OVERALL CAREER SATISFACTION OF FEMALE PRESIDENTS OF AMERICAN HIGHER EDUCATION
INSTITUTIONS: A COMPREHENSIVE DESCRIPTION AND ANALYSIS OF PREDICTORS
(REPLICATED STUDY)

by

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ABSTRACT

The purpose of this study is to replicate the research conducted in 1996 by Dr. Lee Ann Nutt. Using the identical survey questions from Dr. Nutt's research, the overall career satisfaction of higher education female presidents in the United States is calculated for this quantitative study. The results of this study will construct a current description of the overall level of career satisfaction for female presidents, explore the personal (input) and environmental variables that predict career satisfaction, and compare the results of the original study (Nutt, 1996) to the current study.

Due to the increase in female presidents within higher education, assessing the career satisfaction of current female presidents and comparing the results of both studies will increase awareness of the issues and possible roadblocks for females pursing a presidency pathway. This study will also provide insight for governing boards and other hiring entities as they prepare for female presidents at their institution of higher education.

KEY WORDS: higher education, female presidents, career satisfaction

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INTRODUCTION

The primary purpose of this research proposal is to replicate the comprehensive study from Dr. Lee Ann Nutt (1996) that addresses the overall satisfaction of female presidents of higher education institutions in the United States. According to Dr. Nutt (1996), "Despite the growing amount of quality information available regarding female presidents of American higher education institutions, a significant body of literature that focuses on the degree of and determinants for career satisfaction for female presidents is virtually nonexistent" (pp. 1–2). At the time of her study, this research was deemed appropriate because of the increasing number of female presidents of colleges and universities and the length of time a president would remain in his/her position. Both precedents hold true according to the American College President Study of 2017 that reports three out of ten college presidents were women, and the tenure of college presidents continues to decline (American Council on Education [ACE], 2017).

The role of female administrators within higher education is an increasing topic of consideration among researchers. There are questions from this assembly that address demographics, leadership styles, and barriers that female leaders encounter in their quest for achievement. While these topics are vital to the study of female leadership, a more targeted focus on the degree of and determination needed for career satisfaction continues to be lacking within the research (Nutt, 1996).

Since Dr. Nutt's dissertation study in 1996, there has not been a comprehensive and in-depth study on the career satisfaction of female presidents within the higher education setting. However, various studies have been conducted on job satisfaction related to those working at a higher education institution. August and Waltman (2004) is an example of research that studied career satisfaction among female faculty. Howard-Baldwin (2012) researched administrative job satisfaction among four-year institutions of higher education in the southwest region of the United States. While these examples are essential to the overall research on career satisfaction within higher education, they do not address the specific niche of female presidents' career satisfaction at higher education institutions:

> While some broad questions of presidential job satisfaction were included in certain studies, these research projects did not thoroughly examine the distinct elements of job satisfaction, adequately explore determinants and predictors of job satisfaction, nor sample the entire universe of female presidents of higher education institutions. (Nutt, 1996, p. 2)

A replication of this study is needed to examine, analyze, and compare the career satisfaction of female presidents in higher education from 1996 to the current period.

STATEMENT OF THE PROBLEM

The original research of the career satisfaction of American female presidents in higher education was conducted during 1996. During the past 24 years, there has been growth in the number of female presidents, while the tenure of the presidency continues to decline. Because of the increase in female presidencies, it is worthwhile to conduct a replicated study to examine the current overall career satisfaction and compare those results with the research of 1996. A continued decline in years of holding the president position is also an indicator that speaks to

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the effect of career satisfaction. As Thomason (2018) noted: "According to a 2017 survey conducted every five years by the American Council on Education, the average tenure for college leaders was 6.5 years in 2016, down from 8.5 years a decade before" (para. 4).

TREND ONE—INCREASING NUMBER OF FEMALE PRESIDENTS

While there is progress to be made in the representation of women in the presidency role, significant gains have been made during the past 24 years. Nutt (1996) reports that as of 1994-95, 16% of the presidential positions were held by women (p. 4), but by 2017, the ACE reported women held over 30% of the presidential positions. Table 1 summarizes the growth trend of female presidents in American higher education institutions since the year 1871.

Table 1: Percentages of American Female Presidents

YEAR	PERCENTAGE
1871	.18
1975	4.8
1982	7.5
1995	16
2017	30

Nutt, 1996; ACE, 2017

Doctoral-granting institutions, while at a slower pace in their placement of female presidents, have increased from 13% of presidential positions being held by women in 2001 to 22% in 2017 (ACE, 2017). Two-year institutions continue to lead the development of female executives, with 36% of presidencies being held by women. The following table renders a picture of how presidencies among women are divided among institutions of higher education.

Table 2: Percentage of Women Presidents within Higher Education Institutions

DEGREE GRANTING INSTITUTION	PERCENTAGE OF ALL WOMEN PRESIDENTS
Associate's Degree	37
Bachelor's Degree	20
Master's Degree	23
Doctoral Degree	8
Special Focus	10
Other	3

ACE, 2017

While the increase of women in Presidential roles within higher education is a positive indicator for females aspiring to obtain this type of position, the career satisfaction of current female presidents cannot be assumed. Are the current female presidents satisfied with their careers, and was it worth the effort in overcoming situational barriers to attain this position? Reisser and Zurfluh (1987) discuss this question in their writing as they analyze the effects, both positive and negative, an institution's culture places on a female administrator.

TREND TWO—DECREASING PRESIDENTIAL TENURES

A college president's tenure averaged 8.5 years in 2006, seven years in 2011, while in 2016, the average decreased to 6.5 years according to the ACE (2017) report. The trend of decreasing years of tenure has continually declined over the years as the job responsibilities of a president within higher education have become more intense and extensive.

The top five challenges listed by presidents (ACE, 2017) included:

- Never enough money

- Faculty resistance to change

- Lack of time to think

- Problems inherited by previous administrations.

- Belief by others that you are infinitely accessible.

While the ACE report does not discern between male and female presidency tenures, the decline in the number of years spent at a university or college as a president is relevant to the study as it can be an indicator of career satisfaction for both men and women.

Bowman (2017) also discusses the heightened responsibilities of presidents within higher education as she discusses the increasingly complex and stressful job which encompasses responsibilities ranging from strategic planning and relationship building to budgeting and fundraising. While the leaders must be multidimensional, they must also address decreased funding, rising tuition costs, demographic changes, and declining enrollment (Bowman, 2017).

Current statistics also reflect an increase in the average age of a university or college president. Seltzer (2017) reports, "the average president is 61.7 years old, up from 60.7 years old in 2011 and 59.9 years old in 2006" (para. 5). Because of the age of current presidents, we will see a massive departure of administrators holding this position during the next several years as retirement options become more alluring.

As the literature validates, the current position of a higher education president is challenging and requires various skill sets to be successful. This, coupled with the increasing average age of presidents, presents a scenario that facilitates an explanation for the brief tenure at this level of administrator.

THESIS

The research conducted by Dr. Nutt (1996) gave insight into the overall career satisfaction of female presidents and described the variables that contributed to career satisfaction for the population of women respondents. The number of women in presidential positions has almost doubled since Dr. Nutt's research and so it's imperative to replicate the study and evaluate the current variables that affect the career satisfaction of female presidents.

Locke (1984) is still a relevant source as we study the effect of career satisfaction from the female president on the institution she serves. The impact of the organizational culture on the female president's career satisfaction or dissatisfaction will be valuable information as we continue to increase the number of women presidents (Locke, 1984). The woman president's perception and experiences of her work will have significant implications for the institution (Austin, 1985). For these various implications, a replicated study of the overall career satisfaction of female presidents within American higher education institutions is relevant and desired.

STATEMENT OF PURPOSE

The primary purpose of this research project was to replicate the original study of Dr. Lee Ann Nutt (1996) and conduct an in-depth, comprehensive study of the career satisfaction levels of female presidents of higher education institutions in the United States. The goals of this study are to:

- Construct a current description of the overall level of career satisfaction for female presidents

- Explore the personal (input) and environmental variables that predict career satisfaction

- Compare the results of the original study (Nutt, 1996) to the current results.

CRITERION AND PREDICTOR VARIABLES

The criterion variable for this study, overall career satisfaction, "is defined as an affective response by an individual to the interrelated job facets, personal inputs, and environmental elements that concurrently constitute the professional experience" (Nutt, 1996, p. 9). Career satisfaction is not to be confused with job satisfaction, which "tends to measure only the (1) degree of contentment with a particular work role; and (2) the input and environmental elements separately without analyzing their combined effect" (Nutt, 1996, p. 10). Assessing career satisfaction analyzes the combined effect of environmental and input elements on the career choice's contentment.

Astin's (1991) Input Environment-Output Model of Assessment was used to design and choose the predictor variables for the original study (Nutt, 1996) and will be replicated for this research. The predictor variables included both the personal (input) and environmental variables, which influence overall career satisfaction. Inputs can be described as the personal traits that a female president brings to the job, such as age, prior job satisfaction, and marital status (Nutt, 1996). Environmental variables include institutional type, size, and acceptance of the female president on campus (Nutt, 1996). These variables can directly influence the development of satisfaction within the individual.

With the increased demands of a presidency and the changing American culture during the past decade, the need for an updated study on the variables affecting the female presidency is past due. The title or prestige of the position does not indicate that the female president is satisfied with her career choice. With this assumption, the variables associated with

her personal attributes (input) and environment need to be updated and analyzed. This study intends to replicate the original study (Nutt, 1996) that addresses the gap in the literature and asks, "how satisfied are female presidents of American higher education institutions with their careers?" and "what input and environmental variables are related to the career satisfaction of female presidents?"

OBJECTIVE ONE—DESCRIBE

Describing the overall career satisfaction for female presidents of American institutions of higher education is the first objective. One of the most widely used definitions in organizational research is that of Locke (1976), who defines job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1304). A more current definition from Hulin and Judge (2003) states that overall job satisfaction is a multidimensional psychological response that an individual has to his/her job. The psychological responses include dimensions that pertain to the cognitive (evaluative), affective (emotional) and behavioral components of the job. This study, however, is focused on career satisfaction and will use Locke's (1969) Theory, which describes the sum of the evaluations of the discriminable elements by which it is composed.

Based on the definitions and descriptions of overall career satisfaction, five scales were developed to measure the multidimensional components together as a whole. The five scales that Dr. Nutt (1996) developed included the following:

- Satisfaction with the Job Scale
- Satisfaction with Compensation Scale
- Satisfaction with Professional Relationships Scale

- Satisfaction with Performance Scale

- Satisfaction with the Institution Scale.

Each of the scales was comprised of items (or facets) that would appropriately represent the topic of the assessment. Facets or items of the job are defined as the individual features, elements, or aspects of a job that an employee encounters, which influence the overall work experience (Nutt, 1996). There are various methods to decide which facets will be chosen to measure an individual's overall career satisfaction. For this study, the facets were replicated from the surveys that were administered by Dr. Nutt. The original surveys were developed by reviewing related job satisfaction literature, which is also included in this study.

The job facet measurements can be administered in several formats. For this study, a survey was given to all female college and university presidents in the United States, which Dr. Nutt (1996) created in the Likert-type satisfaction scale. The survey's delivery method was different from the original study, which was sent through the United States Postal Service; this study was sent electronically to email addresses. Questions were developed with a rating scale for each job facet, and participants were asked to respond accordingly. Each of the questions addressed the overall career satisfaction components of compensation, relationships, personal performance, and their institution's performance. Through individual responses, career satisfaction was determined for female college and university presidents in the United States (Nutt, 1996).

Objective one was intended to identify the overall career satisfaction of female presidents by measuring the individual facets of job satisfaction and combining the results as a composite score: "By combining the satisfaction scores on different job facets, an overall

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measure of satisfaction can be determined (Thierry & Koopman-Iwema, 1984)" (Nutt, 1996, p. 12). To accomplish this task, facets of the job, compensation, professional relationships, performance, and institutional scales were evaluated and combined to compute the overall career satisfaction measurement. The statistical analysis of this data is discussed further in Chapter Three.

OBJECTIVE TWO—EXPLORE AND PREDICT

To explore and predict the overall career satisfaction of female presidents in the United States, the personal (input) and environmental factors were evaluated to determine their predictive value. While the first objective was to describe the satisfaction of female presidents with the various components of their position as a president, the second objective was to predict the overall career satisfaction of female presidents as it pertains to specific personal and environmental factors.

The model used for the assessment of overall career satisfaction will be Astin's Input-Environmental-Output (I-E-O) theoretical framework (Astin & Antonio, 2012). This framework is used in higher education as a method to analyze variables and their impact on the overall outcome. According to Astin's model, the outcome (e.g., overall career satisfaction) is a function of two factors, including inputs (e.g., demographic characteristics) and environment (e.g., experiences as a president). The diagram below further describes Astin's I-E-O Model: "Input and outcome refer simply to the state of the person at two different time points, and environment refers to the intervening experiences" (Astin & Antonio, 2012, p. 23).

Figure 1: The I-E-O Model
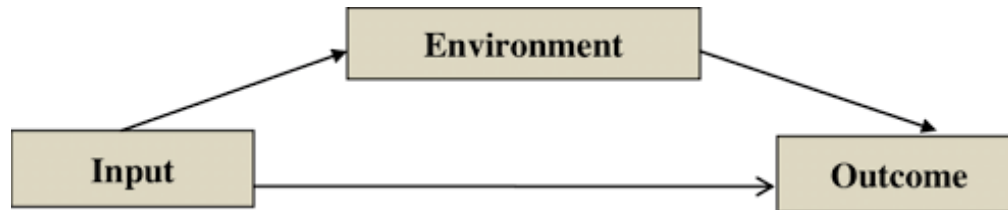
Astin & Antonio, 2012

According to Seashore and Tabor (1976), "Job satisfaction is affected by the personal characteristics of individual workers, and ... the relevant personal characteristics range from the relatively enduring characteristics ... to others that are relatively fleeting, transient, although perhaps recurrent states" (pp. 108–109). The influence of input factors in assessing the overall career satisfaction necessitates the inquiry of personal (input) data from female presidents so that a complete analysis is conducted.

In replicating the study of Nutt (1996), the following personal (input) variables are studied:

- Prior satisfaction measures
- Personal demographics
- Professional demographics.

To measure prior satisfaction, questions regarding compensation, professional relationships, performance, institution, and overall career satisfaction were asked to evaluate the respondent's satisfaction with her position prior to attaining the current president position. Other significant variables within the study include personal demographics (e.g., age, number of school-age children living at home, and marital status) and professional demographics (e.g.,

years in current presidency, total years as a president, and attraction to the presidency). The

personal and professional input variables are summarized in Chapter Three.

As explained in the E-I-O model of assessment, the environmental factors are essential

for analyzing the overall career satisfaction. For this study, the environmental factors for

measurement include:

- Professional involvement

- Personal involvement

- Other variables (institutional acceptance of a female president, whether or not she is the first female president at her institution, and current annual salary)

- Data on the institution at which she is president.

The preceding four categories of environmental factors are summarized in Chapter Three.

The survey contained questions that place importance on the president's involvement

at the college/university. This was intentional because of the influence of the environmental

factors on overall career satisfaction. By adding these questions, Astin's (1991) theory can test

the significance of influence that a president's campus participation has on her overall career

satisfaction.

Astin's (1991) theory takes into consideration the degree at which an individual

participates within their setting and its impact on satisfaction. The individual's investment in

physical and psychological energy determines their degree of involvement, which affects the

satisfaction outcome. While the involvement theory has typically been used for student

development within higher education settings, the concept is also applicable to this situation.

Kahn (1990) discusses the importance of the involvement theory within the context of engaged

or disengaged persons at work: "Engagement at work is not simply about the effort and vigor

that people put forth. It is also about people fully employing their selves—calling forth and expressing themselves in the performance of their roles" (Kahn & Fellows, 2013, p. 105). As Kahn (1990) reports, engagement is an integral part of involvement which supports the use of involvement theory. Buxton et al. (1976) report the effects of a lack of involvement on a president's satisfaction. Buxton et al. cite examples of dissatisfaction for presidents of state colleges and universities because of their lack of involvement with teaching and conducting research, the inability to stay abreast of current developments in their fields of specialization, and their role in the local community. The use of involvement theory for analyzing satisfaction is appropriate for this study.

Involvement in this study is described as professional and personal. Professional involvement includes activities such as:

- Time spent on work-related activities
- Involvement with professional associations and committees
- Interaction with students, faculty, and other pertinent constituents
- Energy devoted to a variety of presidential roles/duties.

Personal involvement refers to the behaviors or activities that a president exhibits when she is outside the role of president. Examples of these behaviors or activities include religious participation, frequency of exercise, and time spent with family. Questions were posed to female presidents on both of these topics because female presidents' personal and professional involvement overlapped and can cause dissatisfaction if either area is not in concert with the other. The concept of separate spheres, "the idea that men should be the breadwinner and women should take care of the home" (Klotz, 2014, p. 7), explains the struggle female

presidents face when balancing work and family life. Determination of how involved the president is with her professional and personal life are factors that directly influence career satisfaction.

Separate data were provided through the survey on environmental topics, such as the institution's acceptance of a female president, her annual salary, and whether she was the first president for her college or university. These answers were supplied by the respondents. Data were also collected on the respondents' institutions, which included Carnegie Classification, student body compositions, affiliation or control (public or private), and full-time equivalent student enrollment through the college websites. These data points can explore the predictive value and effect that an institution's variables have on the career satisfaction of a female president.

OBJECTIVE THREE—COMPARE

Using the information from Chapter Four of Dr. Nutt's (1996) dissertation and the results from the most recent survey, an analysis was conducted as to improvements, changes, and declines represented within the data. The identical questions from the 1996 survey were sent electronically to current female presidents within the higher education system of the United States of America.

RESEARCH QUESTIONS

The primary purpose of this research was to conduct a replicated and comprehensive study of the overall career satisfaction of female presidents of higher education institutions in

the United States. The following research questions were addressed to replicate and compare the objectives of Dr. Nutt's study of 1996.

Objective one described how satisfied female presidents are with their careers via an analysis of five satisfaction scales. To accomplish this objective and determine how satisfied female presidents are with their careers, the following research questions were asked:

- RQ1: How satisfied are female presidents with their jobs?

- RQ2: How satisfied are female presidents with their compensation?

- RQ3: How satisfied are female presidents with their professional relationships?

- RQ4: How satisfied are female presidents with their performance?

- RQ5: How satisfied are female presidents with their institutions?

- RQ6: How satisfied are female presidents overall? (Nutt, 1996, pp. 16-17)

The second objective explored the personal (input) variables and environmental variables related to career satisfaction for female presidents and determined the predictive value of those variables. The research question for objective two was:

- RQ7: Which personal (input) variables and environmental variables predict career satisfaction for female presidents? (Nutt, 1996, p. 17)

JUSTIFICATION OF THE STUDY

Since Dr. Nutt's (1996) original study over twenty years ago, female presidencies have increased along with an awareness of inequalities with women in the workplace. This awareness of inequality caused a fourth wave of feminism that began around 2013 and focused on women's empowerment (Cochrane, 2013). By evaluating the overall career satisfaction of women presidents in the year 2020, an analysis between the two studies can occur that would

be indicative of the progress that has been made in the workplace that supports women in leadership.

Information that was gathered from the current study can also be used to evaluate the changes made in the higher education institutions' structures between 1996 and 2020 to support female presidents. Understanding the positive components that make up the structure of successful institutions can increase the number of women interested in choosing this career path and extend the tenure of current female presidents. Recommendations suggested by a comparison of the two studies can also provide an environment for the successful integration of women presidents.

This study can also impact future leadership opportunities for women that desire to become the president of a college or university. It has become increasingly important for our faculty, staff, and administrators of higher education to represent the students that we serve. According to Mintz (2019), women earn 57.4% of bachelor's degrees, 58.4% of master's degrees, and 52.8% of doctoral degrees. There is a discrepancy in representation, as was stated earlier, that only 30% of college or university presidents are female. The lack of females in presidential positions sends a message to our students about what leadership looks like (Pierce, 2011). It is possible to equitably represent the student body composition within our higher education institutions by addressing the components and structure that is needed to provide longevity in a satisfying career.

Finally, the results and analyses of this study can provide substantial evidence needed for policy and cultural changes within higher education. Understanding the factors that affect career satisfaction and the degree of significance by which they affect the female president can

lead to these necessary changes. The adjustments or changes to policy and culture can occur at the local, state, and federal levels of the educational system.

