and wealth of an institution. Specifically, they found that hidden in many of the aggregate statistics on declining tenure, there were differences based on institutional size and wealth, where larger institutions experienced more consistent declines in tenure. This aspect of their work illustrated one of the major limitations of the career surface model, which is that it does not account for institutional characteristics, such as the type of institution or size of institution—but all of these are likely to play a role in turnover decisions.

As an additional limitation to the career surface model, Kerr (1970) illustrated the importance of the contextual environment on turnover by discussing specific events or times of student unrest and militancy that correlated with high presidential turnover. This was illustrated by low presidential tenure of 5.9 years in the 1960's—a decade known for student activism (Kerr, 1970). The career surface model can't account for these types of exogenous shocks which could lead to bias tenure estimates.

However, others have utilized March and Cohen's (1974) framework despite the limitations (e.g., Glen & March, 1975; Padilla & Ghosh, 2000). Replicating the original study, Glen and March (1975) found that the career surface was "fairly accurate" at predicting the presidential departures from 1971-1974 (expecting 25 departures and observing 23), thus confirming the importance of personal characteristics (namely age) in predictive frameworks studying turnover. In addition, they posited, as March and Cohen had argued previously, that there had been little change in the tenure expectations of presidents over the last half century. Any observed changes, they argued, were small and likely based on localized contexts rather

than large shifts. Unfortunately, their framework could not account for large shifts in the higher education landscape, nor does it attempt to conceptualize localized contexts.

Padilla and Ghosh (2000) further enhanced the work of March and Cohen (1974) by using the same conceptual framework, but utilizing the statistical method of survival analysis. Survival analysis, in this context, calculates the probability that a president will stay in office over specified increments of time. This tool allowed Padilla and Ghosh to estimate the likelihood of “survival” for presidents in their sample who had not completed their tenure over five or ten years. This was the first use of this method to study presidential turnover, and further utilization of this method is merited (Padilla, 2004).

In addition to utilizing a different method, Padilla and Ghosh (2000) argued that better estimates of tenure could be found by taking the average tenure for college presidents by pentads as a way to account for the volatility of tenure from year to year by averaging tenure over a set number of years. With a sample of 200 presidents from Research I public and private institutions, they found that tenure for presidents was declining. They also found that the decline was more severe for public presidents than for private presidents and predicted that that declines would continue for the presidents currently in office. Their conclusion that tenure was different by institution further illustrated the need for both organizational and individual factors to be utilized in future research, beyond simply disaggregating data by institutional type.

While some scholars continued to focus on age and length of service as predictors of turnover, Reed (2002) conducted an exploratory study focused on the race, gender, and career path¹¹ (i.e., administrative career or academic career) of college presidents.¹² Using t-tests to

¹¹ Wessel and Keim (1994) conducted a study on the career paths of presidents, but it was not related to turnover.

¹² In this study the administrative career track referenced coming into the presidency through a vice president position such as, finance and administration, student affairs, executive vice president, and development.

analyze whether gender, race (i.e., being a white or non-white president), or career path would lead to statistically significant differences, Reed (2002) found no such result. In fact, around three quarters of her sample were still in office six years later, and the average time in office was 8.54 years. This study, however, was limited because it was based on a series of pair-wise comparisons between groups (e.g., men and women). In addition, the chosen method failed to control for other significant personal and organizational factors that could also contribute to presidential turnover, such as presidential age, institutional type, and public or private status. Despite limitations, this study has utility for researchers as baseline data and demonstration of an increasingly diverse presidency (Monks, 2012; Ross & Green, 2000).

In summary, the scholarship referenced in this subsection illustrates the need for future research to account for the personal characteristics of presidents, and to consider organizational characteristics when studying turnover. Though this work did not account for both aspects, it did set the foundation for a line of inquiry that continued to develop in the early 2000's. This foundation is critical today as the age of presidents continues to rise and the challenge of accounting for this age change in any predictive framework will be necessary (Hennessey, 2012).

Organizational and Contextual Characteristics. In the last subsection, research on individual presidential characteristics was outlined with their corresponding limitations, showing the need for an enhanced framework to account for organizational components. This subsection will discuss research on college presidential turnover that focuses on organizational and contextual characteristics. Strengths and limitations to this work will be presented and the need for integrated models will be articulated.

Contrastingly, the academic track referenced coming to the presidency after some time as a full-time faculty member, department chair, dean, or academic vice president.

As was previously illustrated, March and Cohen developed a predictive model that utilized individual characteristics, but they also provided evidence, perhaps inadvertently, that organizational factors influenced presidential turnover (1974). Unfortunately, though March and Cohen hinted that organizational factors influenced presidential turnover, they were not included in the predictive model. In a similar vein, Kerr (1970) argued that contextual and organizational factors, could likely influence turnover, such as institutional finances, student relations, new directions for programs, and control of the institution (Kerr, 1970, P.141). Birnbaum (1992a, 1992b) also argued that presidents were more likely to leave office when institutions faced significant resource-related pressures.

In a study of German university rectors, the equivalent of U.S. university presidents, Röbbken (2007) using an implicit conceptual model that accounted for organizational size, resources devoted to teaching, resources spent on research, and environmental reform pressures attempted to understand the relationship between organizational factors and turnover. While not ideal, he tested these organizational factors utilizing a buffet of methods.

First, using ANOVA and post hoc tests, he found that there were significant differences in tenure depending on institutional size—namely that rectors at larger institutions tend to have longer tenures. Second, he utilized correlation analysis and found that expenditures on teaching were positively related to tenure, but expenditures on research and political environmental pressures were negatively related. While Röbbken’s sample was small and international, the factors he highlighted could contribute to a model studying American presidential tenure and turnover.

Bernadin-Domougeot (2008) studied factors similar to Röbbken by analyzing institutional characteristics, internal and external environments, and the organizational challenges of eleven

community colleges. By calculating the number of times the institution's president departed in a ten year time frame, Bernadin-Domougeot was able to derive a turnover score for each institution (i.e., one turnover is a low score, two turnovers is moderate, and three turnovers is high). This scoring system allowed Bernadin-Domougeot to then analyze organizational factors of the same colleges and identify which were more influential to presidential turnover.

Of the eleven community colleges in the sample, five had high turnover with a statistically significant correlation to institutional characteristics. Specifically, a positive correlation was found between the size of this institution, the ethnic diversity of the campus, and presidential turnover. Two internal environment factors were found to negatively influence turnover: the presidents' desire to build consensus with the staff, and the presidents' ability to assess and change institutional culture as needed.¹³ Meanwhile, none of the hypothesized external factors¹⁴ produced a statistical relationship with turnover.

As a somewhat separate analysis, this study also included a question on what challenges the respondent felt were most related to college presidential departure. The relationship between the governing board and the president, as well as the relationship between the president and the faculty, were perceived as significant factors that contributed to presidential turnover. While this study further demonstrated the role of organizational relationships in turnover, the sample is small and consists exclusively of community college presidents.

Taking a different perspective, some scholars have chosen to focus on organizational policies or practices as possible predictors to presidential turnover (e.g., Davis & Davis, 1999;

¹³ The six factors were measured by asking one question for each factor on a survey. Four factors were found to have no relationship with turnover: perception that institutional resources are adequate, the president is involved in strategic planning, the president practices consensus building among board members, and the president practiced consensus building among faculty members to execute a single vision for the institution.

¹⁴ The seven external factors were also tied to one question a piece and included: economic development, the president's abilities to interact with the boards of trustees and community leaders, president's ability to mediate conflict, community relations, fundraising, and action to prepare the institutions for the future.

Howells, 2011). One common organizational tool, which helps presidents know their standing with their institution, is the presidential evaluation (Kerr, 1984; Kerr & Gade, 1986). Evaluations are typically conducted annually or once every few years, but they are one of few formal ways that presidents are given feedback during their tenure (Davis & Davis, 1999).

These evaluations are useful because, as the Association of Governing Boards (AGB) stated, “Formally announced and conducted reviews sometimes give presidents a chance to showcase accomplishments; or they give the board a chance to start the process of eliminating a president...” (AGB, 1984, P. 54). Based on the AGB’s view that evaluations could be a precursor to presidential turnover, Davis and Davis (1999) hypothesized that evaluations could be one factor that effected presidential tenure. In a study of 130 state institutions, however, there was no evidence to support their assertion.

Nonetheless, many scholars posit that evaluations can be an effective tool to help assess and improve presidential leadership, even if they are likely not an effective measure of whether or not a president will leave office (AGB, 1984; Davis & Davis, 1999 Kerr & Gade, 1986). Davis and Davis’ (1999) work was more theory building as opposed to theory testing, as their findings were integrated with their own anecdotal experience (Maxwell, 2004). However, this was the first attempt to investigate how the evaluations affect the turnover of presidents.

Another institutional practice that may be associated with presidential turnover is how presidents are selected. Howells (2011) hypothesized that the way institutions select a president (i.e., internal search committee, external search committee, national search firm, etc.) was related to presidential tenure, though she did not clarify which approach lead to longer tenures. She did however, articulate that she found that for past presidents there appeared to be no statistically significant relationship between tenure and how the president was found, but there was a

relationship for the most recent presidents in her study. However, this study had a number of troubling limitations including a small non-representative sample, weak guiding theory, and few control variables. In addition, the study compared presidential tenure for one set of presidents using full tenure and another set using complete tenure. Despite the limitations, the concept of focusing on how a president is selected may be important to better understanding presidential tenure (Dowdall, 2004; Howells, 2011).

In summary, the scholarship referenced in this subsection illustrates the need for future research to account for the organizational characteristics of presidents, and to consider personal characteristics when studying turnover. Though this work did not account for both aspects, it did demonstrate the importance of considering organizational and contextual components when studying presidential turnover.

Integrated Frameworks. Primarily during the last 20 years, research on presidential turnover began to integrate individual characteristics with those of institutions. These integrated frameworks typically involved more complex statistical methods and had explicit theoretical foundations than previous research (e.g., Langbert, 2012; Tekniepe, 2013). It was found that studies that integrated both individual and organizational components were better grounded than research that focused mainly on either individual characteristics or organization components as determinants of college presidential turnover (e.g., Langbert, 2012; Monks, 2012).

Langbert (2012) illustrated this in a study on private college presidents. He hypothesized that socially matched presidents would have longer tenures. In his model, social matching refers to the phenomenon that people are drawn to people who are like themselves. Additionally, people will be drawn to places that they are familiar with, either because they grew up in that location or because the place has similar characteristics to them (Langbert, 2012). Langbert

measured the social match by accounting for the proximity of their current institution to their baccalaureate institution, whether the president was hired internally, whether the president attended a public institution, whether the president had alumnus status at the institution, and whether there was a match of religious affiliation, if applicable. He found that social matching, particularly whether the president was an internal hire, was related positively to tenure.

Social matching, however, was not the only focus of Langbert's study. Presidential performance, or "turnaround performance," was also measured by Langbert (2012), which was "defined as having had media coverage indicating that he or she had increased enrollment at least 25 percent, increased SAT scores at least 100 points, built up an institution from scratch, or increased the endowment by at least 25 percent" (p. 11). While this particular framework does a nice job of accounting for the individual characteristics and organizational components, there are three specific troublesome assumptions made in this research.

First, the measure of social matching was problematic, as it assumed that being an internal hire means that a candidate is socially matched. For example, it is not even stated from what area of the institution the new president was internally hired. There are different cultures across the institution and a social match may be more easily made in one department than another (Reed, 2002). Another plausible reason the social match may not be accurate can be found in Reed (2002), who found that presidents on the administrative track had higher tenures than presidents who had academic careers. It is possible that the estimates of Langbert (2012) are biased based on which track these internal hires were pursuing. Specifically, there may be endogeneity between someone being an internal hire and his or her specific career track. In order to account for this assumption, presidents' career pathway must also be accounted for in future models to strengthen the finding that presidents who are internally hired have longer tenures.

Second, using media as a source for presidential performance could prove problematic. For many schools there may not be a significant news outlet, and what is published and perceived by the public may be very different from what trustees and institutional leaders perceive (Colbert et al., 2008). Additional measures of performance, like IPEDS data¹⁵, may be more telling of a president's true performance, because it is not reliant on the media's or the external stakeholders' interpretation of presidents' performance, and is instead based on what is actually happening at the institution. Including both measures may be advantageous to encapsulate perceived performance and actual performance.

Finally, the measures of performance are narrow. Langbert argues that further research using other possible measures of performance, such as earnings or fundraising, should be considered in order to enhance our understanding of how performance affects tenure. Though salary does not represent performance, it can be seen as an indicator of performance, which is why some scholars have further argued the need for conceptual frameworks to consider presidential earnings as a possible predictor of college presidential turnover (Monks, 2012; Padilla & Ghosh, 2000).

In fact, Monks (2012) utilized a unique data set that contained salary, institutional, and demographic information. A total of 787 four-year institutions were used to test an implicit conceptual framework to identify factors that influenced presidential turnover, which included presidential compensation, among other organizational and personal variables. This implicit framework was based on evidence that private college presidents were paid more than their

¹⁵ IPEDS stands for [The Integrated Postsecondary Education Data System](#) which collects data for colleges in the united states.

public college counterparts, and that there is a relationship between presidential remuneration and college presidential turnover.¹⁶

Monks found that the odds of a public university president leaving their job during the first five years were 50% higher than presidents of private colleges. Additionally, presidents of public colleges received lower compensation and smaller increases to pay over time¹⁷ than private college presidents (Monks, 2007), which Monks argued was leading to shorter tenures.

Further, public college presidents were more likely to move to take a second presidency. To illustrate that point, in this sample no private college president took a second presidency at a public school, but some public college presidents moved into the private college market, providing evidence that public presidents may be seeking higher compensation (Monks, 2012).

Using robust statistical methods, Monks (2012) also provided evidence that the individual characteristics of age and tenure are predictive of presidential turnover. He also found that the specialization of the president has a relationship with presidential turnover. Specifically, specializing in social science or business leads to shorter tenures than specializing in education.

While Monks does not offer an explanation for why this difference may occur, Reed (2002) similarly found that presidents who came through an administrative track (i.e., no academic/faculty positions) had longer tenures. It is likely that presidents who majored in education would go through the administrative track, which helps to explain the positive relationship between an academic specialization in education and longer presidential tenures while other specializations, such as science/business, do not have the same relationship.

¹⁶ Three separate methods are used to measure turnover in private and public institutions. First, logit estimation is used to determine the likelihood of private and public university presidents to turnover. Second, multinomial logit was used to investigate whether public and private university presidents' turnover for the same reasons. Third, job stability is analyzed by estimating differences in the tenure of presidents.

¹⁷ Monks (2012) also created an interaction term for an OLS regression estimation of time in office and whether the institution was public or private to demonstrate compensation over time is 3.4% higher at private institutions than at public institutions.

Scholars have also separated personal characteristics and organizational characteristics using developed theories. Tekniepe (2013) studied the tenure of community college presidents by utilizing push-pull motivation theory (Clingermayer, Feiock, & Stream, 2003; Helmich, 1974; Lundberg, 1986) as a theoretical base to account for both individual and organizational factors. Push-Pull motivation theory broadly categorizes factors that affect executive level turnover into two areas: push-induced factors, referring to organizational or political characteristics that motivate stakeholders to seek the dismissal of an executive and pull-induced factor, which are personal preferences that lead to turnover.

In Tekniepe's study, 101 current presidents who had also served as president at their previous institution were interviewed, and their responses were coded as either feeling pushed or pulled out of their previous position.¹⁸ Tekniepe was especially interested in why presidents felt the push-motivation to depart. Finding that many presidents felt pushed, Tekniepe argued that better governing board training, stronger employment contracts, better faculty interaction, better administrator interaction, less community pressure, and an increase in the general operating budget would decrease the likelihood of presidential turnover.

While this study had a solid theoretical grounding, it did have significant limitations. First, the sample was not random, which limited the studies ability to make generalizable claims. More problematic, however, is that all presidents in the sample had served in a presidency before and were now in their second presidency, which meant his sample excluded presidents who had retired or chosen a different occupation. Given that this study is focused on whether presidents leave because they feel pushed by stakeholders or pulled to another job, it seems odd that the whole sample would be made of presidents who are now in another presidency. There are many

¹⁸ A pushed exit was "precipitated by differences in style, orientation, and/or policy direction with the governing board and/or other internal/external stakeholders," and pull departure was "primarily due to a career advancement opportunity that ... aligned with their professional, financial, and/or personal objectives" (p. 148).

other positions that resigning or retiring presidents could take, and may be more likely to take if they had a challenging experience as a president (e.g., Jones, 1948; Ross & Green, 2000). This sampling problem could account for why the number of presidents who felt pull motivation ($n=71$) more than doubled the number of presidents who felt pushed ($n=30$) out of their previous presidency. While these findings may be accurate, a more appropriate approach would have been to include presidents who took other jobs in higher education, retired, or entered the corporate sector.

Limitations of Research on College Presidential Turnover

Considering these three categories of research collectively, the research on college presidential turnover has found a number of interesting characteristics related to turnover. However, in addition to non-representative samples (e.g., Tekniepe, 2013), weak measures (e.g., Langbert, 2012), and narrow institutional focus (Langbert, 2012; Monks, 2012; Tekniepe, 2013) that plague research on presidential turnover, there are five major limitations to our understanding of college presidential turnover.

First, the empirical research on college presidential turnover has been sporadic at best with little cohesiveness. This is illustrated by a claim historian David Labaree made that educational researchers are unable to “construct towers of knowledge on the foundations of the work of others” (1998, p.5). He elaborated when he further said, “it is possible at best to construct Quonset huts of knowledge through a short-term effort of intellectual accumulation” (p.5). This quip embodies the current state of research on presidential turnover. Scholars design implicit frameworks using a new idea and then loosely base their work on previous scholarship. While each study has enhanced our knowledge, we are left with many questions of how this

work intersects and what a framework would look like that encapsulates the sporadic efforts of past scholars.

Second, focusing on either personal or organizational characteristics alone results in a limited study in a few specific ways. For example, these frameworks do not account for the contextual influences of the time or institutional types in which presidents are selected to serve (Kerr, 1970). As was previously discussed, March and Cohen (1974) serendipitously illustrated this when they found that during World War II there was a shift to longer presidencies which they could not explain using their career surface model, thus providing an example of the limitations of the career surface model. In addition, these frameworks, while accounting for demographic profiles of presidents, do not account for the values and views of presidents and how they match with the institution. This limitation is especially true when little attempt is made to measure the organizations influence in turnover decisions. Frameworks that only account for a president's personal characteristics have resulted in developing few, if any, practical interventions that could influence a president's decision to stay.

Third, organizational representation and measurement of organizational characteristics, with few exceptions, has been insufficient. Specifically, samples are too small and non-representative (e.g., Bernadin-Domougeot, 2008; Howells, 2011; Röbbken, 2007) with discouragingly low response rates (e.g., Howells, 2011). Further, the majority of the studies conducted on organizational factors do not go beyond summary statistics or correlation analysis. While these measures are sufficient for building theory, they are insufficient for making generalizable claims or providing evidence-based practical implications to practitioners (Bernadin-Domougeot, 2008). In addition, the organizational factors discussed in college presidential turnover literature are not measured with rigor. Each factor is typically based on *one*

question from *one* survey, which could lead to biased findings. For example, in one study, respondents were asked to rank the factors they felt led to presidential turnover (Bernadin-Domougeot, 2008). This was based on the assumption that the reader thinks those factors are related to presidential turnover at all—and even if they do there was no way to know the difference in weight that the respondent put on each factor, clearly leading to a limited conclusion.

Fourth, empirical research on college presidential turnover has limited use in practice or policy. Much of the research focuses on characteristics that institutions, policy makers, and presidents have no control over like age, geographic location, size, and wealth. For example, March and Cohen (1974) eloquently stated in their seminal work that “prospective presidents are invited to study their own futures by walking the line (i.e., career surface) corresponding to their starting age” (p. 177). In other words, the research focusing on individual characteristics is very deterministic based on their age and other unchangeable factors. This view leaves little opportunity for change to increase tenure. Organizational frameworks, while better, are still somewhat deterministically focused on the size or student population of the institution as it relates to tenure in general. This leaves scholars to question what research is needed to be able to make policy or institutional changes that could yield longer and more effective presidential tenures.

The fifth and last limitation is that even in models that integrate personal and organizational characteristics, the methods used do not account for the interaction between who the president is and the identity of the organization. Specifically, the frameworks are weak and limited to an implicit framework that accounts for one interaction, like presidential compensation (Monks, 2012) or geographic proximity (Langbert, 2012). These implicit frameworks have weak

justification for included measures of fit and raise questions of how deeper measures of interaction and fit could lead to a more accurate understanding of what causes college presidential turnover.

As the research moves forward these limitations and unanswered questions will need to be addressed. Conceptual frameworks that not only integrate organizational and individual factors, but also measure the interaction between the president and the institution, will be critical to enhance understanding of what leads to premature presidential departure (Cole, 1976; Howells, 2011; Langbert, 2012). Addressing these limitations is one of the goals of this dissertation.

A Case for Using Fit Theories

The limitations of research on college presidential turnover leave questions unanswered and illustrate an evident need for scholars to use more complex and developed conceptual frameworks. Specifically, frameworks that can account for the interaction between presidents and their organizations are needed to enhance our understanding of declining college presidential tenure (Howells, 2011; Langbert 2012; Ostroff, Kinicki, & Tamkins, 2003; Ostroff & Rothausen, 1997). Looking at research in management provides one direction as to how this can be done.

Management literature has a rich history of studying predictors of turnover (e.g., Cotton & Tuttle, 1986; Griffeth, Hom, & Gaertner, 2000), organizational commitment (e.g., Meyer et al., 2002; Tett & Meyer, 1993), and the intention of corporate leaders (i.e., CEO's, executives, and owners) to quit (Brigham, De Castro, & Shepherd, 2007; Colbert et al., 2008; Huang, Cheng, & Chou, 2005). Much of this research has utilized the concept of "fit," which focuses on the interaction between individual characteristics with environmental contexts (e.g., Argyris, 1957;

Barrick et al., 2007; Colbert et al., 2008; Dawis & Loftquist, 1984; Verquer, Beehr, & Wagner, 2003).

Fit research has evolved over time and now consists of many well-developed theoretical models and frameworks (Edwards, 1991; Kristof-Brown, Jansen, & Colbert, 2002; Ostroff & Judge, 2007). Given that these frameworks have been used to study corporate executives, their use in studying college presidents is appropriate due to a number of similarities between them (especially CEOs) and college presidents (Greenberg, 2002; Selden, 1960). In fact, the president is at times referred to as the CEO in research and institutional settings (e.g., Bailey, 2001; CCLC, 1996, 2006, 2010; Lasher & Cook, 1996).

The similarities between the two positions go beyond a common title in four important ways. First, CEOs and college presidents both have a fiduciary responsibility to their organizations (Kerr, 1970). Their role to ensure the financial vitality of their organizations differentiates them from their employees. Second, both CEOs and college presidents typically serve under oversight boards. While the amount of control the boards have over their organizations differs for both corporations and colleges, there is a common relationship that must be navigated (Huddleston et al., 1984; Tekniepe, 2013). Third, CEOs and college presidents are both integral to the vision and strategic planning of their organizations. Many case studies have been written to demonstrate the importance of institutional leaders in changing the direction of their organizations in both corporations and colleges (e.g., Cameron & McNaughtan, 2015; Kerr, 1984; Logan, King, & Fischer-Wright, 2008). Finally, CEOs and college presidents are both seen as the face of their institutions on many fronts. Namely, they are both expected to speak on behalf of their institutions and lead the institution in a well-defined direction.

Given the similarities between CEOs and college presidents, and the need to account for the interaction between individual and organizational characteristics in college presidential turnover research, it seems appropriate to delve into fit concepts to clarify their use for the latter. Specifically, the Person-organizational fit (POF) framework, used in management literature, seems most appropriate to illuminate the subject. Informed by multiple disciplines and theoretical perspectives, POF attempts to measure congruence of an individual's values, needs, and characteristics with those of their organization (Kristof-Brown & Jansen, 2007). The POF framework's strong historical roots and related theories also offer researchers a number of ways to conceptualize fit and study various outcomes, including turnover (Ostroff & Schulte, 2007).

The Interactionist Perspective

The conceptual origin and precise definition of POF is contested by scholars (Kristof, 1996; Rynes & Gerhart, 1990). However, most agree that the POF framework stems from an interactionist perspective, which proposes that neither individual characteristics nor organizational characteristics alone fully explain the variance in a person's behavior or decisions (Bolton, 1958; Caplan, 1987; Endler & Hunt, 1966; Muchinsky & Monahan, 1987). Pervin and Lewis (1978) posited that the purpose of interactional perspectives in psychology is to explain human behavior "beyond what can be explained by a biological-genetic explanation" (p. ix) through focusing on the interaction between individuals and their contexts (Ostroff & Judge, 2007). The interactionist perspective is, therefore, important because of the strong theoretical foundation it provides to help further construct fit frameworks. Specifically, the perspective involves conceptualizing an interaction in five distinct ways: descriptive interaction,

statistical interaction, additive interaction, interdependent interaction, and reciprocal action-transaction (George, 1992; Pervin & Lewis, 1978).¹⁹

First, descriptive interaction refers to how researchers conceptualize a specific interaction. Said another way, descriptive interaction is an intentional effort by the researcher to reflect on the characteristics of specific participants and contexts in a given situation (Andrews, Baker, & Hunt, 2011; Lennard & Bernstein, 1969; Rausch, 1965).

Second, statistical interaction is based on the idea that behavior can be measured through complex statistical modeling that calculates the interaction between individuals and their organizations (Caplan, 1987; Endler & Hunt, 1966; Olweus, 1977). Pervin and Lewis (1978) postulated that it is easy to “confuse the conceptual approach to an interaction with a particular statistical technique” (p. 13). Because the two are so easily confused, conceptualizations should be based in theory and logic, and then tested using statistical analysis in order to identify interactional relationships (Pervin & Lewis, 1978).

Third, additive interaction is the effect that adding additional contextual or personal factors will have on a specified outcome. For example, when one independent variable is added to an existing model, it may influence the outcome because of a relationship that it has with other variables in the model (Allport, 1955). This added influence is the additive interaction.

The fourth way to conceptualize an interaction is as an interdependent interaction, which is that some variables are only significant if they are in the model with other specific variables (Pervin & Lewis, 1978). This contrasts additive interaction because the addition of a new variable is not independently significant, but it becomes significant because of other existing variables, or other variables become significant because of the new variable.

¹⁹ In *Perspectives in Interactional Psychology* Pervin and Lewis (1978) break down these four ideas in greater depth.

Finally, the fifth way to conceptualize an interaction is reciprocal action-transaction. This concept presents interaction as a dynamic relationship that is constantly in flux as contexts change, and that the response to those contexts by individuals varies (Kristof et al. 2005a; Overton & Reese, 1973). It is very similar to the concept of interdependent interaction, but in reciprocal action-transaction, it is understood that variables constantly influence each other. The complexity of interactionist perspectives led to the development of many psychological and sociological theories, one of which was fit theories (Pervin & Lewis, 1978; Stryker, 2008). The influence of the multiple conceptualizations of the interactionist perspective can be seen in the subsequent sections discussing the dimensions of fit.

Person-Environment Fit (PEF): A family of fit frameworks

The interactionist perspective does not explicitly specify how people or their environment are to be defined (Ostroff & Schulte, 2007). Given the ambiguity, scholars have sought to differentiate ways to conceptualize interactions, many based on environmental contexts. PEF became an umbrella term for various dimensions of fit that focused on specific environmental contexts, including person-job fit, person-group fit, person-vocation fit, and person-organization fit (French, Rodgers, & Cobb, 1974; Kristof, 1996; Lindholm, 2003; Ostroff & Judge, 2007).²⁰ Given that these dimensions have some common roots, many scholars find it difficult to differentiate between them (Cable & Edwards, 2004; Cable & Judge, 1996; Cable & Parsons, 2001).