DELIMITATIONS AND LIMITATIONS

Delimitations were imposed on this study to manage the volume and scope of the research. The replicated study of the dissertation *Overall Career Satisfaction of Female Presidents of American Higher Education Institutions: A Comprehensive Description and Analysis of Predictors* (Nutt, 1996) addresses a large population of female presidents throughout all Carnegie classified higher education institutions within the United States of America, with the exception of for-profit and proprietary institutions. According to data received from Higher Education Publication (2019), there are 1,067 female presidents of higher education institutions, and all were sent the survey. While the study's reach was vast, a delimitation was set by not including other female administrators such as deans, vice presidents, department chairs, or faculty. This delimitation was established to replicate the original study. A delimitation was also set by not including female presidents of foreign institutes of higher education. This was also necessary for the replication of the original study: "The necessary delimitations confine generalizations of the results only to female presidents and chief executive officers of American nonprofit colleges and universities that are degree-granting and accredited by an agency recognized by the U.S. Secretary of Education" (Nutt, 1996, p. 25).

Replication of the original study required the delimitation of a quantitative study as it pertains to empirical measures of satisfaction and the ability to perform qualitative measures. Satisfaction questions were gauged on extremely satisfied or extremely dissatisfied responses and did not assess the particular value of a job aspect. The inability to know personal

satisfaction components for each respondent leads to the study using broad and generalized

questions. Because of possible inaccuracies of the questions, this is a delimiting factor. While

the use of qualitative data would have enhanced the study and possibly the results, the

researcher could not utilize this type of data acquisition in her pursuit of a replicated study.

Certain limitations occurred beyond the researcher's control in the areas of

methodology, instrumentation, and sampling procedures. The methodology used for the

research included a quantitative survey that was emailed to identified female presidents of an

American higher education institution. Each respondent was to self-rate their satisfaction,

which can be considered a limitation on the validity of the replicated study. As an example, a

respondent may be unaware of her feelings, biases, beliefs, or consequences for revealing her

feelings when answering a question (Cripps, 1986). Surveys continue to be used as an

instrument to gather data, while there may be limitations for using this research tool. The final

limitation of the research is the accuracy of the list of female presidents that was developed in

December 2019. Because there are changes in positions regularly, the list may have been

inaccurate due to unforeseen circumstances.

ASSUMPTIONS

Several concepts were assumed throughout the administration of this research project.

The following five assumptions were made through the implementation and development of

the replicated study.

First, there is a theoretical assumption using Herzberg's (1966) Two-Factor Theory.

Within this theory, Herzberg states that certain factors in the workplace cause job satisfaction,

while a separate set of factors causes dissatisfaction, all of which act independently of each

other. This translates to understanding pay contributes little to job satisfaction, whereas

growth in psychological and interpersonal relationships are more likely to lead to dissatisfaction

than satisfaction (Sachau, 2007). This assumption is translated into the empirical data that will

be examined from the survey in Chapters Three and Four.

The second assumption understands the respondents' responsibility in assessing their

work situation and then communicating those insights through a survey that can produce

measurable results. Cripps (1986) gives prudence to the ability of the respondent to respond

appropriately. Austin (1985) concurs by acknowledging the respondent's ability to identify their

attitudes of job satisfaction on a Likert Scale.

Self-reported surveys are a reliable and valid source of data, which is the third

assumption of this research project. Various reports and studies have proven the Likert Scale to

be an effective method for accumulating data. Astin (1991) has used these types of studies

during his scholarly research on student development. Most scholars also agree that the

questions within the survey that use the Likert Scale must be clearly stated and must reflect

subject matter that is familiar to the respondent.

Fourth, there is an assumption that cultural and institutional experiences influence the

responses of a female president. The relationships with faculty, the board of trustees, staff, and

students of a specific institution can impact the overall career satisfaction, whether positive or

negative.

Finally, the leadership style of female presidents has also been considered as an

assumption. Research indicates that women use an interpersonal oriented style of leadership

(Eagly & Johannesen-Schmidt, 2001). Leadership of this nature tends to focus on being a team player and less on hierarchal structures (Nutt, 1996).

THEORETICAL FRAMEWORK

The replicated study used the same theoretical framework as the original study because of similarities in structure. Edwin A. Locke's (1969) Value Theory, which has evolved into the Goal Setting Theory, and Alexander W. Astin's (1991) Involvement Theory form the foundation in which the overall job satisfaction research was conducted.

VALUES THEORY AND GOAL SETTING THEORY

Edwin A. Locke is a retired Dean's Professor of Motivation and Leadership at the Robert H. Smith School of Business at the University of Maryland, College Park, and a current American psychologist. His research with job satisfaction and organizational psychology has been used since the late 1960s.

According to Locke's Value Theory (1969) of Job Satisfaction, the more people receive outcomes they value from their jobs, the more satisfied they will be. It must be understood, however, that aspects of a job that are important may not be the same for all individuals. The most popular definition of job satisfaction was supplied by Locke (1976), who defined it as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1304).

To assist in understanding how value speaks to job satisfaction, Locke (1976) describes "a value as what a person consciously or subconsciously desires, wants, or seeks to attain" (p. 1304). According to this definition, there may be values that a person doesn't realize they

desire, want, or seek to achieve. Dr. Nutt (1996) makes the following assertion concerning

values based upon Locke's research:

> Values are acquired or learned. They may or may not be consistent with or conducive to
> the fulfillment of an individual's needs. Furthermore, when referring to an individual's
> values, this does not refer solely to his/her professed values. What a person says he/she
> values and what he/she values may be inconsistent. Values regulate actions and
> emotional responses and have two attributes: content and intensity. (p. 44)

Added to the equation of job satisfaction is the emotional response that is generated

when values (desire, want, or attainment) are achieved. Locke (1976) describes emotions as

"the form in which one experiences the attainment or frustration of one's values" (as cited by

Nutt, 1996, p. 45). It is important to appreciate the relationship between values and job

satisfaction as research seeks to define the components of overall career satisfaction: "There is

a v-shaped relationship between value importance and satisfaction" (Nutt, 1996, p. 45). If a

value is of high importance, there will be a strong emotional response that could be either

negative or positive. The lower the importance of the value, the less of an emotional response

will be produced, again either positive or negative.

Locke (1976) describes seven job factors that influence job satisfaction or

dissatisfaction. The first factor is the work of the job. The following attributes will impact how a

person views their work:

- Level of love of the activity or personal interest in the work

- Meeting standards of excellence or achievement of the work

- Mentally challenging work that engages the mind; learning new things; and control
  over key aspects of the work

- Belief that the work is in some way important.

The second factor of job satisfaction is the compensation for the work. As stated before, there continue to be pay disparities between men and women (Bleiweis, 2020). According to Locke (1976), for pay to have a positive effect on job satisfaction, the pay must be set by a fair method, and the amount should be fair or exceed expectations of the recipient. Third, promotions or opportunities for advancement must be present in the structure of the job environment. The process for this growth must be fair and transparent to those who have the interest. The fourth factor involves the interpersonal aspects of the environment. Peers and colleagues must be nice to work with, cooperative, considerate, honest, and competent. Fifth, if there is a supervisor, he/she must also be competent, trustworthy, have integrity, considerate, respectful, and share the subordinates' job goals with clear expectations. Competent and honest top leadership is the sixth factor of job satisfaction. The culture of the institution is set at the "top" and influences how the rest of the team views the connectedness of the organization (Bruns, 2018). Last, the organization must support competitive and healthy benefits and policies. This seventh job factor provides safe working conditions that protect both the institution and employee.

Locke (1976) acknowledges that attributes of individuals also play a role in job satisfaction. These individual factors include one's values, personality, and mental health. People will enjoy jobs that are commensurate with their values or allow them to pursue their values.

Understanding how the Value's Theory and Goal-Setting Theory of Locke are connected is critical in setting the foundation for the original and replicated research of this study. As mentioned earlier, outcomes achieved from valued job expectations will create a more satisfied

employee. To understand the expectations or outcomes that are projected, the employee must

be clear on the goals for the job. Goal setting can be difficult, but Young (2017) provides Locke

and Latham's five principles of effective goal setting:

- Clarity. A goal must be specific and clear.

- Challenge. An easy or tedious goal is demotivating. But keep a realistic balance: don't expect anyone on your team to spin straw into gold.

- Commitment. Your employees have to understand and buy into the goal from the outset.

- Feedback. Provide regular feedback throughout the whole process. This helps to keep the goal on track.

- Task complexity. Think about realistic timescales and break down the process into sub-goals with regular reviews. (para. 5)

The Comprehensive Careers Satisfaction survey does not specifically address the goals

of the institution nor the individual. It does, however, ask the respondent about her satisfaction

with detailed job facets by answering the first five research questions.

More detail could be asked in the CCSS to address Locke's Goal Setting Theory and its impact on

career satisfaction.

INVOLVEMENT THEORY

The core concept of Alexander Astin's (1991) Theory of Involvement is based on three

elements of inputs, environments, and outcomes, along with the five basic postulates about

involvement. Involvement is a relevant variable for this study and is combined with Locke's

(1969) Value Theory to provide the theoretical framework for this research.

The inputs of Astin's (1991) theory represent demographics, background, and previous

experiences. The CCSS addresses demographics and background information. Previous

experience information is difficult to capture within the current survey; however, years of

experience data was received. Environment represents the institutional type, size, and

acceptance of the female president on campus while serving in the position of president.

Astin's (1991) Theory of Involvement contains five basic postulates or assumptions. The

first is the assumption that involvement requires an investment of psychosocial and physical

energy. Secondly, involvement is continuous, and that the amount of energy invested varies

from person to person. Next, involvement can be classed as qualitative or quantitative. The

fourth postulate believes that what a person gains from being involved is directly proportional

to the extent to which he/she is involved. Last, performance is directly correlated to

involvement.

Combining the Values Theory (Locke, 1986) and Involvement Theory (Astin, 1991)

provides the structural and foundational support to analyze the overall career satisfaction of

female presidents in the original and replicated studies. Dr. Nutt (1996) describes the validation

of use for both theories in her following summaries:

> Values theory was selected as a conceptual construct for this study for three reasons: (1) "it is the (perceived) job situation in relation to the individual's values that is the most direct determinant of job satisfaction" (Locke, 1976, p. 1304); (2) Values theory works well with the design of the study, which examines facet satisfaction; and (3) Locke recognizes the construct of involvement as an important determinant of satisfaction.

> Involvement theory is simple. Greater involvement leads to greater satisfaction… Secondly, involvement theory, according to Astin, focuses on the motivation and behavior of the person being studied and considers the person's time and energy as a resource… Thirdly, involvement theory is practical as institutional policies and practices can be evaluated in terms of the degree of involvement on behalf of the president. (pp. 49–50)

Both theories are used extensively throughout higher education research which also supports

using them in this study.

DEFINITION OF TERMS

For purposes of clarity and potential replication by other researchers, the following

operational definitions apply. These definitions were used in Nutt's (1996, pp. 30–31)

dissertation.

- CAREER SATISFACTION: An affective response by an individual to the interrelated job facets, personal inputs, and environmental elements that concurrently constitute the professional experience; An overall measure of the degree to which an individual is content and happy with components of the chosen career.

- CARNEGIE CLASSIFICATIONS: Colleges and universities in the United States that are degree-granting and accredited by an agency recognized by the U.S. Secretary of Education and defined as: Research University I, Research University II, Doctoral University I, Doctoral University II, Master's Comprehensive) College and University I, Master's (Comprehensive) College and University II, Baccalaureate (Liberal Arts) College I, Baccalaureate College II, Associate of Arts College, and Specialized Institution.

- ENVIRONMENTAL VARIABLES: Variables which directly influence the development of satisfaction (Astin, 1991).

- INPUT VARIABLES: Personal qualities the president brings initially to the presidency that are treated as predictor variables.

- INVOLVEMENT: The investment of physical and psychological energy in various objects (Astin, 1984).

- JOB FACET: The individual features, elements, or aspects of a job which the employee encounters.

- PRESIDENT: (1) Chief Executive Officer (President/Chancellor) directs all affairs and operations of a higher education institution; (2) Chief Executive Officer Within A System (President/Chancellor) - directs all affairs and operations of a campus or an institution which is part of a university-wide system.

- SATISFACTION SCALE: A grouping of related job facets.

- SATISFACTION WITH COMPENSATION SCALE: Measures the degree to which the female president is satisfied with various extrinsic compensation-related facets, such as salary and fringe benefits.

- SATISFACTION WITH THE INSTITUTION SCALE: Measures the degree to which the female president is satisfied with various institution related facets, such as mission, culture, climate, and facilities.

- SATISFACTION WITH THE JOB SCALE: Measures the degree to which the female president is satisfied with various job-related facets, such as time required to fulfill duties, autonomy, and influence.

- SATISFACTION WITH PERFORMANCE SCALE: Measures the degree to which the female president is satisfied with various performance-related facets, such as leadership, vision, decision making, and communication skills.

- SATISFACTION WITH PROFESSIONAL RELATIONSHIPS SCALE: Measures the degree to which the female president is satisfied with various relationship-related facets, including her relationship with faculty, students, administrators, other presidents, etc.

CONCLUSION

Chapter One has been a review of the initial and current circumstances that have prompted a replicated study of the *Overall Career Satisfaction of Female Presidents of American Higher Education Institutions: A Comprehensive Description and Analysis of Predictors* by Dr. Lee Ann Nutt (1996). The replication is important as the information obtained from current data can be used to assess policy and culture changes while also recommending future implementations for higher career satisfaction. Chapter Two is a comprehensive review of the literature that is relevant to career satisfaction and female presidencies. In Chapter Three, the topics discussed include the research design and specific details of how the study was conducted. The remaining chapters focus on the actual research conducted for this study. The research results are provided in Chapter Four, followed by an interpretation and recommendations of the findings in Chapter Five.

CHAPTER TWO: LITERATURE REVIEW

INTRODUCTION

There is limited information on the overall job satisfaction of female presidents in the United States. The majority of data, both quantitative and qualitative, is related to a broader population of "women in leadership." While the information on this broad topic does not speak to the niche of women presidents in higher education, it can provide a structure that offers valuable insights. After establishing the baseline of information for the broader population of women in leadership, specific facets of career satisfaction are examined for higher education female presidents. These facets are measured in both the original and replicated study using the Comprehensive Career Satisfaction Survey (CCSS). The career satisfaction facets are part of the implications that are discussed in this chapter.

The focus of this literature review has four components that provide the foundation for the overall study. The first area of focus summarizes the historical and present context of women in leadership. Information on stereotypes, legislation, barriers, bias, and other social system inequalities are provided. Second, as this replicated study seeks to evaluate and compare career satisfaction for higher education female presidents, the theoretical framework of Locke's Theory of Value (1969) and Astin's (1991) Theory of Involvement are described. Third, there is an examination of the role presidents undertake within higher education. This section also provides current data and trends related to female presidents currently serving in

the presidential role. Last, the implications within higher education institutions that affect a higher education president's overall career satisfaction are presented. Current and past evidence of these implications is found in this portion of the chapter.

SEARCH STRATEGY

The strategy used to begin researching for this study started with establishing a literature review component outline, which guided the keywords used in search databases. Keywords included but were not limited to female presidents in higher education, leadership, value, involvement, career satisfaction, and job facets. Various databases such as ProQuest, ERIC, SAGE, and the FLITE Library were used for this review. Google Scholar was also utilized during this process. Sources of information included peer-reviewed journal articles, books, educational statistics, white papers, and dissertations.

Current material (within the last five years) and older sources were both employed during the chapter to present the perspective and relevance for the replicated study. Zotero and an excel spreadsheet are utilized to document and organize the material.

HISTORICAL AND PRESENT CONTEXT OF WOMEN IN LEADERSHIP

Numerous informational sources discuss the historical struggle for women in attaining leadership positions. Dating back to the early 1960s when equal rights legislation was passed, women have consistently faced an uphill battle in acquiring leadership positions across all disciplines. Within Dr. Nutt's study (1996), she presents the observations from Vaughan's 1989 article "Female Community College Presidents" and how they can achieve their full potential.

The following barriers and bias, according to Vaughan, can prevent a female leader in higher

education from reaching her full potential:

- Stereotypes associated with women continue to cause some female presidents' difficulty.

- A "double standard" is applied to some female presidents, whereby they are expected to accomplish more than their male colleagues.

- Breaking into the "old boys' network" presented problems for some female presidents.

- All questions that can be even remotely related to gender should be eliminated from the interview process.

- Mentors and role models are important to most female presidents.

- The presidency is viewed as asexual by the majority of the female presidents.

- Nevertheless, all-female presidents should use their assets as women to strengthen the presidency and provide the diversity in the office that is sadly lacking in most situations today. (pp. 25–26)

Fast forward 20 years and women in leadership positions continue to be a focus. A

directed effort from the federal government was developed through The White House Project.

Specific to women's realm in leadership, *The White House Project: Benchmarking Women's*

Leadership report was created and released (The White House Project, 2009). Marie Wilson,

president and CEO of the White House Project (2009) states in the report,

> While women may be participating in the workforce in equal — or in some cases, higher—numbers relative to their male peers, they rarely make it to the top. Across the leadership spectrum in the sectors studied here, women are stalled at 18% — with numbers much lower among women of color. So few women are at the leadership table with men, and the country is not benefiting from their ideas, talent, and experience, especially on corporate boards, on editorial pages, and on the Senate floor. (p. 3)

Also stated within the report are the following key findings from the academia sector:

- Nationally, women are 57% of all college students but only 26% of full professors, 23% of university presidents, and 14% of presidents at the doctoral degree-granting institutions.

- The number of female presidents has not changed in the last ten years.

- Women account for less than 30% of the board members on college and university boards.

- Female faculty have not made any progress in closing the salary gap with their male counterparts. In 1972, they made 83% of what male faculty made; today, 82% of what male faculty make. (The White House Project, 2009, p. 10)

In 2013, The University of Denver-Colorado Women's College released a follow-up report, *Benchmarking Women's Leadership in The United States*. Lennon (2012) found similar results as The White House Project: "By examining top performers and positional leaders, we uncovered data trends revealing that women are often among the highest performers yet are often not proportionally represented in top leadership" (Lennon, 2012, p. 5). The academic sector of the updated report had the following key findings (Lennon, 2012, p. 8):

- Despite women being underrepresented at 29.1% in tenure track positions at doctoral institutions, women researchers comprised 55.88% of grantees for some of academia's more prestigious awards in education, health, humanities, and science.

- In 2012, women-led five of the eight Ivy League institutions.

- Women comprise an average of 24.53% of positional leaders in academia.

- In 2009, women of color accounted for 11.4% of instructors, 10.6% of assistant professors, and only 3.7% of professors.

- At four-year institutions, women earn close to 20% less than their male counterparts.

While progress for women's leadership had been made between the years 2009 and 2012, the inequality of women in leadership remains stark.

Heather Johnson presented updated information in her 2017 report, *Pipelines,*

Pathways, and Institutional Leadership: An Update on the Status of Women in Higher Education.

Within this report, Johnson (2017) provides descriptive statistics on women in higher education

leadership. Through this data, blockades that have and continue to affect women with the

desire to attain leadership roles are identified. Pathways to a presidency, intangible systemic

barriers (also known as glass ceilings), pay discrepancies between male and female presidents,

self-efficacy beliefs, and various patterns of bias are barriers that continue to hinder female

leadership in higher education.

PATHWAYS TO THE PRESIDENCY

The "pipeline myth" is defined by Johnson (2017) as the persistent idea that there are

too few women qualified (e.g., degree-holding) for leadership positions (p. 2). The data show a

very different scenario. According to Johnson's (2017) statistics, women have earned more than

50% of all master's degrees since 1987 and more than 50% of all doctoral degrees since 2006

(p. 3). According to these numbers, qualified applicants for presidential positions is available.

If there are academically qualified women for these positions, what are the other

variables to become a female president within higher education? Johnson (2017) states,

"Women presidents are less likely to be married, less likely to have children, and more likely to

have altered their career to care for dependent, spouse/partner, or parent" (p. 11). Analysis of

the data from Johnson (2017) also indicates that "women presidents are more likely to have

served as a CAO [chief academic officer]/provost or other senior executive in academic affairs"

(p. 11). Kalaitzi et al. (2017) concur with Johnson's report that a more likely path to a higher

education presidency involves time spent within the academic pipeline.

In 1964, the Civil Rights Act and the 1972 enactment of Title IX nurtured noteworthy change within the workforce. The Civil Rights Act of 1964 ended segregation in public places and banned discrimination of employment based upon race, color, religion, sex, or national origin (Encyclopædia Britannica, n.d.). Title IX is part of the Education Amendments that were passed in 1972 as federal civil rights law. Within this amendment, it prohibits sex-based discrimination in any school or other education program that receives federal money (Office for Civil Rights, 2021).

This specific legislation paved the way for the steady rise in college attendance for women. As noted earlier, more than half of the students enrolled in U.S. colleges are women (Johnson, 2017). While women continue to achieve in academics at the same level or higher than men, there are still substantial barriers women face in pursuing leadership within higher education.

WORKPLACE RECOGNITION BARRIERS

Women in higher education face unique workplace recognition barriers or stereotypes. Bartel (2018) states women are still seen as the primary caregivers: "It's one of the oldest stereotypes, and it's still holding women back from advancing in the workplace" (Bartel, 2018, para. 5). The pursuit of academic leadership for women can be hindered by their caregiver responsibilities:

> The academic career ladder—virtually unchanged for hundreds of years—does not account for the reality that many women are still expected to have caregiving roles for their spouses, children, and elderly parents. These additional responsibilities and time-consuming tasks can be a drag on women's career mobility. (Bartel, 2018, para. 6)

The ACE (2017) report statistics say 32% of women presidents alter their career progression to care for a dependent, compared to 16% of men.

Another barrier for women striving for leadership positions in the workplace involves gender-role stereotypes. Many colleges and universities are removing the administrative support staff because of new technological advances. There is still work for support staff, but in lieu of hiring these positions, "women faculty and administrators often find themselves falling in line with gender-role stereotypes, performing tasks that are traditionally undertaken by secretaries and administrative assistants" (Bartel, 2018, para. 8).

Bartel (2018) also describes the scenario where, "Women are assigned and take on more service work than their male counterparts, including committee involvement; formal and informal advising roles; professional service work; and various events related to student life, admissions, and school organizations" (para. 9). While this seems to be a worthwhile gesture on the part of the university or college to include females in various roles at the college, it has the potential to diminish the time for these women to pursue career advancement opportunities.

WORKPLACE CULTURE BARRIERS

Historically, men have predominately lead institutions of higher education: "Male-centric leadership models and norms have served to limit women's aspirations regarding leadership, as well as their access to leadership roles. The underrepresentation of women in academic administration suggests that masculine practices and leadership norms function to exclude women" (Dunn et al., p. 9). The barriers of women in leadership through a cultural perspective suggest that organizational context (culture, ideology, and policies) is also relevant in explaining women's limited success in attaining high-level positions within the higher

education system (Timmers et al., 2010). Last, stereotypes about female leaders as mothers can negatively affect women pursuing leadership roles (Hill et al., 2016). These aforementioned barriers continue to hinder female leadership within the higher education setting by limiting access through the lens of cultural norms.

SELF-EFFICACY BARRIERS

The term self-efficacy refers to the idea of capability, where self-esteem references feelings associated with self-worth. Several investigators (Hoyt, 2005; Murphy, 1992; McCormick, 2001; McCormick et al., 2002) have found that women, particularly at early academic-career stages, are more likely than men to hold low self-efficacy beliefs for leadership (Isaac et al., 2012, p. 309). As Hoyt (2005) explains in her study, these low self-efficacy beliefs are reinforced in situations where men outnumber women in leadership settings. Low self-efficacy in female leadership is a barrier that must be discussed as it is a key construct derived from Bandura's (1986) social-cognitive theory.

PAY DISCREPANCIES

As the number of women in leadership continues to climb, albeit, at a slow rate, salary equality still struggles to keep pace. *Forbes Magazine* contributor, Liz Elting (2019), writes, "The salary gap — seventy-nine cents on the dollar — is well-documented and well-known. The causes of it are myriad, a matrix of systemic inequalities reduced to a dollar amount" (para. 9).

The Center for American Progress (Bleiweis, 2020) reports the salary gap between men and women to have decreased slightly — eight-two cents on the dollar — within the year's study of Elting (2019): "The gender wage gap is not only complex and nuanced, but it is also

stubborn. Without updated and comprehensive equal pay reform, the gender wage gap has only closed by 4 cents in more than a decade. At the current pace, women are not estimated to reach pay parity with men until 2059" (Bleiweis, 2020, para. 16). Pay inequalities play a factor in women deciding to exit current positions, hence narrowing the pipeline for women in higher education leadership positions.

SOCIAL SYSTEM BIAS

Matusovich et al. (2010) emphasize the importance that a social system of peers and family plays in the individual's pursuit of his/her goals. As female leaders look to their peers for encouragement and guidance, they are often met with resistance because of prescribed gender bias in our society.

There is unconscious bias and stereotyping within all industries and educational systems (Bartel, 2018). To begin dismantling these barriers, specifically towards women in leadership, acknowledging and understanding the barriers of bias and stereotyping of gender is crucial (Bartel, 2018). According to Bartel (2018), there are three key areas where higher education creates an atmosphere of gender bias and stereotyping: Women are still seen as caregivers, reduced administrative support leads to increased work for women employees, and women are given service work: fulfilling but not necessarily career-advancing.

An article published by Alcalde and Subramaniam (2020) identifies and describes the persistent obstacles that women pursuing advanced leadership opportunities encounter. The obstacles mentioned in this article coincide with Bartel's (2018) assessment of female leadership concerns. The negative effects of these obstacles for women seeking higher

education presidential or executive positions have resulted in an imperative call to action in

these four areas (Alcalde & Subramaniam, 2020):

- The ethical and antiracist imperative. Achieving gender parity in leadership is, first and perhaps most important, a matter of fairness. When women are excluded from top leadership positions, they are denied the agency to make a difference in their workplaces and societies. (para. 8)

- The business imperative. As we strive to create workplaces that are productive, respectful, collegial, and inclusive, we should remember that having diverse women in leadership positions can be beneficial to the bottom line. (para. 10)

- The higher education is imperative. Gender intersects with race in higher education: 86% of administrators are white, while only 7% are Black, 2% Asian, and 3% Latinx. Less than a third of college or university presidents have been women, and most of them have been white women. Not surprisingly, among faculty members, white men make up the largest numbers of people in senior positions, and in recent years, white women have made significantly more gains than women of color. (para. 11)

- The student is imperative. Women may relate their own challenges to those other people now coming through the academic career pipeline are experiencing and may serve as mentors to faculty and students. They contribute to diversifying experiences, bringing to the center experiences of those who are marginalized and excluded — both faculty and students. (para. 14)

SUMMARY

Through the most recent reports from the ACE (Johnson, 2017), The University of

Denver-Colorado Women's College (Lennon, 2012), and The White House Project (2009), there

is a common theme of gender bias and societal barriers that pervades. Data extrapolated from

each of these reports are consistent and provide the statistics to support the previously

mentioned common themes. Other articles from Alcalde and Subramaniam (2020), Bartel

(2018), and Dunn et al. (2014) concur with these findings.

While women who held college president positions more than doubled between the

years of 1986 and 2006, the trend has dramatically decreased since that time (Johnson, 2017):

"Men out-earn women by $13, 874 at public institutions [and] $18,201 at private institutions" (Johnson, 2017, p. 9). Women continue to serve as the primary caregiver in the family, which can hinder career growth (Lennon, 2012). The "glass ceiling" or structural and cultural conditions within higher education continue to create barriers for women to reach their goals of leadership, specifically the presidency (The White House Project, 2009).

For the needle to be moved within higher education leadership for women, the literature suggests that the structural and cultural barriers, gender biases, and pay disparities to be addressed on the local, state, and federal levels. Continuing with the research that has been cited and the current study provides an opportunity for further dialogue and action.

THE PRESIDENCY IN HIGHER EDUCATION

The past study of Dr. Nutt (1996) and the current replicated study are assessing the overall career satisfaction of female presidents in higher education. Prior literature review in this chapter has described the current landscape of women in leadership, which includes the barriers and progress that has been made. The next portion of the study will review various components of the presidency that have an impact on the overall career satisfaction of female presidents in higher education.

ROLE OF THE PRESIDENT

The role of the president in higher education has increased its complexity during the past 40 years. Buxton et al. (1976) stated:

> Today the college president must, to a varying degree, satisfy vocal student bodies, increasingly political faculties, and boards of control, which are frequently divided among themselves. Presidents are faced with new and difficult pressures both from within the academic community and, more frequently, from state legislatures… The role

has increasingly become a social, diplomatic, financial, and administrative post rather than one of educational leadership. (p. 79)

Dougherty (1992) conducted a qualitative study on the leadership styles of five college presidents, each of whom was Sisters of Mercy who headed baccalaureate institutions sponsored by the religious congregation of the Sisters of Mercy. The emerging metaphors in this study were the president as poet, prophet, and provisioner. (Nutt, 1996, p. 53)

Academic Impressions published a printed dialogue that discusses the changing

presidency within the higher education system. Sanaghan and Fusch (2015) from Academic

Impressions state the following:

And presidents have to navigate not only the complexity of this changing landscape of higher education but also the conflicting demands and pressures of a job in which they are accountable to an array of stakeholders. They are asked to be the compass for the institution's mission and values while at the same time moving the institution in new, bold directions. They must be a trusted and accessible leader on campus while at the same time serving as the external face of the institution. They must cut costs, increase enrollments, and find time to raise increasing sums of money from donors and alumni. (p. 3)

According to the Presidential Study conducted by ACE in 2017, the president's surveyed

spend 65% of their time working on financial and budget management. ACE (2017) also cited

budget and financial management, fundraising, and managing senior staff as areas that a

current president must be competent and proficient. The insight offered by Birnbaum (1988) in

Dr. Nutt's (1996) study remains relevant for the president today, "Balancing the conflicting

expectations of these roles have always been difficult, but changing trends, fiscal restraints, and

unrealistic public expectations are making it impossible" (pp. 51–52).

The role of presidency at an institution of higher education is complex. Realizing there are diverse expectations of a person that serves as a president, there are attributes or areas of expertise that will aid a president in accomplishing the task set before him/her.

Robin Mamlet and Sheila Murphy (2017) are search consultants who have defined, from their perspective, the six qualities that search firms and governing boards should be looking for in their next president. The skills include the following:

- Soft skills (which includes emotional intelligence)

- Data and analytics understanding the ability to make timely decisions and then pivot direction as necessary

- "Team" focus on completing tasks (collaboration)

- Core skill competency (budget and financial management, fundraising, and managing senior staff)

- Effective change management skills.

The *Chronicle of Higher Education* published the article from Mamlet and Murphy (2017) to aid prospective presidents, search firms, and governing boards.

Dunn et al. (2014) provided research based upon the reflections of three women in higher education leadership. As part of their findings, they reviewed Wolverton et al. (2009) literature on the common characteristics of effective leaders: "Passion and commitment, self-awareness, and self-confidence are among the characteristics listed, and each is evident in the three reflection narratives" (Dunn et al., 2014, p. 11). Through the reflections, Dunn et al. also noted that the following attributes were consistently mentioned by each participant:

- Selfless leadership (defining success in terms of the accomplishments of others)

- Ability to build networks (success is viewed as a team effort)

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- Task orientation with a blend of interpersonal skills (communication of vision)

- Focus on funding (budget and fundraising)

- Facing resistance and challenge successfully.

While Dunn et al. (2014) states the research may not be classified as "scientific" because of concerns of sample bias, biased perceptions, and the limited generalizability of findings, "the writers were struck by the many common themes that emerged from the independent reflections, suggesting much commonality in their experiences" (p. 17).

In research conducted in 2009, Christine Lepkowski noted that while women have different leadership styles and attributes than men, their effectiveness as leaders is not so different:

> Rosser (2001) asked faculty and staff to evaluate the effectiveness and leadership performance of 22 deans (16 males, six females) at a major research university. The 865 respondents rated the female deans to be more effective than the male deans in all areas, including communication skills, research, community, professional endeavors, interpersonal relations, and the management of the unit. (Lepkowski, 2009, p. 4)

Various facets within an individual's environment and personal inputs work together to present a picture of career satisfaction. One facet involves the qualities needed to perform a job (Mamlet & Murphy, 2017) and the overlay of the skills an individual possess. Lepkowski (2009) uses her study to provide evidence in the effectiveness and leadership skills of women. This evidence leads to an assumption that when individual skills are matched with job expectations there is a possibility of greater career satisfaction.

TIME MANAGEMENT

The ability to manage priorities and time is crucial when discussing the presidency in higher education. Sanaghan and Fusch (2015) state "negotiating competing demands on your

time and talents" (p. 3) as one of the major challenges presidents face in leading their

institutions. As previously mentioned, the president must balance his/her with internal and

external constituents, enrollment, budget and finance opportunities, legislative issues, personal

time, management of senior staff, and working with the board.

"Managing the board" is a second challenge that Sanaghan and Fusch (2015, p. 3)

present. While Howard and Gagliardi (2018) report that the board can be the most supportive

external constituent group, there is time involved with building and sustaining those

relationships.

MISSION

In the presidential role, the individual must know, understand, and believe in the

mission and vision of the institution. Howard and Gagliardi (2018) emphasize "the value of

mission-driven work in higher education" (p .4).

Historically, women higher education leaders have been focused on their mission when

choosing a position, while their male counterparts are driven by career advancement when

choosing their administrative position (Lepkowski, 2009). For this reason, it is important for

prospective presidents, especially those who are mission-driven, to choose an institution that

matches his/her career goals: "Women lead institutions that enroll historically underserved

student populations and can serve a vital function in propelling them to success" (Howard &

Gagliardi, 2018, p. 8). The American College President's Study from ACE (2017) concurs as the

data indicate: "Women are more likely to lead public institutions than private institutions in

2016. They were most underrepresented in doctoral-granting institutions and were more likely

than men to lead public special focus institutions" (p. 5).

FINANCIAL ACUITY

A president in today's higher education institution must be astute in the area of budgeting, finance, and fundraising. As funds needed are increasing, the revenue generated through institutions and state support is decreasing:

> Tuition dollars are the biggest part of non-profit higher education budgets...very few schools depend on endowment returns or investments for a significant portion of their budgets. Donations are also vital, especially to non-profit schools (15%) and, increasingly, to public ones as well (now 3%). Finally, state funding is a very important portion (27%) of public college and university revenues, which provide education to about 75% of all students. All three of these revenue sources are threatened by the current economic downturn. (Weisbrod & Asch, 2010, p. 28)

As mentioned earlier, as a valued attribute, the ability to manage the budget, fundraise, and understand finance are all part of the core skill competencies required for higher education presidents (Mamlet & Murphy, 2017).

PROFILE OF THE FEMALE PRESIDENT

The profile of a female president will be detailed by using a two-dimensional approach. First, the demographics and descriptors of female presidents through four sequential studies will be revealed. The second dimension will provide insight into the leadership styles that most prevail throughout the literature for female leaders.

DEMOGRAPHICS AND DESCRIPTORS

To understand the progress or stagnation of female presidents within higher education, a comparison of several descriptive studies will be presented. The first compendium is a descriptive study by McGee that profiles female presidents within higher education in 1979 (pp. 8–9):

- She was white.

- She was formerly or currently married.

- She had a religious affiliation.

- Her mother was at least a high school graduate who did not work outside the home.

- Her father attended college and worked in a professional, technical, or managerial field.

- She graduated from a public high school and a co-education private college with an enrollment of 500-2,499.

- She was an honor student.

- She had an earned doctorate.

- She was single when she earned the bachelor's and master's degrees and married when she earned the doctor's degree.

- She had not included being an administrator in her career plan.

- She had spent her entire career in education.

- She had worked in three or fewer other institutions.

- She came to the institution as president, had held no other position there, and had been president for three years or less.

- She was appointed to the first presidency for which she applied.

- She was approached by a search committee for the presidency and did not initiate her own application.

- She considered timing and the influence of a mentor the most significant factor in her career development and publications and membership in professional organizations the least significant factors.

- She belonged to one or more community organizations and was a former or current officer.

- She belonged to one or more professional organizations.

- She had a female role model, thought other women viewed her as a role model and was comfortable with the perception.

- She considered her sex a distinct asset in her position.

- She was very satisfied with her position. (Nutt, 1996, pp. 58-59).

Approximately 15 years later, Touchton et al. (1993) conducted a descriptive study of female college and university presidents for the ACE 1985 study. The summary of the responses includes (cited in Nutt, 1996, pp. 64–65):

- Of the respondents, 80% headed liberal arts or two-year institutions.

- The largest percentage of total female respondents (23%) were age 45-49.

- Of the total respondents, 50% indicated Catholicism as their religious preference.

- Of the respondents, 93% were white.

- Of the respondents, 50% were single, never married. The next highest percent (23%) were married.

- Only 38% of the respondents had children.

- The majority (54%) were the first or only child.

- Of the respondents, 30% spent the major portion of their lives until high school in a large city.

- Respondent's fathers were either blue-collar (31%) or white-collar (31%) workers and had a high school education or less (52%).

- 44% of the respondents' mothers worked outside the home, primarily in white-collar jobs (45%) and had a high school education or less (59%).

- 40% earned a baccalaureate degree from a women's university.

- 47% majored in humanities/fine arts in undergraduate work.

- 62% had earned a Ph.D. and had majored in education.

- 28% had been employed in higher education for 16-20 years.

- 84% had never been out of the job market for other than professional reasons.

- 26% came to the presidency as a vice president for Academic Affairs.

- 47% became attracted to the presidency as they moved up the administrative ranks.

- 63% had been an active candidate for only their current position.

- 25% earned $50,000-$60,000 annually.

A descriptive study was written by Howard and Gagliardi (2018) using the information from the most updated report from the ACE on the American College President's Study of 2017. The insights from this study on female college presidents include:

- 32% of women presidents altered their career progression to care for a dependent, spouse or partner, or parent.

- Only 8% of women presidents lead doctorate-granting institutions.

- 78% of women presidents are serving their first presidency.

- Of the 4,500 higher education campuses, 30%, or 1,350, are led by women.

- 83% of women presidents are white.

- Approximately 8% of women presidents are African American.

- Approximately 5% of women presidents are Hispanic, and 1% are Asian American.

- Women's top three fields of study are education/higher education (46%), humanities/fine arts (16%), and social sciences (11%).

- Approximately 83% of women presidents have earned a Ph.D. or Ed.D.

- There are 33 women leading an associate's degree-granting institution.

- There are 23 women leading a bachelor's degree-granting institution.

- There are 23 women leading a master's degree-granting institution.

- There are 22 women leading a doctoral degree-granting institution.

Using the data from the survey of this current study, the following information was disaggregated from the 141 respondents (who are all current presidents):

- 45% are between the ages of 56 and 65.

- The primary religion is protestant (40%).

- White female presidents made up 84% of the respondents.

- 49% are in their first marriage.

- 77% have no children living at home.

- Doctorates (J.D., Ed.D., and Ph.D.) are held by 83%.

- 65% feel very accepted by their institution.

- Over 63% have a salary of $200,000 or more.

- 46% of the respondents are the first president at their respective campuses.

By comparing the statistics and data from the 1979, 1985, 2017, and 2020 studies, there are several items that can be noted as pertinent. First, female presidents have been predominately white throughout each study. Second, the percentage of earned doctorates for female presidents has increased each year. Third, the focal point of graduate degrees for female presidents has been in education. Fourth, religion is evident in most female presidents. While Catholicism was practiced by 50% of the respondents in the 1985 study by ACE, 40% of respondents in the current study noted Protestantism as their preference for religious association, and 26% practice Catholicism. In the study by ACE in 1985, 50% of the female presidents had never been married, while 78% of the respondents in the current study are married. However, in the 1985 study by ACE, 38% of the women presidents had children in contrast to the 77% of the current study have zero children living at home.

LEADERSHIP STYLES

Various factors influence the leadership style of individuals. Women leaders often comment on their focus to see others succeed, to serve, and to make the work of others easier,

faster, and clearer (Dunn et al., 2014). This kind of leadership has been labeled by Porat (1991) as facilitative leadership. As a facilitative leader, one has a service mentality which is a common trait among female leaders in education. Eagly (2007) posited that female leaders use a more democratic and participative leadership style to earn legitimacy and to avoid resistance from subordinates. In spite of their differences, female leaders emphasize both interpersonal relations and task accomplishment.

Partnering with facilitative leadership is the idea of using team effort or collaboration to solve issues, concerns, and roadblocks. The literature often refers to this type of leadership as "expressive," "communal," and "participative" (Eagly et al., 1992).