However, each of these dimensions of fit are theoretically different (Kristof-Brown, Zimmerman, & Johnson, 2005a), despite common roots. Each dimension of fit has its own

²⁰ It is important to note that PEF is also considered to be the umbrella for other types of fit, like person-situation fit, person-culture fit, person-person fit, and person-supervisor fit. However these types are also argued to be synonymous with some of the four reviewed in this paper (Kristof, 1996; Kristof-Brown & Jansen, 2007).

additional theoretical foundation that has informed its development (Kristof, 1996; Lindholm, 2003; Ostroff & Schulte, 2007). While it is challenging conceptually, the blurred lines between these types of fit have allowed scholars to build creative conceptual frameworks that integrate multiple dimensions of fit (Kristof, 1996). Given the interconnectedness of the varying dimensions of PEF, and because an understanding of them is vital to utilizing the POF framework, below is a brief description of each of the four primary dimensions of fit.

Person-vocation fit. Person-vocation fit is the level of congruence between the tasks a person is asked to perform (e.g. their vocation) and the confidence and perceived aptitude that a person has in their ability to complete those tasks (Super, 1953). It is important to note that this type of fit is not necessarily the congruence of a person's actual ability to complete the specified tasks, although self-confidence and ability may be correlated (Lindholm, 2003; Super, 1953). Rather, as Holland (1959) posited, this type of fit is manifest by the level of congruence between an individual's personality and the personality required to accomplish specified tasks.²¹ The assumption of this type of fit is that higher congruence between the individual's personality and the ideal personality needed for the tasks will lead to better performance and employee satisfaction (Holland, 1985; Horn, & Kinicki, 2001; Tranberg, Slane, & Ekeberg, 1993).

The outcomes of this dimension of fit were first articulated by Frank Parsons (1909) more than a century ago when he argued that "an occupation out of line with the worker's aptitudes and capacities means inefficiency, unenthusiastic and perhaps distasteful labor..." (p.1), whereas "an occupation in harmony with the nature of the man means enthusiasm, love of work, and high economic values,-- superior product, efficient service, and good pay" (p. 1). Contemporary scholars have confirmed Parson's hypothesis, finding that person-vocation fit leads to job

²¹ Holland developed the most common instrument used to measure vocational fit which categorizes occupations and personal occupational preferences into six categories (e.g., Realistic, Investigative, Artistic, Social, Enterprising, and Conventional) (Holland, 1977, 1985).

satisfaction, better performance, and organizational commitment (for reviews see Assouline & Meir, 1987; Gabriel, et al., 2014; Holland, 1996; Osipow & Fitzgerald, 1996; Spokane, 1987; Tranberg et al., 1993). This aspect of fit is often conflated with person-job fit, but they are two distinct constructs.

Person-job fit. Person-job fit is derived from Murray's (1938, 1951) needs-press theory, which posits that environments can either facilitate or hinder a person's physical and/or psychological needs (Cable & Judge, 1994; Kulik, Oldham, & Hackman, 1987). Specifically, people have specific needs and seek to fulfill them through social contexts, like work (Murray, 1938). In contrast to person-vocation fit, which focuses solely on personality, person-job fit focuses on the compatibility between an individual's skills and the skills required to complete the job (Edwards, 1991; Kristof, 1996; Lindholm, 2003).

Two distinct types of person-job fit have been identified (Vogel & Feldman, 2009). The first is abilities-demands fit, which refers to the skills and abilities of the employee and the demands of their specific job. A math teacher is an illustration of this type of fit. A math teacher will have a set of skills that are related to the subject matter, math, and the responsibility to teach. The specific job will also have a set of demands on that teacher, like the ability to teach an age group of students, or a specific subset of math that needs to be taught.

The second type of fit is needs-supplies fit, which is achieved when the needs (i.e., rewards, security, work-life balance, etc.) of the employee match the supplies (i.e., compensation, time off, etc.).²² For example, using the same math teacher, this type of fit would be met if the compensation package was congruent for both the organization and the employee.

While these two types of fit have been studied as separate concepts (Edwards, 1991), they

²² It is important to note that both abilities-demands fit and needs-supplies fit have multiple conceptions. For example, needs-supplies fit may mean that my lifestyle needs are met by the compensation supplied by my work, or it may mean that my emotional needs are met by the work supplied by my organization.

are both now considered to be needed in order to conceptualize person-job fit (Cable & DeRue, 2002; Vogel & Feldman, 2009). High levels of person-job fit have been found to correlate with organizational commitment (Livingstone, Nelson, & Barr, 1997), lower stress (Edwards, 1996; Edwards, Caplan, & Van Harrison, 1998), creativity (Livingstone et al., 1997), work engagement (Pratt & Ashworth, 2003) and turnover intentions (Edwards, 1991; Scroggins, 2007).

In addition to the fit between the individual and the work required, scholars have also sought to analyze the relationships built while at work, which led to more abstract dimensions of fit like person-group fit and person-organization fit.

Person-group fit. The concept of person-group fit has gained more prominence in fit research over the last few decades due to the growing emphasis on work teams (Kristof, 1996; Kristof-Brown & Jansen, 2007). Person-group fit is defined as the compatibility between individuals and their various social or work groups (Kristof-Brown, Barrick, & Stevens, 2005b; Lindholm, 2003). This dimension of fit provides an illustration of how fit can be measured on multiple levels of the same organization (Ostroff & Schulte, 2007). For example, at a university, person-group fit can be measured between an individual and the university, an individual and their division/college, or an individual and their immediate colleagues. Within the person-group fit literature, there is also no limit to the size of the group (Kristof, 1996), which allows it to work at many levels. A work group can be a large group of people in the same organization or a small two-person work team.

Person-group fit, unlike other types of fit, does not always have the same unidirectional relationship with outcomes (Kristof-Brown & Jansen, 2007). In other words, while it's generally believed that greater fit between an individual and their job, vocation, and/or organization leads to positive outcomes, the results of homogeneity within a group are contested (Kristof-Brown et

al., 2005b). In line with the demands-abilities perspective, heterogeneity in knowledge and skills has been found to increase efficiency (Laughlin, Branch, & Johnson, 1969, Shin & Zhou, 2007), creativity (Shin & Zhou, 2007), and satisfaction (Shaw, Duffy, & Stark, 2000). However, homogeneity has also been found to lead to less conflict and increase efficiency (e.g., Bowers, Pharmer, & Salas, 2000). This tension is not surprising given the variety of work environments, thus one would expect to see varying results in this vein of research (Seong et al., 2012).

Person-organization fit (POF). POF is broadly defined as “the compatibility between people and organizations” (Kristof, 1996, p.3). Specifically, POF is concerned with how closely aligned individuals’ values, goals, needs, interests and abilities are to those of the organization (Edwards & Shipp, 2007; Ostroff, Schulte, 2007). Unique under the PEF conceptual umbrella, POF requires a connection to an organization in order to measure fit, whereas other dimensions of fit are not concerned with the organizational component (Lauver & Kristof-Brown, 2001). POF has been found to lead to similar positive outcomes as other dimensions of fit. For example, job satisfaction and organizational commitment have been found to correlate with high POF (Boxx, Odom, & Dunn, 1991; Chatman, 1989; Chatman & Jehn, 1994; Edwards & Shipp, 2007). In addition, intent to quit and turnover decreases as POF increases (Chatman, 1989; Edwards & Shipp, 2007; Lindholm, 2003; O’Reilly et al., 1991).

POF is well utilized in the literatures of organizational development (Verquer et al., 2001), management (Kristof, 1996), and psychology (Arthur et al., 2006). Over the last half century, POF has evolved through its interdisciplinary use and the weaving together of other dimensions of fit and their foundational theories, such as need-press theory, interactionist theory, and the theory of work adjustment (TWA), into a multifaceted conceptual framework (Chatman, 1989; Judge, 2007; Ostroff & Judge, 2007). This integration has caused multiple

conceptualizations of the POF framework to be developed, including goals/values fit (Muchinsky & Monahan, 1987), needs/supplies fit (Caplan, 1987), and demands/abilities fit (Edwards, 1991). Due to the diverse conceptualizations of POF there is still controversy over how to measure POF and what each conceptual model should entail (Rynes & Gerhart, 1990). Each will be explained in detail in the following section.

Strengths of the POF Framework

While the dimensions of PEF predict similar outcomes, this section will briefly discuss how the POF framework is best suited for this study. Specifically, I cover some of the many strengths of POF that make it better suited for research on employees working in strong organizational contexts in comparison to other dimensions of PEF.

Though in many ways POF is interwoven with the other dimensions of PEF, POF's organizational orientation is important to most accurately predict employee performance, organizational commitment, job , and turnover (for reviews see Edwards & Shipp, 2007; Kristof, 1996; Gabriel et al., 2014; Schneider, 1994; Osgood & Tannenbaum, 1955; Schneider, Goldstein, & Smith, 1995). An example of the need for an organizational orientation is argued by Kristof (1996), who claimed that scholars have consistently found that even in environments where employees would be expected to have high person-vocation fit, the contexts of organizations vary and can lead to poor fit (e.g., Chatman, 1991; Deal & Kennedy, 1982; Schein, 1992). Specifically, in a study using biodata scores, Schneider (1994) found that even when vocation was held constant, an individual's biodata score could predict which specific law firm or accounting firm the individual chose.²³ In addition to predicting organizational selection,

²³ Based on the idea that past behavior is the best predictor of future behavior, biodata is information about the person's past. In this case the person was given a biodata score that they used to then predict organizational fit.

Chatman (1991) found that after controlling for vocational fit, organizational fit was still predictive of other outcomes like turnover and performance.

Regarding person-job fit, Vogel & Feldman (2009) argued that the importance of the organization can be seen in the education system. A person may be a great teacher but not enjoy working in an urban school. If they end up teaching in a large city, they would appear to have low fit, but in reality their poor fit is a result of the organizational context and not the job of teaching. Further, empirical evidence has shown that POF and person-job fit are separate constructs with unique effects on outcome variables (Lauver & Kristof-Brown, 2001; Saks & Ashforth, 1997; Scroggins, 2007), such as the intention to quit and performance.

Person-group fit has not been well integrated in the POF framework. Van Vianen, De Pater, and Van Dijk (2007), in a study founded in person-group fit, found that congruence between employees and their supervisors was more important than congruence with co-workers when measuring organizational commitment. This illustrates that outcomes can be influenced by multiple stakeholders and the need for thinking of organizations as multi-leveled. The multi-level nature of person-group fit is important when thinking about utilizing a POF framework to study turnover in college presidents, because presidents are connected to many stake holders (i.e., trustees, faculty, community, executive teams), all of whom have been argued to influence turnover (Billsberry, March, & Moss-Jones, 2004; Huddleston et al., 1984; Kerr, 1970; Reed, 2002; Van Vianen, 2000).

While all dimensions of fit are important in predicting turnover (Edwards & Cable, 2009; Edwards, 2008), having an organizational orientation is critical. Given that the role of presidents varies by institutional contexts, identifying congruence between presidents and institutions is an important part of enhancing our current understanding of college presidential turnover. However,

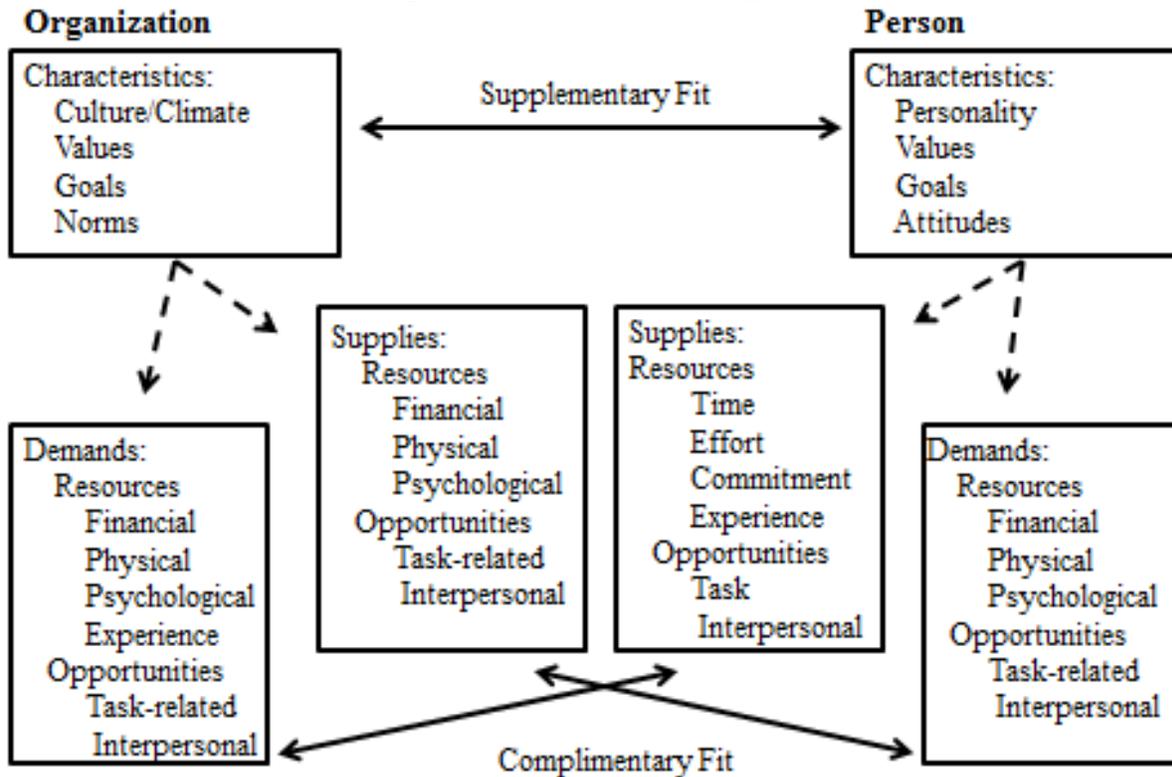
the way to identify that congruence is complex due to the multiple conceptualizations of the POF framework (Kristof, 1996; Kristof-Brown, 2007; Kristof-Brown & Jansen, 2007), which will be outlined in the following subsection.

Multiple Conceptualizations of POF

An identified strength of the POF framework is the way it intersects with other dimensions of fit. However, that same strength makes it complex, conceptually, for scholars to use (Bretz & Judge, 1994; Cable & Judge, 1996). Understanding the development of the different conceptualizations of POF is a critical step to building frameworks in new contexts (Edwards & Cable, 2009; Edwards & Shipp, 2007; Kristof-Brown & Jansen, 2007). As a point of reference when reviewing the multiple conceptualizations of fit, Figure 2.1 illustrates Kristof's (1996) approach for organizing the conceptualizations of POF, which has been used by many scholars to frame their own studies on fit (e.g., Ishola, 2014; Khaola, Mohapi, & Matobo, 2013; Kristof-Brown et al., 2005a). For example, McCulloch and Turban (2007) utilized Kristof's conceptualization to compare components of POF to cognitive ability, job satisfaction, performance, and to understand which construct was the best predictor of tenure in ten call centers. They found that POF was highly correlated with job satisfaction and job tenure, but was not significantly related to job performance.

Similarly, Lauver and Kristof-Brown (2001), using the Kristof conceptualization, found that when comparing person-job fit variables, like cognitive ability to POF, that POF was a better predictor of employee tenure. In addition, Moynihan and Pandey (2008), using Kristof's conceptualization of POF, found that there was a statistically significant relationship between having high value congruence between individuals and organizations and long-term commitment to an organization.

FIGURE 2.1: Various Conceptualizations of Person-Organization Fit



Source: Kristof 1996

Each component of this conceptualization can be used in different ways, which is illustrated in the many studies using the POF framework (for reviews see Carless, 2005; Hoffman & Woehr, 2006; Kristof et al., 2005a; Ostroff & Judge, 2007; Verquer et al., 2003).

Figure 2.1 presents various characteristics/aspects of individuals (e.g., goals, values, skills, abilities) and their commensurate organizational characteristics for researchers to consider. Kristof (1996) follows the guidance of Muchinsky & Monahan (1987) and differentiates organizational fit into two main conceptualizations: supplementary fit and complementary fit. The following subsections will discuss these two conceptualizations. Given their broad nature, they will also be broken up to further explain how they are operationalized.

Supplementary fit. Kristof (1996) illustrates supplementary fit using a solid line at the top of the Figure 2.1, connecting the individual's characteristics to organizational characteristics. Characteristics, in this case, refer to the values, goals, norms, attitudes (individual), and culture

(organization) of the person or organization. Supplementary fit happens when characteristics of a person amplify the characteristics of the organization (Eddy, 2005; Kristof, 1996; Mount & Muchinsky, 1978; Ostroff & Schulte, 2007). Said another way, when someone has supplementary fit, the individual's characteristics are congruent, or similar, to those of the organization.

Studies that focus on supplementary fit have been guided by two main schools of thought. The first is based on the premise that individuals have values and goals that are enduring (Chatman, 1991), and that organizations also have values and goals that are at the core of their existence, which are typically manifest as culture (Chatman, 1991; Kristof-Brown et al., 2005a; O'Reilly et al., 1991). Some scholars have called this school of thought for supplementary fit *person-culture fit* (O'Reilly et al., 1991; Piasentin & Chapman, 2006), but because they are used interchangeably in research (Kristof-Brown & Jansen, 2007), for the purposes of this paper, person-culture fit will be considered synonymous with POF (Kammeyer-Muller, 2007; Kammeyer-Muller, et al., 2013).

The most common methods to study supplementary fit in the first school of thought are self-report questionnaires and cultural profiles using Q-sort methods (Caldwell, Herold, & Fedor, 2004; McCulloch & Turban, 2007; Ostroff & Judge, 2007).²⁴ Self-report questionnaires are typically used on large scale studies and involve the researcher asking an employee either how well they think they fit into the organization through a series of questions, or by asking the employees to rank what they feel is important to the climate of the organization. Q-sort methods typically involve a large number of characteristics (e.g., respect, trust, high expectations) which

²⁴ Q-sort methods, in this case, involve giving the respondent a set of cards with values of an organizational culture. The person then ranks the cards. The organizational culture is the average of the ranked cards for the organization

employees then sort into a set number of groups.²⁵ Each characteristic is then given a score based on their group. The average for each characteristic is then calculated using all respondents' responses, and individual respondents are compared to the aggregate average. This allows the researcher to create an organizational profile to predict outcomes, like turnover (Chatman, 1989; Kristof-Brown et al., 2005b; Ostroff, 1993).

The second school of thought used to study supplementary fit is based on Schneider's (1987) attraction-selection-attrition (ASA) framework (Kristof, 1996, Schneider et al., 1997). This ASA framework posits that people are drawn to others who are like themselves, and likewise, that people will be selected by organizations with similar goals (Schneider, 1987; Vroom, 1964). This school of thought is differentiated from the first because it requires organizations to have pre-defined values so that congruence can be measured (Kristof-Brown & Jansen, 2007). Stated organizational goals and values may be different from perceived values and goals, which is an assumption of the first school of thought for supplementary fit (Edwards & Shipp, 2007). Though supplementary fit is studied from two differing perspectives, they are both designed to measure congruence between individuals and organizations.

Complementary fit. Complementary fit is illustrated by the two solid lines near the bottom of Figure 2.1 connecting the demands and supplies of the organization to those of the individual. Complementary fit is differentiated from supplementary fit because it refers to the congruence of individuals characteristics (e.g., aptitudes, skills, experience) that make the organization whole, or vice versa (Kristof, 1996; Muchinsky & Monahan, 1987). For example, supplementary fit is exemplified by a person who joins an investment firm with goals that are congruent with the organizations goals, like increasing wealth. Whereas complementary fit occurs when a person has goals or skills that “compliment” the organization, such as a technical

²⁵ In the case of a study conducted by Chatman (1991) it was nine groups.

aptitude that an organization needs to enhance production (Muchinsky & Monahan, 1987; Turban & Keon, 1993). For example, dentists may hire someone who has skills in accounting because they recognize the need for that specific skill to “compliment” their organization. While there may not appear to be fit between the dentist and accountant, the specific skills of the accountant exemplify complementary fit.

Complementary fit is primarily drawn from work based on two theoretical veins. The first is Murray’s (1938) needs-press theory, which, as previously stated, posits that the environment (i.e., press) either aids or hinders the needs of individuals (Edwards, 1991; Kristof, 1996). Needs-press theory has been used extensively to conceptualize person-job fit, and its theoretical underpinnings inform POF (Edwards, 1991; Edwards, 2008; Edwards, et al., 2006). While this theoretical connection has been used to study classroom environments and student outcomes (e.g., Fraser, 1989; Fraser & Rentoul, 1980, Li et al., 2012), it has also been found beneficial in the study of corporate leaders (Colbert et al., 2008; Pritchard & Karasick, 1973).

The second main theoretical vein is the theory of work adjustment (TWA) (Dawis & Loftquist, 1984, Loftquist & Dawis, 1969).²⁶ The TWA posits that an individual’s job satisfaction increases when their needs are fulfilled by the environment. This theory has been utilized frequently to study person-vocation fit (e.g., Feij, et al., 1999; Kristof, 1996; Rounds, Dawis, & Lofquist, 1987), and it has also been used as a theoretical foundation for some conceptualizations of POF (Bretz & Judge, 1994). Complementary fit has been operationalized in two ways (Edwards, 2008; Ostroff & Schulte, 2007), as either demands/abilities fit (e.g., Choi, 2004; Lu et al., 2014) or needs/supplies fit (e.g., DeRue & Morgeson, 2007; Westerman & Cyr, 2004).

²⁶ It is important to note that job satisfaction is discussed in POF literature. However, it is viewed as an outcome though it is highly correlated with turnover, so it is discussed as another outcome, and not a precursor to turnover.

The supplies and demands boxes illustrate these two ways that complementary fit has been conceptualized. The dotted lines in Figure 2.1 illustrate the relationship between the supplies and demands for both individuals and organizations.²⁷ Supplies are the resources or opportunities that organizations or individuals have to offer each other. Demands are the resources or opportunities that are demanded by the individuals or the organization. Demands/abilities fit are represented by looking at the complementary fit line that goes from a person's "supplies" to organizations demands. This type of fit is best achieved when the abilities of a person fulfill the demands of the organization and vice versa (Kristof, 1996; Muchinsky & Monahan, 1987).

Needs/supplies fit is similar to demands/abilities fit, but refers to the complementary fit line that goes from an organization's supplies to the demands of a person. Needs/supplies fit is best achieved when the needs of a person are fulfilled by the supplies of the organization and vice versa (Edwards & Shipp, 2007; Kristof, 1996). For example, the needs of a person and the supplies of the organization could be measured by congruence in compensation packages. There are, however, many ways to operationalize the needs and supplies of organizations and individuals (e.g., professional development, emotional support, work community).

Kristof (1996) cautioned readers and users of her model to note that while it is designed to help differentiate between conceptualizations of POF, it is often difficult to distinguish between them in research. This is likely due to how these concepts are operationalized in many different ways (Kristof-Brown & Jansen, 2007). Edwards (2008) argued that the difficulty in differentiation of these concepts makes it difficult for researchers to build on each other's work.

²⁷ The lines are dotted to represent that these characteristics are influenced by underlying characteristics of either the individual or the organization (Kristof, 1996).

Both Edwards (2008) and Kristof (1996) posited that scholars should clearly define their measures and present what conceptual aspect of POF they are seeking to describe.

Each conceptualization of POF is different, interconnected, and explains a unique amount of variance in turnover (Judge & Bretz, 1994; Edwards & Shipp, 2007). For reviews on the variety of ways these conceptualizations have been utilized see Edwards (2008), Kristof-Brown and Jansen (2007), Ostroff and Schulte (2007), and Verquer and colleagues (2001). The following subsection will discuss the complexities and limitations associated with fit theories in general and the POF framework specifically.

The Need for a Fit Perspective to Study College Presidents

Practitioners and researchers alike frequently discuss the fit of college presidents serving their institutions (Korschgen et al., 2001). Despite the discussion, there has been little work done in the research on college presidential turnover to define what “fit” means in the context of higher education, or to measure it (Langbert, 2012). For this reason, many scholars have called for research that focuses on the fit between the president and the institution (Davis & Davis, 1999; Howells, 2011; Langbert, 2012; Tekniepe, 2013). This section will discuss work that demonstrates the need for a coherent fit perspective to study college presidential turnover.

In a recent study focused on community college president derailment, or turnover, Touzeau (2010) found many reasons for turnover were related to “fit”. According to his research, problems with interpersonal relationships, failure of the president to adapt to the institutional culture, and difficulty working with key constituencies all had roots in a poor fit between the president and the institution.

In a similar study that focused on internal and external pressure, Tekniepe (2013) found that both internal and external pressure led to turnover. Specifically, poor cohesiveness and bad

communication between presidents and their faculty associations, deans, and administration were all precursors to presidential turnover. These are symptoms of poor presidential fit. Given that the role of college presidents involves over 100 constituencies (Davis and Davis, 1999), it is important that colleges look for presidents who will have high fit with these diverse groups.

Research seeking to understand presidential fit from the past has been limited by a lack of conceptual frameworks (Langbert, 2012) and weak methods (Monks, 2012). Recently, however, there has been a strong effort from scholars to study turnover of college presidents with robust methods and conceptual frameworks that attempt to integrate organization and presidential characteristics (e.g. Langbert, 2012; Monks, 2012; Tekniepe, 2013). These frameworks scratch the surface of measuring the interaction between organizational and individual characteristics—or “fit.” Unfortunately, many of these efforts have weak measures of fit (e.g., Langbert, 2012; Monks, 2012), lack strong guiding theory (e.g., Davis & Davis, 1999; Howells, 2011), and have narrow or non-representative samples (e.g., Bernadin-Domougeot, 2008; Howells, 2011; Röbbken, 2007; Tekniepe, 2013).

For example, Langbert’s (2012) use of social matching was the closest framework based on fit. However, the measures were weak because he used mainly geographic relationships between presidents and their institutions to measure fit. This was limited because it was based on the assumption that values or goals congruence are based primarily on geography. In addition, he did not delve deeper into complementary levels of fit, like demands/abilities or needs/supplies.

Further, measures of “fit” should be based on an interactionist perspective, which posits that neither individual characteristics nor organizational characteristics alone explain the variance in a person’s behavior or decisions (Caplan, 1987; Muchinsky & Monahan, 1987). In addition, thus far the research on the turnover of college presidents has been static and doesn’t

account for the fit between presidents and their intuitions in a coherent way. The POF framework is one way to approach coherency and understanding of how presidential fit effects turnover decisions.