Susan Madsen's (2008) book, *On Becoming a Women Leader: Learning from the Experiences of University Presidents*, describes several leadership styles of women in higher education. Emergent leaders are participatory, flexible, ethical, authentic, connective, and team-oriented (Madsen, 2008). Androgyny leadership is a combination of task-oriented behaviors and relations-oriented attributes (Madsen, 2008). Situational leadership combines emergent and androgyny leadership to provide the leader with an array of tools to respond appropriately to the various stakeholders and constituents in the proper context (Madsen, 2008).

CAREER SATISFACTION

There is much to be learned about the facets that play a role in the overall career satisfaction of female presidents in higher education. Research from Dr. Nutt's (1996) study provided several descriptive studies of female presidents of higher education (e.g., McGee, 1979; Taylor, 1981) that will be cited. The researcher documented more recent studies of

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presidential job satisfaction, which includes both males and females (Bruns, 2018; Perrakis et al., 2020; Travis & Price, 2013) that will be referenced within this section. However, specific literature on the overall career satisfaction of females in higher education was limited, which supports the need for a replicated study.

SATISFACTION OF THE PRESIDENT

In 1979, McGee conducted research that measured a higher education female president's job satisfaction. Nutt (1996) reports the majority of those taking McGee's survey "considered task-related activities to be the greatest source of satisfaction. people-related issues emerged as the most common dissatisfier" (p. 70). One of the survey questions asked respondents to rate their overall career satisfaction. The question was delineated by institutional type and "McGee found that 87% of the two-year institution presidents were very satisfied, 80% of the public four-year institution presidents were very satisfied, 47% of the private four-year institution presidents were very satisfied, and 47% were satisfied" (Nutt, 1996, p. 70).

The study by Taylor (1981) focused on the frustrations and satisfactions of female community college presidents. Within the study, the concepts that received the highest ratings of satisfaction included those areas most associated with the self and helping others at the institution:

> Self-satisfaction included being able to provide educational leadership, mater politics, define the institutional future or turn it around, to be in charge, have total responsibility or have an impact on the institution. Satisfaction with others included working as a part of a management team, having good relationships with faculty and students, having the confidence of the board, and getting individuals and groups with different agendas together. (Nutt, 1996, p. 70)

Frustrations identified by the respondents in the study include lack of finances which impacted items that needed to be completed or improved, the bureaucracy of the institution, personal leadership deficits, stress, and the lack of time to complete tasks and meet with constituents.

Perrakis et al. (2011) analyzed variables correlating with self-reported satisfaction and performance of presidents among community college and four-year universities within four states of North America:

> The results of our analysis suggest that personal and institutional demographics, as well as a measure of institutional discord, are significant predictors of self-reported presidential satisfaction and performance. It was found that malleable factors – such as the difference in perception between what 'is' and what 'should be'- are more influential in predicting satisfaction and performance than fixed factors, such as personal and institutional demographics (Perrakis et al., 2011, p. 57).

Within the Comprehensive Career Satisfaction Survey (CCSS), questions are asked pertaining to the relationships between administrators, students, parents, alumni, governing boards, and legislators, which address the institutional discord issue. Questions concerning the connectedness or collaborative culture of the institution, which may affect the institutional discord sentiments, are not presented in the CCSS.

The study of Travis and Price (2013) research the effect of job preparation or pathways to the presidency in higher education predict job satisfaction. Since many administrators begin as faculty, the study focused on the effects of moving from an academic environment to an executive position: "The common career path of presidents, from faculty to administration, does not appear to affect job satisfaction. The authors emphasize that more research is clearly needed" (Travis & Price, 2013, p. 1).

In 2018, Jeff Bruns presented his research problem as "understanding the variables that impact a president's satisfaction with his/her position" (p. 2). Based upon his prior research, Bruns (2018) grouped the presidential job satisfaction/dissatisfaction into four groups:

- Conflict between the controlling board and the president

- Internal conflict between different subunits of the organization and the president

- External conflict with community stakeholders

- Financial and budgeting stress.

His research revealed several key points and takeaways from analyzing the relationships between different independent variables and job satisfaction of higher education presidents. Bruns (2018) concluded the following:

> Presidents at small private institutions experience more stress and lower job satisfaction relative to economic/fiscal issues than those at public and large private institutions. In addition, those same presidents are usually less enthusiastic about the overall state of their institution. They have multiple stakeholders trying to influence and put pressure on them. When an individual has different stakeholders, all trying to influence policy/strategic/operational decisions, it can cause undue stress. As the stress level increases, the individual's satisfaction with the position decreases. (p. 14)

As the literature indicates, the career satisfaction of presidents in higher education is multi-faceted. There is minimal research that has been conducted on this topic, yet the importance of career satisfaction for this population is imperative to the success of higher education (Bruns, 2018). Also note the studies of Bruns, Travis and Price (2013), and Perrakis et al. (2011) do not delineate between male and female presidents but include both genders in their research and findings.

CONCLUSION

As noted in the aforementioned review of literature that addresses career satisfaction, the population samples are delimited, and evaluation of female president's career satisfaction is not separately considered. The previous studies also do not address involvement as a predictor for career satisfaction, while time in the presidency is considered. Dr. Nutt's (1996) research on the overall career satisfaction of female presidents continues to be the sole resource that addresses a specific population with the following job facets: job, professional relationships, institutional acceptance, performance, and compensation.

CHAPTER THREE: METHODOLOGY

INTRODUCTION

The primary purpose of this research is to replicate Dr. Lee Ann Nutt's (1996) study.

During the original research, two significant areas are addressed: 1) a description of the overall

career satisfaction of female presidents and their satisfaction with related job facets; and 2) the

exploration of personal (input) variables and environment variables as they relate to the overall

career satisfaction of university and college female presidents (Nutt, 1996). By comparing the

results from Dr. Nutt's research and the current study, an analysis of the data will be conducted

where improvements can be documented, and recommendations will be formulated.

An increasing number of female presidents within higher education institutions, coupled

with decreasing tenure in these positions, constitutes the replication of Dr. Nutt's study from

1996 (ACE, 2017). Comparing and analyzing the components of career satisfaction from a past

and current study will give insight and quantifiable information to the researcher. Using this

knowledge, recommendations will be provided in Chapter Five to enhance female presidents'

overall career satisfaction.

RESEARCH DESIGN

In replicating the study, identical survey questions from Dr. Nutt's (1996) research were

used to assess female presidents of American higher education institutions' overall career

satisfaction. The information gathered from the survey is used to describe and explore the

relationships between the variables and their predictive value in female presidents' career

satisfaction. Astin's (1991) Input-Environment-Output (I-E-O) Model of Assessment was used as

the structural framework in creating the original survey questions.

While Astin's Model of Assessment was created in 1984, its theoretical perspective is

still relevant for the current and natural study. As quoted in Nutt's (1996) research:

> In natural experiments, we try to study naturally occurring variations in environmental
> conditions and to approximate the methodological benefits of true experiments by
> means of complex multivariate statistical analysis ... we try to study the real world
> rather than the artificial ones that are created by experimentation. (Astin, 1991, p. 28)

Using Astin's (1991) definition, the I-E-O model is an appropriate construct for

conducting the current research. To further solidify this structural context, the Systems Theory

Framework (STF) of Career Development is also considered. Within STF, interrelated facets are

identified and considered when analyzing career development and satisfaction. Michelle Lovasz

(2020) discusses three prevalent areas in a Systems Theory Framework for career development.

Lovasz (2020) states,

> STF acknowledges three systems that influence the content of individuals' career
> development:
>
> - Interpersonal (e.g., identification of race, ethnicity, gender, sexuality, ability, age,
>   and personality)
>
> - Social (e.g., values, beliefs, attitudes, and membership among family, peers, school,
>   workplace, community, and media)
>
> - Environmental/Societal (e.g., historical oppression, government policies, workplace
>   restructuring, socioeconomic variables, geographic location, and the values, beliefs,
>   and attitudes of age cohorts). (para. 1)

While the systems are similar between the Astin and STF models, Astin's (1991) I-E-O

model provides the structure and framework most appropriate for conducting the quantitative

analysis and comparing the overall career satisfaction of female presidents.

ASTIN'S INPUT-ENVIRONMENT-OUTPUT (I-E-O) MODEL

Alexander Astin's theory of involvement was published in 1984. The core concepts of

the theory are based on three elements and five basic postulates about involvement. Inputs,

environments, and outcomes are based on his theory, which was then developed into a model

for student development in higher education. Within this model, outputs are affected by the

environment, the inputs or personal qualities, and an individual's demographics. The level of

involvement is also affected by the input traits, which affects the quality of the output. From

Astin (1991), Nutt (1996) succinctly explains the purpose of using this model for the study:

> The basic purpose of the I-E-0 model is to correct or adjust for input differences among
> subjects to get a less biased estimate of the effects of different environments on
> outputs. Input variables may directly affect both environments (Line A) and the
> outcomes (Line C). They may also indirectly affect outputs by affecting the environment
> and the observed relationship between environments and outputs. (Astin, 1991, p. 99)

Figure 2: Flow of the I-E-O Model
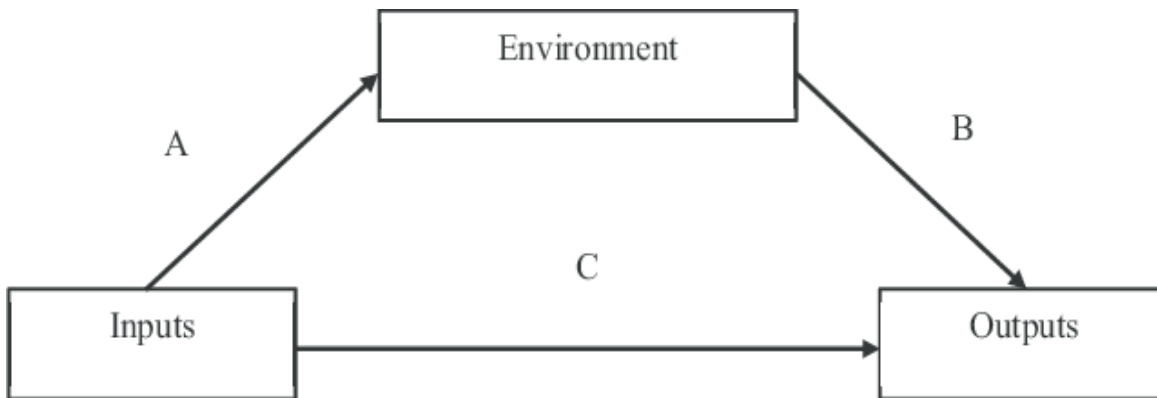
Astin, 1991

Astin (1991) describes inputs as demographics, background, and previous experiences.

For this study, *input* will be a predictive variable and consist of personal qualities, personal and

professional demographics, and satisfaction before attaining a presidency (Nutt, 1996). The

second element of the model, *environment,* accounts for all the president's college

experiences. Within this study, the environment is considered a predictive variable and

accounts for "professional and personal involvement measures, data on the institution in which

the president operates, institutional acceptance of a female as president, whether or not the

respondent was the first female president of the institution, and salary information" (Nutt,

1996, p. 98). Lastly, the *outcomes* describe the characteristics, knowledge, attitudes, beliefs,

and values that exist after a student has graduated from college. Used as a criterion variable for

this research, outcome information is considered the overall career satisfaction. The following

table shows input, environment, and output elements with their associated variables.

Table 3: Input-Environment-Output Variables

INPUT VARIABLES	ENVIRONMENT VARIABLES	OUTPUT VARIABLE
Personal Demographics	Personal Involvement	Overall Career Satisfaction
Professional Demographics	Professional Involvement	
Prior Satisfaction	Institutional Characteristics	
	Other-Acceptance, first female presidency, salary	

Astin (1991) also defined five basic assumptions about students' involvement when using his model. The five assumptions are:

1. Involvement requires an investment of psychosocial and physical energy.

2. Involvement is continuous, and the amount of energy invested varies from person to person.

3. Involvement may be qualitative and quantitative.

4. What a person gains from being involved are directly proportional to the extent to which s/he is involved (quality and quantity.

5. Performance is correlated with involvement.

The stated assumptions hold for overall career satisfaction and are considered in the final comparison and analysis of the data.

In recent studies outside of student development, Astin's (1991) model has been used as the framework to ascertain the impact of input and environmental facets on outcomes. Dr. Nutt (1996) references two authors who used the I-E-O model as their structural framework for studies that occurred outside the area of student development. The first example is a paper written by Opp (1992) that studied the differences in faculty career satisfaction based on discipline. Hodge (1995) also presented research on the community college student satisfaction

with Tech Prep programs in Texas, which used the input and environmental variables as the basis for his study. Other recent uses of the model include Berchiolli's (2019) dissertation. This research studied women's choices of pursuing a stem versus a non-stem major. Lastly, the research from Na-Nan et al. (2019) used Astin's model to study the effects of perceived environment support and knowledge sharing between self-efficacy and job performance.

INSTRUMENTATION

The self-reported questionnaire developed by Dr. Nutt in 1996 was utilized for this replicated study. By distributing this cross-sectional data tool to a predetermined group of female presidents within American higher education institutions. Questions within the questionnaire specifically address the research questions and objectives of this study.

Dr. Nutt (1996) researched several job index satisfaction surveys used within the business and education sector. The Job Descriptive Index (JDI) was identified as the most widely used survey in higher education in her investigation (Nutt, 1996). According to Lake et al. (2010), "The JDI is a facet measure of satisfaction, meaning that the measure assesses people's satisfaction with five differentiable aspects of the job: the work itself, pay, opportunity for promotion, supervision, and coworkers" (p. 48). The five aspects' measurements are then used to infer job satisfaction and do not ask a specific question(s) about overall job satisfaction. This replicated study intends to measure the specific question of job satisfaction while also integrating measurements of input variables and the environment. At the time of Dr. Nutt's original research and the replicated evaluation, none of the job satisfaction surveys recommended by Scarpello and Campbell (1983) met the criteria needed to assess female presidents' overall career satisfaction accurately.

Each question in the CCSS was created by Dr. Lee Ann Nutt (1996) to fully evaluate female presidents' overall career satisfaction in higher education. The evaluation encompasses five different satisfaction scales, one measure of overall career satisfaction, a prior satisfaction scale, a section for personal and professional demographic information, a section for personal and professional involvement, and an environmental section that captures other influences. This format follows the I-E-O assessment model, and all of the scales answer the research questions and objectives of the study.

The CCSS questions used by Dr. Nutt were not altered for this study. With the original study in 1996, a paper survey was mailed to individual respondents. For the replicated study, the questions were transposed in an electronic format and sent via email. Responses were received via email and coded based upon institution type. Because of the responses' nature, the information has been kept confidential by the current researcher's coding mechanism.

OBJECTIVE ONE—DESCRIBE

The purpose of this research is to replicate the comprehensive study from Dr. Lee Ann Nutt that addresses the overall satisfaction of female presidents of higher education institutions in the United States (Nutt, 1996). Dr. Nutt's five individual multiple measure satisfaction scales and one overall satisfaction scale are used to accomplish this purpose. The five scales used for objective one includes the following:

1. Satisfaction with the Job Scale (SWJS)

2. Satisfaction with Compensation Scale (SWCS)

3. Satisfaction with Professional Relationships Scale (SPRS)

4. Satisfaction with Performance Scale (SWPS)

5. Satisfaction with Institutional Scale (SWIS).

Each of the five multiple scales was individually analyzed using factor analysis and Cronbach's alpha coefficient to ensure adequate reliability levels.

For each of the scales, the respondents self-reported their satisfaction using a word-anchored, six-point Likert scale. The scale is designed as follows: 1 = *very dissatisfied*, 2 = *dissatisfied*, 3 = *more dissatisfied than satisfied*, 4 = *more satisfied than dissatisfied*, 5 = *satisfied*, and 6 = *very satisfied*.

A six-point scale was used to compel the respondents in choosing a more accurate response with either *more dissatisfied than satisfied* or *more satisfied than satisfied*.

Reliability of Multiple-Measure Scales

Each of the five multiple measure scales was measured in Dr. Nutt's (1996) original study using Cronbach's alpha reliability coefficient method and factor loading for item analysis. According to Borg & Gall (1989), "Cronbach's alpha was the reliability coefficient of choice since the items on the scales had several possible answers and could not be measured dichotomously" (Nutt, 1996, p. 103). The value of reliability coefficients ranges from 0.00 to 1.00, with values closer to 1.00 being the more reliable measure. Factor loading analysis was also conducted for each item of the survey. Questions in the survey with a factor loading of less than 0.30 are eliminated from the study.

The researcher conducted an independent analysis, using both Cronbach's alpha and factor loading, to compare the results of the original and replicated studies. Using an outside source (C. Weatherly, personal communication, July 12,2020), the software program "R" was

utilized to analyze the data. "R" is a programming language for statistical computing and

graphics. Roger Peng, an 18-year R programming veteran who teaches R both at the university

and on the Coursera online platform, states, "R is the most popular language used in the field of

statistics" (Krill, 2015, para. 2). The results of both analyses will be included in the subsequent

reports.

Satisfaction With the Job Scale

The Job Scale (SWJS) satisfaction includes measured items that indicate the satisfaction

of female presidents with the varying components of the work they perform within their job.

Dr. Nutt (1996, p. 104) cites the references used when creating the following items of

measurement:

- Time required to fulfill work duties

- Autonomy

- Influence

- Task variety

- Challenge

- Skill and ability utilization

- Time for scholarly activities

- Job security.

SWJS was used to answer the study's first research question, "How satisfied are female

presidents with their jobs?" Table 4 denotes the eight items and the corresponding factor loads

for each.

Table 4: Satisfaction with the Job Scale

QUESTIONNAIRE ITEM	FACTOR LOAD FOR NUTT (1996) $N = 281$	FACTOR LOAD FOR CURRENT STUDY $N = 136$
Time required to fulfill duties	.40	.58
Autonomy	.68	.68
Influence	.78	.74
Task Variety	.64	.47
Challenge	.59	.44
Skill and ability utilization	.68	.53
Time for scholarly activities	.57	.53
Degree of job security	.64	.64

Factor loadings ranged from 0.44 to 0.74 with 136 valid observations in the current study, while the first study from Dr. Nutt (1996) had factor loading ranges from 0.40 to 0.78 with 281 valid observations. Within the original study, all factor loadings of the current research were above the 0.30 threshold, and all questions were included in the SWJS. Cronbach's alpha for Nutt's 1996 study was 0.76, and the calculation for the replicated study is 0.79.

Satisfaction With Compensation Scale

The Satisfaction with Compensation Scale (SWCS) includes measured items that indicate female presidents' satisfaction with the extrinsic rewards they receive from their position. Dr. Nutt (1996, p.105) cites the references used when creating the following items of measurement:

- Salary

- Fringe benefits

- Leave time.

SWCS was used to answer the second research question of the study, "How satisfied are female presidents with their compensation?" Table 3.3 denotes the three items and the corresponding factor loads for each.

Table 5: Satisfaction with Compensation Scale

RESEARCH QUESTION #2: HOW SATISFIED ARE YOU WITH THE FOLLOWING COMPENSATION-RELATED VARIABLES?

QUESTIONNAIRE ITEM	FACTOR LOAD FOR NUTT (1996) N = 290	FACTOR LOAD FOR CURRENT STUDY N = 110
Salary	.84	.72
Fringe benefits	.86	.98
Leave time	.80	.64

Factor loadings ranged from 0.64 to 0.98 with 140 valid observations in the current study, while the first study from Dr. Nutt (1996) had factor loading ranges from 0.80 to 0.86 with 290 valid observations. As with the original study, all factor loadings of the current research were above the 0.30 threshold, and all questions were included in the SWCS. Cronbach's alpha for Nutt's 1996 study was 0.77, and the calculation for the replicated study is 0.81.

Satisfaction With Professional Relationships Scale

The Satisfaction items with Professional Relationships Scale (SWPRS) describe the satisfaction female presidents have with relationships between several groups within the scope of a president's job. Dr. Nutt (1996, p.106) cites the references used when creating the following groups and measurement of satisfaction within these professional relationships:

- Students at your institution

- Faculty at your institution

- Administrators at your institution

- Male members of the governing board

- Female members of the governing board

- Male presidents of other institutions

- Female presidents of other institutions

- Community leaders

- Legislators

- Alumni

SWPRS is used to answer research question number three, "How satisfied are presidents with their professional relationships?" Table 6 denotes the ten items, and the corresponding factor loads for each.

Table 6: Satisfaction with Professional Relationships

RESEARCH QUESTION #3: HOW SATISFIED ARE YOU WITH THE QUALITY OF THE PROFESSIONAL RELATIONSHIP YOU HAVE WITH THE FOLLOWING?

QUESTIONNAIRE ITEM	FACTOR LOAD FOR NUTT (1996) $N = 261$	FACTOR LOAD FOR CURRENT STUDY $N = 132$
Students at your institution	.47	.42
Faculty at your institution	.51	.34
Administrators at your institution	.54	.36
Male members of the governing board	.62	.45
Female members of the governing board	.66	.43
Male members of the governing board	.77	.65

Questionnaire Item	Factor Load for Nutt (1996) $N = 261$	Factor Load for Current Study $N = 132$
Female presidents of other institutions	.69	.63
Community leaders	.66	.68
Legislators	.60	.67
Alumni	.64	.38

Factor loadings ranged from 0.34 to 0.68 with 132 valid observations in the current study, while the first study from Dr. Nutt (1996) had factor loading ranges from 0.47 to 0.77 with 261 valid observations. As with the original study, all factor loadings of the current research were above the 0.30 threshold, and all questions were included in the SWPRS. Cronbach's alpha for Nutt's 1996 study was 0.81, and the calculation for the replicated study is 0.77.

Satisfaction With Performance Scale

The Satisfaction with Performance Scale (SWPS) includes measured items that indicate female presidents' satisfaction with their skills and abilities. Dr. Nutt (1996, p.108) cites the references used when creating the following items of measurement:

- Vision

- Leadership

- Decision making

- Communication

- Conflict resolution

- Political acuity

- Financial management

- Fundraising.

SWPS is used to answer the fourth research question of the study, "How satisfied are female presidents with their performance?" Table 7 denotes the eight items and the corresponding factor loads for each.

Table 7: Satisfaction with Performance Scale

RESEARCH QUESTION #4: HOW SATISFIED ARE YOU WITH YOUR PERFORMANCE IN EACH OF THE FOLLOWING AREAS?

QUESTIONNAIRE ITEM	FACTOR LOAD FOR NUTT (1996) $N = 292$	FACTOR LOAD FOR CURRENT STUDY $N = 135$
Vision	.67	.50
Leadership	.77	.62
Decision making	.73	.65
Communication	.61	.47
Conflict resolution	.61	.59
Political acuity	.60	.54
Financial management	.58	.56
Fund raising	.47	.44

Factor loadings ranged from 0.44 to 0.65 with 135 valid observations in the current study, while the first study from Dr. Nutt (1996) had factor loading ranges from 0.47 to 0.71 with 292 valid observations. As with the original study, all factor loadings of the current research were above the 0.30 threshold, and all questions were included in the SWPS. Cronbach's alpha for Nutt's 1996 study was 0.77, and the calculation for the replicated study is 0.75.

Satisfaction With the Institutional Scale

The satisfaction with the Institutional Scale (SWIS) is used to measure the respondents' amount of satisfaction towards the various attributes of the institutions they lead. Dr. Nutt (1996, pp.108–109) cites the references used when creating the following items of measurement for the SWIS:

- Mission

- Culture

- Climate

- Status

- Facilities

- Financial condition

- Operating policies and procedures

- Organizational structure.

SWIS is used to answer the fifth research question of the study, "How satisfied are female presidents with their institutions?" Table 8 denotes the eight items and the corresponding factor loads for each.

Table 8: Satisfaction with Institution Scale

RESEARCH QUESTION #5: HOW SATISFIED ARE YOU WITH YOUR PERFORMANCE IN EACH OF THE FOLLOWING AREAS?

QUESTIONNAIRE ITEM	FACTOR LOAD FOR NUTT (1996) $N = 292$	FACTOR LOAD FOR CURRENT STUDY $N = 135$
Mission	.60	.45
Culture	.71	.87
Climate	.74	.90

Questionnaire Item	Factor Load for Nutt (1996) *N* = 292	Factor Load for Current Study *N* = 135
Status	.70	.57
Facilities	.59	.48
Financial Condition	.63	.45
Operating policies and procedures	.74	.54
Organizational structure	.74	.64

Factor loadings ranged from 0.45 to 0.90 with 137 valid observations in the current study, while the first study from Dr. Nutt (1996) had factor loading ranges from 0.59 to 0.74 with 287 valid observations. As with the original study, all factor loadings of the current research were above the 0.30 threshold, and all questions were included in the SWIS. Cronbach's alpha for Nutt's 1996 study was 0.83, and the calculation for the replicated study is 0.84.

Objective Two—Explore and Predict

Objective Two for this study explores and predicts female presidents' overall career satisfaction through the criterion variables of personal (input) and environmental factors. Using a multiple regression analysis, research question number seven, "Which personal (input) variables and environmental variables predict career satisfaction for female presidents?" is addressed.

Input Variables

The Prior Satisfaction Scale (PSS) was developed by Dr. Nutt (1996) to analyze three

input variables specific to this study. The three input variables include a primary satisfaction

measure, personal demographics, and professional demographics. By measuring satisfaction of

the respondent before they attained a presidential position, the final analysis can compute the

effect presidential position attainment has on their career satisfaction. Within the PSS,

respondents note their satisfaction, based upon their experience, with the following items:

- Previous institution/organization

- Previous job

- Previous compensation package

- Previous professional relationships

- Previous performance

- Previous overall career satisfaction

It is vital to communicate the deficiencies associated with using the PSS as a base

measure for career satisfaction. As noted in Dr. Nutt's (1996) original study, the PSS was "an

efficient and expeditious way to obtain pre-test input data, as this information had not been

previously collected from administrators who became female presidents" (p. 110). Because the

respondents were asked to remember their past feelings of satisfaction with prior employment,

the answers may be skewed on both the negative and positive perspectives. Because of the lack

of prior information, however, the PSS was the best way to ascertain this group of respondents'

prior satisfaction.

As mentioned, personal and professional demographics were two of the three input variables used to measure satisfaction. The specific items that were collected for the measurement of these two variables are provided in Table 9.

Table 9: Personal and Professional Input Variables

PERSONAL INPUTS	PROFESSIONAL INPUTS
Age	Years in current presidency
Racial or ethnic group	Total years as president
Current marital status	Highest degree earned
Religious preference	Attraction to the presidency
Membership in a religious order	Presidential code (01 or 02)
Number of school-aged children living with you	

Nutt, 1996

Environmental Variables

There are four areas of environmental areas that were measured within this study. They are defined as the following:

- Professional involvement measure

- Personal involvement measure

- Other measured variables (institutional acceptance of the president, if she is the first female president for the institution and annual salary)

- Data on the female president's institution.

Measuring the degree of involvement evaluates the following characteristics:

- Estimated average number of hours per week that is spent on professional activities

- Reporting the number of professional associations and committees in which they are involved

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- Indicating the frequency with which they interact with students, faculty, administrators, the governing board, alumni, legislators, parents, and other external constituents

- Rating the amount of energy devoted to presidential activities.

Personal involvement describes the amount of activity the female president exerts outside of her presidency. Measurement of exercise, religious worship services, and the amount of time spent with family was part of the predictive variables in assessing the environmental variables.

Data on the respondent's institution and other variables within the environment were considered in creating an overall picture of career satisfaction. The institution's characteristics included information on its Carnegie Classification, student body composition, affiliation type, and enrollment (Higher Education Publications, 2019). Institutional acceptance of the female president, annual salary, and if the respondent was the first female president of the college are measured by the respondent's answers to these items.

The use of Astin's (1991) Involvement Theory ensures the questions of the survey represent the environmental and input components of overall career satisfaction. In the final analysis, the multiple regression model was used by both studies for reliability and validity. However, Dr. Nutt (1996) used specific attributes from the survey to create blocks by which to calculate the multiple regression. The current study uses all the questions of the survey to create the multiple regression model. By using the entirety of the survey, a more robust process was conducted with a thorough analysis of the data.

Outcome – Overall Career Satisfaction

The output or criterion variable of overall career satisfaction is determined using the input and environmental variables as previously described. The measurement of overall career satisfaction is calculated in two steps: (1) find the mean (or average) for each of the five satisfaction scales described, then (2) calculate one average from the five satisfaction scale means. While the overall career satisfaction measurement data was used as the criterion variable for statistical analysis, an Overall Career Satisfaction Measure (OCSM) question was used in the survey to compare and validate the criterion variable results.

SAMPLING PROCEDURE

This replicated study's target population is female presidents of colleges and universities within the United States of America. National representation was possible as at least one female president of a college or university is now serving in each state. Sample size was not limited because of the small number of individuals meeting a female president's qualifications within American higher education institutions.

Female presidents within the American higher education system were identified through a paid vendor, Higher Education Publications (HEP), on December 17, 2019. The vendor identified the female presidents by name, title, school name, state, manpower code (MPC), and email address. Manpower codes are numeric designations of job functions at colleges and universities. MPCs are used to categorize administrators by job function, regardless of administrative titles. For this study, the MPC's designations of 01 and 02 were used. The MPC of 01 is defined as the Chief Executive Officer, president, or chancellor who directs all higher education institutions' affairs and operations. MPC 02 is defined as the Chief Executive Officer,

president, or chancellor who directs all affairs of a campus or institution which is part of a university-wide system (Nutt, 1996). This information was sent to the researcher in a spreadsheet that was then securely downloaded into a specific file folder for research.

DATA COLLECTION PROCEDURE

Dr. Nutt's original survey, the CCSS, was converted from a paper format to a web-based survey through Formstack. All of the original questions and responses were kept from the original study to authenticate the study's replication.

An email was sent to the individuals that were presented as meeting the criteria for participation (female presidents of American colleges or universities). Within the initial email content, consent for completing the survey will be accomplished by providing a separate website (via a hyperlink embedded within the email) for the respondent to complete the electronic version of the Comprehensive Career Satisfaction Survey. Informational privacy will be addressed within the email by providing the researcher's identity, organizational affiliation, the purpose of the inquiry, and the explanation of data retention pertaining to the confidential survey. A hypertext feature will also be provided for those respondents who need more information and elaboration of confidentiality procedures for this study.

Additional emails were sent through the process to encourage participation, which included the hyperlink to both the survey and confidentiality procedures for this study. Each survey is coded to identify the respondent, presidential code, and specific institutional characteristics to best replicate the original study. The results of the survey are anonymous and will be retained through a secure database. Institutional codes are listed in Table 10.

Table 10: Institutional Characteristics and Code Numbers

CARNEGIE CLASS	CODE	STUDENT BODY	CODE	AFFILIATION	CODE	ENROLLMENT	CODE
Research University I	0	Co-educational	1	State/Local (public)	1	< 1,000	1
Research University II	1	Female only	2	Independent/Non-profit (private)	2	1,001-5,000	2
Doctoral University I	2	Male only	3	Religious Denomination	3	5,001-10,000	3
Doctoral University II	3	Not supplied	4	Tribal/Federal or other	4	10,001-15,000	4
Master's College/ University I	4					15,001-20,000	5
Master's College/ University II	5					20,001-25,000	6
Baccalaureate College I	6					>25,001	7
Baccalaureate College II	7					Not Supplied	N
Associate of Arts College	8						
Specialized Institution	9						

Higher Education Publications, 2019

The response rate of electronic surveys has been historically low. Andrews et al. (2003) note that "response rates of 20% or lower are not uncommon" (p. 196). However, the data received from an electronic survey is more accurate than mailed paper surveys, where the researcher extrapolates data through paper and pencil (Andrews et al., 2003).

DATA ANALYSIS

Replication sets a somewhat higher bar than reproducibility and has been described as

"the ultimate standard by which scientific claims are judged" (Peng, 2011, p. 1226). According

to the National Science Foundation and Institute of Education Sciences (2018):

> Direct replication studies seek to replicate findings from a previous study using the
> same, or as similar as possible, research methods and procedures as a previous study.
> The goal of direct replication studies is to test whether the previous study results were
> due to error or chance. This is done by collecting data with a new but similar sample and
> holding all the research methods and procedures constant. (p. 2)

Using this premise for replication, the current study's data will be analyzed using the

same quantitative statistical techniques as Dr. Nutt's (1996) original research. The first step of

the analysis is to summarize the data received to describe the research population. Descriptive

statistics are used for this computation by calculating the means for continuous items (level of

satisfaction) and frequencies for categorical items (race and marital status) and the distribution

of responses (Nutt, 1996). The second step that replicated Dr. Nutt's analysis computes the

relationship between predictor variables and the criterion variables to determine overall career

satisfaction.

OBJECTIVE ONE-DESCRIBE

To describe the overall career satisfaction (criterion variable) of female presidents

within American institutions of higher education, the career satisfaction scales were statistically

analyzed based upon satisfaction in their jobs, compensation, professional relationships,

performance and institutions. Using the following formula for item mean, $\overline{X_{item}} = \frac{\sum X}{N}$, where

each item's mean in the SWJS, SWCS, SPRS, SWPS, and SWIS was calculated (Nutt, 1996).

Using the original study's information, the calculations and scales were replicated from the original study (Nutt, 1996). Determination of the overall career satisfaction with specific category facets was calculated using an overall mean for each scale. The satisfaction scales were each based on the following six-point, word-anchored scale:

1 = Very Dissatisfied,

2 = Dissatisfied,

3 = More dissatisfied than satisfied,

4 = More satisfied than dissatisfied,

5 = *Satisfied*, and

6 = Very Satisfied.

After calculating the mean responses from each item, the real limits were set as follows:

< 1.49 = Very Dissatisfied

1.5–2.49 = Dissatisfied

2.5–3.49 = More dissatisfied than satisfied

3.5–4.49 = More satisfied than dissatisfied

4.5–5.49 = Satisfied

> 5.5 = Very Satisfied.

The formulas used to calculate the means for each of the satisfaction scales are as follows:

$$\overline{X_{SWJS}} = \frac{(\overline{X_{\iota 1}} + \overline{X_{\iota 2}} + \overline{X_{\iota 3}} + \cdots + \overline{X_{\iota 8}})}{8}$$

$$\overline{X_{SWCS}} = \frac{(\overline{X_{\iota 1}} + \overline{X_{\iota 2}} + \overline{X_{\iota 3}})}{3}$$

$$\overline{X_{SPRS}} = \frac{(\overline{X_{\iota 1}} + \overline{X_{\iota 2}} + \overline{X_{\iota 3}} + \cdots + \overline{X_{\iota 10}})}{10}$$

$$\overline{X_{SWPS}} = \frac{(\overline{X_{\iota 1}} + \overline{X_{\iota 2}} + \overline{X_{\iota 3}} + \cdots + \overline{X_{\iota 8}})}{8}$$

$$\overline{X_{SWIS}} = \frac{(\overline{X_{\iota 1}} + \overline{X_{\iota 2}} + \overline{X_{\iota 3}} + \cdots + \overline{X_{\iota 8}})}{8}$$

To determine the overall career satisfaction, the average of the five satisfaction scale means was calculated. The criterion variable was calculated using the following formula:

$$\overline{X_{OVERALL}} = \frac{(\overline{X_{SWJS}} + \overline{X_{SWCS}} + \overline{X_{SWRS}} + \overline{X_{SWPS}} + \overline{X_{SWIS}})}{5}$$

OBJECTIVE TWO—EXPLORE AND PREDICT

This study's second objective presents a more complicated scenario, as the research is asked to explore and predict. Multiple regression analysis is an appropriate statistical approach when exploring the input and environmental variables that will predict female presidents' overall career satisfaction.

Multiple Regression Analysis

As Dr. Nutt (1996) explains, "Multiple regression is a multivariate technique for determining the correlation between one criterion variable (overall career satisfaction) and two or more predictor variables" (p. 120). The purpose of using multiple regression is to determine which of the predictor variables (or combination of predictors) will most accurately predict the criterion variable (overall career satisfaction). With this technique, the researcher will be comparing the data results from the original and current studies.

> Multiple regression analysis is an excellent statistical procedure to implement the I-E-0 assessment model because it permits the investigator to control a vast number of potentially biasing ... input characteristics. Note that the regression formula allows the investigator to express the [president]'s entering characteristics in terms of an expected output score. By comparing the expected and actual output scores of [presidents] who

experienced different types of environments ..., we can evaluate the effects of almost any environmental variable on the outcomes of interest. (Astin, 1991, p. 108)

There are four key assumptions when using a multiple regression technique. The first assumes a linear relationship between the criterion (outcome) variable and the predictive (independent) variables. This assumption is tested using a scatterplot to verify the linear relationship. Second, the multiple linear regression analysis requires that the errors between observed and predicted values, or the regression residuals are typically distributed. This assumption is tested using a histogram. Third, multiple regression assumes that the predictive (independent) variables are not highly correlated with each other. When the predictive variables are highly correlated, multicollinearity occurs. If there is multicollinearity between the predictive variables, an inference is made, which skews the multiple regression analysis results. To ensure there is not multicollinearity, the Variance Inflation Factor (VIF) values are calculated. The last assumption of multiple linear regression is homoscedasticity, which states that the variance of error terms is similar across the predictive (independent) variables' values. A scatterplot is used to verify this assumption.

The mathematical formula used for the multiple regression statistical analysis will be replicated from the original study (Nutt, 1996, p. 121):

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + \cdots + b_k X_k$$

where Y = the criterion variable

α = a constant term

b_i = partial regression coefficients

x_i = predictor variables

The *Y* stated in this equation represents the criterion variable, overall career satisfaction. This was calculated by determining the overall mean of the five satisfaction scale

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means. The relationship between the criterion variable (Y) and a predictor variable (x_1), while controlling for the other predictor variables, is shown with b_i's or partial regression coefficients. Predictor variables are represented as x_i.

Input and Environmental Blocks

A blocked, forward multiple regression analysis is used with both the original and replicated studies. There is a total of six blocks used in the analysis, three input, and three environmental.

The input blocks include the variables of prior satisfaction scale items, personal demographics, and professional demographics. Each of these variables "was entered into the regression, one at a time, until no additional variable in that block was capable of adding significantly to the prediction of career satisfaction" (Nutt, 1996, p. 122). Once this process was completed for the input blocks, the process moves to the environmental blocks.

The environmental blocks include variables within institutional effects, personal involvement effects, and between institution effects. The variables within institutional effects presented sub environments which consist of estimates of time spent on work-related activities, involvement with professional associations and committees, interaction with students, faculty, and other pertinent constituents, energy devoted to presidential duties, the institution's acceptance of the female president, if she was the first female president of her institution, and current annual salary. Personal involvement effects include variables representing the number of hours per week the respondent exercises, volunteers, enjoys leisure activities or hobbies, spends with family and friends, participates in religious worship

services, and frequency of meditation or prayer. Variables representing institutional effects

include the Carnegie Classification, student body composition, affiliation, and enrollments.

Similar to the input blocks, all variables were entered into the regression, one at a time, until no

variable within the block was significantly influencing the prediction of career satisfaction (Nutt,

1996).

Presidential input characteristics are represented through the input blocks. The

environmental blocks represent the environmental factors that may contribute to predicting

career satisfaction beyond the input characteristics. Through the multiple regression technique,

direct relationships between predictor (input and environmental blocks) and criterion (overall

career satisfaction) variables. The I-E-O model was adjusted to delineate the blocks within the

multiple regression technique and is represented in Figure 3.

Figure 3: The Adjusted I-E-O Multiple Regression Model

Input Block		
Prior Satisfaction	Personal Demographics	Professional Demographics

Output
Overall Career Satisfaction

Environmental Block		
Within Institution Effects	Personal Involvement Effects	Between Institution Effects
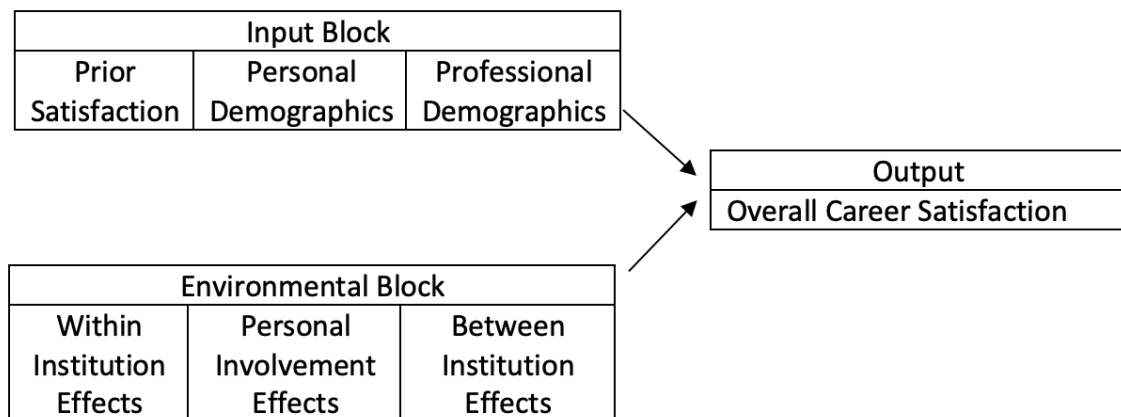
CONCLUSION

The information in Chapter Three serves as the basis for the research design, data

collection parameters, instrumentation used to collect the data, the target population for

sampling, and the data analysis structure. Replicating the strategies used by Dr. Nutt in 1996,

the statistical methods of descriptive and multiple regression analysis will be used for this

study. The comparison of the initial and current statistical analysis is presented in Chapter Four.