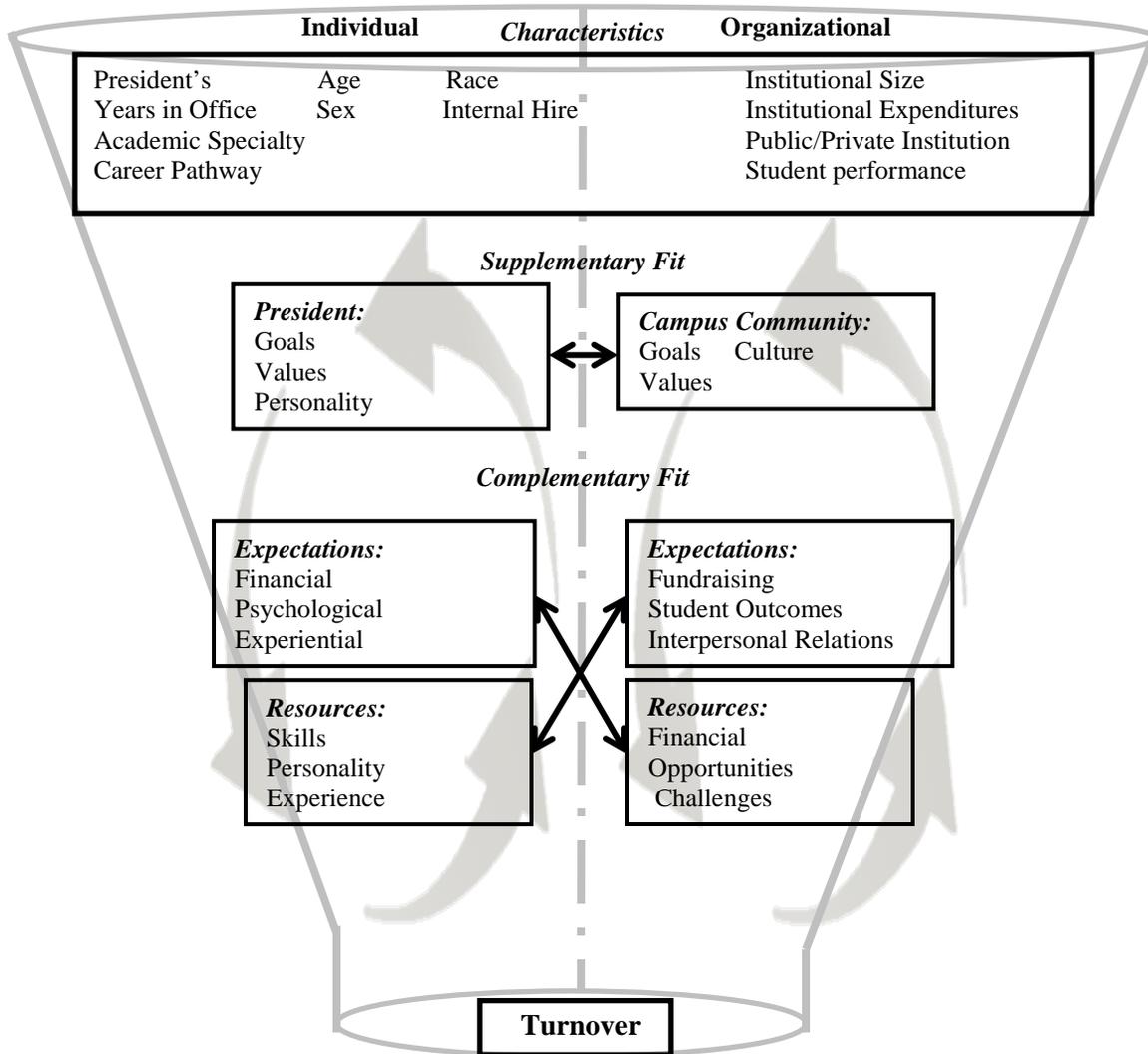
Thus, researchers of college presidential turnover are in need of a new conceptual framework that utilizes the fit perspective and builds on past research on presidential turnover. The next section presents a conceptual framework that utilizes components of the POF framework and discusses how these concepts should be measured based on current scholarship on college presidential turnover.

Integrating POF to Develop a Hybrid Framework to Study College Presidential Turnover

The literature on college presidential turnover discussed in this paper illuminated the lack of cohesive frameworks and the need for studies that measure how turnover is influenced by fit between presidents and their institutions. Due to this deficiency, a new conceptual framework is presented in this section (Figure 2.2), which is derived from past turnover research in higher education and integrated with an interactionist perspective. I now discuss the different conceptual components of the framework.

Conceptual Components. Figure 2.2 is represented by the shape of a funnel. This is to signify that studying turnover starts with a broad focus and narrows as one moves deeper into the topic. The funnel is divided vertically by a gray dotted line with individual and organizational attributes associated with turnover listed on their own respective sides. This division emphasizes the importance of studying turnover using both individual and organizational attributes. While both sets of attributes are important on their own, it is equally significant that researchers account for the interaction between the two.

FIGURE 2.2: Integrated Conceptual Framework Predicting Turnover



Both individual and organizational attributes are divided into three broad conceptual components (e.g., characteristics, supplementary fit, and complementary fit). These three components are organized in the funnel in a hierarchical fashion with the most broad and basic components at the top of the funnel and the more narrow and focused components at the bottom.

Additionally, the included characteristics of the individual and organization are at the top of the funnel because they directly influence the other two conceptual components of supplementary and complementary fit. For example, on the individual side of the funnel, a

presidents' age influences their individual goals/values (supplementary fit) and their expectations/ resources (complementary fit) (March & Cohen, 1974; Kristof, 1996). However, the presidents' values do not influence their personal characteristics like race and age. Likewise on the organizational side of the funnel the institutional size, student characteristics, and expenditures of the organization will influence the supplementary and complementary components of fit, but the complementary and supplementary components do not necessarily influence the institutions size.

The supplementary fit conceptual component is placed before the complementary conceptual component in this framework because attributes of supplementary fit are more likely to influence complementary fit attributes (Kristof-Brown & Jansen, 2007). However, there is also evidence that parts of the complementary fit conceptual component influence aspects of the supplementary fit conceptual component (Kristof, 1996; Kristof-Brown & Jansen, 2007). For example, the resources (i.e., experiences) of the individual president or organization will influence the goals and culture/personality within the supplementary fit conceptual component. This point is emphasized by the circular arrows which illustrate that while the supplementary fit conceptual component is to be considered more influential than the complementary fit conceptual component, there is vertical interaction taking place within the framework.

As previously mentioned, the funnel provides a graphic representation of how existing research on presidential turnover, which focuses on characteristics of individuals and/or organizations, is broad in nature. The dearth of existing explicit theoretical frameworks for studying college presidential turnover has led to broad and shallow approaches to understanding what causes presidents to leave office, which almost exclusively emphasizes characteristics (Langbert, 2012). The funnel shows that through the narrowing use of POF conceptual

components (i.e., supplementary and complementary fit), researchers will be able to delve deeper into the phenomenon and more accurately predict turnover. The three main conceptual components (e.g., characteristics, supplementary fit, and complementary fit) will be explained in greater detail below.

Characteristics. The inclusion of the “Characteristics” component is based on existing college presidential turnover research (e.g., Langbert, 2012; March & Cohen, 1974; Reed, 2002). On the individual side, with the exception of race and sex, the characteristics included were found to be associated with presidential turnover (e.g., Monks, 2012; Reed, 2002).²⁸ However, as the presidency becomes increasingly diverse, researchers argue that the characteristics of race and sex are increasingly relevant (Hennessey, 2012; Reed, 2002), justifying their inclusion in this framework. Likewise, the included organizational characteristics (e.g., institutional size, expenditures, and type) have been found to have a relationship with college presidential turnover (e.g., Langbert, 2012; Röbbken, 2007), and are thus also included.

In addition, research in POF has found that individual traits and characteristics influence aspects of supplementary and complementary fit, thus necessitating their inclusion to better understand what is leading to college presidential turnover (e.g., Yaniv & Farkas, 2005).

While past presidential turnover research has been limited because it primarily focused on either organizational (e.g. Röbbken, 2007) or individual characteristics (e.g. Padilla & Ghosh, 2000), research that accounts for both is able to better explain what leads to presidential turnover (e.g., Langbert, 2012; Monks, 2012), which this framework realizes. Likewise, the interaction between individual and organizational aspects, illustrated by the supplementary and complementary fit components, is critical to further understanding of turnover.

²⁸ This is true whether the president was on the academic (i.e., worked at some point in academic positions: professor, department chair, or dean) or an administrative track (i.e., administrator with no academic position) (Monks, 2012; Reed, 2002).

Supplementary Fit. The second conceptual component in Figure 2.2 is labeled “Supplementary Fit.” This conceptual component is based on the idea that individuals and organizations have specific values, goals, and personalities that, when congruent, lead to higher fit and positive outcomes (e.g., lower turnover) (Muchinsky & Monahan, 1987). Given that in higher education there are different populations (e.g., students, faculty, governing board, and staff) which are all part of the organization, the overarching campus community is the natural “organizational representative” to be included in typical POF frameworks, because it includes all populations and represents the organization as a whole (Chatman, 1989; O’Reilly et al., 1991). In addition, Kerr (1970) argued that presidential turnover and job satisfaction were byproducts of the relationship between presidents and the campus community.

Complementary Fit. The third conceptual component in Figure 2.2 is labeled “Complementary Fit,” which is derived from the POF framework presented by Kristof (1996) and also from person-job fit frameworks (Caplan, 1987; Edwards, 1991). The majority of prior scholars’ complementary fit conceptualizations are focused on needs/supplies and demands/abilities congruency (Ostroff & Schulte, 2007), which is also true for this conceptualization. However, in this framework they are referred to as *expectations* and *resources* because that more accurately represents the concepts that need to be included. This section will discuss included and excluded aspects in the new framework based on these conceptualizations.

The needs/supplies perspective is illustrated in Figure 2.2 as the *expectations* of the individual and the *resources* of the organization (Kristof, 1996; Muchinsky & Monahan, 1987). This conceptualization of fit is primarily based on financial expectations, given the relationship found between presidential compensation and turnover (Monks, 2012); psychological expectations, given the relationship found between completed objectives and the desire to leave

an organization (Alton, 1971, 1982); and experiential expectations, because presidents have varying desired experiences (Fisher, 1984; Fisher, 1991; Fisher & Koch, 1996).

There were some concepts that were deemed irrelevant from the needs/supplies perspective outlined in Kristof's (1996) framework. Specifically, the time and effort required for the job were not included, given that fit strives to match qualifications that vary between candidates, and college presidents unvaryingly choose the position knowing that they will be expected to work long hours and be committed to the institution (Duderstadt, 2009; Kerr, 1984, Muller, 1994). Thus the other included measures of fit should be able to sufficiently account for the desired expected commitment.

The demands/abilities conceptualization is represented in Figure 2.2 by the *resources* of the individual and the *expectations* of the organization. This framework focuses on the categories of expectations that organizations typically have for college presidents, including fundraising (Nehls, 2008), student outcomes (Langbert, 2012), and interpersonal relationships (Davis & Davis, 1999; Kerr, 1984, Tekniepe, 2013), because of evidence of their relationship to turnover in both POF (e.g., Edwards & Shipp, 2007) and higher education literature (e.g., Langbert, 2012). In this perspective of complementary fit, congruence between the president's resources and the aforementioned desired expectations would measure fit. Approaching demands/abilities fit by focusing on specific expectations differs from prior POF frameworks, but better aligns with a demands/abilities approach to presidential turnover.

Similar to the needs/supplies perspective there were some components from the demands/abilities perspective that were not included in the new conceptual framework. Specifically, expected effort and commitment were not included in the framework due to the assumed understanding presidents would have of this commitment prior to taking the job and the

possibility for heterogeneity of these ideas with other concepts already accounted for in this new framework (Kerr, 1970, 1984; Monks, 2012).

Figure 2.2 provides a framework and illustrates key ideas for scholars studying presidential turnover. Conceptual ideas including the structure (e.g., shape of figure) of the new framework and the identification of three specific conceptual components will advance future research on college presidential turnover. In addition to these ideas there are complexities that will be addressed in the following section to further enhance and inform the use of this new framework.

Hypotheses

The conceptual framework outlined above informs the following hypothesis which correlate to the research questions outlined in Chapter One of this dissertation. The hypotheses and research questions will be tied together in the subsequent chapter (Chapter Three):

H1: Organizational factors like increasing institutional size and public control (as opposed to private control) will have a negative relationship with presidential tenure.

Similarly, as the age of the president increases presidential tenure will decrease.

H2: As complementary and supplementary fit increase, there will be a positive relationship with presidential tenure.

H3: When disaggregating the data, I expect to find that two-year colleges have lower tenures overall and that the fit variables will have a more positive relationship with presidential tenure.

H4: The relationship between organizational fit and turnover will be consistent over time, and will demonstrate that poor fit leads to earlier departures.

H5: The relationship between presidential turnover and fit will be stronger for two-year colleges than four-year colleges.

Summary of Literature Review and Conceptual Framework

Past research on college president tenure and turnover can be best coalesced through the use of the POF framework. The literature on college presidential turnover demonstrates that there are both individual and organizational predictors of how long presidents will stay in office, in addition more recent research has begun to scratch the surface of the importance of developing more complex models that can account for the fit of presidents and their respective institutions. This study seeks to improve and build on past inquiries into the causes for premature presidential departure. I apply the POF framework as a way to tie past research and a new perspective together.

POF's rich history, interactional focus, and ability to predict turnover make a strong case for its framework to be foundational in the development of a new conceptual framework for studying college president turnover. In addition, the complex nature of this conceptual framework allows scholars to create innovative ways to analyze fit in their specific contexts. In the next chapter, I describe the data and methodological approach I employ to test my hybrid conceptual framework.

CHAPTER 3

DATA AND RESEARCH METHODOLOGY

In this chapter, I present the empirical approach employed to analyze college presidential turnover in this study. I first discuss the history, context, and source of the data in order to provide the reader with an understanding of the reasons for the data selection. Second, I describe the analytical sample and discuss differences in the sample over time. Third, I describe the variables included in this model and outline why they are important to the previously presented conceptual framework. Specifically, I discuss the dependent variable, control variables, and explanatory variables utilized in my model. I then present the analytical approach, outline the methods that were employed to answer each research question, and provide a description for how the missing data were handled in this study. I conclude with a discussion of a few possible limitations of this study.

Data

The conceptual framework presented in the previous chapter requires data that contains both demographic information on college presidents and information on the characteristics of their respective institution. In addition, attitudinal data for presidents and institutions must be included to account for the supplementary and complementary fit of presidents and their respective institution. If explicit attitudinal data is unavailable, there must be enough information to create proxy data to compensate for the missing information.

Though there is a dearth of comprehensive data on college presidents in general, data that accounts for a large number of institutions from multiple sectors is especially lacking with one

noteworthy exception. For the last thirty years, the American Council on Education (ACE) has conducted a survey of college presidents entitled, the American College Presidents Survey (CPS), which provides one of the few resources for scholars and policy makers to study and make inferences on the state of the college presidency. In fact, ACE argues that it is “the only study to provide a comprehensive look at presidents from all sectors of higher education” (ACE, 2012 p.vi). Further, the CPS has been administered to American college and university presidents approximately once every five years since 1986, thus allowing for comparisons of the presidency over time.

The CPS, since its inception, has focused on the collection of demographic information of college presidents, such as the age, sex, race, education, and career pathway to the presidency. While that is still a function as of the 2011 iteration, each iteration of the survey has included additional information designed to help researchers and policy makers understand the changing presidency. For example, in the late 1990s information on the compensation package of presidents and the duties presidents perform began to be collected. In the mid-2000s, presidents were asked to report their attitudes towards their duties and which institutional responsibilities took the majority of their time.

The evolution of the CPS continued as ACE began to make it possible for researchers to merge institutional data from the Integrated Postsecondary Education Data System (IPEDS) surveys, which are administered annually by the National Center for Education Statistics (NCES), to their existing data previously collected on presidents. IPEDS is the primary source of institution-level data and in the CPS it is used to provide additional institutional context for the respective presidents. While the CPS continues to evolve, from 2001 to 2011 the survey and included IPEDS data are consistent enough to allow for cross sectional comparisons.

The CPS is the most appropriate data for this study for three reasons. First, the CPS is one of the few comprehensive sources of data on college presidents that tracks demographic and attitudinal data from all sectors of American higher education. Comprehensive in this context refers to the number of presidents included in the data, the diversity of the institutions presidents served, and the substantive breadth of the questions presidents were asked on the survey. The comprehensive nature of this data, allows researchers to better understand how outcomes, like turnover in the college presidency, differ by institutional type and if there is a relationship to complex concepts like “fit” and turnover.

Second, the CPS is the only survey of college presidents that covers all classifications of institutions that has been administered over an extended period of time, which allows researchers to see differences over time using robust analytical methods. Though the data is cross-sectional over the last 10 years (three iterations), the three separate iterations have been merged together for use in this study. This will not only allow for analysis in each year it was administered, but will also allow for more complex analysis from iteration to iteration.

The final reason that this data is most appropriate is that it can be merged with IPEDS. This gives unprecedented texture to the data and allows researchers the ability to analyze the interaction between institutional and presidential characteristics in a more robust way. Given the benefits of this data set, it is important to note that it is an underutilized resource that researchers can use to better understand the critical challenges and roles of college presidents.

Sample

To understand the sample for this study, it is important to clarify how the responses to the CPS were collected and how that process has changed over time. Having conducted this survey for almost three decades, ACE’s methods for gathering responses have evolved, especially in the

last decade. Specifically, in 2001 questionnaires were mailed to over 3,848 presidents of Title IV²⁹ colleges and universities. Non-responding presidents received two additional mailings encouraging them to complete the survey. In 2006, questionnaires were mailed to 3,396 presidents who were given the choice to mail the survey back or complete it online. In 2011, 3,318 presidents were emailed information about the survey and were asked to complete the online survey. Non-responding presidents received three email reminders and then were mailed a hard copy of the survey if they still had not responded to the survey request. Thus the process evolved from an exclusively paper based survey to an online survey in a mere ten years.

The changing methodology for collecting responses may be a reason for the declining response rate to the survey (see Table 3.1), but it also is a less expensive option that allows ACE to reach more presidents in the future. It is important to note that in an effort to get the best representation of what the college presidency looks like (from a demographic perspective), ACE infers the demographic information of presidents who are in the same position from one iteration of the survey to another. They do this for presidents who fail to respond to the second survey only if they are known to be in the same position for both iterations. This decision makes sense as the demographic information they infer is not likely to change from iteration to iteration, like birth year, race, and sex.

An example of this practice can be seen in Table 3.1. In 2005 there were 545 presidents that were in the same position from 2001 to 2005 that had their demographic data inferred into the 2005 iteration because they did not respond to the 2005 survey. While inferring demographic information is helpful to increase the size of the sample and the accuracy of the demographic profile of the college presidency, it did create some analytical challenges in this study. Specifically, the attitudinal information was not inferred from one iteration to the next because it

²⁹ ACE only surveys presidents of Title IV institutions.

TABLE 3.1: College Presidents Survey Response Rates

	1986 ³⁰	2001	2006	2011
Presidents Surveyed	2,822	3,848	3,396	3,318
Presidents Responses	2,116	2,594	2,148	1,662
Presidential Responses Analyzed	N/A	2,131	1,970	1,598
Response Rate (New Only)	75%	52%	47%	44%
Response Rate (Known Included)	75%	67%	63%	50%

was more likely to change. This challenge will be discussed later in this chapter (see Missing Data within the Analytical Approach Section).

The analytical samples for each iteration are slightly lower than the recorded responses for two reasons. First, I eliminated all interim presidents from the sample to avoid skewing the data, and because the probability of interim presidents becoming the institutions next full time president is not a guarantee, especially at four-year institutions which make up the largest portion of this sample (ACE, 2012). Second, I dropped all college presidents who did not report their tenure. Given that tenure was the dependent variable of interest, presidents who did not report it would have been dropped anyway. Even with these two caveats, the analytical sample accounts for around 30% to as many as 45% of all title IV college presidents in the United States.

Research Variables

This subsection will outline each variable used in this study and provide the rationale for its inclusion and the method used to operationalize the variable, if applicable. It is important to note that some of the variables in the model were taken directly from the CPS or IPEDS from the year the survey was administered for consistency. Other variables were developed in order to

³⁰ This study uses data from 2001, 2006, and 2011 only. The 1986 response data is given here as a reference point as that was the first year the survey was administered.

best measure the specified constructs needed for the model. When variables were developed, I describe in detail how they were created and why they are needed.

Dependent Variable. There are two dependent variables used in this study, which are college presidential tenure and presidential departure. In Chapter Four I use tenure which is measured and defined as the number of years the president has been in office. In Chapter Five I use presidential departure which is defined as the point when a president departs one institution to another institution.

As previously discussed, March and Cohen (1974) outlined multiple ways to measure the tenure of college presidents. They posit that “most people who talk about tenure of college presidents really mean full tenure, forward cohort, or additional tenure” not understanding that there are many ways to conceptualize tenure (p.155). However, March & Cohen found in 1974 that most studies utilized completed tenure or backward cohort measurements, while no studies up to the point of their study actually reported any of the three measurements they felt people were talking about. This holds true today, with most scholars utilizing the completed tenure measurements when analyzing presidential tenure and turnover, we have little understanding of the other conceptualizations of tenure.

In fact, past empirical research on college presidential tenure has almost exclusively been limited to completed tenure as the dependent variable for two main reasons. First, completed tenure is easy to report for the individual presidents that are currently in office. Especially, when compared to the backward cohort (calculating the tenure of everyone leaving in a given year), forward cohort (calculating the tenure of a group of presidents starting in a given year), and additional tenure (estimating the amount of additional time the president will be in office) approach, completed tenure is an easily known number that can be reported by any president at

any time. Second, since it is easy to report and is known by the person completing the survey it is also very accurate. This is compared to full tenure that typically requires the use of an estimated additional tenure. For these reasons, completed tenure dominates the already sparse literature on college presidential tenure.

While the use of completed tenure is widely accepted, it does have some limitations. For example, completed tenure is typically not the actual number of years the president will serve and it can skew averages if a large group of the sample leaves in one year due to random departure, or a shift in the higher education environment. This means that when using completed tenure, we cannot be certain how accurate our average of tenure for presidents is and our estimates from year to year will almost certainly be rather volatile. Further, completed tenure limits our ability to run predictive models because it is always a point in time estimate as opposed to an outcome.

To conduct a more rigorous analysis of college presidential tenure, as mentioned, this study I utilize two different methods for measuring tenure. First, the most common approach of completed-tenure is used in the cross sectional analysis for RQ1, RQ2, and RQ3. The completed-tenure approach is how ACE historically, and currently, reports college presidential tenure. Utilizing the completed-tenure approach makes it possible to analyze the entire sample of presidents surveyed by ACE and is helpful since the measurements are consistent over the life of the CPS and it will also be comparable to past research. In addition, RQ1, RQ2, and RQ3, are focused on the association of specific variables with presidential tenure, as opposed to the causal relationship between those variables and tenure, so completed tenure will suffice.

The methodological approach to RQ4 and RQ5 utilizes a full tenure approach. This is possible because rather than analyzing the whole sample, this analysis focuses on comparing

presidents who have completed their tenure at a specific institution, and then departed to a second institution, or who have not yet departed their institutions. . In other words, this analysis is designed to give a second perspective of the relationship between the dependent variable and explanatory variable. It is important to note that presidents who move from one institution to another are only counted once.

Control Variables. The control variables for this study were selected through careful analysis of past research and the guidance of the new conceptual framework for studying college presidential turnover. For convenience, the variables of interest are grouped below into one of two general areas. First, the characteristics of the president and second the characteristics of the institution (see Table 3.2). The variables related to the president are acquired from the responses of the presidents on the CPS. Alternatively, the variables related to the institution were merged to the CPS and are derived from IPEDS.

Age at presidential appointment. The age of the president at the time of appointment has been associated with presidential tenure for over 60 years (March & Cohen, 1974; Padilla & Ghosh, 2001), however, many scholars have failed to include it in their models. In this study, age at appointment is calculated by taking the presidents birth year and calculating their age. Their completed tenure is then subtracted from their age in order to achieve their age at presidential appointment.

While it is generally accepted that presidents on average are getting older, scholars and policy makers alike have been claiming that the aging presidency would lead to a mass exodus of presidents. However, despite the average age of college presidents hitting 60 years old in 2006 (ACE, 2006), the average age rose to 61 in 2011 (ACE, 2012) and there has been no evidence of an abnormal number of presidents leaving yet. This is helpful because it demonstrates that while

Table 3.2: Control Variables: Characteristics

Variable Name	Institution /President	Description of the Variable	Years Included
Age at Appointment	President	The age of the president when he/she was first appointed to their current presidency.	All
Sex	President	The sex of the president .	All
Underrepresented Minority	President	Presidents who are not white are considered “underrepresented” among American college presidents.	All
Prior Job	President	The prior job of presidents was divided into five categories: 1) President; 2) Provost; 3) Academic Leadership (e.g., Faculty, College Dean); 4) Executive Leadership (e.g., Financial Management, Development, Student Affairs); 5) Outside of Higher Education (e.g., Clergy, Politicians, Business).	All
Field of Study	President	The field of study reported by presidents was divided into five categories: 1) Physical/Life Sciences; 2) Applied Fields (e.g., Business, Law, Medicine); 3) Humanities/Theology; 4) Social Sciences; 5) Education/ Higher Education.	All
Institutional Control	Institution	Institutional control refers to whether the college is public, private, or a private for-profit institution as reported in IPEDS.	All
Institution Size	Institution	The size of the institution refers to the number of student (Full-time equivalent) at the institution. This was collapsed into five categories: 1) 0-999 Students; 2) 1,000-4,999 Students; 3) 5,000-9,999 Students; 4) 10,000-19,999; 5) 20,000 or More Students. These categories are created using the Full-Time Equivalent headcount reported in IPEDS.	All
Tuition as a Proportion of Revenue*	Institution	This represents the proportion of the total revenue collected by the institution that is accounted for by tuition and fees as reported in IPEDS.	All
Donations and Gifts as a proportion of Revenue	Institution	This represents the proportion of the total revenue collected by the institution that is accounted for by gifts and donations as reported in IPEDS.	All
Research as a Proportion of Expenses*	Institution	This represents the proportion of expenses that is allocated to research by the institution as reported in IPEDS.	All
Instruction as a Proportion of Expenses*	Institution	This represents the proportion of expenses that is allocated to instruction by the institution as reported in IPEDS.	All

*NOTE: These variables are standardized in the Event History Analysis (Chapter 5)

the age of presidents is predictive of their tenure, the aging presidency’s effect on presidential tenure has not been as dramatic as hypothesized. Further, the rising age of the presidency demonstrates that the effect of age will not mitigate the association between tenure and other explanatory variables.

Female. Each president reported his or her sex on the CPS. While this variable has not been found to be associated with declining presidential tenure (Reed, 2002), as the presidency

continues to become more diverse there may be a relationship between sex and tenure. Specifically, in 2001 78% of respondents were male and by 2011 73% were male. As the proportion of women who enter colleges highest office grows it will be important to monitor how sex is associated with presidential tenure. Further, women have gained significant ground at two-year schools where in 2001 86% of respondents were men and by 2011 only 66% were men. Given the shift in demographics, this variable becomes especially critical for when I do separate analysis on two-year and four-year schools.

Underrepresented Minority. Presidents reported their specific race on the CPS (i.e., African American, Hispanic, Asian, Pacific Islander, Native American, or White) , however from 2001 to 2011 over 85% of respondents have been white in each iteration. This lack of diversity makes it difficult to analyze tenure differences between racial categories. For this study, underrepresented minority means that the president is not white. The underrepresented minority variable was created to see if there was difference in presidential tenure between presidents of color and white presidents. Past research has not found a relationship between race and presidential tenure (Reed, 2002), but again, as the presidency becomes increasingly diverse the inclusion of race will be a necessity.

President's prior job. Presidents reported the job they held prior to becoming president at their current institution. There were fourteen possible responses for the president's prior job to choose from, or the president could select "other" and manually input their own job title. In an effort to better understand how the president's prior job might be associated with their tenure, and due to minimal responses in some categories (i.e., military personnel, medical professional), the fifteen responses and the manual responses from those who chose the "other" category were

collapsed into seven categories. One of the reasons that some presidents did not feel comfortable selecting one of the fifteen original responses was that their previous job bridged two categories.

In most cases the merging of categories made it possible for me to code their responses into the seven collapsed categories, in others these responses were left as “other.” Of note, one common response in the other category was that of “Advancement Vice-President” or “Chief Development Officer.” Those responses were combined with Senior Executives which included “Vice President for Finance” and “Vice President for Student Affairs.” The other six categories included President/CEO, Chief Academic Officer/Provost, Other Administrator in Academics/ Faculty, K 12 Administrator/ Government Official, Business/ Industry/ Legal/ Medical Professionals, and Non-Profit/ Religious Leader. The reference response for this variable in the analytical models is “Chief Academic Officer/Provost” because it was the most common route to the presidency among the respondents.

President’s field of study. Presidents reported their major field of study for each of the degrees they have obtained. For this study, I focus on the field of study for their highest degree earned and in cases where the president had both a PhD and another applied degree, I used the field of study for the PhD. Similar to their prior job, there were fourteen possible fields of study and I collapsed their responses into five categories. Specifically, I collapsed their responses into the following categories Life/Physical Sciences, Applied Fields (e.g., business, law, Medicine), Education, Humanities/Theology, and Social Sciences. The reference category for my analytical models is “Education” because it is the most common educational preparation for respondents of the CPS.