CHAPTER FOUR: FINDINGS

INTRODUCTION

Information contained in Chapter Four includes a review of the research questions, a thorough analysis of the data obtained from the Comprehensive Career Satisfaction Survey (CCSS), and a comparison of results from Dr. Nutt's original study in 1996 and the current study. The CCSS was presented to female presidents/chief executive officers of Carnegie Classified higher education institutions in the United States.

REVIEW OF THE RESEARCH QUESTIONS

The survey and data that was collected from female presidents/chief executive officers were designed to answer the following research questions:

- RQ1: How satisfied are female presidents with their jobs?

- RQ2: How satisfied are female presidents with their compensation?

- RQ3: How satisfied are female presidents with their professional relationships?

- RQ4: How satisfied are female presidents with their performance?

- RQ5: How satisfied are female presidents with their institutions?

- RQ6: How satisfied are female presidents overall?

- RQ7: Which personal (input) variables and environmental variables predict career satisfaction for female presidents?

The original CCSS was created using a traditional paper format. This paper form of the CCSS was transitioned to a digital format using the platform Formstack. All the questions and Likert Scale response options from the paper copy were identical when replicated to the new digital format.

The researcher then contacted the Higher Education Publications (2019) through e-mail to request an electronic list for the e-mail addresses of all female presidents/CEOs of higher education institutions within the United States. An excel spreadsheet was sent to the researcher that listed 1,064 names, associated higher education institution, and e-mail addresses. All fifty states and territories within the United States were represented in the list received from Higher Education Publications There were two waves of emails sent to the group requesting participation in the study using the CCSS. The first wave of requests yielded 102 responses, which is approximately 10% of the total list. The second wave yielded approximately 4% or thirty-nine of the remaining requests that were submitted. The total yield for the CCSS electronic responses was 141 or approximately 13%.

Responses to the CCSS represent 42 states and territories or 78% of the United States. The states and territories of Alaska, District of Columbia, Guam, Kansas, Maine, Mississippi, Montana, North Dakota, New Hampshire, Rhode Island and Vermont or 22% of the United States were not represented by responses to the CCSS.

Institutional characteristics were also collected about individual respondents. The characteristics included their institution's Carnegie classification, student enrollment, presidential code, and affiliation or control.

Table 11: Institutions and Respondents by Carnegie Classification

Carnegie Classification	Total Institutions by Classification	% of Total Institutions	Respondents by Classification	% of Total Respondents	Rate of Response
Associate's	390	36.6	53	37.1	7.4
2-yr Special Focus	46	4.3	2	1.4	23
Baccalaureate	173	16.2	22	15.4	7.9
4-yr Special Focus	135	12.7	27	18.9	5
Master's	212	19.9	29	20.3	7.3
Doctoral	96	9.0	9	6.3	10.7
Tribal	14	1.3	1	0.7	14
TOTAL	**1,066**	**100**	**143**	**100**	**13.4**

Higher Education Publications, 2019

Dr. Nutt's study (1996) calculated 39.3% of female presidents worked at associate's degree-granting institutions. The classification of respondents for the current study indicates a similar finding of 36.6% which indicates a relatively small decrease in female presidents working at associate's degree-granting institutions of higher education. As Table 12 indicates, there are more institutions led by female presidents in totality; however, the percentage breakdown from each Carnegie Classification remains similar.

Table 12: Comparison of Institutions by Carnegie Classification

CARNEGIE CLASSIFICATION	TOTAL INSTITUTIONS BY CLASSIFICATION (2020)	% OF TOTAL INSTITUTIONS (2020)	TOTAL INSTITUTIONS BY CLASSIFICATION (NUTT, 1996)	% OF TOTAL INSTITUTIONS (NUTT, 1996)
Associate's	390	36.6	176	39.3
Special Focus (2-yr and 4-yr)	181	17.0	66	14.7
Baccalaureate	173	16.2	93	20.8
Master's	212	19.9	88	19.7
Doctoral	96	9.0	25	5.6
Tribal	14	1.3	0	0
TOTAL	1,066	100	448	100.1

Respondents to the survey were also classified by manpower code. This code is assigned by the Higher Education (2019) Directory and is included in the requested data on October 2020. The code "01" is defined as the Chief Executive Officer (President/Chancellor) of a college who directs all affairs and operations of a higher education institution. The code "02" is defined as the Chief Executive Officer within a system (President/Chancellor) who directs all affairs and operations of a campus or an institution which is part of a university-wide system. Table 13 presents the classification of the respondents for the current survey.

Table 13: Respondents by Manpower Code

MANPOWER CODE	TOTAL INSTITUTIONS WITH CODE	% OF INSTITUTIONS	TOTAL RESPONDENTS WITH CODE	% OF RESPONSE WITH CODE
Code "01"	773	72.5	102	13.2
Code "02"	293	27.5	39	13.3
TOTAL	**1,066**	**100**	**141**	**13.2**

Higher Education Publications, 2019

As the table displays, the largest portion of female presidents are categorized as a code "01." A code "1" indicates a Chief Executive Officer (President/Chancellor) of a college who directs all affairs and operations of a higher education institution. The population sample was similar to the original study as seen in Table 14.

Table 14: Comparison of Respondents by Manpower Code

MANPOWER CODE	TOTAL INSTITUTIONS WITH CODE (2020)	% OF INSTITUTIONS (2020)	TOTAL INSTITUTIONS WITH CODE (NUTT, 1996)	% OF INSTITUTIONS (NUTT, 1996)
Code "01"	773	72.5	319	71.2
Code "02"	293	27.5	129	28.8
TOTAL	**1,066**	**100**	**448**	**100**

Student body composition was also documented for the respondent's institution in which they serve. As Table 15 indicates, there are three types of student body composition's documented: co-educational, female only, and male only.

Table 15: Respondents by Student Body Composition

TYPE OF STUDENT BODY COMPOSITION (SBC)	TOTAL INSTITUTIONS WITH SBC	% OF TOTAL INSTITUTIONS	TOTAL RESPONDENTS WITH SBC	% OF TOTAL RESPONDENTS	RATE OF RESPONSE WITH SBC
Co-educational	1,033	96.9	139	97.2	13.5
Female Only	33	3.1	4	2.8	12.1
Male Only	0	0	0	0	0
TOTAL	**1,066**	**100**	**143**	**100**	**13.4**

The data indicate there are no female presidents that lead male-only higher education institutions. Female presidents tend to lead co-educational institutions according to this study. Comparing the previous study (Nutt, 1996), Table 16 indicates a larger percentage of female presidents leading co-educational institutions.

Table 16: Comparison of Respondents by Student Body Composition

TYPE OF STUDENT BODY COMPOSITION (SBC)	TOTAL INSTITUTIONS WITH SBC (2020)	% OF TOTAL INSTITUTIONS (2020)	TOTAL INSTITUTIONS WITH SBC (NUTT, 1996)	% OF TOTAL INSTITUTIONS WITH SBC (NUTT, 1996)
Co-educational	1,033	96.9	391	87.3
Female Only	33	3.1	57	12.7
Male Only	0	0	0	0
TOTAL	**1,066**	**100**	**448**	**100**

Institutions of the respondents are also classified according to their affiliation or control within the higher education directory. State/local or public, independent non-profit or private, religious denomination, and tribe/federal are the distinctive classifications for this category.

Table 17 displays the number of institutions that represent each of the four types of affiliation

or control.

Table 17: Respondents by Affiliation or Control

TYPE OF AFFILIATION OR CONTROL	TOTAL INSTITUTIONS WITH SPECIFIC AFFILIATION OR CONTROL	% OF INSTITUTIONS	TOTAL RESPONDENTS WITH SPECIFIC AFFILIATION OR CONTROL	% OF RESPONDENTS	RATE OF RESPONSE
State/Local (Public)	542	50.8	73	51.1	13.4
Independent Non-Profit (Private)	493	46.3	62	43.4	12.6
Religious Denomination	17	1.6	7	4.9	41.2
Tribal/Federal	14	1.3	1	.6	7.1
TOTAL	**1,066**	**100**	**141**	**100**	**13.2**

As Table 17 indicates, approximately half of the institution's women lead are public, and

46.3% are private. The category of religious denomination leads the highest rate of response in

both the current and original study (Table 18).

Table 18: Comparison of Respondents by Affiliation or Control

Type of Affiliation or Control	Total Institutions with Specific Affiliation or Control (2020)	% of Institutions (2020)	Total Institutions with Specific Affiliation or Control (Nutt, 1996)	% of Respondents (Nutt, 1996)
State/Local (Public)	542	50.8	209	46.7
Independent Non-Profit (Private)	493	46.3	150	33.5
Religious Denomination	17	1.6	83	18.5
Tribal/Federal	14	1.3	6	1.3
TOTAL	**1,066**	**100**	**448**	**100**

Last, the institutions at which the respondents serve are categorized by the Full Time

Equivalent student enrollment. The student enrollment categories are broken into five sections

as indicated in Table 19. Because the student enrollment is categorized differently for 2-year

and 4-year institutions, the researcher combined similar enrollment ranges to ensure the data

would be comparable to the original study.

Table 19: Respondents by Enrollment

Enrollment Categories	Total Institutions with Enrollment Category	% of Total Institutions	Total Respondents with Enrollment Category	% of Total Respondents	Rate of Response
2-yr (< 500) 4-yr (<1000)	211	19.8	28	19.6	13.3
2-yr (500-1999) 4-yr (1000-2999)	356	33.4	51	35.7	14.3
2-yr (2000-9999) 4-yr (3000-9999)	363	34.1	44	30.8	12.1
2-yr and 4-yr (10,000+)	89	8.3	10	7.0	11.2
Graduate/Professional	47	4.4	10	7.0	21.3
TOTAL	**1,066**	**100**	**143**	**100.1**	**13.4**

The information presented in Table 19 indicates that women presidents' serve mostly at institutions with a student enrollment between 500 and 9,999 students. While the enrollment categories are not the same between the original and replicated study, Table 20 compares the data within ranges of enrollment numbers. These comparisons show similar patterns of institutional service by enrollment between the two studies.

Table 20: Comparison of Respondents by Enrollment

Enrollment Categories	Total Institutions with Enrollment Category (2020)	% of Total Institutions (2020)	Total Institutions with Enrollment Category (Nutt, 1996)	% of Total Institutions (Nutt, 1996)
2-yr (< 500) 4-yr (<1000)	211	19.8	132	29.5
2-yr (500-1999) 4-yr (1000-2999)	356	33.4	262	58.5
2-yr (2000-9999) 4-yr (3000-9999)	363	34.1		
2-yr and 4-yr (10,000+)	89	8.3	54	12.1
Graduate/Professional	47	4.4	0	0
TOTAL	**1,066**	**100**	**448**	**100.1**

Based upon the data presented above, the survey respondents adequately represented the seven Carnegie classifications, the two manpower codes, the study body composition types, the enrollment categories, and the control or affiliation types of higher education institutions.

DESCRIPTIVE STATISTICS

Each item on the questionnaire was used to calculate descriptive statistics. Using Dr. Nutt's (1996) method of calculation from the original study, "Means were calculated for continuous items, such as levels of satisfaction. Frequencies were computed for categorical items, such as race and marital status. Percentages were also calculated to determine the distribution of responses" (p. 133).

In the original survey, "the typical female president is age 46-55" (Nutt, 1996, p. 133), while the typical female president age for the replicated study is 55-65 years old. The time at her present institution, Christianity as a religion, not a member of a religious order, white, and in her first marriage with no children at home remained as the same characteristics of female presidents in both studies. The time spent at her present institution remained the same (5.8 years), while the average time served as a president increased from 6.9 years to 7.4 years. The majority of respondents in the first study had received a Ph.D.; however, the majority of respondents in the second survey had earned either a Ph.D. or Ed.D. Both studies shared the same sentiments of female presidents as having the desire to be president as she moved up the administrative ladder.

Current job responsibilities require approximately 52.8 hours for the female presidents in the current study, while the original study indicated 58.3 hours to complete job duties. The time spent on campus working remained similar (39.7 hours for the original study and 40.7 hours for the current study) as did meeting with others (30.6 hours for the original study and 31.5 hours for the current study). The number of professional association memberships decreased from 5.7 in the original study to 4.4 in the current study. The number of officer positions in professional associations decreased slightly from 1.5 to 1.2, the number of campus committees that female presidents served on decreased from 5.7 to 4.0, while local (1.5 to 1.9), regional (1.8 to 1.7), statewide (1.8 to 1.7), and national (1.7 to 1.1) committee participation remained relatively the same. According to Nutt, "She interacts frequently with students, faculty, the governing board, and other external constituents (who were not specifically identified). She interacts with the administration on a daily basis, and with alumni, parents, and

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legislators only occasionally" (Nutt, 1996, p. 134). The previous analysis from the original study was identical to the results of the replicated study.

Both studies show the female presidents spending an average of 11.1 hours per week with family and friends, with an increase in hours exercising (3.7 to 4.1 hours) and a slight decrease in time spent volunteering (2.8 to 2.2 hours) and enjoying leisure activities or hobbies (5.7 to 4.5 hours). On average, the female president attends a religious worship service once a week in both studies and participates in personal meditation or prayer on a daily basis.

While the current study revealed that the respondent is NOT the first women serving as president at that institution, Dr. Nutt's study stated the opposite. Both studies indicated the typical female president feels that her institution is very accepting as president. In 1996, the female president earned $90,000 or more per year. The current study reflects 25% of the respondents make more than $300,000, and 45% earn $150,000–$250, 000 per year.

METHODS

There are two objectives that were used to answer the research questions and develop a survey to be administered to the female presidents of higher education institutions. The first objective was to describe the overall career satisfaction for female presidents of American higher education institutions. The second objective was to determine which combination of variables form the best predictor for career satisfaction in female presidents. Both objectives, the methodology used to quantify the results, and answers to the research questions are addressed in the following sections.

There are six scales that will be used to calculate the overall career satisfaction of female presidents. The results from each of the scales will be presented from the current study and then compared with the original study.

Satisfaction With the Job Scale (SWJS)

The first research question asks the respondent to rate their level of satisfaction with their jobs. The scale used is the following: 1 = *very dissatisfied*, 2 = *dissatisfied*, 3 = *more dissatisfied than satisfied*, 4 = *more satisfied than dissatisfied*, 5 = *satisfied*, and 6 = *very satisfied*. Table 21 summarizes the results and indicates female presidents are satisfied with their jobs today just as they were in 1996.

Table 21: Satisfaction with the Job Scale Item Means

RQ1: HOW SATISFIED ARE FEMALE PRESIDENTS WITH THEIR JOBS?

QUESTIONNAIRE ITEM	ITEM M (2020)	SE (2020)	ITEM M (NUTT, 1996)	SE (NUTT, 1996)
Time required to fulfill duties	4.2	1.3	3.7	1.3
Autonomy	4.9	1.0	4.9	1.1
Influence	5.2	0.8	5.1	0.8
Task Variety	5.5	0.7	5.5	0.7
Challenge	5.5	0.8	5.7	0.5
Skill and ability utilization	5.4	0.7	5.4	0.7
Time for scholarly activities	3.4	1.3	2.9	1.2
Degree of job security	4.5	1.2	4.6	1.2
Overall Mean	**4.8**	**1.0**	**4.7**	**0.6**

The results from the survey indicate that female presidents are satisfied with task variety, challenge, and their use of their skill and/or ability in their jobs. These are similar results found in Dr. Nutt's (1996) study. Their dissatisfaction more than satisfaction lies in their

time for scholarly activities. The overall mean comparison is similar at 4.8 in the current study and 4.7 in the 1996 study.

The 3.4 score in response to the time available for scholarly work indicates a source of dissatisfaction that needs to be addressed. While the score for this item in the questionnaire has increased minimally during the past 25 years, this concern of female presidents has not dissipated. According to the descriptive statistics, female presidents are spending an average of 52.8 hours per week with their job and approximately 22 hours with family, friends, exercising, volunteering, and other leisurely activities. These two areas equate to over 74 hours per week which are accounted for in the female president's life which leaves limited time for scholarly work (teaching, writing, or research).

Satisfaction With Compensation Scale (SWCS)

The second research question, "How satisfied are female presidents with their compensation?" is answered with an overall mean score of 4.8 or satisfied. The scale used for the rating of the questionnaire items is the following: 1 = *very dissatisfied*, 2 = *dissatisfied*, 3 = *more dissatisfied than satisfied*, 4 = *more satisfied than dissatisfied*, 5 = *satisfied*, and 6 = *very satisfied*. Table 22 summarizes the results and indicates female presidents are satisfied with their compensation today just as they were in 1996.

Table 22: Satisfaction with Compensation Scale Item Mean

QUESTIONNAIRE ITEM	ITEM *M* (2020)	*SE* (2020)	ITEM *M* (NUTT, 1996)	*SE* (NUTT, 1996)
Salary	4.6	1.1	4.5	1.2
Fringe benefits	4.8	1.0	4.6	1.2
Leave time	4.9	1.1	4.5	1.3
Overall Mean	**4.8**	**1.1**	**4.5**	**1.0**

The information in Table 22 suggests that female presidents are slightly more satisfied with their fringe benefits and leave time than their salary. Current female presidents seem to be slightly more satisfied with their overall compensation than those taking the first survey in 1996.

Because of the small change in satisfaction of compensation, the pay disparities between men and women appears to have not changed much in the last 25 years. Research indicates there is still a salary gap between men and women of eight-two cents on the dollar on the dollar (Bleiweis, 2020). While the descriptive statistics indicate there is an increase in the total compensation package women presidents are receiving, the gap between male and female pay continues to be an issue.

Satisfaction With Professional Relationships Scale (SWRS)

This scale answers the third research question, "How satisfied are female presidents with their professional relationships?" According to the responses using the following scale: 1 = *very dissatisfied*, 2 = *dissatisfied*, 3 = *more dissatisfied than satisfied*, 4 = *more satisfied than*

dissatisfied, 5 = *satisfied*, and 6 = *very satisfied*, the respondents are satisfied with an overall

mean score of 5.1. Table 23 summarizes the results and indicates female presidents are

satisfied with their professional relationships today just as they were in 1996.

Table 23: Satisfaction with Professional Relationships Scale Item Means

RQ3: HOW SATISFIED ARE FEMALE PRESIDENTS WITH THEIR PROFESSIONAL RELATIONSHIPS?

QUESTIONNAIRE ITEM	ITEM *M* (2020)	*SE* (2020)	ITEM *M* (NUTT, 1996)	*SE* (NUTT, 1996)
Students at your institution	5.2	0.9	4.9	0.9
Faculty at your institution	4.9	1.1	4.8	1.0
Administrators at your institution	5.4	0.8	5.2	0.8
Male members of the governing board	5.1	1.2	5.2	0.9
Female members of the governing board	5.2	1.0	5.2	0.8
Male presidents of other institutions	4.9	1.1	4.9	0.9
Female presidents of other institutions	5.2	1.0	5.1	0.8
Community leaders	5.3	0.9	5.1	0.9
Legislators	4.8	1.1	4.6	1.1
Alumni	5.0	1.0	4.7	1.1
Overall Mean	**5.1**	**1.0**	**5.0**	**0.6**

Information contained within Table 23 indicates similar results between the original and

replicated study. The overall mean of satisfaction is up slightly from 5.0 to 5.1. The most

significant change was the increase of 0.3 item mean score in satisfaction with students and

alumni from the institution. The only decline in satisfaction, which was minimal at 0.1 item

mean score, pertained to the relationship with male members of the governing board.

Satisfaction With Performance Scale (SWPS)

The fourth research question, "How satisfied are female presidents with their

performance?" is answered with the SWPS. The overall mean of the SWPS is 5.1 which was

rated using the following: 1 = *very dissatisfied*, 2 = *dissatisfied*, 3 = *more dissatisfied than

satisfied*, 4 = *more satisfied than dissatisfied*, 5 = *satisfied*, and 6 = *very satisfied*. Table 24

summarizes the results and indicates female presidents are satisfied with their performance

today just as they were in 1996.

Table 24: Satisfaction with Performance Scale Item Means

RQ4: How satisfied are female presidents with their performance?

Questionnaire Item	Item *M* (2020)	*SE* (2020)	Item *M* (Nutt, 1996)	*SE* (Nutt, 1996)
Vision	5.2	0.8	5.1	0.8
Leadership	5.4	0.5	5.1	0.7
Decision making	5.4	0.6	5.1	0.7
Communication	5.1	0.9	4.8	0.8
Conflict Resolution	5.0	0.9	4.7	0.8
Political acuity	4.9	1.0	4.7	0.9
Financial management	5.2	0.9	4.9	0.9
Fund raising	4.3	1.3	4.2	1.2
Overall Mean	**5.1**	**0.9**	**4.8**	**0.5**

The results of the questionnaire items for this research question saw the greatest improvement of satisfaction between the original and replicated studies. The overall mean increased from 4.8 (Nutt, 1996) to 5.1 in the current study, which represents a growth in satisfaction of female presidents with their job performance.

As previously stated by Nutt (1996), "In the context of Locke's values theory, female presidents most highly value having a vision for the institution, being able to provide leadership, and being able to make decisions" (p. 141). The results of the replicated study substantiate the statement made by Dr. Nutt as the scores in leadership, vision, and decision-making remained as strong indicators with item mean scores of 5.4, 5.2, and 5.4 out of a 6-point scale.

Satisfaction with the Institutional Scale (SWIS)

Research question number five, "How satisfied are female presidents with their institutions?", resulted in an overall mean score of 4.7 or satisfied. The questionnaire items were rated using 1 = *very dissatisfied*, 2 = *dissatisfied*, 3 = *more dissatisfied than satisfied*, 4 = *more satisfied than dissatisfied*, 5 = *satisfied*, and 6 = *very satisfied*. As with the original study, the mean for this scale was the lowest of the five satisfaction scales. Table 25 summarizes the results and indicates female presidents are satisfied with their institution today just as they were in 1996.

Table 25: Satisfaction with the Institution Scale Item Means

QUESTIONNAIRE ITEM	ITEM *M* (2020)	*SE* (2020)	ITEM *M* (NUTT, 1996)	*SE* (NUTT, 1996)
Mission	5.6	0.6	5.3	0.8
Culture	4.8	1.3	4.6	1.1
Climate	4.6	1.2	4.5	1.1
Status	4.7	1.1	4.3	1.1
Facilities	4.4	1.4	4.1	1.3
Financial condition	4.1	1.6	3.9	1.3
Operating policies and procedures	4.5	1.3	4.3	1.0
Organizational structure	4.8	1.1	4.5	1.0
Overall Mean	**4.7**	**1.2**	**4.4**	**0.7**

In accordance with the original study, female presidents are satisfied with mission of the institution. When analyzing the descriptive statistics, the information indicates that most female presidents lead associate's degree-granting institutions whose clear mission is to provide access and success to constituents. These corresponding points of data may present the reason why more women presidents lead the specific sector of 2-year institutions of higher education.

While the financial conditions of leading increase in the item mean score from 3.9 (Nutt, 1996) to 4.1 in the current study, it remains the lowest item within the questionnaire. Financial stability and availability have always been issues of concern for administrators in higher education and continues to provide dissatisfaction (Weisbrod & Asch, 2010).

Overall Career Satisfaction (OCS)

The final research question, "How satisfied are female presidents overall?" is answered

using the five previous scales to calculate an overall mean with 1 = *very dissatisfied*, 2 =

dissatisfied, 3 = *more dissatisfied than satisfied*, 4 = *more satisfied than dissatisfied*, 5 =

satisfied, and 6 = *very satisfied*. The calculated overall mean of career satisfaction for this study

is 4.9, an increase of 0.2 from the study conducted by Dr. Nutt (1996). The comparison of

results from both studies are found in Table 26.

Table 26: Overall Career Satisfaction Scale Means

Questionnaire Item	Item *M* (2020)	*SE* (2020)	Item *M* (Nutt, 1996)	*SE* (Nutt, 1996)
Satisfaction with job	4.8	1.0	4.7	0.6
Satisfaction with compensation	4.7	1.1	4.5	1.0
Satisfaction with professional relationships	5.1	1.0	5.0	0.6
Satisfaction with performance	5.1	0.9	4.8	0.5
Satisfaction with institution	4.7	1.2	4.4	0.7
Overall Mean	**4.9**	**1.0**	**4.7**	**0.5**

The information reveals a slight increase in each of the satisfaction scales and overall

mean of career satisfaction between the 1996 and 2020 studies. Research suggests that

increases in pay, increased number of female presidents in higher education, and alignment

with college mission positively affect the overall career satisfaction scale (Lepkowski, 2009).

The study also presented an Overall Career Satisfaction Measure (OCSM), a single-item

question to measure career satisfaction of the respondents. The question, "How satisfied are

you as a president/CEO overall?", results were then compared to the Overall Career Satisfaction

results of the previous five scales which are presented in Table 27.

Table 27: OCSM and Overall Career Satisfaction Compared (in Percentages)

RESPONSE	OCSM (2020)	OVERALL CAREER SATISFACTION (2020)	OCSM (NUTT, 1996)	OVERALL CAREER SATISFACTION (NUTT, 1996)
Very Dissatisfied (1)	3.6	0.0	3.4	0.0
Dissatisfied (2)	0.0	0.0	0.0	0.0
More dissatisfied than satisfied (3)	4.3	0.7	1.7	1.7
More satisfied than dissatisfied (4)	16.4	20.1	16.5	28.9
Satisfied	34.3	69.1	40.9	67.2
Very Satisfied	41.4	10.1	37.5	2.1

The results from the OCSM are different than the Overall Career Satisfaction for both

studies, original and replicated. The "very satisfied" area increased the most between the two

studies while the "satisfied" area had the most substantial decrease. Viewing the histograms of

the OCSM and Overall Career Satisfaction means present a clearer picture of the differences

(Figure 4).

Figure 4: OCSM and OCS Means
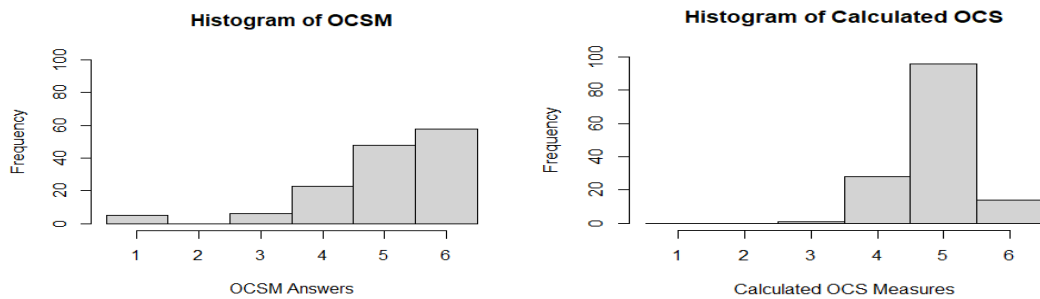
Finding the means of the responses to five scales with numerous questions presents a more defining response that female presidents are satisfied (5) with their overall career than asking one question (OCSM). The singular question has more diversified responses that are not supported, necessarily, by the results calculated for the five scales of career satisfaction. The outcome of this comparison reinforces Locke's (1969) understanding that "overall career satisfaction… is the sum of the evaluations of the discriminable elements of which it is composed" (Nutt, 1996, p. 147).

In summary, current female presidents are satisfied with their career. The results presented from the original and replicated studies are similar, with a slight increase in the overall career satisfaction for the current study. Female presidents continue to feel challenged with their careers, feel as though they are utilizing their gifts and talents, and feel satisfied with their professional relationships. The dissatisfaction that is associated with their careers is the lack of time for scholarly activities.

The second objective of the replicated study is to answer the last research question of the study, "Which personal (input) variables and environmental variables predict career satisfaction for female presidents?" To analyze the results of the current study and then compared to the replicated study, two separate statistical processes were used. Multiple regression was the first method used to predict the variables that most determine the criterion variable, overall career satisfaction, from the current data set. The second method, bootstrapping, was used to compare the results of both studies and then check the statistical significance, if any, of the findings. Bootstrapping is an alternative approach to traditional hypothesis testing and is notable for being easier to understand and valid for more conditions (Frost, n.d.-a).

Multiple Regression Process

The multiple regression process is a multi-step technique used to predict the value of a variable based on the value of two or more other variables. The independent variables used for this study are part of Astin's (1991) input and environmental blocks. The output block in Astin's Theory of Involvement we want to predict is called the dependent variable or overall career satisfaction of female presidents.

Dr. Nutt's (1996) original study began the multiple regression process using three input blocks (prior satisfaction scale items, personal demographics, and professional demographics) and three environmental blocks (within institutional effects, personal involvement effects, and between institution effects): "All of the variables in the six blocks were entered in a forward manner until all of their predictive power was exhausted" (p. 149).

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The current study also used a multiple regression model to ensure the validity and reliability of the study. Within this study's multiple regression, the statistician performed the statistical analysis in a more robust manner to account for all the questions used in the survey. The programming language of R is used to compute the statistical analysis. R is a programming language and free software environment for statistical computing and graphics supported by the R Foundation for Statistical Computing (Hornik, 2017).

Before performing the statistical functions for the study, there are four assumptions about the data that need to be stated. First, there is an assumption that the data has a linear relationship or that all the data points will be plotted in a straight line. Second, we assume that the individual residuals (errors) are approximately the same for each of the responses. In other words, the distance between the straight line and the plotted points are approximately the same. Third, we assume that we have normally distributed errors. The fourth assumption believes that the error term will have a mean of zero. An error term is a value which represents how observed data differs from actual population data. Understanding these assumptions is a critical component of the forthcoming data analysis.

The analysis began by using the eighty-one questions to check for a plausible linear relationship between each column and the dependent variable (Overall Career Satisfaction) or "good fit." Unfortunately, the data was overfitted which results in a condition where "a statistical model begins to describe the random error in the data rather than the relationships between variables. In regression analysis, overfitting can produce misleading R-squared values, regression coefficients, and p-values" (Frost, n.d.-c, para. 1). The first fit test used an ANOVA test with $\alpha = .05$ to remove any questions that did not have a "good fit" or linear relationship. An

ANOVA test utilizes the F-Distribution to perform hypothesis testing on a given linear model.

Thirty-nine questions remained with the following R^2 values:

$$R^2 = 0.66855$$

Adjusted R^2 = 0.06247

R^2 values are indicators of how much the variation in our response (OCS) can be accounted for by the variables in the model. A large discrepancy between the R^2 and adjusted R^2 is a sign that the data may not meet all of the initial assumptions to be an adequate linear model. However, steps were taken to minimize or negate these effects as the model was improved.

Also, as more regressor variables (questions) are introduced into the model, the higher R^2 tends to be. The adjusted R^2 value is just that, an adjustment of the original R^2 made to account for the large number of variables.

The second analysis or fit test used the remaining thirty-nine columns to create another model that would check for multicollinearity.

Multicollinearity occurs when independent variables in a regression model are correlated. This correlation is a problem because independent variables should be *independent*. If the degree of correlation between variables is high enough, it can cause problems when you fit the model and interpret the results. (Frost, n.d.-b, para. 1)

Multicollinearity was checked using Variance Inflation Factors (VIFs). The VIFs measure the correlation among independent variables in least squares regression models and were used on each of the remaining thirty-nine questions. All questions with a VIF of ten (10) or greater were removed, as that indicates correlation between the questions. Thirty questions remain, or nine questions were eliminated because of multicollinearity. The remaining thirty questions had

a VIF ≤ 3.5 which verifies that multicollinearity was removed. The measure of variance

accounted for in our model increased, as seen in these R^2 values:

$$R^2 = 0.41094$$

Adjusted R^2 = 0.15849

With the adjustments in data, an ANOVA table was created that details the p-value

[PR(>F)] of each variable (question) and its statistical significance to the study (Appendix A). For

the study, α = 0.05, where if any given question has a p-value < 0.05 in the ANOVA table, it can

be said this question is statistically significant. Of the thirty questions, four questions had the

necessary p-value to be considered adequate, or statistically significant. However, as seen in

the drastically different R^2 and adjusted R^2 values above, the model was still not statistically

robust enough.

Since we have proven that our initial assumptions were violated (because the data may

not be linear), the next model or fourth fit used a power transformation on our responses (Y) to

negate some of our violated assumptions. The boxcox method was used to transform our data

so that it more accurately resembles a normal distribution. Using this method helps to

normalize our errors and distribution. A second ANOVA chart was created after the power

transformation was performed and we noted the p-values got closer to our target of our p-

value < 0.05 (Appendix B).

The new R^2 values that are calculated indicate we are negated some of our broken

assumptions:

$$R^2 = 0.59340$$

Adjusted R^2 = 0.41914

The fifth and final model or fit requires a third ANOVA table (Appendix C). Within this table, the power transformation calculations are used for the thirty questions, and we now have seven questions that have a p-value of < 0.05 and prove to be statistically significant to the study. The R^2 values move closer together and indicate an adequate variance model:

$$R^2 = 0.4002$$

Adjusted R^2 = 0.3677

The final equation for the power transformation predictive model:

$$\hat{y} = \sqrt[4]{-1788.73 + 32.45(x_1) + 52.95(x_2) + 37.57(x_3) + 134.78(x_4) + 56.16(x_5) + 91.85(x_6) + 105.33(x_7)}$$

The original study had an adjusted R^2 of 43.94% for the ten predictors of overall career satisfaction. The ten predictors (four variable from the input block and six from the environmental block) included: satisfaction with previous compensation, widowed marital status, divorced marital status, years in current presidency, institutional acceptance of a female as president, energy spent recruiting faculty, frequency of interaction with parents, frequency of interaction with students, salary, and frequency of interaction with legislators. The current study had an adjusted R^2 of 36.77% for seven predictors of overall career satisfaction. The seven predictors include: time required to fulfill duties, autonomy, influence, task variety, salary, professional relationships with administrators at your institution, and status of the institution. By simply comparing these lists, salary is the only predictor that is present in both studies.

In comparing the original and replicated studies, the researcher wants to ensure that the sample data (the survey) from both studies, comes from a normal population (the entire population of female presidents). There is a statistical technique that uses bootstrapping to ensure and recreate, if necessary, a "normal" population to be used for a statistical analysis. The process is performed on each scale and takes a single, random data point from each question in that scale. For example, using the Satisfaction with Job Scale (SWJS), a random answer for questions 1–8 is chosen. Once the random answers are chosen, the mean of those 8 random samples is calculated. This process produces one sample mean. The process is repeated 10,000 times to create a quasi-normal distribution of means for the SWJS. The results are that the representative population distribution that can be plotted. The next step in the process is to find the 2.5% and 97.5% cutoff (the ends of a bell curve) which will be plotted and designated by green lines. The green lines represent our confidence interval for the mean of the SWJS. The mean for the original study's scale is plotted using a solid red line. This process is repeated for each of the six scales within the study.

The results from each of the bootstrapped scales tells the story of the population differences or likeness between the two studies and if the populations are different because of time and progression of values in academia. This method of analysis is measuring the statistical significance in the difference or likeness of the comparison. Each graph below (Figures 5-9) is specific to one of the six scales. For each one, if the overall means for each scale from the original study (red lines) are outside of the green dotted lines (confidence intervals), then we can confidently conclude that the samples from each study come from separate populations. If

the red line is within the green lines (confidence intervals), then we cannot confidently

conclude that the populations are different.

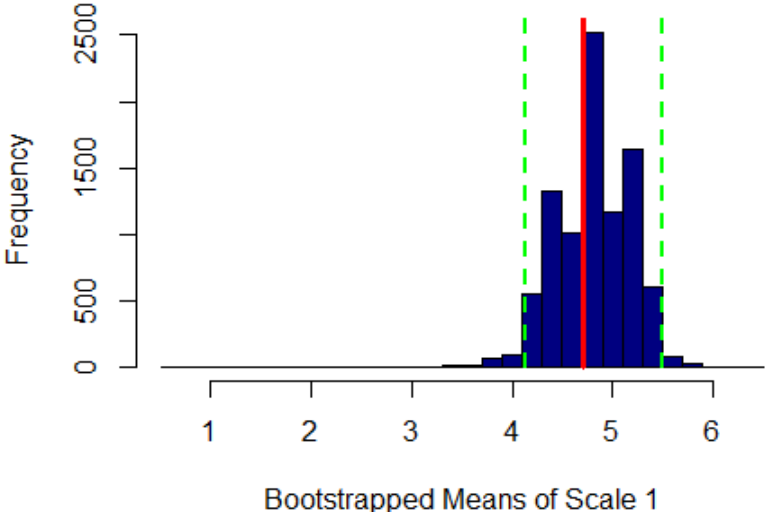**Figure 5: Bootstrapped Means for Satisfaction with Job Scale**

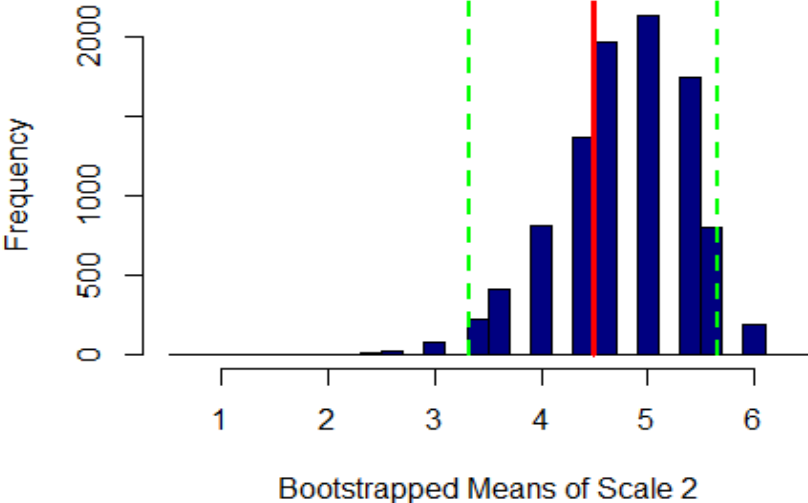**Figure 6: Bootstrapped Means for Satisfaction with Compensation Scale**

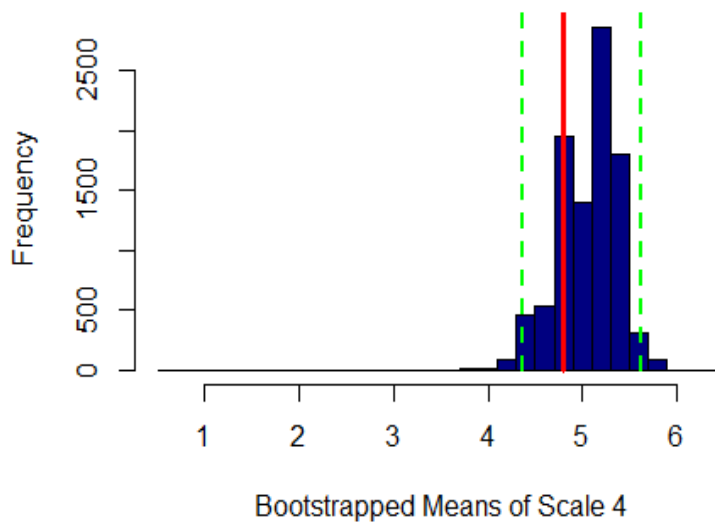**Figure 7: Bootstrapped Means for Satisfaction with Performance Scale**

Bootstrapped Means of Scale 4

Figure 8: Bootstrapped Means for Satisfaction with Institution Scale

Bootstrapped Means of Scale 5
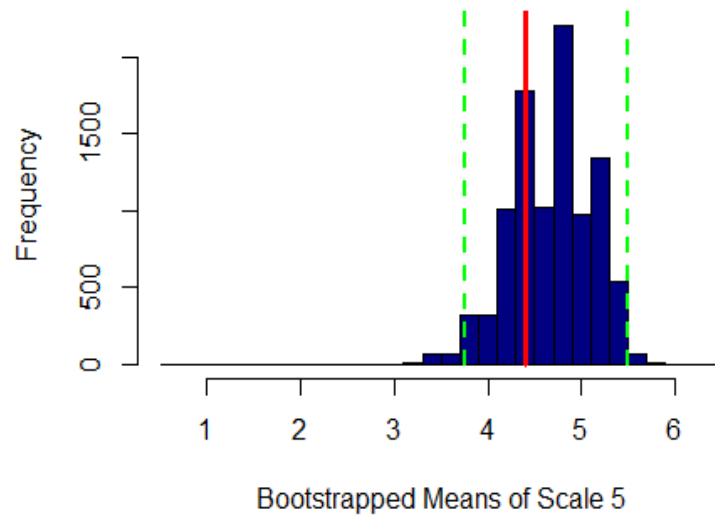
Figure 9: Bootstrapped Means for Overall Career Satisfaction Scale
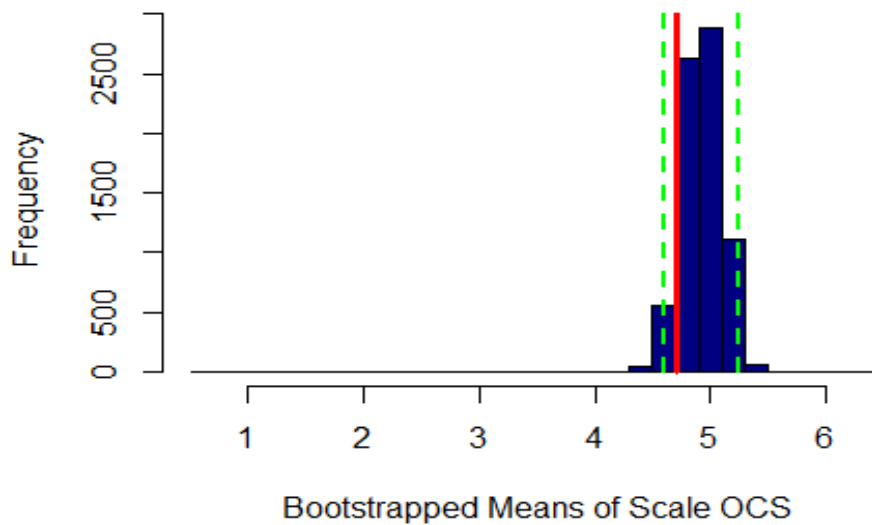
As pictured in the previous histograms, all the means for the original study's scales are within the confidence intervals of the current study scales. There is not enough evidence to conclude there has been a true change in the population for overall career satisfaction.