Institutional control. Institutional control refers to how the institution is governed in connection with whether there is significant pre-designated public support for the institution.

This information is merged to the CPS from IPEDS and identifies institutions as public, private-not-for-profit, or private-for-profit. Public institutions are operated by publically elected or appointed officials and garner significant pre-designated public support, in addition to tuition and fees. Private-not-for-profit institutions are autonomous organizations that do not compensate the individual(s) or entity in control, with the exception of expenses related to running the organization. In addition, these institutions derive the majority of their support from tuition, philanthropy, or non pre-designated state and federal support. Private-for-profit institutions refer to institutions that compensate the individual or entity in control in addition to expenses related to running the organization

Institutional size. Institutional size is divided into three categories based on full-time-equivalent enrollment. The three categories are needed so that the model can account for one of the many variations in the scope of the task that each president will be asked to complete. The three categories are small institutions (0-999 students), mid-sized institutions (1,000-4,999 students), and large institutions (5,000 or more students). These size categories were chosen based on distribution of institutional size. Past research has focused on institutional control and Carnegie classification, but including size in this study will add to the complexity of our understanding of how institutional characteristics are associated with presidential tenure.

Institutional revenue. There were two primary revenue sources of interest in this study and which are measured as proportions of total revenue to create consistency in measurement and to constrain the dispersion of actual dollars collected by each institution. The first measure of revenue is tuition and fees. Tuition and fees are the amount of money assessed to students for educational purposes. This measure includes tuition that is assessed even if there is a plan for

some of part of the tuition and fees to be in remission, and there is no intent to collect the money from the student.

The second measure of revenue is state appropriations. State appropriations are revenues received by an institution through the state legislature. This particular revenue source excludes grants and contracts. In addition, these funds are for meeting current operating expenses and not for specific projects or programs (e.g., capital projects). After analyzing both revenue sources the proportion of revenue coming from tuition and that coming from state appropriations was closely correlated with institutional control, which led me to eliminate state appropriations from the model.

Institutional expenses. There are two primary institutional expenses of interest in this study. Similar to revenue, both are measured as proportions of total expenses to create consistency in measurement and to constrain the dispersion of actual dollars? spent by each institution. Given that the distribution of proportion of expenses that is accounted for by both expenses is significantly different by institutional control, I have also done an interaction between control and institutional expenses in order to account for the relationship.

The first institutional expense is the total cost of instruction. The instructional expenditures include the cost of both credit and noncredit activities, but exclude expenditures for academic administration where the primary function is administration (e.g., academic deans). Instructional costs also include general academic instruction, occupational and vocational instruction, special session instruction, community education, preparatory and adult basic education, and remedial and tutorial instruction conducted by the teaching faculty for the institution's students.

The second institutional expense of interest is money spent on research. These include dollars spent on activities designed to produce research outcomes and can be conducted by either external constituency or by an organizational unit within the institution. This does not include non-research expenditures in a research setting such as training.

Explanatory Variables. The Explanatory variables related to supplementary and complementary fit were created using information provided by the presidents on the CPS. Each of these explanatory variables and how they are operationalized in this study are described in detail below. Further clarification of the fit variables can also be found in Table 3.3. The CPS does not include specific questions about the values and goals or skills required to complete the job of college president for either the individual presidents or their respective institutions.

However, there are specific questions about where the individual president desires to spend their time, where the president actually spends their time, areas where the president felt insufficiently prepared, and areas the president felt insufficiently informed. Given the lack of intentional questioning on the CPS designed for studying fit, a few of the measures for supplementary and complementary fit utilize the competing values framework (CVF) to create presidential/ organizational profiles based on proxies of their values and goals (Cameron & Quinn, 2011).

The CVF has been used for decades to measure the perceived individual and organizational culture preferences (Cameron, 2008; Quinn, 1988). The instrument has been found to be a consistently valid way to assess both leadership capabilities and organizational culture for almost thirty years (Quinn & Cameron, 1983; Quinn & Rohrbaugh, 1983, Cameron, Bright, & Caza, 2004). The CVF is especially appropriate for this analysis because it measures cultures based on underlying values and/or goals (Cameron & Quinn, 2011).

Table 3.3: Explanatory Variables: Supplementary and Complementary Fit

Variable Name	Supplementary/ Complementary	Description of the Variable	Years Included
Congruence between enjoy work/ occupy time*	Supplementary	This variable is a dichotomous variable where respondents were either seen as having high congruence or low congruence with their institution. It was constructed by taking the presidents responses to the question about where they enjoy spending their time and comparing it to where they actually spend their time. This provided a difference score that was categorized as either high or low.	All
Internal Hire	Supplementary	Presidents are considered an internal hire only if their most recent job was at the same institution they were selected to serve as president.	All
Congruence between insufficient preparation/ occupy time	Complementary	This variable is a dichotomous variable where respondents were either seen as having high congruence or low congruence with their institution. It was created by taking the presidents responses to the question about where they felt insufficiently prepared and comparing it to where they are asked to spend their time. This provided a difference score that was categorized as either high or low.	All
Accurate information about the challenges of the institution provided.	Complementary	This is a dichotomous variable where presidents responded to the question of whether they thought they were provided an accurate account of the institutional challenges they would face.	All
Accurate information about the financial state of the institution provided.	Complementary	This is a dichotomous variable where presidents responded to the question of whether they thought they were provided an accurate account of the financial situation of the institution.	All
Accurate information about the expectations of the board provided.	Complementary	This is a dichotomous variable where presidents responded to the question of whether they thought they had a clear understanding of the board's expectations.	All
Accurate information about the expectations of the institutional community provided.	Complementary	This is a dichotomous variable where presidents responded to the question of whether they thought they had a clear understanding of the institutional community's expectations.	All

*For the 2001 iteration of the CPS, presidents were not asked what areas they enjoyed spending time, so as a proxy I use which constituency they found to be the most challenging to work with. I used the same CVF coding process to code responses to this variable as I did with the other questions presidents were asked (See Appendix B)

Specifically, the CVF consists of two dimensions—one drawn vertically and the other drawn horizontally—resulting in four quadrants. When studying the effectiveness of organizations, it was discovered that while some organizations were effective when demonstrating *flexibility and adaptability*, other organizations were also effective if by demonstrating *stability and control*. Similarly, some organizations were effective if they

maintained *efficient internal processes* whereas others were effective if they maintained *competitive external positioning* relative to customers and clients (Quinn & Rohrbaugh, 1981; Quinn & Cameron, 1983; Cameron, 1986). These differences represent the different ends of two dimensions, and these dimensions constitute the basis of the CVF. Each quadrant in the framework represents a way framing an organization.

One cultural type is the “clan or collaborate” culture, which refers to a culture that is collaborative in nature. Clan cultures are driven by values such as communication, organizational commitment, and development. People in this culture type tend to be committed to their community, focusing on shared values and communication. Their culture is oriented towards involvement and building commitment over time. A driving influence of this culture include cohesion and commitment. Leaders tend to focus on encouraging trusting relationships and seek to nurture a sense of community and cohesion. For example, a president in a clad culture would prefer to engage in activities that involve interactions with students, faculty, alumni, and staff are considered partners in an extended community and interactions with them would be seen as collaborative.

A second cultural type is the “adhocracy or create” culture, which refers to a culture that is creative in nature. The creative culture is driven by innovation, new ideas, and the ability to adjust quickly within environments and is the second dominant culture. Individuals with this perspective tend to be change oriented. The culture that supports their work is characterized by experimentation, flexibility, and looking forward toward the future. The focus of this culture is to innovate and inspire growth by maintaining a future orientation. Leaders build the organization by developing a compelling vision and emphasizing new ideas and technologies, flexibility, and adaptability. Presidents and organizations that focus on an adhocracy culture try

to enhance the fundraising, technology, and strategic planning functions of the organization. They believe that if they can be innovative and new, the organization will have the best chance of being successful.

A third cultural type is a “hierarchy or control” mentality. Hierarchy refers to a culture that is focused on organization control and values efficiency, consistency, and timeliness, believing that these are the most important attributes of successful organizations. People in this culture tend to be systematic, objective, and practical. These organizations tend to avoid transformation and focus on incremental changes. When presidents or organizations focus on issues of budget, accountability, or crisis management they are focusing on a control culture because they believe that if there are sufficient policies and practices in place that guarantee efficiency and consistency the organization will be successful.

A fourth culture quadrant is the “market or compete.” The market is centered on competition, particularly with external competitors. The market culture is based on the values of productivity and goal achievement as the foundation for which success can be best attained. Individuals with this perspective tend to be focused on performance and goals. These organizations tend to emphasize speed and getting results. Leaders build the organization by clarifying objectives and improving the organization's competitive position through hard work and productivity. These organizations seek to deliver results to stakeholders as quickly as possible. Presidents and organizations that focus on the market culture will be most interested in enrollment management, public relations, and athletics. They believe that a successful organization will understand the relationship between the organization and the market, and then capitalize on it.

In this study, I utilize the CVF to identify the values, goals, skills, and abilities of presidents and the cultures of their institutions by coding the responses to the following questions into the four CVF quadrants (e.g., collaborate, create, control, and compete):

- Select the top three areas that you enjoy working in the most as a college president:
- Select the top three areas that occupy most of your time:
- In which of the following areas did you feel insufficiently prepared for your first presidency?

FIGURE 3.1: Coding ACE Responses (Areas enjoy/occupy time/insufficient preparation)
Individual Flexibility

	CLAN Collaborate	ADHOCRACY Create	
	<ul style="list-style-type: none"> ➤ Faculty Issues ➤ Staff Issues ➤ Community Relations ➤ Student Life/ Conduct 	<ul style="list-style-type: none"> ➤ Capital Improvement Projects ➤ Entrepreneurial Ventures ➤ Fundraising ➤ Strategic Planning ➤ Academic Issues (e.g., Curriculum Changes) 	
<i>Internal</i>	HIERARCHY Control	MARKET Compete	<i>External</i>
<i>Maintenance</i>	<ul style="list-style-type: none"> ➤ Accountability/ Assess. ➤ Budget/Financial Management ➤ Risk Management/Legal Issues ➤ Governing Board Relations ➤ Crisis Management ➤ Technology Planning 	<ul style="list-style-type: none"> ➤ Athletics ➤ Enrollment Management ➤ Government Relations ➤ Campus Internationalization ➤ Media/ Public Relations 	<i>Positioning</i>
	<i>Stability Consistency</i>		

Figure 3.1 represents how presidential responses were coded for this study using the CVF. The method for this coding is based on a two-prong approach. First, after reviewing CVF literature, the different tasks were assigned to specific quadrants. Second, a survey was sent to four individuals who are very familiar with the CVF³¹ where these experts were asked to code the items using their knowledge of work in the academy and their in depth understanding of the

³¹ The survey was sent to the two creators of the CVF, Kim Cameron and Bob Quinn, as well as Carlos Mora an expert in the use of the CVF with over 15 years of experience using it in both research and consulting settings. I served as the fourth respondent.

CVF. Upon compilation of those results I calculated a reliability coefficient for the coding. For the CPS responses that covered areas of interest (e.g., capital improvement projects, athletics, and staff issues), the reliability coefficient was .74 and for the CPS responses focused on constituencies (e.g., faculty, Alumni/ae, and media) the coefficient was .73.

After the initial survey I met with the three other raters to discuss each item and review the major discrepancies. During the follow-up discussion, some responses were changed when given additional context of the item. For example, during a discussion with one reviewer, he decided to change his response regarding community relations to the create quadrant because he understood more clearly the president's role as building support in the community. After meeting with each of the other three raters, I used their adjusted responses and calculated a second reliability coefficient. For areas of interest, the reliability coefficient increased to .94 and for constituencies the coefficient increased to .91. Both coefficients and the reliability coefficients for each item can be found in Table 3.4.³²

This procedure for reliability classifying presidential focus or activities into the four culture types provides sufficient justification for the coding scheme and ensures that there is limited bias in the resulting classification. As a demonstration for how some of the answers were discussed and coded I discuss two fairly straightforward examples and then provide context on a more difficult one. First, for the areas of interest, accountability and assessment are in the "control" quadrant because this type of work demonstrates a value of internal hierarchy and a need for consistency and stability. For the constituency groups, I have placed the media in the "compete" quadrant because the media is a public facing external constituency that would need to demonstrate a consistent public image.

³² The reliability coefficient for the challenging constituency can be found in Appendix C.

TABLE 3.4: Reliability Coefficient Coding for CPS Responses (Areas)

	Pre-Discussion	Post Discussion
Academic Issues (e.g., Curriculum Changes)	0.75	1
Capital Improvement Projects	0.75	1
Accountability/ Assessment	1	1
Athletics	0.75	0.75
Enrollment Management	0.75	0.75
Entrepreneurial Ventures	0.75	1
Faculty Issues	0.75	1
Budget/ Financial Management	0.75	1
Fundraising	0.75	1
Campus Internationalization	0.5	1
Governing Board Relations	0.5	0.75
Staff Issues	0.75	1
Government Relations	0.75	0.75
Risk Management/ Legal Issues	1	1
Community Relations	0.75	1
Media/ Public Relations	0.5	1
Technology Planning	0.5	0.75
Crisis Management	0.75	1
Student Life/ Conduct	1	1
Strategic Planning	0.75	1
Reliability Coefficient	0.74	0.94

Some of the choices presidents were given were more difficult than others. For example, governing board relations could be viewed at some institutions in the “compete” quadrant because governing boards are typically made up of external stakeholders; however, the overarching function of these boards is fiduciary responsibility which is an internal function. In addition, these boards are typically the policy setting bodies, thus making their inclusion in the “control” quadrant justified. The combination of existing CVF literature and the high reliability produced by the four raters provided the catalyst for the way responses were coded.

Utilizing the coded responses in the CVF I then created congruence profiles of, activities and areas of focus, which I discuss as synonymous with presidential values/goals and

institutional values/goals. To do this I took the presidents coded responses and mapped them using the CVF. For example, one president marked the items accountability and assessment, crisis management, and capital improvement in response to the areas he enjoyed spending his time, or in other words, what he valued. In this case the president would have a 66% in the control quadrant (accountability and assessment, crisis management) and 33% in the create quadrant (capital improvement). I then followed the same procedure for presidents' responses to the areas that actually occupy his time, which represents what the organization values. Let us say that for this example the president has 33% in the clan quadrant, 33% in the create quadrant, and 33% in the compete quadrant. This president's level of congruence is actually low, because there is only a match on one value, the create quadrant. Thus, his score would be calculated by adding up the difference which would result in:

$$\text{Clan } (.33) + \text{Create } (-.33 + .33) + \text{Control } (.66) + \text{Compete } (.33) = 1.32$$

The score of 1.32 is considered incongruent. This same calculation is used for the two measures of fit that require a congruence profile. The maximum difference in a congruence profile using this approach is 2.00 and the minimum is 0. As opposed to using these raw fit congruence scores, I created a dichotomous congruent and incongruent variable for ease in interpretation. The calculated congruence profile is used to measure both supplementary and complementary fit between presidents and their institutions.

Congruence between enjoy work/ occupy time. The congruence between what areas the presidents value, or enjoy spending their time in, and what areas actually occupy their time is one of the supplementary fit variables included in this study. Using the CVF to code the CPS responses to the questions, "Select the top three areas that you enjoy working in the most as a

college president:” and “Select the top three areas that occupy most of your time:” allowed me to construct the congruence profiles.

This construct is founded in the idea that presidents have specific areas of interest and institutions have specific areas of need. The POF framework is based on the premise that congruence between what you enjoy and where the organization needs you to spend time leads to longer presidential tenure. In this study high congruence means that there are no more than two discordant values between where presidents like to spend their time and where the institution expects presidents to spend their time.

Internal Hire. The CPS collected information on whether the president was an internal or external hire. Given that the president was hired from within connotes an understanding of the institutional goals and values by the president and serves as one aspect of supplementary fit, which has been used in prior research under a construct similar to POF called social matching (e.g., Langbert, 2012). In addition, institutional stakeholders would also have a better understanding of the internally selected president’s goals and values before the president was hired. In previous research, this variable also found that exogenous factors like the president’s social circles and religious affiliation could also be at play if the president was internally hired because the president would have developed those types of external relationships while working at the institution in another capacity (Langbert, 2012). This variable is dichotomous and did not require the use of the CVF in the same way as some of the other fit variables.

Congruence between insufficient preparation/occupation of time. In the CPS, Presidents were asked to identify areas that they did not feel sufficiently prepared to handle. As the first measure of complementary fit, I created a congruence profile by used the CVF to code the CPS responses to the questions, “In which of the following areas did you feel insufficiently

prepared for your first presidency?” and “Select the top three areas that occupy most of your time:.” I then created congruence profiles for each president. In contrast to the questions on the CPS where presidents were asked to select a specific amount of answers (usually three), the insufficient preparation question allowed presidents to select as many as they felt applied to them. Due to this difference, the congruence profiles were calculated based on the total answers, as opposed to the set amount presidents were asked to answer.

This construct is based on the premise that presidents have specific skills and abilities and institutions have specific areas of need. The complementary fit component of the POF framework posits that congruence between your skills, abilities, and expectations, when paired with the organizational needs and expectations, will lead to longer presidential tenure. Hence, the inclusion of these congruence profiles in the model. Similar to the other congruent variable, high congruence means that there are no more than two discordant values between where presidents felt they were insufficiently prepared and where the institution expect the president to spend their time.

President accurately informed on the state of institution. Presidents were asked five questions about how accurate the information they received was during the process of being selected as the next institutional president. Specifically, presidents were asked if they were given a clear and accurate understanding of the financial state of the institution, the current institutional challenges, the role their partner would play, the board’s expectations of them, and the institutional community’s expectations of them.

Given that many presidents did not have a partner and that the question around the role of the partner did not tie directly to the POF framework, that question was omitted from the analysis. The other four questions were each included as four dichotomous variables.

The first is did the president receive “a realistic assessment of the current challenges facing the institution?” This question, though broad, is a good proxy for other specific skill based questions that the president could have been asked. If they were not given an accurate account then they may feel that their expectations of what the job was going to require may have been inaccurate.

The second question is did the president receive “A full and accurate disclosure of the institution’s financial condition?” This question was much more specific and can be tied to specific abilities and expectations of the president. Specifically, this question aligned with the ability of the president to manage the fiduciary responsibility of the institution and given individual abilities to raise revenue to offset the existing and future institutional costs.

The third and fourth questions were specific to the actual expectations of the institution and the president’s perception of how well those expectations were articulated in the search process. For example, presidents was asked if they had “A clear understanding of the board’s expectations?” This is an especially important question because of the work done by (Huddleston et al., 1984) which found that board relations were increasing associated with presidential tenure. In this model, this falls into the complementary fit component of presidential fit, but an argument could be made that this could also be considered supplementary fit because the word “expectations” could be either skills and abilities or goals and values. Similarly, the final question presidents were asked was about whether they had “A clear understanding of the institutions expectations,” which could be either complementary or supplementary.

Analytical Approach

The overarching question of this study is, “What are the factors associated with college presidential turnover?” In order to best identify the factors associated with college presidential turnover, I utilize two analytic strategies and attempt to answers five specific research questions.

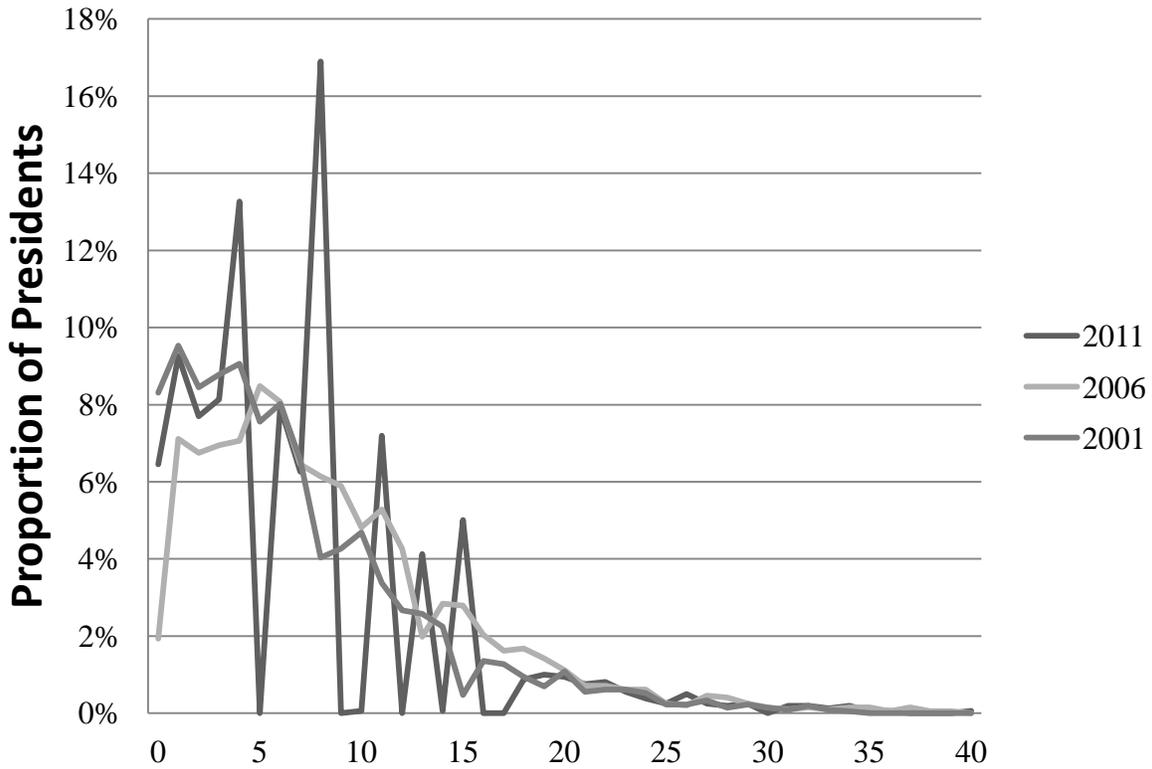
TABLE 3.5: Research Questions, Proposed Methods, and Hypothesized Results

Research Question	Method	Hypothesized Result
RQ1: What are the main organizational and demographic factors associated with declining college presidential tenure, and how have they changed over time?	Negative Binomial Regression	H1: Increasing institutional size and public control (as opposed to private control), will have a negative relationship with presidential tenure, likewise, a decrease in the presidents age-at-appointment will be associated with an increase in tenure. These relationships will be consistent over time.
RQ2: Is fit (supplementary or complementary) associated with presidential tenure?	Negative Binomial Regression	H2: As complementary and supplementary fit increase, there will be a positive relationship with presidential tenure.
RQ3: Do the factors associated with presidential turnover differ by institutional type?	Negative Binomial Regression	H3: Two-year colleges will have lower tenures overall and fit at two-year college will have a stronger positive relationship with presidential tenure.
RQ4: Has the relationship between organizational fit and turnover changed over time?	Event History	H4: The relationship between organizational fit and turnover will be consistent over time, and will demonstrate that poor fit leads to earlier departures.
RQ5: Has the relationship between presidential turnover and organizational fit varied over time by institutional type?	Event History	H5: The relationship between presidential turnover and fit will be stronger for two-year colleges than four-year colleges.

Table 3.5 presents the five questions, the method used to answer each question, and a hypothesized result. Though there have been many attempts to analyze presidential tenure, this study will be the first effort that amalgamates the findings of all previous research and accounts for presidential fit with their respective institutions.

The first method I employ is a negative-binomial regression model. Though tenure is technically a continuous variable, the distribution of tenure served by each president is skewed to the right and is much more in line with a count variable (see Figure 3.2). Given the skew and tenure being more closely aligned with count data, ordinary-least-squares and logit regression would be inappropriate (Freedman, 2008). Count data require a discrete probability distribution like a poisson or negative-binomial distribution. To determine the best approach I conducted a test of variance and a test of overdispersion (Cameron & Trivedi, 2010; Cameron & Trivedi, 2013; Zou & Donner, 2013). First, I analyzed the variance of responses from the mean and

Figure 3.2 Tenure of Presidents



found that the sample variance is five times larger than the mean (7.15 Mean and a variance of 38.78) in the 2011 data, which constitutes a high level of variance.³³ Second, I ran my models using the Poisson distribution and found a statistically significant chi-square which indicates that there is overdispersion in the data on presidential tenure. This is not surprising given that this data is based on completed tenure and thus is skewed to towards 0. Given the findings of my two tests for fit, employing the negative-binomial regression model is the best choice for achieving them most accurate coefficients.

The negative binomial regression model starts with the Poisson model, which is defined by equation (1):

$$P(n_i) = \frac{\lambda_i^{n_i} \exp(-\lambda_i)}{n_i!} \quad (1)$$

³³ This analysis was conducted on the 2011 data, but findings were similar for the 2006 and 2001 iterations.

Where $P(n_i)$ is the probability of an additional year of tenure for president i over a one-year period of time, and λ_i is the expected tenure for each president. When applying the Poisson model, the expected tenure is assumed to be a function of the explanatory variables such that

$$\lambda_i = \exp (\beta X_i) \quad (2)$$

where X_i is a vector of explanatory variables that could include presidential characteristics and organizational characteristics of president i that determine the likelihood of an additional year of tenure. β is a vector of estimable coefficients. The coefficients in vector β can be estimated using the maximum likelihood method. As mentioned earlier, the problem of overdispersion requires the use of the negative binomial regression model which relaxes the assumption that mean tenure for presidents equals the variance (Chang, 2005). This is done by adding an error term to the expected accident frequency (λ_i) such that the equation becomes

$$\lambda_i = \exp (\beta X_i + \varepsilon_i) \quad (3)$$

where ε_i is a gama-distributed error term with the mean one and variance α (Allison, 1995). By integrating ε_i the formulation of the distribution, or the negative binomial formula (4), is

$$P(n_i) = \frac{\Gamma(\theta+ni)}{[\Gamma(\theta) \cdot ni!]} \cdot u_i^\theta (1 - u_i)^{ni} \quad (4)$$

where $u_i = \theta / (\theta + \lambda_i)$ and $\theta = 1/\alpha$, and $\Gamma(\cdot)$ is a value of the gama distribution.

The credibility of a negative binomial regression model used in this study is based on two critical assumptions (Hilbe, 2011). First, the dependent variable (tenure in years) is overdispersed as discussed previously. Overdispersion is accounted for in the negative binomial model by adding an additional shape parameter that is not used in the poisson distribution. The shape parameter is created by allowing for the variance to adjust with the mean when analyzing the relationship. Said another way, the relationship may not be linear, but the shape should be a constant curvilinear shape. The second assumption of negative binomial regression is that the

variables are independent. Independence in this case is met, though there are some relationships between variables. It is important to note that there are at least thirteen different derivations of the negative binomial distribution, which means that for each of the variations there may be additional assumptions that need to be met, but these are the two general assumptions of the method (Boswell & Patil, 2011).

While negative binomial regression is sufficient to identify relationships between predetermined variables and an outcome of interest in this study, there is one very significant limitation to my interest in fit that can only be handled through the use of a method that measures relationships over time. Specifically, in this study the outcome of interest and survey responses are from the same year which makes it difficult for me to know if the number of years in office led to greater fit or if greater fit led to more years in office. Given this limitation, I employ a second methodological approach known as event history analysis (EHA) or survival analysis.

EHA is one approach to set of models that analyze the *hazard rate* of an event, which is the number of times the outcome of interest happens in a given period of time (Bahr, 2009; Allison, 1995). While EHA employs the same general link function of a logistic regression, whether something occurred or it did not, EHA is not constrained to one single event and can analyze multiple points in time (Bahr, 2009; Long, 1997). EHA uses the same function, but the coefficients are interpreted as a factor change in the conditional odds of an event (departure) occurring (Long, 1997; Teele, 2008).

In this study, the event of interest is departure from the current institution to another institution. While there are many reasons for presidential departure, such as retirement, death, institutional fit, or career progression, departure in this study will focus on the departure event of presidents transitioning to a new institutions because that is more likely aligned with being an

issue of fit. Said another way, retirement could be caused by mis-fit, but it is likely more associated with age. Transitioning from a current institution to another institution is likely caused by the president perceiving better fit at the second institution, or perhaps the president is seeking a new challenge, which is also associated with their organizational fit. The focus on this aspect of departure does cause some inherent limitations to the study, which will be discussed later in this chapter.

There are three primary assumptions of EHA that need to be met to justify the use of this method (Blossfeld, Hamerle, & Mayer, 2014). First, it is important that the time the survey was administered is not associated with the outcome of interest, which is in this case departure. I can confirm that assumption is met because ACE administers the survey approximately every five years and does not coordinate their administration of the survey with any exogenous factors that may interfere with presidential departure. The second assumption is that there is a distribution of when the event of interest could occur and that the event is not predicated on another outcome that will be controlled for in the model. Said another way, there needs to be variation in when the event occurs that is not tied to a specific variable. Given that there is variation in presidential tenure, and that presidents can transition at any time in their tenure, this assumption is also met.

The third assumption is associated with the censoring of the data. When using EHA there are typically observations that do not experience the event (departure) during the observed period. These observations are considered “censored.” In this student the majority of the presidents included do not experience departure and are therefore censored. The third assumption is that we know that those observations did not experience the event during the observed period (2001-2011). In truth, we do not fully meet this assumption because it is possible that the presidents who are censored just failed to fill out the survey, or that they did

transition to a new institution, but their new institution does not participate in the survey. While this assumption is not met, I did make a few methodological choices to mitigate the effect of failing to meet this assumption. First, I only include observations that filled out two or more surveys during the observation period. Second, in cases where presidents had filled out two or more surveys, but their institution was not included I identified if they had transitioned institutions by searching for the respective president via the internet.

Missing Data

Missing data is a problem in social science research that leads to lost information and a decrease in statistical power (Bartlett, 2012; Manly & Wells, 2012). Many scholars simply gloss over their handling of missing cases which often calls into question their handling of those observations and leaves the reader unsure how to interpret the results of the new research (Schafer & Graham, 2002). In this study there was a significant proportion of missing cases (over 10%) for each of the three years among the explanatory/attitudinal variables, but there was little missing data in the demographic information (around 1%) See Table 3.6 for a complete report of missing values for each variable.

The majority of the missing data in the attitudinal variables is due to ACE's practice of imputing demographic information of presidents who may not respond to one survey, but had responded to a previous iteration and were still at the same institution. They did not impute attitudinal data because of the possibility of that information changing over time. Thus, the cases that were missing were due to presidents' failure to fill out the survey in a subsequent iteration. The logic behind their imputation of demographic information is sound, but does create the need to handle the missing explanatory/attitudinal information with extreme care.

TABLE 3.6:Proportion of missing values for demographic and explanatory/attitudinal variables

Demographic Variables				Explanatory/ Attitudinal Variables			
Variable	# Missing (% Missing)			Variable	# Missing (%Missing)		
	2001	2006	2011		2001	2006	2011
Age at Appointment	63 (3%)	33 (2%)	98 (6%)	Internal Hire	45 (2%)	27 (1%)	37 (2%)
Female	5 (1%)	0 (0%)	14 (1%)	Congruence- Occupy Time/ Enjoy Work	575 (27%)	465 (24%)	229 (14%)
URM	0 (0%)	30 (2%)	0 (0%)	Congruence- Occupy Time/ Insufficient Preparation	33 (2%)	464 (24%)	226 (14%)
President's Prior Job	175 (8%)	151 (8%)	28 (2%)	Accurate View- Institutional Challenges	119 (6%)	93 (5%)	230 (14%)
President's Field of Study	88 (4%)	62 (3%)	11 (1%)	Accurate View- Financial Situation	175 (8%)	101 (5%)	234 (15%)
Institutional Control	62 (3%)	18 (1%)	36 (2%)	Accurate View- Board Expectations	125 (6%)	89 (5%)	236 (15%)
Institutional Size	202 (9%)	27 (1%)	38 (2%)	Accurate View- Institutional Expectations	118 (6%)	87 (4%)	229 (14%)
Revenue-Tuition	227 (11%)	106 (5%)	84 (5%)				
Expenses- Instruction	227 (11%)	106 (5%)	84 (5%)				
Expenses- Research	227 (11%)	106 (5%)	84 (5%)				

The goal for handling missing data is three fold: 1) minimize bias, 2) maximize the use of available information, and 3) yield the best estimates possible (Allison, 2002). In this study I employ multiple imputation to impute values for the missing cases, both those that are caused by ACE imputing demographic information and those where the presidents simply did not respond. I argue that multiple imputation is the most appropriate method for handling the missing data because it is able to best meet all three goals above.

First, the main assumption for handling missing data is that the many cases missing are at random (Rubin, 1976). Very few studies can fully satisfy this assumption (Allison, 2002; Molenberghs et al., 2014), and this study is no different. In this study, the majority of the missing cases did not respond to the survey. While their non-response may be at random, they will all have served as president for longer than four years. Thus, their non-response is loosely tied to their tenure and does have the potential to bias my estimates. However, there is no

information in the data that can confirm whether the appropriate imputation model is being used, nor is there a statistic that can give the reliability of the model (Little & Rubin, 2002). In an effort to mitigate this challenge, I run my models with both the imputed data and the non-imputed data. In addition, I run multiple imputation models, which is the best practice when dealing with data that is not missing at random (Molenberghs et al., 2014).

Second, unlike any form of a single imputation, which treats imputed values as though they were observed, multiple imputation runs a series of models and then converges on the most accurate estimate. It is important to note that single imputation or multiple imputation are only estimates and are not observed values. Multiple imputation introduces an additional form of error based on variation in the parameter estimates across the imputations to account for the coefficients only being estimates.³⁴

Finally, multiple imputation maximizes the use of available information. Through the use of imputation modeling researchers are able to use variables likely to be associated with the missing data to reach the best estimate for data. This is in stark contrast to other approaches to missing data like listwise or pair deletion, which simply eliminates the missing cases all together. Listwise deletion is especially problematic when the data may not be missing at random, which is the case in this study (Cox et al., 2013).

Imputation model. Allison (2009) argued that while the analysis model and the imputation model do not have to be the same, they are said be congenial. The focus of creating an imputation model is to identify variables that are most likely to be associated with those that

³⁴ There are three steps to the multiple imputation process. First, the researcher develops an imputation model that is based on theory and intuition of what variables are associated with the variables to be imputed and a series of imputed data sets are created. Second, regression analysis is completed on each separate data set. Third, the estimates from the imputed datasets are pooled and a single set of estimates are presented. The coefficients are the mean of estimates across all of the multiple imputations.

have missing values (Rubin,1987; Meng, 1994). Given that the majority of the missing data was in a few of the attitudinal variables I used, it made sense to include demographic information, career pathway information, and institutional information.

The specific imputation strategy employed is a multivariate normal (MVN) approach, which is a very common approach in social science research (Allison, 2009) . The model ran twenty-five times and then the multiply imputed data sets were analyzed and then coefficients were created by pooling the results. In order to ensure consistent results I set the seed of my data to 1234.³⁵ The results of the imputation were then used to run negative binomial regression models that could be compared to those that were run on the non-imputed data.

Table 3.6 presented the missing data for all three iterations of the survey. Using the imputation model a total of 1,598 complete observations was created. However, some variables were not included because of their lack of fit in the imputation model which lowered the number of observations uses in the analytical models presented in the results chapter. It is important to note that some of the variables in this data had around 20% of their cases missing. While there is not maximum percentage of missing that is viewed as inappropriate when imputing values, some scholars have argued that 20% is around the maximum that researchers should attempt. In order to help mitigate any concerns, in the results chapter I present both the regression models for the imputed data as well as those for the non-imputed data to check the sensitivity of the estimates.

Limitations

Like most research, this study has its limitations. First, I am attempting to measure the relationship with presidential tenure and a number of variables related to both presidents and

³⁵ The number of the seed is not necessarily important, but a seed has to be set to ensure that the randomization process is the same that you can have consistent estimates with your multiply imputed models.

their institution over a ten-year span of time. However, what I am not accounting for are the effects of external environment over those ten years. Just one example of a potentially impactful environmental shift unaccounted for is the economic downturn of 2008, which affected colleges and could have affected presidential longevity. Not accounting for events like this could lead to misunderstanding differences across iterations. While I am not able to specifically control for exogenous forces, the inclusion of institutional variables should account for a good portion of the effect because one would imagine that similar institutions were affected comparable ways. In addition, the cross sectional design allows me to see if there are significant differences over time to help understand the significance of those external events.

Second, the data have been collected using a lengthy, complex, and fluid survey. While the length and complexity may lead to survey fatigue and declining response rates, the greater challenge is the fluid design. With questions being added and retracted, one can imagine that the respondent may answer differently depending on question order, or location within the survey. The fluid design is also problematic because some variables are not available in 2001 that are available in 2011. In most cases, I was able to locate sufficient substitutes for missing variables, which I disclose in the results section, but in other cases, there were not sufficient substitutes.

Third, the reported measurement of tenure is completed tenure. While this is the most common way for researchers to measure college presidential tenure, completed tenure is problematic because it is a point in time estimate that does not actually account for the total amount of time these presidents will remain in office (March & Cohen, 1974). By running an analysis on a smaller sample of presidents that I am able to calculate full tenure for (or time of departure), I mitigate this challenge. In addition, given that tenure has consistently been

measured using a consistent approach it should also not affect my ability to compare my results with other studies.

A fourth limitation to this dissertation is that the data are almost all taken from the perspective of the president. While I do have some information collected from IPEDS on the organization, the president is the respondent for all of the questions used for the fit variables in the analytical models. On the surface this seems like a significant problem, however, there are two benefits to this approach. First, there is consistency in the respondent's interpretation of the constructs, because presidents will be presenting their own perspective as well as their perspective of the organization's culture. Second, there is a strong literature base that supports this approach. "Same source responses," as this method is called, is commonly used because it is more direct in nature and has been found to induce more authentic responses (Chapman, 1989). This approach is considered by POF researchers to be subjective because it focuses on an individual-level measurement where respondents evaluate both their personal perspective and *their* perspective of the organization (French, Rodgers, & Cobb, 1974; Kristof-Brown & Jansen, 2007). Although, subjective approaches to measuring fit do introduce some "single source" bias, this method is widely used and accepted (Kristof-Brown & Jansen, 2007, p.135).

Finally, there are two limitations related to the sample used in this study. First, this sample of presidents is a self-selected sample over a constrained period. Though ACE invites all institutions to participate, their response rate is around 55% on average for each iteration of the survey. This could lead to biases in the aggregation of the responses, which is even more plausible in sub-samples based on institution type (e.g., two-year or four-year schools) given that individual cases will then be more impactful. Said another way, a self-selected sample could be much different from the population. Future research should try to take a more holistic approach

to studying presidents that utilizes both IPEDS data and information that is available online about presidents.

The second challenge is that I used two inherently different analytical samples of presidents. Given that different parameters for inclusion and exclusion in my analytical samples will cause varied limitations, I will address this limitation more fully in Chapters Four and Five respectively when discussing the analytical sample for these two analyses.

CHAPTER 4

DESCRIPTIVE ANALYSIS AND THE RELATIONSHIP BETWEEN FIT AND TENURE

Chapter Four includes both a brief discussion of the descriptive statistics for this study and the results of the negative binomial regression models that seek to answer the first three research questions. The chapter is divided into three sections. First, I discuss the descriptive statistics for the three iterations of the survey. Specifically, I focus on outlining trends and patterns in the descriptive data. Second, using the results of the negative binomial regression models for each of the three iterations of the CPS, I discuss the results for both imputed and non-imputed models. Third, I present the findings of the negative binomial regression models for four-year and two-year colleges, separately. The results related to the final two research questions will be presented in Chapter Five.

Descriptive Results

This section presents descriptive statistics for the college presidents used in this analysis. I then identify some of the trends and patterns in the presidency over time and organize the discussion by first analyzing college presidents in the aggregate (i.e., all college presidents). Second, I disaggregate the presidents in this data by whether they served as a president for a two-year or a four-year institution. I conclude by briefly discussing the institutional descriptive statistics of the presidents used in this analysis.

College Presidential Trends. Table 4.1 presents the descriptive statistics for the college presidents for all three iterations of the CPS. While there is a lot of information in this table, I first focus on trends of presidents taken together. A notable piece of data is that the average

Table 4.1: Frequency distributions of selected characteristics for college presidents

	2011			2006			2001		
	All	4-Year	2-Year	All	4-Year	2-Year	All	4-Year	2-Year
Average Completed Tenure	7.15	7.17	7.11	8.54	8.55	8.46	6.74	6.69	7.09
Average Current Age	60.66	61.13	59.69	59.80	60.12	59.16	62.11	62.17	61.75
Sex									
Male	0.733	0.766	0.663	0.771	0.802	0.708	0.785	0.773	0.860
Female	0.258	0.225	0.329	0.229	0.198	0.292	0.213	0.225	0.137
missing	0.009	0.009	0.008	0.000	0.000	0.000	0.023	0.002	0.003
Race/Ethnicity									
White	0.861	0.868	0.845	0.854	0.864	0.835	0.875	0.873	0.890
African American	0.058	0.062	0.051	0.059	0.059	0.059	0.063	0.067	0.044
Hispanic	0.037	0.032	0.047	0.042	0.035	0.056	0.033	0.035	0.023
Asian	0.011	0.010	0.012	0.009	0.009	0.009	0.011	0.015	0.007
Pacific Islander	0.003	0.001	0.006	N/A	N/A	N/A	N/A	N/A	N/A
Native American	0.008	0.004	0.016	0.007	0.004	0.014	0.006	0.003	0.023
missing	0.023	0.023	0.024	0.029	0.029	0.026	0.012	0.012	0.013
Prior Job Institution									
Same Institution	0.276	0.266	0.298	0.263	0.250	0.290	0.258	0.250	0.308
Different Institution	0.563	0.555	0.581	0.643	0.636	0.658	0.630	0.657	0.465
Didn't Work at College	0.138	0.153	0.106	0.080	0.103	0.039	0.091	0.074	0.197
missing	0.023	0.027	0.016	0.014	0.014	0.012	0.021	0.020	0.030
Age at Appointment									
< 41	0.045	0.039	0.056	0.074	0.070	0.082	0.019	0.016	0.037
41-45	0.094	0.093	0.096	0.112	0.117	0.112	0.062	0.060	0.074
46-50	0.155	0.148	0.168	0.241	0.228	0.269	0.125	0.122	0.147
51-55	0.237	0.220	0.274	0.272	0.269	0.276	0.273	0.278	0.241
56-60	0.253	0.266	0.227	0.214	0.220	0.200	0.268	0.274	0.234
61-65	0.125	0.143	0.086	0.062	0.075	0.036	0.176	0.178	0.164
>66	0.030	0.030	0.029	0.009	0.009	0.008	0.047	0.046	0.057
missing	0.061	0.062	0.061	0.017	0.017	0.017	0.030	0.027	0.047
Presidents Prior Job									
President	0.203	0.189	0.231	0.213	0.183	0.273	0.204	0.220	0.104
Provost	0.334	0.317	0.372	0.308	0.291	0.342	0.275	0.292	0.174
Other Academic Administrator/ Faculty Executive(e.g.Finance, Student Affairs)	0.144	0.165	0.099	0.159	0.185	0.104	0.167	0.153	0.251
Outside Higher Education	0.168	0.156	0.194	0.157	0.151	0.169	0.198	0.207	0.137
Missing	0.131	0.157	0.076	0.087	0.102	0.058	0.075	0.059	0.167
	0.020	0.017	0.027	0.077	0.088	0.054	0.082	0.068	0.167
<i>N</i>	1,598	1,087	511	1,970	1,326	644	2,131	1,832	299

completed tenure has risen from 6.74 years in 2001 to 7.15 years in 2011. While tenure does increase during this ten year window, it is important to note that average tenures through the 1960s were over 10 years (March & Cohen, 1974) and even into the 1980s were well over 9 years (Padilla & Gosh, 2000). Given the context of past research, we can see that the trend continues downward. However, this measurement illustrates the volatility of using completed tenure as the sole measure of tenure.

The second trend of interest is that of the age of the president. There are actually two points of interest when considering age. First, the average age of the presidents in these surveys ranges from 62 in 2001 to hovering around 60 in 2006 and 2011. While the presidency has clearly aged since the late 1900s, it seems to have stabilized over the last decade at around 60 years old. This provides some evidence that the mass exodus of presidents caused by age may not be as inevitable as some have claimed (e.g., Cook, 2012; Lederman, 2012). Second, the age at appointment for these presidents has changed slightly over the last decade with 54.1% of presidents being hired between the ages of 51 and 60 in 2001 and only 49.0% of presidents hired from the same age group in 2011. It appears that there were more presidents that were hired at a younger age in 2011 with 24.9% of presidents being hired between the ages of 41 and 50, compared to only 18.7% of presidents in the same age range in 2001.

The third trend is that women have made gains in their proportion of college presidents across the country with 25.8% of presidents being female in 2011, compared to the 21.3% of presidents who were female in 2001. While women have seen increased representation, underrepresented minorities have seen little growth. For example, in 2001 of presidents, 87.4% were white and that declined to 85.4 % in 2006, but by 2011 it had risen again to 86.1% demonstrating the lack of diversity and the stability of the racial representation in the college

presidency. The large portion of presidents being white is one reason that in the analytic models used in this study we do not divide presidents by race, but instead have an underrepresented minority flag for any presidents of color.

The final trend of note in the descriptive data for presidents is related to their path to the presidency. Reed (2001) argued that the path to the presidency was associated with their longevity in office. While the descriptive data cannot provide evidence for that claim, we do see that the path to the presidency has changed over time in two interesting ways. First, there are more current presidents in 2011 that served as a provost prior to their presidency (33.4%) compared to 2006 (30.4%) and 2001 (27.5%). Serving as a provost was by far the most common path to the presidency with the second most common path being a previous presidency, which was consistently around 20% for all three iterations of the survey. In contrast, the other trend in the pathway to the presidency data was an increase in the proportion of presidents who came from outside higher education directly into a presidency. In 2001 only 7.5% of presidents came from outside higher education and by 2006 that proportion had only risen to 8.7%. By 2011, the proportion had almost doubled in one decade to 13.1%. While entering the presidency from outside of higher education is still the least common path, the significant shift in the path to the presidency is noteworthy.

Descriptive Differences Between Two and Four-Year College Presidents. In addition to the trends of presidents in the aggregate, there were also four notable differences in the descriptive data between two and four-year schools. First, the proportion of two-year colleges doubles from 2001 (14%) to 2006 (32.7%), which is evident in in Table 4.2. While there was a greater proportion of two-year school in the 2006 and 2011 iteration of the survey, the other institutional characteristics presented in Table 4.2 were stable. It is important to note that this

Table 4.2: Frequency distributions of selected characteristics for institutions

	2011	2006	2001
Institutional Control			
Public	0.503	0.509	0.495
Private (Not For-profit)	0.444	0.447	0.442
Private (For-profit)	0.031	0.035	0.033
missing	0.023	0.009	0.029
Institutional Size (In Students)			
0-999	0.168	0.196	0.191
1,000-4,999	0.448	0.455	0.424
5,000-9,999	0.178	0.166	0.146
10,000-19,999	0.110	0.107	0.095
20,000 or more	0.072	0.062	0.049
missing	0.024	0.014	0.095
Institutional Sector			
Two-year	0.319	0.327	0.140
Four-year or above	0.658	0.656	0.780
missing	0.023	0.017	0.080
<i>N</i>	1,598	1,970	2,131

demonstrates a shift in the presidents who responded and not a comparable shift in the actual number of two-year schools from 2001 to 2006.

Returning to an examination of Table 4.1 on the presidential characteristics, the second interesting difference was that the tenure of presidents at four-year schools was lower than that of two-year schools in 2001, but from 2006 on four-year school presidents had on average, longer tenure. Conversely, the average age of presidents at four-year schools was consistently higher than that of two-year school presidents. This demonstrates that while presidents have been consistently older at four-year schools, the average tenure has been a little more volatile between two-year and four-year schools.

The third trend is related to the increasing number of female presidents over all in the sample, which rose from 21.3% in 2001 to 25.8% in 2011, as previously stated. It is clear that a good proportion of that gain happened mainly at two-year schools. Specifically, there was no

change at four-year schools in the proportion of female presidents from 2001 to 2011. At two-year schools, the proportion went from 13.7% in 2001 to 32.9% in 2011, which almost tripled the proportion of female presidents at two-year schools. While not as drastic, the proportion of underrepresented minority presidents at two-year schools also increased from 11% in 2001 to 15.5% in 2011 with gains made in every racial category. In contrast, there were no comparative gains made at four-year schools in the racial diversity of college presidents.

The final substantive difference in the descriptive data is in the pathway presidents take to their role. Of note, from 2001 to 2011 the number of presidents who entered the presidency from outside higher education rose in each of the three iterations of the CPS. However, that increase was exclusively at four-year institutions. To illustrate, in 2001 only 5.9% of presidents had been selected from outside higher education at four-year institutions. In 2006 the proportion of presidents hired at four-year institutions from outside higher education had risen to 10.2% and by 2011 it was at 15.7%. Conversely, at two-year schools the proportion of presidents hired from outside higher education was 16.7% in 2001 and by 2011 it was nearly half that proportion at 7.6%. At two-year schools, it seems that presidents are coming from a more diverse range of pathways but the biggest increase in proportion of presidents to come from one path was that of executive vice presidents (e.g., student affairs, finance, development, etc.), which rose from 13.7% in 2001 to 19.4% in 2011.

Summary of Descriptive Statistics. In summary, there were a number of substantive shifts in the demographic representation of presidents from 2001 to 2011. Despite the common perception that the presidency is aging, it has actually been somewhat stable from 2001 to 2011. Similarly, tenure and the racial representation of presidents has been stable. In contrast, there are more female presidents and the pathway to the presidency has shifted over the last decade.

Both the increased representation of female presidents and the shift in the pathway to the presidency are more complex when comparing two-year schools to four-year schools. Specifically regarding the proportion of female presidents, two-year schools had greater increases in their proportion of female presidents (13.7% in 2001 to 32.9% in 2011) when compared to four year school which have been consistent at 22.5% from 2001 to 2011. The pathway to the presidency became much more complex when considering that four-year schools are selecting a greater proportion of presidents from outside of higher education (15.7%) in 2011 compared to (7.5%) in 2001. Whereas, two year schools are selecting more executive vice presidents (19.4%) in 2011 to fill their highest office compared to 2001 (13.7%).

Negative-Binomial Regression Results

The research questions addressed by the negative-binomial regression results include: 1) What are the main organizational and demographic factors associated with declining college presidential tenure, and how have they changed over time?; 2) Is fit (supplementary or complementary) associated with presidential tenure?; and 3) Do the factors associated with presidential turnover differ by institutional type? I first present the negative-binomial regression models that estimate the relationship between presidential characteristics, organizational characteristics, and fit that include all presidents (see Table 4.2). I ran separate regression models for each of the three iterations of the survey (e.g., 2001, 2006, and 2011) and combined them into one table for ease in comparison.³⁶ In addition, I present both the results of the regression models that did not use multiple imputation (No Imp) and the results which did utilize multiple imputation to handle the missing data (Imp) in Table 4.3.

³⁶ I ran each of models in nested form to analyze how the addition of institutional and fit variables effected the various relationships but found little variation. Nested models are available upon request.

Table 4.3: Negative-Binomial Regression of Years of Presidential Tenure Reported as Incident Rate Ratios- All Colleges (Non-Imputed and Imputed)

		2001		2006		2011	
		<i>N=1,143</i>	<i>N=1,855</i>	<i>N=1,240</i>	<i>N=1,747</i>	<i>N=1,122</i>	<i>N=1,510</i>
		No Imp	Impute	No Imp	Impute	No Imp	Impute
Age at Appointment		0.933 ^{***}	0.936 ^{***}	0.938 ^{***}	0.942 ^{***}	0.948 ^{***}	0.950 ^{***}
		(0.004)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
	Female	0.877 ^{**}	0.881 ^{***}	0.989	0.954	0.939	0.924 [*]
		(0.053)	(0.040)	(0.046)	(0.036)	(0.054)	(0.043)
	Underrepresented Minority	0.977	0.908 [*]	0.965	0.964	0.966	1.030
		(0.074)	(0.050)	(0.057)	(0.045)	(0.077)	(0.063)
Prior Job (Ref. Provost)	President	1.183 ^{**}	1.121 ^{**}	1.131 ^{**}	1.111 ^{**}	1.120	1.128 ^{**}
		(0.078)	(0.059)	(0.061)	(0.050)	(0.079)	(0.065)
	Academic-Leadership/Faculty	1.184 ^{**}	1.178 ^{***}	0.914	1.021	0.964	1.008
		(0.084)	(0.063)	(0.057)	(0.048)	(0.077)	(0.064)
	Vice President(e.g., Business, Development, Student Affairs)	1.085	1.051	0.968	0.964	0.935	0.908
		(0.072)	(0.054)	(0.057)	(0.045)	(0.069)	(0.056)
	Outside of Higher Education	1.077	1.161 [*]	1.089	1.136 ^{**}	1.295 ^{***}	1.284 ^{***}
		(0.106)	(0.088)	(0.083)	(0.069)	(0.117)	(0.089)
Field of Study (Ref. Educ.)	Social Sciences	1.054	1.237 ^{***}	1.032	0.992	1.019	1.017
		(0.113)	(0.082)	(0.072)	(0.048)	(0.105)	(0.071)
	Applied Field (e.g., Law, Business)	0.892	0.869 ^{**}	0.820 ^{***}	0.844 ^{***}	0.925	0.903
		(0.077)	(0.058)	(0.057)	(0.045)	(0.075)	(0.061)
	Humanities/ Theology	1.051	1.045	1.048	1.043	1.089	1.099
		(0.070)	(0.054)	(0.059)	(0.047)	(0.077)	(0.065)
	Physical/Life Science	1.344 ^{***}	1.011	1.020	1.032	1.099	1.207 ^{***}
		(0.075)	(0.055)	(0.061)	(0.060)	(0.080)	(0.078)
Control (Ref. Public)	Private Non-Profit	1.112	1.124 [*]	1.060	0.992	0.917	0.933
		(0.084)	(0.070)	(0.071)	(0.053)	(0.078)	(0.064)
	Private For-Profit Institution	0.677 ^{**}	0.854	0.649 ^{**}	0.818 [*]	0.535 ^{***}	0.646 ^{**}
		(0.133)	(0.117)	(0.111)	(0.097)	(0.111)	(0.098)
	Institutional Size	Included	Included	Included	Included	Included	Included
	Proportion of Revenues -Tuition	1.043	1.046	1.135	1.208 [*]	1.453 ^{**}	1.348 ^{**}
		(0.133)	(0.112)	(0.150)	(0.129)	(0.225)	(0.172)
	Proportion of Expenses -Instruction	1.628 [*]	1.208	0.948	1.001	1.287	1.104
		(0.459)	(0.253)	(0.225)	(0.181)	(0.390)	(0.274)
	Proportion of Expenses - Research	1.139	1.215	2.638 ^{**}	2.164 ^{**}	1.203	1.197
		(0.581)	(0.451)	(1.124)	(0.770)	(0.586)	(0.501)
Supplementary Fit	Internal Hire	1.138 ^{**}	1.029	1.085 [*]	1.017	1.102	1.172 ^{***}
		(0.066)	(0.045)	(0.053)	(0.039)	(0.069)	(0.055)
	Congruence Between Occupy Time/ Enjoy Work	0.942	1.077	1.152 ^{***}	1.138 ^{***}	1.098 [*]	1.089 [*]
		(0.050)	(0.051)	(0.049)	(0.049)	(0.058)	(0.049)
Complementary Fit	Congruence Between Occupy Time/ Insufficient Preparation	1.166 ^{***}	1.137 ^{***}	1.055	1.051	1.174 ^{***}	1.103 [*]
		(0.061)	(0.047)	(0.052)	(0.047)	(0.069)	(0.058)
	Provided accurate view of the Challenges of the Institution	1.052	1.088	1.011	1.038	1.000	1.003
		(0.078)	(0.065)	(0.058)	(0.053)	(0.070)	(0.061)
	Provided accurate view of the Financial Situation	0.905	0.950	1.054	1.039	0.906	0.932
		(0.061)	(0.056)	(0.054)	(0.047)	(0.061)	(0.053)
	Provided accurate view of the Board Expectation	0.929	1.000	1.151 ^{**}	1.141 ^{**}	1.229 ^{***}	1.193 ^{***}
		(0.069)	(0.062)	(0.072)	(0.061)	(0.096)	(0.081)
	Provided accurate view of the Institutional Expectations	1.015	0.897 [*]	0.871 ^{**}	0.888 ^{**}	0.942	0.950
		(0.078)	(0.058)	(0.055)	(0.047)	(0.074)	(0.066)

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

I found little difference between the imputed negative-binomial results and the non-imputed results. It is important to note that the similarity between the two models is a positive indication that the imputation model used was good. Even though little difference was found between the imputed models and the non-imputed models, as a best practice both are presented. However, for convenience I focus my reporting of the results using the coefficients that were created using multiple imputation to handle the missing cases.

The second results I present are for four-year schools and two-year schools alone, which allow me to compare the two institutional types and identify any meaningful differences (See Table 4.4). In Table 4.4 results of the negative-binomial regression that was run using multiple imputation are the only coefficients presented. For all negative-binomial regression models, the coefficients are displayed as incident rate ratios (IRR). This makes them easier to interpret given the outcome of tenure. Specifically, the IRR is the estimated rate that a specific outcome will happen, in this case an additional year of service (tenure), if there was a one-unit increase in the given variable. In this model each IRR calculates the likelihood of the president remaining another year. So, for positive relationships the “risk” of remaining another year is increased and for negative relationships, the “risk” decreases. For example, if the coefficient for the proportion of revenue garnered by tuition was 1.043, then we could say that given the other variables held constant in the model for every one-unit increase in the proportion of revenue garnered by tuition we would expect to see a 4.3% increase in the probability that the president would return another year.

One final thing to note is the limitation associated with the sample analyzed here. As discussed in Chapter Three, through the use of multiple imputation I include almost all presidents who took the survey in each of the three iterations. However, as illustrated by the

changing descriptive statistics discussed in this chapter, it is clear that different institutions and their leaders have engaged with the ACE survey over the last decade. For example, there are substantially more two-year schools participating in 2011 than in 2001. This change in the sample makes aggregate comparisons from iteration to iteration somewhat problematic. Having a heavily weighted sample of presidents from either four-year or two-year schools in one year could give one set of results, and then as the balance shifted it would look like something had changed over the years, when in reality the change may be tied to the balance of institutional type. However, when the analysis is divided by institutional type, comparisons from year to year are more useful and the balance will be less important because I compare a group of two-year schools from 2001 to a group of two-year schools in 2011. This second analysis also helps to clarify what some of the changes in the aggregate analysis might mean.

Factors Associated with Presidential Tenure

Table 4.3 presents the results of the negative-binomial regression model with both the coefficients that utilized multiple imputation to handle missing cases and those that were not imputed.³⁷ I focus the discussion on the imputed coefficients and on the relationship between college presidential tenure as the way to best answer RQ1 and RQ2. Given that the three iterations of the CPS were given at different points over a ten-year period, I also discuss how the relationships have changed over time.

Presidential Characteristics. A well-documented, but consistently notable result is the relationship between the age of the president at appointment and college presidential tenure, which in this study had a statistically significant relationship ($p < .01$). This result was consistent for all three iterations of the survey when holding all other variables constant. Specifically, I

³⁷ For convenience, a Table that only displays imputed coefficients can be found in Appendix D.

found that as the age at appointment of the president increases, the likelihood that the president will remain in the position decreases every year. In addition, I found that female presidents, compared to their male counterparts, have associated lower tenures. However, sex was only significant in 2001 ($p < .05$) and in 2011 ($p < .10$). This is the first study to find a statistically significant finding between tenure and sex. In part, this may be due to the increasing representation of women in the college presidency. In contrast, when comparing underrepresented minorities to white presidents, there were still no statistically significant results, though for all three iterations the relationship between being an underrepresented minority and tenure was negative.

Analyzing the relationship between a president's background and tenure as a president also illuminated a few interesting relationships. First, when compared to having a prior job as a provost, serving as a president or coming from outside of higher education both were found to be associated with increasing likelihood of longer presidential tenure. Specifically, serving as president subsequently to the current presidency was associated with a higher likelihood of additional year of tenure ($p < .05$). This relationship was at its strongest in 2011 where serving in a subsequent presidency was found to increase your likelihood of an additional year of tenure by 12.8%. In a similar vein, presidents' academic background was found to have some consistent relationships with presidential tenure, with the notable exception of social science. Presidents with an academic background in physical/life sciences and humanities/theology had a consistently positive relationship with tenure when compared to a background in education, though it was only significant for presidents in the physical/life sciences. In contrast, presidents who had an academic background in select applied fields like business, law, and medicine had consistently significant negative relationship with college presidential tenure.

These findings were consistent with the one tenant of H1, in that the age of the president had a consistently negative relationship with the president's likelihood of an additional year of tenure. However, other relationships were also found to be significant demonstrating the importance of including individual presidential characteristics when seeking to predict college presidential tenure.

Organizational Characteristics. The relationships between organizational characteristics and presidential tenure presented in Table 4.3 are not as consistent as the presidential characteristics. For example, the relationship between institutional size and presidential tenure was sporadic at best across the three iterations of the survey. Similarly, institutional control also had sporadic results. In 2001, being a president at a private non-profit institution was associated with higher presidential tenure when compared to a public institution ($p < .10$). In 2006 and 2011, it was found to be associated with lower presidential tenure when all other variables were held constant, though not at a statistically significant level. Private for-profit institutions had the only consistent relationship, regarding institutional control, across the three iterations of the survey, which was an increasingly negative statistically significant relationship with presidential tenure when compared to their public non-profit counterparts. In 2011, the likelihood of a private for-profit president to return another year decreased by 36% ($p < .01$), the strongest negative relationship in the entire model.

In addition to including institutional control and size, a select number of expense and the revenue categories were included. The relationship between these categories and presidential tenure was more consistent than the relationships with institutional size and control. For example, the proportion of the institutional revenue that was garnered from tuition had an increasingly positive relationship with tenure which was strongest in 2011 ($p < .05$). Specifically,

in 2011 for each unit increase in the proportion of revenue that was collected in the form of tuition, the likelihood that the president would be there another year rose by 34.8%. Similarly the proportion of expenses that were used for instruction and research were also positively associated with tenure in all iterations, though not at a consistently significant level.

These findings were inconsistent with another tenant of H1 in that neither being a president from a private non-profit college nor institutional size had a statistically significant relationship with the president's likelihood of having a longer tenure. However, other relationships were found to be significant. Most notably the proportion of revenue accounted for by tuition. Though this relationship had been found internationally (Robken, 2007), this is the first time it has been confirmed domestically.

The Role of Fit in Presidential Tenure. In RQ2 I question the imperative of including measures of fit in a model measuring the relationship between presidential tenure and select presidential and organizational characteristics. In addition to the inclusion of presidential and organizational characteristics, Table 4.3 also includes variables that account for the relationship between fit (supplementary and complementary) and presidential tenure.

Supplementary Fit. There are two measures of supplementary fit included in this study. The first measure was whether the president was an internal hire or external hire. I found that being an internal hire had a positive relationship with tenure in all three iterations of the survey, but it was only significant in the 2011 iteration ($p < .01$). Specifically, in 2011 if the president was an internal hire their likelihood of returning for an additional year increased by 17.2%, holding all other variables constant.

The second measure of fit was a congruence variable, which was created using the competing values framework (CVF) to code responses to two questions on the CPS. The first question used focused on what areas of the institution the president enjoyed working in, and the second question centered on what areas of the institution the president actually spent their time. This was used to create the congruence variable where the president was deemed as either congruent or incongruent. This variable also had a positive relationship with tenure in all three iterations, but the relationship was only statistically significant in 2006 ($p < .01$), and 2011 ($p < .10$). Similar to the president being an internal hire, in 2011 if the president's values around where they spend their time, and where they perceive the institution demands them to spend their time are congruent, the likelihood of returning for an additional year increased by 8.9%, holding all other variables constant.

The positive relationship of being an internal hire and having congruent fit between values of the president and the institution is consistent with one tenant of H2. In H2 I predicted that supplementary fit would be associated with longer tenures and that as fit increases, the tenure of the president would also increase.

Complementary Fit. Similar to supplementary fit, there are two measures of complementary fit included in this study. The first measure was the second congruence variable which also used the CVF to code responses to where the president felt insufficiently prepared and where they end up spending the majority of their time. This variable is critical to complementary fit because it measures how well matched the president perceives their skills and abilities are in relation to those demanded by their institution. I found that congruence between the preparedness of the president and their associated perceived expectations had a positive relationship with tenure in all three iterations of the survey, but it was only significant in the

2001 ($p < .01$), and 2011 ($p < .10$) iterations. In 2011 I found that when the president had high complementary fit congruence their likelihood of returning for an additional year increased by 10.3%, holding all other variables constant.

Four questions from the CPS were used to account for the second measure of complementary fit. Each of the four questions focused on the understanding that the president had about a broad concept. Namely, the presidents were asked if they were provided an accurate view of the institutional challenges, financial condition of the institution, the board's expectations, and expectations of the institutional community in general. The relationship between these four questions and college presidential tenure was somewhat sporadic. However, having an accurate view of the governing boards expectations was consistently positive through all three iterations and statistically significant in 2006 ($p < .05$) and 2011 ($p < .01$). In contrast, having an accurate view of the institutional expectations had a consistently negative relationship with tenure which was statistically significant in 2001 ($p < .10$) and 2006 ($p < .05$).

The results of this study were consistent with H2, which argued that complementary fit between the president and the institution would be associated with longer tenures. Not only were their statistically significant relationships, but those relationships were positive, meaning that as congruence increased so did the likelihood of the president remaining for an additional year. In addition, the results of this study were particularly interesting because of the often hypothesized, but previously not confirmed, positive relationship between having an accurate view of the governing boards' expectations as the president (Huddleston et al., 1984).

Tenure in Differences by Institutional type (Two and Four-year Schools)

Given the inherent differences between two and four-year schools I ran separate negative-binomial regression models on just two and four-year colleges. Table 4.4 presents the results of those models with coefficients that utilized multiple imputations to handle the missing data. In this section I focus my discussion on the similarities and differences between two and four-year colleges over the three iterations of the survey. These results provide insight into RQ3 which asked if the factors associated with presidential turnover differed by institutional type. For convenience I divide this section into three subsections: presidential characteristics, organizational characteristics, and supplementary/complementary fit.

Presidential Characteristics. The results of the negative-binomial regression models for presidential characteristics in two and four-year institutions are similar on many variables. For example, age at appointment, being female, and being an underrepresented in all three iterations are associated with declining likelihood of serving for an additional year. While the results are only consistently statistically significant for age at appointment ($p < .01$), this demonstrates that for these variables, there is little variance between two and four-year institutions in terms of the direction of relationship with college presidential tenure.

Other presidential characteristics are less homogenous. For example, when compared to a background of serving as a provost prior to entering the presidency, two-year school presidents who served as a president prior to their current presidency have an increase in likelihood of remaining as a president for an additional year. In contrast, presidents of similar background have been decreasing in likelihood of serving for an additional year at four-year schools.

Table 4.4: Imputed Negative-Binomial Regression of Years of Presidential Tenure Reported as Incident Rate Ratios at Two and Four-Year Colleges

		2001		2006		2011	
		N=226	N=1,629	N=588	N=1,159	N=482	N=1,028
		2-Year	4-Year	2-Year	4-Year	2-Year	4-Year
	Age at Appointment	0.945*** (0.007)	0.933*** (0.003)	0.937*** (0.004)	0.943*** (0.003)	0.947*** (0.005)	0.952*** (0.003)
	Female	0.971 (0.166)	0.889* (0.042)	0.901 (0.058)	0.996 (0.048)	0.840** (0.068)	0.976 (0.056)
	Underrepresented Minority	0.665** (0.124)	0.953 (0.056)	0.929 (0.078)	0.980 (0.056)	0.962 (0.106)	1.060 (0.079)
Prior Job (Ref. Provost)	President	1.097 (0.209)	1.119* (0.061)	1.132 (0.086)	1.112* (0.062)	1.263** (0.123)	1.051 (0.075)
	Academic-Leadership/Faculty	1.024 (0.149)	1.202*** (0.070)	1.063 (0.104)	1.003 (0.054)	0.805 (0.109)	1.057 (0.077)
	Vice President(e.g., Business, Development, Student Affairs)	1.057 (0.184)	1.047 (0.057)	0.941 (0.076)	0.993 (0.058)	0.882 (0.093)	0.942 (0.072)
	Outside of Higher Education	1.124 (0.189)	1.165* (0.103)	1.259* (0.166)	1.113 (0.077)	1.277* (0.186)	1.289*** (0.103)
Field of Study (Ref. Educ.)	Social Sciences	1.431 (0.327)	1.215*** (0.086)	1.033 (0.103)	0.972 (0.056)	0.934 (0.160)	0.991 (0.079)
	Applied Field (e.g., Law, Business)	0.967 (0.156)	0.811*** (0.062)	0.906 (0.114)	0.810*** (0.049)	0.650*** (0.100)	0.916 (0.071)
	Humanities/ Theology	1.009 (0.151)	1.055 (0.060)	1.040 (0.120)	1.022 (0.053)	1.142 (0.145)	1.051 (0.073)
	Physical/Life Science	0.721 (0.154)	1.047 (0.060)	1.051 (0.130)	1.013 (0.070)	1.466*** (0.170)	1.111 (0.089)
Control (Ref. Public)	Private Non-Profit	1.158 (0.234)	1.135* (0.078)	1.438 (0.327)	0.982 (0.062)	0.801 (0.224)	0.911 (0.073)
	Private For-Profit Institution	1.193 (0.398)	0.779 (0.120)	1.036 (0.280)	0.772* (0.108)	1.003 (0.322)	0.567*** (0.103)
	Institutional Size	Included	Included	Included	Included	Included	Included
	Proportion of Revenues -Tuition	1.008 (0.206)	1.042 (0.131)	1.180 (0.337)	1.184 (0.142)	0.872 (0.276)	1.354** (0.201)
	Proportion of Expenses -Instruction	1.930 (1.711)	1.173 (0.507)	0.694 (2.313)	2.144** (0.808)	3.000 (9.562)	0.929 (0.407)
	Proportion of Expenses - Research	1.285 (0.642)	1.154 (0.266)	1.421 (0.549)	0.866 (0.187)	1.176 (0.565)	1.067 (0.311)
Supplementary Fit	Internal Hire	0.896 (0.106)	1.055 (0.049)	1.000 (0.00)	1.054 (0.049)	1.096 (0.092)	1.219*** (0.068)
	Congruence Between Occupy Time/ Enjoy Work	1.056 (0.142)	1.085 (0.056)	1.189*** (0.080)	1.116** (0.062)	1.091 (0.087)	1.073 (0.060)
Complementary Fit	Congruence Between Occupy Time/ Insufficient Preparation	1.122 (0.125)	1.151*** (0.052)	1.081 (0.084)	1.048 (0.055)	1.110 (0.105)	1.094 (0.068)
	Provided accurate view of the Challenges of the Institution	1.343 (0.243)	1.042 (0.068)	0.952 (0.086)	1.088 (0.067)	1.064 (0.115)	0.959 (0.071)
	Provided accurate view of the Financial Situation	0.972 (0.154)	0.956 (0.061)	0.995 (0.084)	1.049 (0.056)	0.840 (0.096)	0.966 (0.066)
	Provided accurate view of the Board Expectation	0.844 (0.138)	1.032 (0.070)	1.145 (0.104)	1.132* (0.074)	1.213 (0.160)	1.177** (0.092)
	Provided accurate view of the Institutional Expectations	0.952 (0.171)	0.885* (0.062)	0.955 (0.087)	0.859** (0.056)	0.902 (0.107)	0.976 (0.082)

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

In 2001 two-year presidents who had previously served as a president were expected to increase their likelihood of an additional year by 9.7%, but by 2011 that had risen to 26.3%, which was statistically significant ($p < .05$). This interesting when considering that four-year presidents in 2001 were expected to increase their likelihood of serving an additional year by 11.9% ($p < .05$), but by 2011 that had decreased to 5.1% and was no longer statistically significant. Presidents who had previously served as both academic leadership/faculty or as an administrative vice president (e.g., business, development, students affairs) had a declining likelihood of serving an additional year in both two and four-year colleges, whereas presidents who came from outside higher education saw an increase in likelihood of serving an additional year.

In similar vein, the relationships between the presidents' academic background and their tenure was also sporadic with two notable exceptions. First, at both two and four-year institutions presidents who had an academic background either the social sciences or an applied field had a decreased likelihood of serving an additional year when compared to presidents who had an academic background in education. However, in two-year schools this change was more significant for presidents with a background in applied fields. This is evident in the 2011 literature where the likelihood of serving an additional year at their institutions as a two-year college presidents with a background in an applied field decreased by 35% ($p < .01$). Second, presidents with an academic background in the physical/life sciences had their likelihood of serving an additional year increase at both two and four-year colleges. Again, this relationship was more significant in two-year schools.

Organizational Characteristics. The comparison between the relationships of organizational characteristics at two and four-year schools is especially helpful since institutional

type is an organizational characteristic. By looking at the institutional control, revenue, and expense variables by institutional type I am able to analyze in greater depth the nuance of these variables in a way that was not possible in the aggregate. There were two notable findings while examining the differences and similarities between two and four-year institutions.

First, there were two shifts in the relationship between tenure and institutional control. The first shift was that in 2001 there was a positive relationship between college presidential tenure and being at a private non-profit institution for both two and four-year institutions, but by 2011 there was a negative relationship for private schools when compared to their public counterparts. The second shift was only evident at four-year private for-profit institutions. Specifically, presidents at private for-profit institutions had a decreased likelihood of serving for an additional year by 43.3% ($p < .01$), when compared to their four-year public counterparts. There were insignificant changes at two-year schools.

The second notable finding was the shift in the relationship between the proportion of revenues received from tuition and institutional type. This shift was notable because at two-year schools as the proportion of tuition increases the likelihood of increased tenure decreases, whereas at four-year schools as the proportion of revenues from tuition increases the likelihood of additional tenure increases. In 2011, this divergent pattern between two-year schools and four-year schools reached a climax where presidents at four-year schools saw their likelihood of increased tenure rise by 35.4% ($p < .05$) for every unit increase of the proportion of revenue garnered by tuition.

Supplementary/ Complementary Fit. Disaggregating the data and focusing on two and four-year institutions was also helpful in further analyzing the use of fit and its association with

tenure. For example, while both supplementary fit variables in the model remain increasingly positive for both two and four year institutions, we do see that the relationship between being an internal hire and tenure is especially prevalent at four-year institutions ($p < .01$). Both congruence variables also remain positively associated with presidential tenure, but when disaggregated there is only statistical significance in 2006, which is true for both two and four-year institutions.

One final note for complementary fit is tied to the accuracy of the expectations of the governing board to the president. Similar to the analysis in table 4.4, there is an increasingly positive relationship between the accuracy of the expectations of the governing board and presidential tenure at both two and four-year schools. However, similar to the internal hire variable, this relationship is only significant in four-year schools.

The results of table 4.4 were inconsistent with H3, which argued that two-year colleges would have lower tenures overall and that fit would have a stronger relationship with presidential tenure at two-year institutions. Not only was tenure at four-year schools similar to two-year schools, in 2011 it was higher (see Table 4.1). In addition, while the results of the negative-binomial regression were similar for two and four-year schools, they were stronger at four-year schools than two-year schools.

Summary of Negative Binomial-Regression Results. In summary, the results of the negative-binomial regression confirm that there are strong relationships between presidential tenure and individual/organizational characteristics. The age of the president and the president's prior job were the individual characteristics of the president with the most consistent relationship with tenure. The control and the proportion of revenue collected from tuition were the

organizational characteristics with the strongest and most consistent relationship. These relationships were generally consistent with H1.

While the confirmation of previously studied relationships is helpful, the inclusion of fit in this study also provided new insight. In all three iterations of the CPS, both indicators of supplementary fit (i.e., internal hire, and congruence between occupy time/enjoy work) were positively related to tenure. In addition, they were both statistically significant in the most recent iteration of the CPS. Similarly, three of the five indicators of complementary fit (i.e., congruence between occupy time/insufficient preparation, accurate view of institutional challenges, and accurate view of board expectations) positively related to presidential tenure. The other two indicators (i.e., accurate view of the institutional financial situation and accurate view of institutional expectations) were inconsistent in their relationship with tenure across the three iterations. The positive relationships between measures of fit and presidential tenure were in harmony with H2 in both the direction of the relationship and the statistical significance.

The negative binomial regression results comparing two-year institutions were inconsistent with H3, which argued that two-year colleges would have lower tenures overall and that fit would have a stronger relationship with presidential tenure at two-year institutions. Tenure at four-year schools was similar to two-year schools, and in 2011 it was higher. In addition, the results of the negative-binomial regression were similar for two and four-year schools. For most variables of interest, the strength of the relationship with presidential tenure was higher at four-year schools.

CHAPTER 5

PRESIDENTIAL DEPARTURE AND FIT

Chapter Five presents the results of the event history analysis (EHA) that provides insight into the last two research questions of this study. The chapter is divided into two sections. First, I compare the descriptive statistics of the analytical sample of presidents included in the EHA to the group of presidents excluded from the EHA. I then identify substantive differences in the two groups, thus providing transparency through illuminating any potential bias that could derive from how the sample was selected. Second, I present the results of the EHA. In this section, I discuss the results of the EHA for the whole sample, and then focus on major differences between two and four-year colleges, similar to chapter four.

It is important to note at the outset that the outcome of the EHA discussed in this chapter (i.e., departure) is substantively different from the outcome of interest in chapter four (i.e., tenure in years). In chapter four I utilized negative-binomial regression to measure the relationship between presidential/organizational characteristics, fit, and tenure, or the number of years the president had served as measured in completed tenure. The EHA utilize similar characteristic and fit variables, but it measures the relationship between a president's departure from one institution to another. Thus, comparing the identified relationships in chapter four, with those found in chapter five should be done with caution. Specifically, the EHA analysis provides a greater depth of understanding to one particular type of presidential turnover, as opposed to examining tenure, which does not discriminate between reasons for presidential departure.

Comparison of Descriptive Information for Included and Excluded Presidents

This section presents a brief discussion on how the sample that was used to perform the EHA analysis was selected. I then provide and compare selected descriptive statistics for the group of presidents that was included in the EHA and those excluded from the analysis. While acknowledging that the included presidents were not chosen at random, the objective of this section is to provide transparency into the analysis and demonstrate both the similarities and differences between the two groups.

Selection of Sample for EHA. I now discuss how the presidents that were included in the EHA were selected, and provide a detailed account of each part of the process. First, I began by merging all three iterations of the survey together using a pre-determined ACE leader ID number that corresponds with each individual president in the data.³⁸ Merging the three iterations resulted in 3,638 individual presidents who have taken the survey at least once over the ten-year period from 2001 to 2011. Table 5.1 presents the distribution of how many presidents took the survey

Table 5.1: Distribution of presidents who took each iteration, or iterations of the CPS

Year (s)	2001 Only	2006 Only	2011 Only	2001 and 2006	2001 and 2011	2006 and 2011	2001, 2006, and 2011	TOTAL
Participants	821	342	823	888	28	357	379	3638

Of the 3,638 presidents, 1,986 only took the survey once and were not included in the analysis. This is a necessary decision because at least two completed surveys are needed to identify the presidents who transitioned from one institution to another during the time between the first and second/third survey. An additional, 586 presidents were not included in the analysis

³⁸ The ACE leader ID number exists for each president who has taken the survey since the first iteration in 1986. However, many of the explanatory variables used in this study are not included prior to 2001, thus I chose to only use the three most recent iterations.

because their presidency started before 1995. This “censoring” was necessary to ensure that the fit variables were created within five years of the presidents selection. While fit in this analysis is assumed constant, this decision helps to ensure that everyone in the sample answered the questions used to create the fit construct within a similar period of time from when they started their presidency. Finally, nine additional presidents were missing an institutional id, which made it impossible to determine whether a transition had occurred. This brought the total number of excluded presidents to 2,581 and the total number of presidents included in the EHA to 1,057.

Table 5.2 presents some select descriptive statistics in addition to the difference between the included and excluded group. A negative difference means that there is a higher proportion in the excluded group of that particular descriptive characteristic, whereas a positive difference means that there is a higher proportion in the group of presidents included in the analysis. I now discuss the substantive differences and similarities between the two groups.

Before I discuss the differences between the excluded presidents and those included in the analysis, it is important to note that even with the two groups being similar, my focal outcome may lead to some potential unseen differences potentially altering my findings. The differences are a byproduct of how the samples were selected. As referenced in Chapter Three, I will now discuss who is left out by virtue of each decision, and the potential of that group to limit the generalizability of the results of my analysis.

The largest group of excluded presidents (1,986) was not included because they only appeared in one iteration of the survey because I required a second response to know if they had changed institutions. There are many reasons that a president would not be in a second iteration of the survey, but I focus on the two most common reasons. First, the president could have

retired and thus would not have taken the survey a second time. This is the most likely outcome for the 586 presidents who began their tenure prior to 1995. Since the focus of this analysis is on changing presidencies, or departure, I do not believe this would substantially change my results. However, in future research identifying the actual next step for these presidents (e.g., retirement, job outside of higher education, additional presidency, or a faculty role) would be very informative.

The second most likely reason a president would not have filled out the survey a second time is that they changed jobs out of higher education or moved into a new presidency at an institution that does not participate in the ACE survey. Given evidence of declining tenure, there are likely many presidents who would transition during this time. Further, some presidents may have been transitioning from one presidency to another and thus would not have filled out the survey. Given that changing institutions is the focus of my analysis, this group of excluded presidents could affect the results of my analysis. If I were able to capture all of the changes that occurred during this time, I may find more presidential transitions or departures than I was able to identify with the data in its current state. Thus, the results of this analysis may actually underestimate how frequently presidents depart their institutions.

Differences Between Included and Excluded Presidents. The included group of presidents is 29.1% of the entire sample of presidents who completed at least one of the three iterations of the survey over the last ten years. Given that this is around one-third of the presidents, comparing the two groups to identify noticeable differences and similarities is important to understand what limitations may arise because of the sample used. The similarities and differences of the characteristics of presidents will be discussed first, followed by the similarities and differences of the institutions they serve.

The first noticeable similarities between the two groups of presidents include sex and race. The differences in these characteristics range from 1.3% to .01%, demonstrating that these samples are comparable on these characteristics. It is important to note, that race in this case is referring to whether the president is a person of color (URM), because the presidency is predominantly white (87%) and there are very few presidents in the each more specific racial category referenced in Table 4.1. In contrast to sex and race, there are slightly more presidents who are external hires (as opposed to internal hires) included in the analysis than excluded. Specifically, there was 2.1% less presidents that were internally hired in the group analyzed in the EHA. This difference is also negligible.

The most noteworthy difference between the presidents included and those excluded is their age at appointment. Specifically, there was a 10% difference between presidents included in the analytical sample, and those excluded, with the presidents in the analytical sample being appointed at a more advanced age. The most noteworthy difference was found between the ages of 56-60 where there was a 7.8% difference between the analytical sample and the excluded group. While there are a number of potential explanations for this difference, it is most plausible that this discrepancy is associated with the 823 presidents who were excluded because they were in the 2011 survey only. Given that the included presidents had to have a minimum of two completed surveys, they were excluded from the analysis and would likely be younger at appointment than the presidents from 2001 or the 2006 iteration. This is especially salient when considering that there were a higher number of presidents in 2001 and 2006 whose age at appointment reflects their age when appointed at a second, third, or fourth presidency.

Table 5.2: Frequency distributions of selected presidential/institutional characteristics by those included in the EHA analysis and those excluded from the analysis

		Included	Excluded	Difference
Sex	Male	0.759	0.768	-0.009
	Female	0.240	0.227	+0.013
	missing	0.000	0.003	-0.003
Race	White	0.871	0.869	+0.002
	Underrepresented Minority	0.128	0.129	-0.001
	Missing	0.000	0.001	-0.001
Prior Job Institution	Same Institution	0.249	0.270	-0.021
	Different Institution	0.744	0.710	+0.034
	missing	0.005	0.018	-0.013
Age at Appointment	< 41	0.021	0.042	-0.021
	41-45	0.048	0.091	-0.043
	46-50	0.136	0.158	-0.022
	51-55	0.286	0.260	+0.026
	56-60	0.322	0.244	+0.078
	61-65	0.141	0.136	+0.005
	>66	0.036	0.028	+0.008
	missing	0.005	0.038	-0.033
Institutional Control	Public	0.529	0.495	+0.034
	Private (Not For-profit)	0.442	0.429	+0.013
	Private (For-profit)	0.024	0.044	-0.020
	missing	0.002	0.029	-0.027
Institutional Size (Students)	0-999	0.246	0.251	-0.005
	1,000-4,999	0.525	0.446	+0.079
	5,000 or More	0.215	0.257	-0.042
	missing	0.012	0.044	-0.032
	Institutional Sector	Two-year	0.326	0.334
	Four-year or above	0.665	0.626	+0.039
	missing	0.008	0.038	-0.030
		<i>N</i>	1,057	2,581

Similar to the characteristics of presidents, there were some similarities and some differences between the institutions included in the analytical sample, and those excluded. First, there was little substantive difference between the institutional control of the colleges included and those excluded from the analysis. Though there were 4.7% more public and private non-profit colleges in the included sample, most of that difference was because of the amount of “missingness” for institutional control in the excluded sample, where 2.7% of the cases were missing the information for this particular characteristic. Institutional sector had a similar difference, with

3.9% greater representation of four-year schools compared to two-year schools, with the majority of that difference being in the missing values reported (3.0%) of the excluded group.

Institutional size and sector, however, presented a more notable difference. The representation of the mid-sized institutions (1,000-4,999 students) was 7.9% greater in the analytical sample than in the excluded group. The difference in size, while interesting, should not present any major bias to the analysis because it is used as a control, not one of the main explanatory variables.

In summary, there were only two notable differences identified between the analytical sample and the excluded group of presidents. The first being age at appointment and the second being the size of the institution. Both institutional size and president's age at appointment are used as controls in this analysis, but there may be some unknown connection between how fit is associated with these two variables. The difference between the two groups could also be in how these two continuous variables were divided into categories, thus making the difference less significant than it appears. It is plausible that the differences are more associated with the categorization than any substantive differences between the analytical sample and the excluded group. Thus, these differences should not present a significant bias to the analysis.

Results of the Event History Analysis

The questions addressed by the event history analysis (EHA) on presidential departure are the final two research questions of this study, which include: 4) Has the relationship between organizational fit and turnover changed over time?; 5) Has the relationship between presidential turnover and organizational fit varied over time by institutional type? In this section I present the results of the EHA for presidents in the aggregate adjacent to the analysis for both four and two-

year colleges (see Table 5.3). In contrast to the negative-binomial regression results presented in chapter four, I did not utilize imputation for any missing data in the EHA.

The results of the EHA are displayed as odds ratios (OR). This simplifies the interpretation of a given characteristic, or concept and its relationship with presidential departure. Specifically, OR is the estimated odds that a specific outcome (departure in this case) will model each OR calculates the likelihood of the president departing to another institution. For positive relationships (i.e., coefficients greater than one), the “odds” of departing increases and for negative relationships (i.e., coefficients less than one), the “odds” of departing decrease. For example, if the coefficient for the proportion of expenses expended on research, which has been standardized for this analysis, was 0.986, then we could say that given the other variables held constant in the model for every one-unit (standard deviation) increase in the proportion of expenses spent on research, there would be an associated 1.4% decrease in the probability that the president would depart. In this section I first discuss the EHA results for all presidents included in the analysis, and then discuss substantive differences and similarities between the four and two-year presidential departure analysis.

Results of the EHA from 2001-2011 for All Presidents. The results of the EHA for all presidents are presented in the first column of Table 5.3. I divide my discussion into two parts. First, I report the significant findings for both the presidential and institutional characteristics, related to their relationship with presidential departure over time. Second, I report the findings of the included fit variables and their relationships with departure over time, which will provide insight into the fourth research question of this dissertation.

Table 5.3: EHA of presidential departure (e.g., changing institutions) from 2001-2011

	All	Four-Year	Two-Year
Age at Appointment	0.995 ^{**} (0.002)	0.995 ^{**} (0.002)	0.996 (0.004)
Female	0.993 (0.025)	1.019 (0.034)	0.920 ^{**} (0.037)
Underrepresented Minority	1.033 (0.033)	1.006 (0.045)	1.017 (0.057)
Prior Job (Ref. Provost) President	0.861 ^{***} (0.026)	0.869 ^{***} (0.031)	0.825 ^{***} (0.049)
Academic- Leadership/Faculty	0.928 ^{**} (0.029)	0.951 (0.035)	0.886 [*] (0.058)
Vice President(e.g., Business, Development, Student Affairs)	0.909 ^{***} (0.028)	0.916 ^{**} (0.034)	0.918 (0.051)
Outside of Higher Education	1.007 (0.040)	1.034 (0.047)	0.940 (0.064)
Field of Study (Ref. Education) Physical Sciences	1.041 (0.042)	1.048 (0.048)	0.998 (0.119)
Applied Field (e.g., Law, Business)	1.044 (0.040)	1.044 (0.047)	1.047 (0.079)
Humanities/ Theology	0.985 (0.027)	0.982 (0.032)	1.020 (0.070)
Social Sciences	1.003 (0.032)	0.992 (0.036)	1.112 (0.081)
First Presidency (Compared to Second/Third)	Included	Included	Included
Institutional Control (Ref. Public) Private Non-Profit	1.069 [*] (0.037)	1.024 (0.041)	1.245 (0.191)
Private For-Profit Institution	1.072 (0.120)	1.135 (0.122)	1.323 (0.290)
Institutional Size (Ref. 1,000-4,999) 0-999 Students	0.943 ^{**} (0.027)	0.948 (0.033)	0.928 (0.046)
5,000 or More Students	1.060 ^{**} (0.031)	1.004 (0.037)	1.168 ^{***} (0.059)
Proportion of Revenues Accounted for by Tuition (STD)	0.968 ^{**} (0.016)	0.984 (0.018)	0.883 ^{**} (0.054)
Proportion of Expenses Spent on Instruction (STD)	0.991 (0.013)	0.991 (0.017)	0.985 (0.025)
Proportion of Expenses Spent on Research (STD)	0.986 (0.012)	0.994 (0.013)	1.312 (0.298)
Supplementary Fit Internal Hire	1.036 (0.029)	1.032 (0.035)	1.001 (0.052)
Congruence Between Occupy Time/ Enjoy Work	0.970 (0.021)	0.950 [*] (0.025)	1.050 (0.041)
Complementary Fit Congruence	0.973 (0.022)	0.989 (0.028)	0.913 ^{**} (0.038)
Between Occupy Time/ Insufficient Preparation	1.024 (0.033)	1.004 (0.042)	1.040 (0.057)
Provided accurate view of the Challenges of the Institution	0.964 (0.031)	0.968 (0.037)	0.959 (0.062)
Provided accurate view of the Financial Situation	1.036 (0.036)	1.067 (0.044)	0.969 (0.067)
Provided accurate view of the Board Expectation	0.957 (0.031)	0.957 (0.038)	0.917 (0.054)
Provided accurate view of the Institutional Expectations			
<i>N</i>	1,057	703	345

Coefficients displayed as odds ratios; Standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Presidential and Institutional Characteristics. Similar to the results of the negative-binomial regression, the age of the president had a statistically significant negative relationship with presidential departure ($p < .05$). In addition, neither sex nor presidents being an underrepresented minority had a strong relationship with departure when analyzing presidents in the aggregate. The only other presidential characteristic that had a strong relationship with presidential departure was the pathway to the president, where presidents who had served previously as a president, faculty, or an administrative vice president (e.g., student affairs, finance, or advancement) had lower odds of departing their current institution to a different institution when compared to academic vice presidents.

Similar to the relationships between the presidents' characteristics and departure, there were only a few significant relationships when analyzing institutional characteristics. Specifically, there were differing relationships between institutional size and presidential departure with presidents having higher odds of departing for larger institutions. For presidents at institutions of 5,000 students or larger, there were 6% higher odds of departure when compared to presidents of mid-sized institutions, holding all other variables consistent in the model ($p < .05$). The only additional statistically significant relationship between presidential departure and an institutional characteristic was how much of the revenue the institution garnered from tuition where for every standard deviation increase in revenue from tuition, there was a corresponding 3.2% decrease in the odds of departure ($p < .05$).

Fit Constructs and Presidential Departure. The EHA results for all presidents and the variables created to measure the relationship between fit and departure did not yield any statistically significant relationships. However, the associations between fit and departure were negative for most fit constructs. For example, the supplementary fit and complementary fit

congruence variables both had a negative relationship with presidential departure, meaning that for presidents with high fit their odds of departing their current institution for a different institution decreased. Similarly, if the president received an accurate view of the institution's financial condition and felt that they were given an accurate understanding of the institution's expectations their odds of departure also decreased at a non-statistically significant level.

I hypothesized that there would be a statistically significant relationship between fit and presidential departure over time. Thus, these findings were inconsistent with H4. Though the direction of the relationship was as expected, (i.e., lower fit would increase the odds of departure) I was not able to reject the probability that fit is not associated with presidential departure. However, this analysis provides further evidence to support the argument that select presidential and organizational characteristics are associated with presidential departure to a second institution.

Comparative Results of the EHA for Four and Two-Year Institutions. In an effort to understand if there were substantive differences in the odds of presidential departure between two and four-year colleges when considering presidential/ organizational characteristics and fit, I ran separate EHAs for the two groups of presidents. The second column of Table 5.3 presents the results of the EHA for four-year institutions and the third column presents the results for the EHA of two-year institutions. This section will discuss the substantive differences between these two inherently different institutional sectors. I first discuss the differences by presidential and organizational characteristics. I then focus on the differences in the relationship between departure and fit constructs at two and four-year institutions.

Differences Between Presidential and Institutional Characteristics by Sector. Some of the relationships were consistent across four and two-year institutions. For example, the relationship between age at appointment and having served as a president previously remained constant. However, there were two significant differences. First, there was not a statistically significant relationship between being female and departure at four year institutions.. In contrast, female presidents at two-year had an 8% decrease in their odds of departure holding the other variables in the model constant ($p < .05$). The second difference was in the institutional characteristics. For every one standard deviation increase in the proportion of expenses spent on research at four-year colleges there was an associated decrease in the odds of presidential departure, whereas, at two-year schools for every increase there was an associated increase in presidential departure.

Though there were few major differences, it is important to note that there were differences in the magnitude of the relationship with the characteristic and presidential departure. For example, the relationship between the presidents prior job and departure was similar for both types of institutions, but for two-year schools there was 11.4% decrease in the odds that the president would depart if they came into the presidency from a faculty or mid-level academic job when compared to entering the presidency after being a provost ($p < .10$). The same relationship existed for four-year institutions, but it was not significant, and the odds were not as high. Similarly, though the negative relationship between proportion of revenue garnered by tuition and departure was consistent for two and four-year schools, the magnitude is notable. For every standard deviation increase in the proportion of revenue garnered by tuition there is an associated 1.6 % decrease in the odds of departure of the president at four-year schools, whereas at two-year schools the odds of departure decreased by 11.7% ($p < .01$).

Fit Constructs and Presidential Departure by Sector. Similar to the differences by characteristics, the majority of the discrepancies between four and two-year schools are in the magnitude of the increase or decrease in odds. The most notable of these differences being the complementary fit congruence measure (i.e., occupy time/ insufficient preparation), where at four-year institutions there is only a 1.1% decrease in the odds that the president will depart when congruence is high and for two-year schools there is a 8.7% decrease in the odds that the president will depart ($p < .05$).

There were however, two directional changes in the fit constructs between the two and four-year institutions. Namely the supplementary fit congruence measure (i.e., enjoy work/ occupy time) where at two year institutions there was a positive relationship with departure, and at four-year institutions there was a negative relationship, though neither of these relationships were statistically significant. Similarly, having an accurate view of the governing boards expectations appeared to have a positive relationship with the odds the president would depart at four-year institutions, while it was negative at two-year institutions.

The results of the EHA for two and four-year institutions were consistent with H5, which argued that two-year college presidential departures would have stronger relationships with fit constructs overall. Though the relationships with fit were only statistically significant for one of the fit constructs, congruence between what occupies the president's time and what areas the president felt insufficiently prepared to work in, for the majority of the variables the relationship between fit and presidential departure was more salient at two-year colleges.

Summary of EHA Results

In summary, the results of the EHA confirmed many of the previously identified relationships between presidential/ organizational characteristics and turnover. In this analysis of one specific variation of turnover, departure from one institution to another, which provides unique information to better understanding what may be associated with the presidential turnover challenge. Specifically, age at appointment, pathway to the presidency, institutional size, and the source of revenue were found to have statistically significant relationships with presidential departure.

In contrast, the results of the EHA did not confirm that there was a strong relationship with fit and presidential departure to another institution which was inconsistent with H4. However, the relationship between fit by institutional sector was more salient at two-year colleges than at four-year schools which was consistent with H5. This was especially true complementary fit constructs. This was also evident when analyzing presidential/organizational characteristics and their relationship with departure between two and four-year colleges.

CHAPTER 6

DISCUSSION, IMPLICATIONS, AND CONCLUSION

Given the economic state of higher education institutions and the uncertainty of the future of the university, effective leadership has never been so important. As the leader of those institutions, college presidents are critical to their success and vitality (Cook, 2012; Fisher, & Koch, 2004; Ingram, 1979; Kerr, 1984). While scholars and practitioners alike have argued that effective presidents need longer tenures to build strong relationships and develop a sustainable vision (Kerr, 1970; Korschgen et al., 2001), study after study has concluded that college presidential tenure is in decline (Jones, 1948, Kerr, 1970; Padilla & Ghosh, 2000; Reed, 2002). Table 2.1 illustrated this claim by presenting calculations of presidential tenure over the last 100 years, as compiled by researchers and policy organizations. It is interesting to note that in the early 1900s, presidents served for an average of eight to ten years, whereas by the 1980s the average was down to five to eight years.

Despite the decline, we know very little about what is associated with premature departure (Alton, 1982; Jones, 1948; Kerr, 1970; Monks, 2012). This dissertation offers significant insights into what is associated with presidential tenure, and potential tools to further develop our knowledge of what effects tenure.

While confirming that many previously identified relationships are still associated with presidential tenure (e.g., age at time of selection, career path to the presidency, and institutional control) this dissertation provides evidence that fit matters. Much of the research done previously identified relationships that were outside of the control of institutions. While these

variables are interesting to know, this dissertation brings to light the constructs that institutions do have control over, while still controlling for the immutable characteristics. For example, this study highlights the importance of communicating expectations between trustees and perspective presidents. The inclusion of fit advances both our understanding of declining tenure from a research perspective, and offers potential directions for practitioners to stymie the decline. Specifically, this study provides an impetus for further developing and including measures of fit when selecting college presidents by individual institutions. In contrast to the size and control of institutions, fit between presidents and their organizations are relationships that can be examined and shifted, thus offering potential ways to improve both the tenure of presidents and their relationships with institutional stakeholders.

A second significant contribution of this dissertation is the introduction of a hybrid version of the POF conceptual framework as a potential theoretical foundation for this work. Notably, past research in this area has been limited due to theoretically insufficient implicit and explicit conceptual frameworks (Langbert, 2012; Tekniepe, 2013). Said another way, too many researchers have not sufficiently grounded their work, which has led to disparate findings and minimal progress. By introducing POF, this dissertation coalesces past work in this area and gives future scholars sound theoretical footing.

In short, this dissertation is beneficial to both researchers and practitioners by presenting new conceptual tools that can be used to study and impact the relationship between presidents and their institutions. In this chapter, I discuss the key findings associated with this analysis followed by the relevant implications for theory, policy, and practice. Finally, this chapter presents directions for future research and concludes with some final comments.

Discussion of Key Findings

Changes in the Presidency. This dissertation utilized the same data collected on the college presidency that many scholars over the last three decades have used. However, some similar conclusions and a number of differing interpretations were found when considering trends and patterns of the presidency over the last ten years. I highlight four of those trends in this section, which offer rich context to the discussion of implications and future research, which will be covered later in this chapter.

The first notable trend is the lack of volatility of age over the ten year time span of this analysis. The recent rhetoric around the demographic makeup of college presidents has argued that the presidency is aging, citing the change in the average age of presidents from 2006 to 2011, which rose from 59 to 61 (Cook, 2012; Lederman, 2012). This sharp increase incited fear that an unprecedented number of presidential retirements are eminent. However, when viewing age over the last ten years it is clear that age has been somewhat stable, if not in decline, given that in 2001 the average age of college presidents was 62, a full year lower than the average age in 2011. In addition, the proportion of presidents selected between the age of 41 and 50 increased from 18.7% in 2001 to 24.9% in 2011 which demonstrates that more presidents are coming in at a younger age. When paired with the increasing percentage of presidents that transition to a second presidency, this increasing cohort of younger presidents should help to keep the average age of presidents stable.

A second trend is related to the racial identity of college presidents. While the aggregate race of college presidents has been stable from 2001 (12.6% URM) to 2011 (13.9% URM), the shift at two-year colleges from 11% in 2001 to 15.5% in 2011 demonstrates that at two-year schools the presidency is seeing an increase in the racial diversity of their leaders. Further, at

two-year schools every racial category saw increases except whites. In contrast, at four-year schools the proportion of presidents that were underrepresented minorities has actually declined over the last ten years by .7%. This finding aligns with what scholars and policy makers have been arguing for the last decade (Cook, 2012; Reed, 2002), but it helps to clarify that racial diversity of college presidents is shifting for some institutional types.

The increasing number of female presidents is the third major trend. While still not a comparable proportion to males, the representation of women rose from 21.3% in 2001 to 25.8% in 2011. Similar to race, the majority of the increase was found in two-year schools where the proportion went from 13.7% in 2001 to 32.9% in 2011. Conversely, at four-year schools there was no change in the proportion of female presidents from 2001 to 2011. The increasing representation of female presidents also aligns with past research (Reed, 2002), however this study adds clarity that the increase is almost exclusively happening at two-year schools.

The final trend identified in the descriptive data is associated with the shifting background of new presidents. Specifically, more current presidents served as a provost prior to their presidency in 2011 (33.4%) than in 2001 (27.5%). Serving as a provost is by far the most common path to the presidency with the second most common path being a previous presidency, which was consistently around 20% for all three iterations of the survey. However, providing an interesting contradiction, there was a similar increase in the proportion of presidents who came from outside higher education directly into a presidency. In 2001 only 7.5% of presidents came from outside higher education and by 2006 that proportion had only risen to 8.7%. By 2011, the proportion had almost doubled in one decade to 13.1%. Being selected as president from outside of higher education is still the least common path, but the increasing proportion demonstrates a different view of the experience and skills needed to lead colleges and universities. It is also

important to note that the increase of presidents hired from outside of higher education was exclusively at four-year institutions. To illustrate, in 2001 only 5.9% of presidents had been selected from outside higher education at four-year intuitions. In 2006, the proportion of presidents hired at four-year institutions from outside higher education had risen to 10.2% and by 2011 it was at 15.7%. Conversely, at two-year schools the proportion of presidents hired from outside higher education was 16.7% in 2001 and by 2011 it was nearly half that proportion (7.6%).

Overall, the descriptive findings provide evidence that the college presidency is changing and that those changes are substantively different for four-year and two-year colleges. Specifically, at two-year schools, it appears that presidents are increasingly diverse, both racially and by sex compared to their four-year counterparts. However, at four-year schools presidents are coming from two very divergent pathways. Either they are firmly entrenched in the academic leadership of the institution or they are increasingly from outside of higher education all together, whereas at two-year schools there are few shifts in the pathway to the office of the president. The shifts in the demographic characteristics of presidents and the differences by institutional type provide an impetus to understand the association or personal/organizational factors related to tenure, and the inclusion of measures of fit between the president and the institution. I discuss the major findings of the negative-binomial regression, focusing on the results in the aggregate and then breaking down the results by institutional type.

Factors Associated with College Presidential Tenure. The results of this dissertation provide evidence that is consistent with previously identified relationships between personal/organizational characteristics and tenure (Langbert, 2012; Padilla & Gosh, 2001; Reed, 2002). In addition, this study found that fit between the president and the organization is also

associated with presidential tenure, which supports the overarching hypothesis of this study. In short, this dissertation has helped to catalyze the past research on college presidential turnover and provided evidence of the importance of the interaction between presidential characteristics, goals, skills, demands, values, and those of their organization. The results of the negative-binomial regression are summarized in Table 6.1 with + representing a positive relationship (i.e., likelihood of additional year of tenure increasing) and – representing the converse relationship. Given that there were some trends found while observing the associations between key variables and tenure by analyzing institutions in the aggregate, and some trends that were specific to institutional type (e.g., four-year and two-year), I discuss the key findings in this section accordingly.

All Institutions. The relationships between presidential characteristics and tenure presented in Table 6.1 provide support that there are strong negative associations between the age of the president and the sex of the president, specifically if the president is female. Though a president's age has consistently been found to be negatively associated with tenure (Glen & March, 1985; March & Cohen, 1974; Padilla & Gosh, 2001), the sex of the president had not previously been associated with declining tenure (Reed, 2002). While there are many reasons this relationship may not have been manifest in the past, the current negative relationship demonstrates that sex is an important additional consideration when predicting tenure, as women continue to make up a greater proportion of college presidents. Although not close to parity, the proportion of female presidents in this sample rose from 21% to 25% over the ten-year span of time.

Table 6.1: The Relationship Between Presidential/Organizational Characteristics and Fit Using Negative-Binomial Regression

	2001			2006			2011		
	<i>N</i> =1,855	<i>N</i> =226	<i>N</i> =1,629	<i>N</i> =1,747	<i>N</i> =588	<i>N</i> =1,159	<i>N</i> =1,510	<i>N</i> =482	<i>N</i> =1,028
	All	2-Year	4-Year	All	2-Year	4-Year	All	2-Year	4-Year
Age at Appointment	***	-	-	***	-	-	***	-	-
Female	***	-	-	-	-	-	*	**	-
Underrepresented Minority	*	**	-	-	-	-	+	-	+
Prior Job (Ref. Provost)									
President	***	+	**	**	+	*	**	**	+
Acad. Leadership/Faculty	***	+	***	+	+	+	+	-	+
Admin Vice Presidents	+	+	+	-	-	-	-	-	-
Outside of Higher Education	+	+	+	**	*	+	**	*	***
Field of Study (Ref. Educ.)									
Social Science	***	+	***	-	+	-	+	-	-
Applied Field (e.g., Law)	**	-	***	***	-	***	-	***	-
Humanities/ Theology	+	+	+	+	+	+	+	+	+
Physical/Life Science	+	-	+	+	+	+	+	***	+
Control (Ref. Public)									
Private Non-Profit	*	+	*	-	+	-	-	-	-
Private For-Profit	-	+	-	-*	+	-	***	+	***
Institutional Size	Inc.	Inc.	Inc.	Inc.	Inc.	Inc.	Inc.	Inc.	Inc.
Prop. of Revenues -Tuition	+	+	+	*	+	+	**	-	+
Prop. of Expenses -Instruct	+	+	+	+	-	+	+	+	-
Prop. of Expenses -Research	+	+	+	**	+	-	+	+	+
Supplementary Fit									
Internal Hire	+	-	+	+	+	+	**	+	***
Congruence Between	+	+	+	***	***	***	*	+	+
Occupy Time/ Enjoy Work									
Complementary Fit									
Congruence Between	**	+	***	+	+	+	*	+	+
Occupy Time/ Insuf. Prep.									
Provided Accurate View:									
Challenges of the Institution	+	+	+	+	-	+	+	+	-
Financial Situation	-	-	-	+	-	+	-	-	-
Board Expectation	+	-	+	**	+	*	***	+	**
Institutional Expectations	*	-	*	**	-	**	-	+	+

NOTE: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The relationship between race and the college presidency was less consistent than that of age and sex. In 2001 and 2006 there was a weak negative association between being an underrepresented minority and college presidential tenure. In 2011, a weak positive relationship was found. Given that the presidency is still predominantly white (86%), these results, though

not significant, may not be presenting the most accurate picture of the role race plays in presidential departure.

The majority of the relationship between a president's background and tenure were consistent. For example, when compared to having a prior job as a provost, serving as a president or coming from outside of higher education all were found to be associated with increased likelihood of longer presidential tenure, whereas entering the presidency from academic leadership positions other than provost or from administrative positions led to inconsistent relationships with presidential tenure.

In a similar vein, the relationship between the presidents' academic background and tenure were consistent, with the exception of social science, which was somewhat sporadic. Presidents with an academic background in physical/life sciences and humanities/theology had a consistently positive relationship with tenure when compared to a background in education. In contrast, presidents who had an academic background in select applied fields like business, law, and medicine had a consistent negative relationship with college presidential tenure.

The organizational characteristics associated with tenure were not consistent with the notable exceptions of the proportion of revenues garnered from tuition and the proportion of expenses spent on research. Both had a positive relationship with tenure. Said another way, as the proportion of revenue garnered from tuition, or spent on research increases, so did the likelihood of additional tenure.

The constructs used to measure fit in this study had a generally positive association with an increased likelihood of additional tenure. Specifically, supplementary fit as measured by the president being an inside hire and the congruence between the presidents values and those of

their institution were all positive, and were statistically significant in 2006 and 2011. Similarly, the constructs used to measure complementary fit were positively associated with presidential tenure, with the congruence between presidents' skills and those demanded by the institution being statistically significant in 2001 and 2011. Of the other variables used to measure complementary fit, having an accurate view of the governing boards' expectations was consistently positive through all three iterations and statistically significant in 2006 and 2011. In contrast, having an accurate view of the institutional expectations had a consistently negative relationship with tenure, which was statistically significant in 2001 and 2006.

Based on past research and guided by the new conceptual framework outlined in this study, I hypothesized that in addition to personal and organizational characteristics, there would be a relationship between fit and presidential tenure. Specifically, I argued that fit would be positively related to tenure. The results of this study generally support this hypothesis. However, I also posited that the relationship between fit and tenure of some variables would be different at two-year schools when compared to four-year schools. While my assertion that both characteristics and fit would be associated with tenure, the relationship was similar at four-year and two-year schools, with only a few noticeable differences. In the next section I highlight a few of those discrepancies.

Differences by Institutional Type. There were a few notable differences between four-year and two-year schools when analyzing the relationship between presidential tenure and, personal characteristics, organizational characteristics, or fit. Focusing first on the personal characteristics, compared to a background of serving as a provost prior to entering the presidency, four-year school leaders with academic leadership backgrounds (e.g., dean, department chair) had a positive relationship with tenure, whereas two-year school presidents

with a similar background did not. Further, in 2001 two-year presidents who had previously served as a presidents had an increased likelihood of an additional year, and that relationship was even more significant in 2011. In contrast, four-year presidents in 2001 had an increase in their likelihood of serving an additional year, but by 2011 that relationship had decreased. Similarly, the relationships between the presidents' academic background and their tenure were different when examining the background of ascending to the presidency with a background in an applied field. While both two and four-year schools had a negative relationship between an applied field background and tenure, for two-year school presidents this change was more significant.

Analyzing the organizational characteristic differences revealed two noteworthy findings. First, at both two and four-year schools there was a shift from a positive relationship between tenure and institutional control to a negative relationship. In contrast, only four-year private-for-profit schools saw a decrease in the likelihood of serving an additional years, when compared to their four-year and two-year public counterparts. Second, regarding revenues at colleges, I found that at two-year schools, as the proportion of revenue garnered by tuition increases the likelihood of increased tenure decreases, whereas at four-year school as the proportion of revenues garnered from tuition increases the likelihood of additional tenure increases. In 2011, this divergent pattern between two-year schools and four-year schools reached a climax where presidents at four-year schools saw their likelihood of increased tenure rise by 35.4% ($p < .05$) for every unit increase of the proportion of revenue garnered by tuition compared to a decrease of 12.8% at two-year schools.

Finally, when comparing two and four-year schools on the relationship between fit and presidential tenure I found two noteworthy differences. First, while both supplementary fit variables in the model remain increasingly positive for both two and four year institutions,

internal hire and tenure is especially prevalent at four-year institutions. Second, for complementary fit the accuracy of the expectations of the governing board being relayed to the president is an increasingly positive relationship. However, similar to the internal hire variable, this relationship is only significant in four-year schools.

In summary, the results of the negative-binomial regressions provide additional support for the inclusion of both personal/ organizational factors and fit to best understand declining presidential tenure. Even more important, the conceptual framework put forward provided a way to include past research and structure the concept of fit to reveal strong associations between the fit and presidential tenure. The associated positive relationships provide evidence for the importance of more robust statistical analysis that can account for shifts in presidential and organizational needs and values over time.

The Relationship between Organizational Fit and College Presidential Departure. In conjunction with the findings of the negative-binomial regression analysis, the EHA of presidential departure offers further insight into the role that individual characteristics, organizational characteristics, and fit inform reasons behind presidential turnover. The EHA also provides an important perspective because it limits the definition of turnover to departing one institution to another. Many scholars have argued for more research that focuses on specific reasons for departure, like taking a subsequent presidency (Padilla & Ghosh, 2001).

However, as referenced in chapter five, it is important to note that the EHA and the negative-binomial regression analysis are focused on two related, but inherently different outcomes. As such, the insight they provide to the challenge of college presidential turnover should be viewed as cumulative, and not in conflict with each other.

The results of the EHA, presented in Table 5.3, provide additional insight into how the characteristics for presidents and their respective organization can be viewed as predictors of presidential turnover. In contrast to the negative-binomial analysis, there were no statistically significant relationships between supplementary or complementary fit and presidential departure. However, there was a consistently negative relationship between fit and presidential departure. Said another way, as complementary and/or supplementary fit increased, the likelihood of departing decreased. In this section I discuss the most noteworthy identified relationships by presidential/ organizational characteristics and then for the fit variables.

EHA Results for Presidential and Organizational Characteristics. A few of the characteristics of presidents and their respective organizations were significantly associated with presidential departure. Specifically, a president's age at appointment had both a consistent coefficient, and a significant negative relationship on departure at all institutions and four-year institutions ($p < .05$). In other words, as the age of the president at their appointment increased, their odds of departing to another institution decrease. In conjunction with age, the president's pathway to the presidency has a relationship with a president's odds of departing. For example, in all three iterations, presidents that were coming from a second, third, or fourth presidency had a 12% decrease in their odds of departure across all institutional sectors ($p < .01$). The relationships between these personal characteristics and presidential departure demonstrate that prior experience and perceived future opportunity likely influence individual president's decisions associated with departure.

Similarly, there were a few notable relationships with organizational characteristics and presidential departure. In contrast to the negative-binomial regression of presidential tenure, the EHA found a relationship between institutional size and presidential departure. Specifically, as

the institutional head-count grew, the odds of a president departing for another institution increase ($p < .05$). This finding while interesting, does not clarify if the president is going to a larger institution or a smaller institution. In addition, the proportion of revenue garnered by tuition was also found to have negative relationship with departure ($p < .05$). It is interesting to note that these relationships exist even when controlling for institutional control, and was especially salient at two-year schools.

EHA Results for Fit Constructs. While the results of the EHA on the included fit constructs were not statistically significant, this dissertation provided the first attempt to analyze the relationship of fit with presidential departure that utilized a time-sensitive model. As such, I discuss a few of the broader patterns that should be noted as preliminary evidence of the potential relationship with fit and presidential departure. First, almost all of the fit constructs included in the analysis have negative relationships with presidential departure. In the future research section of this chapter I discuss how this analysis can be improved to better understand what this relationship looks like. Second, the complementary fit congruence measure had the strongest negative relationship with presidential departure, which was statistically significant at two-year schools ($p < .05$). This relationship highlights the importance of presidents and institutions understanding how the skills of the president can be used to benefit the needs of the institution.

In summary, the results of the EHA for presidential departure provide further evidence that in addition to including characteristics of the president and the organization, fit needs to be considered. While the relationships were not as strong in the EHA I now go on to discuss how both of these analyses have provided a stronger conceptual framework for research, and have set the stage for further robust research in this area.

Implications

The framing and analyses presented in this dissertation have significant implications for the study of higher education and the associated practice of leading complex educational institutions. In this section, I discuss how this work focused on understanding college presidential tenure influences the development of theory, the enhancement of practice, and potential directions for future research.

Conceptual Framework and Theory Development. The conceptual framework used in this dissertation was guided by the literature on presidential tenure in higher education and rooted in the interactionist theoretical perspective (Bolton, 1958; Caplan, 1987; Endler & Hunt, 1966). This study makes important contributions by providing insight into how the person-organizational fit (POF) framework can be applied to higher education settings and providing a greater degree of coherence and structure to the study of presidential tenure and departure. Though POF has been used in management literature for decades as a way to account for congruence between the goals/values and the skills/needs of individuals and their associated organizations (Chatman, 1989; Edwards & Shipp, 2007; Kristof, 1996; Ostroff, Schulte, 2007), this study provided insight into the POF framework in two critical ways.

First, there are only a few studies where POF has been used to study executive leadership (see Brigham et al., 2007; Colbert et al., 2008) and higher education (Lindholm, 2003). In this study, POF is used to directly analyze how presidential tenure is associated with the congruence between the goals/values and skills/needs of higher education leaders and those of their organization. By finding consistently positive relationships and in some cases, statistically significant associations between fit and presidential tenure, the case for using this framework to study leaders in higher education and other organizations is strengthened. Further, the focus on

presidents also offered insight into how those goals/values and skills/needs could be conceptualized by using the competing values framework (CVF). The CVF is a well-known cultural assessment tool, but this is one of the first times it has been used in a higher education setting as a methodology for categorizing, and measuring congruence. This study provided an example of how it could be used and also demonstrated reliability and validity for its inclusion in future fit conceptual frameworks.

Second, in 1996 Kristof developed a comprehensive conceptualization the POF framework. Her conceptualization (see Figure 2.1) has been the standard for POF studies since, and was the foundation for the conceptual framework in this study. However, this study posits that there are some characteristics that need to be included that do not necessarily fit into supplementary or complementary fit. For example, age is an important individual characteristic that should be included in the study, but does not have a relevant associated organizational characteristic. Similarly, institutional size does not have a relevant associated individual characteristic to measure congruence with. This study presents a hybrid conceptual framework (Figure 2.2) as a way to re-envision POF. The distinction between characteristics and the two types of fit signifies to researchers that both, POF and additional characteristics are needed to best understand outcomes of interest, in this case turnover and tenure.

In conjunction with advancements to the POF conceptual framework, this dissertation also has a few implications in the theory development of presidential turnover. As the first comprehensive attempt to gather presidential tenure and turnover literature, this dissertation offers evidence to support previous findings in this area, and provides evidence for the inclusions of others that have been overlooked or found to be insignificant in the past.

First, past research has found little to no relationship between race, sex, and presidential tenure. In this study, by analyzing the data over time I was able to identify consistent relationships between sex/race and presidential tenure in the negative-binomial regression analysis and similar relationships in the EHA. In addition, the relationship between sex and tenure was found to be statistically significant in the 2011 iteration, providing evidence for their needed inclusion in future work.

Second, this dissertation demonstrated the sporadic nature of the research done on presidential tenure with regards to institutional type (see Table 2.1). In this study, I found that there were substantive difference between the results of the analysis when all institutions are included in the sample, compared to when the sample only includes two or four-year schools alone. This demonstrates the need for conceptual models to not just account for this difference, but to dissect their data in meaningful ways to best understand what the key factors associated with their outcome of interest include. In a related vein to adding race and sex, this dissertation found that the majority of the increases in diversity over the time frame were occurring in two-year school, which could be tied to the students the institutions are serving or potentially related to mission of the institutions. As leadership diversity continues to be at the forefront of both research and policy discussions, this study provides evidence that substantive differences exist between these two institutional types.

This study applied POF to the study of college presidential turnover. As the tenure of presidents has been in decline, innovative and cross discipline approaches to understanding the factors associated with this challenge are needed. This study provided a hybrid conceptual framework and introduced the CVF as plausible methodological tool to measure the goals and values of institutional leaders and the colleges they serve. Further theoretical and conceptual

gains will require recognizing the work of others and building both conceptual arguments and theoretical roots, as opposed to the isolated approaches with implicit theoretical models that have dominated the discourse previously.

Policy and Practice. Hiring college presidents is a complicated and expensive process (Howells, 2011). Given the substantial investment of time and resources to hire new institutional leaders, selecting a new president that has good fit with the institution is becoming increasingly important because, as this study posits and other scholars attest, strong fit leads to longer tenures (Judge & Cable, 2001; Kristof-Brown & Jansen, 2007). Longer tenures, in turn, have been found to correlate with higher productivity and innovation (Davis & Davis, 1999; Korschgen et al., 2001). The results of this study and its associated conceptual framework can be used in five different ways to help increase the quality of a presidency and the tenure of college presidents.

First, this study provides evidence of the importance of defining fit for both individuals seeking a presidency and the institutions looking to fill a vacancy. This is beneficial as it will help the institution to be intentional in defining the goals, values, skills, and experiences desired in a new leader. Likewise, this study posits that institutional leaders (i.e., governing boards) should also define how the goals of perspective leaders connect with institutional goals and values. This reflective process will help to ensure that there is a transparent expectation for the new president and a subsequent alignment with the new leader and the desired direction of the institution.

Korschgen and colleagues (2001), having seen colleagues take presidencies that were doomed at the beginning, posited that the best way to slow down declining tenure was to, "... make certain there is a fit at the outset"(p.4). Measures of fit start at the beginning of a

president's tenure and are evident throughout their time in office (Howells, 2012). Thus, practitioners are in need of both evidence of the importance of fit and a way to conceptualize it, which this study provides.

Building on this idea, the second, practical implication of this study is the demonstrated importance of the relationship between presidents and their respective governing board. Of all of the measures of complementary fit, presidents having an accurate view of the governing board's expectations had the strongest relationship in the negative-binomial regression analysis with an insignificant but similar relationship in the EHA. This finding could have a number of different meanings. For example, it provides an evidence of the importance of transparency between boards and presidents they are seeking to hire. Another plausible implication is that boards need more in-depth training to develop clear vision and direction for their respective institutions. Sadly, such training is lacking and could be a potential culprit for presidents feeling a lack of clarity from the ever changing governing boards. A final implication related to boards is the need to increase coordination between governing boards and search firms, which currently conduct the majority of presidential searches (Howells, 2011). The conceptual framework used in this study could be used to better understand how fit between presidents and their organizations could enhance the search process and lead to longer presidential tenure.

Third, as an appendage to the importance of governing boards, is the implication that practice is related to presidential evaluation. Given that this study accounted for this relationship over time through the use of EHA, it demonstrates that fit as a dynamic construct could be a framework to be used for presidential evaluations that are conducted throughout the tenure of a president. Presidential evaluations notoriously lack teeth and often are weak in structure. As Davis and Davis (1999) found, the current evaluations also had little impact on performance or

decisions to fire a president. The use of the conceptual components in this study of POF and the CVF, could provide a way for institutional stakeholders to assess institutional goals and values in connection to what they expect from their leader, and could also provide the new leader with better feedback and a clearer vision of institutional and governing board expectations. Further, these tools can be used to identify areas of poor fit throughout a president's tenure in order to encourage discussion on differences, thus helping to increase the length and quality of presidents' tenure. Touzeau (2010) found that problems with interpersonal relationships, failure of the president to adapt to the institutional culture, and difficulty working with key constituencies all had roots in a poor fit between the president and the institution—all of which this framework takes into account.

Fourth, this study demonstrated the consistently negative relationship between being female and presidential tenure in the negative- binomial regression model. In the EHA, two year-schools saw an increase in the odds of departure for female presidents, but only by a small amount. A similar, less consistent relationship was found with presidents who were underrepresented minorities (URM). While both URMs and female presidents have made some gains in terms of their proportion of the presidency, the negative relationship could be a byproduct of two policy oriented challenges. Either presidents who are female or URMs are being headhunted by competing institutions because there are so few, or the environment is not amenable for these presidents who are in the significant minority. Regardless of reason, this study demonstrates the need to continue to diversify the presidency as others have called for through the development of female and URM aspiring leaders (ACE, 2001; ACE, 2006; ACE, 2012; Reed, 2002). This study could also be used to help provide structure for how those leaders consider the institutions they seek to lead.

Finally, this study highlights the importance of comprehensive data. Given that ACE is one of the few organizations that has consistently studied college presidents, their survey is the baseline for obtaining the presidents' perspective. However, the survey could be strengthened by adding questions that can better measure the fit and contextual experiences of presidents. For example, the survey is currently very focused on the presidents' current experiences with little understanding of how their current experience is related to the past, or potential future experiences. In addition, there is only one question on the relationship between the president and the board. This study provides evidence that this relationship is closely related to presidential turnover and more nuanced questions could help to better understand that relationship. Further, additional questions on the survey that can add clarity to the role that identity (i.e., sex, race, and background) have presidential experiences could be helpful. While consistency in this survey is critical to conduct longitudinal analysis, as was done in this study, it is equally important that the wording of the questions be clear and intentional.

The implications of this study are both important to how presidents are selected, how they are perceived, and, as articulated, how their relationship with the institution shifts throughout their tenure. The directions for future research discussed in the next section outline ways that these implications and others could be better understood.

Future Research. In addition to practical implications, there are also many opportunities for this framework to enhance research on college presidential turnover. Decades ago, scholars argued that identifying why and when presidents leave office could help universities deal with, and prepare for institutional changes (Huddleston et al., 1984; Kerr, 1970). The same sentiment is still echoed today (Langbert, 2012), and though this study answers some foundational questions, our understanding of this phenomenon has not progressed sufficiently (Langbert,

2012; Tekniepe, 2013). Given that turnover is a natural part of organizational life (Horn & Kinicki, 2001), having a better understanding, especially in a college's highest office, is needed (Bernadin-Demougeot, 2008). The conceptual framework used in this study, in conjunction with results of the analysis provides a foundation for a number of directions for future research.

First, the conceptual framework allows researchers to illuminate drivers of college presidential turnover because it accounts for both individual/organizational characteristics, and the interaction between presidents and their organization, or fit. With this new conceptual framework scholars can test additional components of fit and develop a sound understanding of what type of fit is most salient when studying leaders in higher education. Said another way, current scholarship fails to account for congruence between the abilities or goals of presidents and their respective organization, and this new framework provides a theoretical base for scholars to examine these relationships.

This study was one of the first attempts at robust longitudinal analysis of presidential turnover, but much more is needed. A second direction for future research is to focus on more robust time series analysis. This study highlighted the importance of tracking associations between characteristics and constructs in relation to outcomes over time. Further analysis could include identifying more outcomes than departure to a second institution. For example, Jones (1948) found that most presidents who left office either died or retired. There is little known about the exit of presidents and future work could help to identify how fit may be associated with not only when presidents exit, but what they do when they depart. Further, a limitation to this study was the limited sample of presidents and the amount of "censoring" in the EHA. Future work should seek to account for all presidents in the sample and confirm how long they are in office and why/where they depart.

Third, the data used in this study were collected over time; however, the survey is not administered frequently enough to conduct the needed robust longitudinal analysis. For example, in the EHA fit was assumed constant. While an argument may be made that fit is somewhat constant, without more frequent administration of the survey, this assumption remains a limitation to this analysis. Future research should seek through more consistent surveying to measure how the diverse experiences of presidents shape their development and lead to organizational and personal outcomes, like turnover. While research on college presidential turnover has shed light on whom presidents are, and from where they come (e.g., ACE, 2006, 2012), we don't fully comprehend how their backgrounds influence their identity or behaviors in the presidency. This type of work could also begin to clarify the dynamic nature of concepts like fit, as they surely shift over time.

Fourth, in this analysis it was found that presidents who came into their position after previously serving as a president had a positive relationship with additional tenure. Given this finding, another direction for future research is to analyze the prevalence, motivation, and outcomes of multiple presidencies. Research in this area is becoming especially needed as the representation of presidents with multiple presidencies increases. For example, using the data in this study 54% of presidents in 2011 held a presidency just prior to their current role, which was up from 40% in 1986 and yet there is little work done in this area (Cook, 2012). Using the conceptual framework in this study, researchers have a structure to analyze what factors may be associated with taking a second presidency in both quantitative and qualitative analysis.

Fifth, there is a need for future research to clarify how presidents are chosen. This research could be helpful to understanding how fit is currently being conceptualized and to identify how current practices are associated with outcomes like turnover. The selection of

college presidents is becoming increasingly managed by a third party executive search firm (Howells, 2011). In fact, twelve percent of presidential searches between 1960 and 1980 employed a search firm or consultant, and between 2007 and 2011, that proportion had risen to eighty percent of presidential searches involving a search firm or consultant (Howells, 2011). Given this exponential increase, more research is needed to answer fundamental questions like: What is the role of these firms in selecting college presidents?, How do search firms identify potential leaders?, What are the benefits and costs of having third party consultants direct the presidential search process?, Who is leading these searches, and what experience do they have?, How are constructs like those identified in this study (i.e., supplementary fit, complementary fit) measured and utilized in the selection process?, and How engaged are institutional stake holders in the selection of institutional leaders? A better understanding of the selection process is critical component to better understanding outcomes like turnover in relation to the constructs identified in this study.

This study also introduced the CVF as both a conceptual construct and methodological tool for studying problems in higher education. While this study focused on presidential turnover, the CVF has been used to study organizational culture change and a variety of other outcomes. Future research should continue to utilize the CVF as a way to conceptualize organizational culture in higher education institutions. Given that cultures may vary by institutional mission or leadership, the CVF as a conceptual construct could add clarity to organizational culture change in higher education institutions. Similarly, the CVF as a methodological tool could be used in future research to code responses and clarify organizational values, as was done in this study.

Finally, this study highlighted the importance of the relationship between presidents and institutional stakeholders (e.g., trustees, executive teams, students, and faculty). Scholars have identified different institutional stakeholders as having an impact on the turnover of college presidents (for example see Donnelly, 1993; Huddleston et al., 1984; Tekniepe, 2013; Touzeau, 2010), but this study provides evidence that relationship between trustees and presidents is especially important in predicting presidential turnover. Scholars should seek to understand how involved stakeholders, especially trustees, are in presidential selection and throughout a president's tenure. In addition, further analysis into what training is offered to trustees and how that training is associated with presidential longevity would be helpful to practitioners seeking to strengthen these clearly important relationships.

In summary, future research should build on both the conceptual contributions and practical findings of this study. Further examination into the entire timeline of presidential search and tenure is needed to not only understand presidential turnover, but to hone in on other outcomes of interest for these critical institutional leaders.

Conclusion

The tenure of college presidents has consistently declined over the last century, while the importance and value of these institutional leaders has increased. Given that empirical evidence, and common sense, suggest that the longer presidents are in office the more likely they are to depart (March & Cohen, 1974; Padilla & Ghosh, 2001), we do not fully understand why that is the case or what may cause premature departure. March and Cohen (1974) state that college presidents, like “mothers, generals, rock musicians, football stars, scientists, U.S. Presidential assistants, prostitutes, and others” (p.191) have limited lives in their jobs. Most of these listed jobs, however, have clear reasons why they end (e.g., age, market changes, set terms)—but this

is not the case with the role of college president. The costs and effects of declining tenure are becoming more prevalent in both scholarship (Langbert, 2012; Trachtenberg, Kauvar, & Bogue, 2013) and popular media (Stripling, 2013; Stripling, 2014). However, too few researchers tackle this paradox, which hinders our ability to slow the decline of presidential transition, and strengthen leadership in college's highest office.

In contrast, there are presidents who remain at their institutions for extended tenures, which stand, in stark contrast to the national norm of increased presidential turnover. One such president, Michael Crow of Arizona State University (ASU), has been in office since 2002. During his over 13 years in office, ASU has almost doubled its enrollment, created unparalleled partnership with industry, and more than doubled the institutional research budget (The New York Times, 2015). His longevity and subsequent sustained changes are an example of what can happen there is fit between a selected president and their institution.

Crow came to ASU with a wealth of experience in growing online offerings, globalizing higher education, and developing interdisciplinary departments (Author, 2002). He was open with his values, goals, and skills when seeking the ASU presidency and there was immediate fit. Both ASU and Crow were seeing the opportunity to be innovative and become a leader in the developing world of on-line learning and interdisciplinary education. In his inaugural address, which is entitled *The New American University*, Crow outlined how the goals of ASU meshed with his own skills and values of innovative education (Crow, 2002). Though Crow's years at ASU have not been without controversy and opportunities to leave, both Crow and ASU have remained loyal to each other. The high level of fit from the beginning seen in this pairing represents both the results that can occur when presidents and their respective institutions are aligned, in addition to the potential benefits of long-term presidents with innovative vision.

While much research has found that individual/organizational characteristics are associated with declining tenure, ASU's success with selecting a president with both a skill-set and vision that aligned with that of the institution demonstrates the result and answer to the overarching question of this dissertation. Specifically, this study demonstrates that fit matters, and the outlined practical implications and future research could lead to stronger leaders who will stay with their institutions, thus providing consistency and sustainable vision.

The declining tenure of college presidents is more than a function of personal and organizational characteristics. It is a complex challenge that requires complex solutions and understanding. The findings of this study will hopefully prompt further research and meaningful discussion about why presidents are "leaving so soon" and what can be done to increase their longevity, and enhance the vitality of their respective institutions.

Appendices

Appendix A: Perceptions of Turnover by Presidents and Trustees (Huddleston, et al., 1984)

<i>Presidents</i>	<i>Trustees</i>
People were elected or appointed to the board who should not have been, and it led to an unworkable situation.	The board lost confidence in the president's ability to lead the college.
The president accepted a more appealing and lucrative position at another institution.	The faculty lost confidence in the president's ability to lead the institution.
The board was over involved in the administrative functions of the institution.	The president could not unite the staff to work toward mutual objectives.
A person bearing a grudge was appointed or elected to the board of trustees.	The president did not sufficiently delegate authority.
The president reached retirement age and decided to retire.	The president did not keep the board well enough informed.
The board vacillated in their support of accepted and approved policies and left the president in a precarious situation.	The president reached retirement age and decided to retire.
The president offended someone in the community, on the board, a faculty or staff member, or an administrator and it turned out to be an error of paramount consequences.	The president offended someone in the community, on the board, a faculty or staff member, or an administrator, and it turned out to be an error of paramount consequences.
The president could not support certain board policy to the public and staff.	Too often the board was not accepting the president's recommendations.
The board lost confidence in the president's ability to lead the institution.	The president made some statements that came back to haunt him.
The president failed to educate the board to differences between the board's responsibilities and the administration's.	The president kept himself too isolated from the faculty and students.

Source: Huddleston et al. (1984)

Appendix B: Coding ACE Responses (Constituents rewarding/challenging)

Individual Flexibility

<p style="text-align: center;">CLAN Collaborate</p> <ul style="list-style-type: none"> ➤ Faculty ➤ Student ➤ Parents 	<p style="text-align: center;">ADHOCRACY Create</p> <ul style="list-style-type: none"> ➤ Alumni/ae ➤ Donors/Benefactors ➤ Community Residents/Leaders
<p style="text-align: center;">HIERARCHY Control</p> <ul style="list-style-type: none"> ➤ Administration/ Staff ➤ Governing Board ➤ System Office or State Coordinating Board 	<p style="text-align: center;">MARKET Compete</p> <ul style="list-style-type: none"> ➤ Media ➤ Legislators and Policy makers

Stability Consistency

Internal Maintenance

External Positioning

Appendix C: Reliability Coefficient Coding for CPS Responses (Constituencies)

	Pre-Discussion	Post Discussion
Administration	1	1
Alumni/ae	0.75	0.75
Governing Board	0.75	0.75
Media	0.5	1
Legislators	0.5	1
Donors/ Benefactors	0.75	0.75
Faculty	0.75	1
Students	0.75	1
System Office or State Coordinating Board	0.75	0.75
Parents	1	1
Community Residents/ Leaders	0.5	1
Reliability Coefficient	0.73	0.91

Appendix D: Negative-Binomial Regression of Years of Presidential Tenure Reported as Incident Rate Ratios (Imputed Only)

	2001 <i>N=1,855</i>	2006 <i>N=1,747</i>	2011 <i>N=1,510</i>
Age at Appointment	0.936 ^{***} (0.003)	0.942 ^{***} (0.002)	0.950 ^{***} (0.003)
Female	0.881 ^{***} (0.040)	0.954 (0.036)	0.924 [*] (0.043)
Underrepresented Minority	0.908 [*] (0.050)	0.964 (0.045)	1.030 (0.063)
Prior Job (Ref. Provost) President	1.121 ^{**} (0.059)	1.111 ^{**} (0.050)	1.128 ^{**} (0.065)
Academic- Leadership/Faculty	1.178 ^{***} (0.063)	1.021 (0.048)	1.008 (0.064)
Vice President(e.g., Business, Development, Student Affairs)	1.051 (0.054)	0.964 (0.045)	0.908 (0.056)
Outside of Higher Education	1.161 [*] (0.088)	1.136 ^{**} (0.069)	1.284 ^{***} (0.089)
Field of Study (Ref. Education) Social Sciences	1.237 ^{***} (0.082)	0.992 (0.048)	1.017 (0.071)
Applied Field (e.g., Law, Business)	0.869 ^{**} (0.058)	0.844 ^{**} (0.045)	0.903 (0.061)
Humanities/ Theology	1.045 (0.054)	1.043 (0.047)	1.099 (0.065)
Physical/Life Science	1.011 (0.055)	1.032 (0.060)	1.207 ^{***} (0.078)
Institutional Control (Ref. Public) Private Non-Profit	1.124 [*] (0.070)	0.992 (0.053)	0.933 (0.064)
Private For-Profit Institution	0.854 (0.117)	0.818 [*] (0.097)	0.646 ^{**} (0.098)
Institutional Size	Included	Included	Included
Proportion of Revenues Accounted for by Tuition	1.046 (0.112)	1.208 [*] (0.129)	1.348 ^{**} (0.172)
Proportion of Expenses Spent on Instruction	1.208 (0.253)	1.001 (0.181)	1.104 (0.274)
Proportion of Expenses Spent on Research	1.215 (0.451)	2.164 ^{**} (0.770)	1.197 (0.501)
Supplementary Fit Internal Hire	1.029 (0.045)	1.017 (0.039)	1.172 ^{***} (0.055)
Congruence Between Occupy Time/ Enjoy Work	1.077 (0.051)	1.138 ^{***} (0.049)	1.089 [*] (0.049)
Complementary Fit Congruence	1.137 ^{***} (0.047)	1.051 (0.047)	1.103 [*] (0.058)
Between Occupy Time/ Insufficient Preparation	1.088 (0.065)	1.038 (0.053)	1.003 (0.061)
Provided accurate view of the Challenges of the Institution	0.950 (0.056)	1.039 (0.047)	0.932 (0.053)
Provided accurate view of the Financial Situation	1.000 (0.062)	1.141 ^{**} (0.061)	1.193 ^{***} (0.081)
Provided accurate view of the Board Expectation	0.897 [*] (0.058)	0.888 ^{**} (0.047)	0.950 (0.066)

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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