CONCLUSION

The findings in Chapter Four describe, predict, and answer the seven research questions of the replicated study. Current female presidents are described as satisfied with their career, continue to feel challenged with their careers, feel as though they are utilizing their gifts and talents, and feel satisfied with their professional relationships. The dissatisfaction that is associated with their careers is the lack of time for scholarly activities. Seven factors predict the overall satisfaction of the female presidents in this study. The seven factors include time required to fulfill duties, autonomy, influence, task variety, salary, professional relationships with administrators at your institution, and status of the institution. The comparison of the two

sample populations from the original and replicated studies indicate a lack of confidence in

predicting the sample populations distributions are different. Chapter Five will further analyze

the results as they relate to policy and future research.

CHAPTER FIVE: CONCLUSION

INTRODUCTION

The proceeding chapter will present a summary of the results, compare the data between the original and replicated studies, and discuss further implications on policy and research. The results of this replicated study will be discussed through the answers to the research questions. Before examining those results, the descriptive statistics will be presented.

SUMMARY OF RESULTS

The survey for this study was sent to women presidents of 1,066 institutions within the United States. Of the surveys that were e-mailed to the women presidents/CEOs, responses were received from 141 or 13% of the initial population. Most of the respondents have earned either a Ph.D. or Ed.D. Of the respondents, 37% lead associate's-degree granting institutions, and 45% lead bachelor's-, master's-, and doctoral-granting institutions. The majority of women in the president/CEO positions (96.9%) lead co-educational institutions, and the majority (50.8%) are public versus private (46.3%). They share the sentiment of first desiring to become a college/university president as they "moved up the administrative ladder." The respondents have served an average of seven years in the presidential position and spend an average of 53 hours a week on job responsibilities, with approximately 41 of those hours on campus. Most of their job responsibilities include meeting with others (approximately 32 hours), and they

participate in an average of four association memberships. They frequently interact with students, faculty, the governing board, and other external constituents. Interaction with other administrators is daily while they occasionally interact with alumni, parents, and legislators. The majority of respondents are not the first president of her institution, have acceptance as a female president from the institution, and have spent an average of six years at their present institution.

For this study, most respondents range in the age of 55-65 and choose Christianity as their religious preference. Most of the respondents are white, in their first marriage, and currently have zero children at home. They attend a religious worship service once a week and participate in daily meditation or prayer. Of the participants in this study, 25% earn more than $300,000 per year, and 45% earn between $150,000-$250,000 per year.

OBJECTIVE ONE

The first objective of the study is to describe the overall career satisfaction of female presidents in the United States. To accomplish this objective, six research questions were replicated from Dr. Nutt's (1996) study. The research questions include the following:

- RQ1: How satisfied are female presidents with their jobs?
- RQ2: How satisfied are female presidents with their compensation?
- RQ3: How satisfied are female presidents with their professional relationships?
- RQ4: How satisfied are female presidents with their performance?
- RQ5: How satisfied are female presidents with their institutions?
- RQ6: How satisfied are female presidents overall?

Using the six research questions listed above, six satisfaction scales were created and are listed below:

- Satisfaction with Job Scale (SWJS)

- Satisfaction with Compensation Scale (SWCS)

- Satisfaction with Professional Relationships Scale (SWRS)

- Satisfaction with Performance Scale (SWPS)

- Satisfaction with Institution Scale (SWIS)

- Overall Career Satisfaction Measure (OCSM)

These six scales are the basis for the Comprehensive Career Satisfaction Survey (CCSS) that was created by Dr. Nutt (1996). The eighty-one-question survey was sent via e-mail to 1,006 female presidents/CEOs in the United States. The responses were collected, and then overall means (averages) were calculated for each survey to aid in the overall career satisfaction analysis. Responses were coded using the following system:

- 1 = Very dissatisfied

- 2 = Dissatisfied

- 3 = More dissatisfied than satisfied

- 4 = More satisfied than dissatisfied

- 5 = Satisfied

- 6 = Very satisfied

The first scale, Satisfaction with Job Scale (SWJS), presented the following results:

- A mean score of 4.8 or *Satisfied*.

- Most respondents are satisfied with task variety, challenge, and use of skills within their job.

- Most respondents are dissatisfied more than satisfied in their time for scholarly activities.

According to the descriptive statistics of the respondents, female presidents are spending approximately fifty-three hours with their job and twenty-two hours with family, friends, exercise, volunteering, and other leisure activities each week. This leaves little time for scholarly activities such as teaching, writing, and research. Female administrators are also asked to take on extra service tasks than their male counterparts which can also interfere with time to pursue scholarly activities (Bartel, 2018).

Scale number two, Satisfaction with Compensation Scale (SWCS), revealed the following:

- A mean score of 4.8 or more satisfied than dissatisfied with their compensation.

- The respondents were slightly more satisfied with their fringe benefits and leave time than salary.

There remains a discrepancy in pay between men and women when performing the same jobs. The Center for American Progress reports a difference of eighty-two cents ($0.82) for every dollar ($1.00) that is earned by a male counterpart (Bleiweis, 2020). The continued disparity could be a factor affecting the satisfaction of female presidents with their compensation.

The third scale, Satisfaction with Professional Relationships Scale (SWRS), provides the following data:

- A mean score of 5.1 or *Satisfied*.

- Relationships with administrators at the president's institution scored the highest means of the questionnaire items with a 5.4.

As noted in the literature, the relationships for female presidents are an important aspect of their job as they focus on seeing others succeed, serve, and make the work of others easier,

faster, and clearer (Dunn et al., 2014). It is important for female presidents to be satisfied with

relationships because of their tendency to be participatory, flexible, ethical, authentic,

connective, and team-oriented leaders (Madsen, 2008).

The Satisfaction with Performance Scale (SWPS) is the fourth set of questions for the

survey. The results of the respondent answers for this scale include the following:

- A mean score of 5.1 or *Satisfied*.

- This scale saw the largest increase of means between the original and replicated
  studies.

As mentioned in Chapter Four, the respondents of this study feel satisfied with their abilities to

create a vision, provide leadership, make decisions, communicate, resolve conflict, manage

finances, and be politically astute. Madsen (2008) defines this as androgyny leadership or the

combination of task-oriented behaviors and relations-oriented attributes. Locke's Theory (1969)

of Values also supports this scale as female presidents continue to show value in their ability to

perform as leaders in providing vision and making decisions.

The fifth scale, Satisfaction with Institution (SWIS), provides the following information:

- A mean score of 4.7 or more satisfied than dissatisfied.

- The respondents have satisfaction with the mission of the institutions they lead.

- Majority of respondents and women presidents as a whole population lead
  associate's degree-granting institution.

- Dissatisfaction with financial matters of the institution.

While female presidents are accepted at their institutions, they are dissatisfied with the

institution's financial matters. Financial and budget management accounts for 65% of the

president's time, according to the Presidential Study conducted by ACE in 2017. The lack of

funds, competing interests, decrease in funding from state and local entities, and decline in enrollment all impact the financial and budget management of the institution.

The sixth and final scale, Overall Career Satisfaction, has two components. The first is a calculation of the mean from the means of the five previous scales. The overall mean of the means is 4.9 or *satisfied*. As Lepkowski (2009) suggests, positive effects of overall career satisfaction can be attributed to an increase in pay, increased number of female presidents in higher education, and alignment between the college president and the college mission. The second component of the scale asks the respondents to rate their overall career satisfaction within one question (this is also known as the Overall Career Satisfaction Measure or OCSM). The largest percentage of respondents (41%) rate themselves as very satisfied, and 34% rate themselves as satisfied. Locke (1969) explains the difference in outcomes by explaining overall career satisfaction as a sum of the discriminable elements that are composed within the career, not just one question.

OBJECTIVE TWO

The second objective of the study is to discern which personal (input) variables and environmental variables predict the career satisfaction of female presidents. The final research question was created to meet this objective:

- RQ7: Which personal (input) variables and environmental variables predict career satisfaction for female presidents?

Using Astin's (1991) Input-Environmental-Output Model, the input and environmental variables of the survey were analyzed to ascertain their statistical significance on the overall career satisfaction of female presidents. The overall career satisfaction is the output block for

this model. Input variables include personal qualities, personal and professional demographics, and satisfaction before obtaining the presidency. Environmental variables include professional and personal involvement, data on the institution, acceptance of female presidents, salary, and if this was the first female president of the institution.

After establishing the input and environmental blocks, a multiple regression process was used for each of the eighty-one questions in the survey. The questions were analyzed through an ANOVA test, Variance Inflation Factors (VIFs) test, and power transformation calculations to determine the statistically significant predictors of overall career satisfaction.

Based upon the results, this study revealed seven statistically significant predictors of overall career satisfaction for female presidents. The predictors include the following:

- The satisfaction of female presidents with the time required to fulfill their duties.

- The satisfaction of their ability to have autonomy in their work.

- The satisfaction of their ability to influence.

- The satisfaction of the task variety of their job.

- The satisfaction of the salary received for their job.

- The satisfaction with professional relationships between administrators at their campus.

- The satisfaction of female presidents as it pertains to the status of the institution.

COMPARISON OF STUDIES

The purpose of replicating Dr. Nutt's (1996) study is to compare the results of both studies and document the possible changes in predictors of overall career satisfaction. To make this comparison, the descriptive statistics, the six scales, and results of the predictors will be examined.

The number of female presidents leading institutions of higher education has increased by 138% between the 1996 and 2020 studies. This percentage represents an increase of 618 colleges, including tribal colleges, that now have female presidents/CEOs. In the original research, the majority of the respondents were serving as their institution's first female president, while the majority of respondents for the current study are NOT the first female president of their institution. As to be expected, the salaries for the respondents have increased during the past 25 years. The salary for the majority of female presidents in 1996 was $90,000 and up. For this study, 45% of the respondents earn between $150,000–$250,000 and 25% earn more than $300,000. Other majority descriptors of this population include the religious preference of Christianity, daily meditation or prayer, attendance of at least one religious service per week, ethnicity/race as white, and married with zero children living at home. The majority continue to work at institutions that are accepting of them as presidents, and they frequently interact with students, faculty, the governing board, and other external constituents. Interactions with administrators at their campus are daily, while interactions with alumni, parents, and legislators are occasional.

SIX SCALE COMPARISON

The Satisfaction with Job Scale (SWJS) indicated a similar mean of satisfaction between the two studies, indicating limited change during the past 25 years. Dr. Nutt's (1996) study for the SWJS calculated a mean of 4.7, while the current study has a mean of 4.8. There are four variables included within this scale that are statistically significant in predicting overall career satisfaction. The four variables are satisfaction as it relates to the time required to fulfill duties,

autonomy, influence, and task variety. Mamlet and Murphy (2017) support these variables by describing the necessary skills and current requirements for new presidents to be successful. Dunn et al. (2014) also relay the qualitative data from current female presidents that support the four attributes listed above.

Scale number two, Satisfaction with Compensation Scale (SWCS), indicates a slight increase in satisfaction. Dr. Nutt's (1996) study for the SWCS calculated a mean of 4.5, while the current study has a mean of 4.8. There is one variable from the SWCS that is statistically significant in predicting overall career satisfaction. The variable is salary as it relates to the satisfaction of compensation. Through the descriptive statistics, it is clear the salary has increased exponentially for the majority of the female presidents during the past 25 years. However, the Center for American Progress (Bleiweis, 2020) and The White House Project (2009) indicate continued pay disparities between men and women.

The third scale, Satisfaction with Professional Relationships, again provided similar results. Dr. Nutt's (1996) study calculated a mean of 5.0 while the current study has a mean of 5.1. These scores indicate strong satisfaction with professional relationships. There is one variable from this scale that is statistically significant in predicting overall career satisfaction. The variable from the survey deals with the satisfaction of professional relationships the female president establishes while in her role as president. Madsen (2008) discusses at great length the importance of relationships between a female president and her administrative team. This evidence supports the statistical significance of the professional relationship variable.

The Satisfaction with Performance Scale (SWPS) had a mean of 5.1 for the current study and 4.8 for the original study. While the difference in the means between studies for this scale

is slight, it is still one of the largest changes among the six scales. According to the rubric, respondents moved from more satisfied than dissatisfied in Dr. Nutt's (1996) study to satisfied in the current study. None of the variables within this scale showed significance in predicting overall career satisfaction. However, the strength of the mean for the SWPS indicates support for Locke's Theory (1969) of Values. Female presidents continue to show value in their ability to perform the tasks of decision-making and creating a shared vision within the institution they serve.

Scale number five, Satisfaction with Institution Scale (SWIS), presented the second instance of the largest increase. While the increase remains minimal, the current study calculated a mean of 4.7, while the original study had a mean of 4.4. The variable of institutional status within this scale presented as significantly significant in predicting overall career satisfaction. Interestingly, the survey does not expound on the specific aspects of "status" as it relates to the institution. The researcher assumes this refers to the accreditation, Carnegie classification, financial situation, and possible reputation of the institution in the community and among its peer colleges or universities. Perrakis et al. (2011) note in their study the importance of institutional demographics and measurement of institutional discord as significant predictors of self-reported presidential satisfaction and performance. This aligns with the findings in the SWIS.

The final comparison of data includes a two-dimensional analysis. The first analysis is comprised of the calculated mean of the scale means. The original study has an overall mean of 4.7, while the current study shows a slight increase to a mean of 4.9. Both indicate more satisfaction than dissatisfaction in overall career satisfaction. The second analysis compares the

Overall Career Satisfaction Measure, which is one question within the survey for respondents to quantify their overall career satisfaction. The results are reported in Table 28.

Table 28: Comparison of OCSM

RESPONDENT ANSWER	VERY SATISFIED	SATISFIED	MORE SATISFIED THAN DISSATISFIED	MORE DISSATISFIED THAN SATISFIED	VERY DISSATISFIED
Original Study	37.5	40.9	16.5	1.7	3.4
Current Study	41.4	34.3	16.4	4.3	3.6

Results from both studies indicate a strong perception of overall career satisfaction when asking the pointed question. However, when analyzing through the lens of the combined scales and questions, the results are less profound. The current study of the Overall Career Satisfaction indicates a majority (69.1%) are satisfied, while the Overall Career Satisfaction Measure of one question indicates a majority (41.4%) are very satisfied.

PREDICTORS OF OVERALL CAREER SATISFACTION

To calculate the significantly statistical variables predicting overall career satisfaction, a multiple regression model was applied. Dr. Nutt's (1996) calculations included specific input (personal qualities, personal and professional demographics, and satisfaction before obtaining presidency) and environmental (professional and personal involvement, data on the institution, acceptance of female president, first female president of institution, salary) variables from the survey: "All of the variables in the six blocks were entered in a forward manner until all of their predictive power was exhausted" (Nutt, 1996, p. 149). While the current study also utilized the multiple regression model, a more robust method of evaluation was determined and utilized.

The eighty-one questions or variables were analyzed using several ANOVA tables with F-distribution, p-values, and power transformation. Variance inflation factors (VIFs) were used to ensure the removal of multicollinearity in the model. The previous methods listed were used to ensure the best statistical fit for the data. The results of the calculations indicated seven predictive variables from this study, and only one remains the same between the original and replicated study. The seven predictors of significance for the current study include the following: the time required to fulfill duties, autonomy, influence, task variety, salary, professional relationships with administrators at your institution, and status of the institution. The original study presented the following:

> Ten variables entered the regression equation as significant predictors (p < .05) of overall satisfaction for female presidents: (1) satisfaction with previous compensation; (2) widowed marital status; (3) divorced marital status; (4) years in current presidency; (5) institutional acceptance of a female as president; (6) energy spent recruiting faculty; (7) frequency of interaction with parents; (8) frequency of interaction with students; (9) salary; and (10) frequency of interaction with legislators. The first four predictors of overall career satisfaction are personal (input) variables, and the last six predictors of overall career satisfaction are environmental variables. (Nutt, 1996, p. 155)

The only significant variable between both studies is the salary of the female president.

A final process, bootstrapping, was performed on the data to test whether the population from the two studies were identical or not. Bootstrapping recreates, if necessary, a normal population to be used for statistical analysis. The process is performed on each scale and takes a single, random data point from each question in that scale. The mean of those eight random samples is calculated to produce one mean. The results of this process concluded that all the means for the original study's scales are within the confidence intervals of the current study scales. There is not enough evidence to conclude there has been a true change in the population for overall career satisfaction within the twenty-five-year time frame. While all but

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one of the predictive variables are different between the studies, it is assumed the data comes from a normal population.

IMPLICATIONS OF THE STUDY

The data presented in the study indicates the overall career satisfaction of female presidents is improving. The overall means of each scale increased, and the OCSM realized a majority of the respondents indicating very satisfied. Both studies recognized salary as a significant statistical predictor of overall career satisfaction, which suggests there is a need for continued work in this area. Environmental factors or blocks, for this study, contribute to the overall satisfaction, while both environmental and input blocks contributed to the overall satisfaction in the original study.

Measurement in the current study proved to be difficult due to the non-linear data points from the surveys. Several statistical techniques were used to ensure a good fit of the data and normal population distribution. The use of the bootstrapping technique was added to the current study and contributes to the advancement of any further research that is replicated.

Female administrators aspiring to be presidents within higher education, governing boards, higher education doctoral programs, and leadership programs for female presidents can find the information from the replicated study of interest. The information of predictors, especially pertaining to salary, can be used to inform and prepare current and future female presidents in higher education.

FUTURE DIRECTION

The current study indicates environmental factors as the statistically significant areas that affect overall career satisfaction. For the future, adding components of the female president's beliefs will add to the validity of the study. Understanding that beliefs shape our actions, this addition would incorporate more of the input blocks of the total equation from Astin and Antonio (2012).

Both studies present salary as a strong predictor of overall career satisfaction. This study has presented data to show the disparities that still occur in pay between men and women. The Paycheck Fairness Act is a bill that was passed by the U.S. House of Representatives this week (April 15, 2021). While it has an uphill battle to be passed by the U.S. Senate, President Biden acknowledges the pay disparities as being unfair and unjust between men and women. This study supports the current efforts in legislation to mandate a fair and just manner to determine women's salaries, specifically to women presidents in higher education.

As higher education strives to decrease the gap between the number of male and female presidents, the current study recognizes the importance of mentorship and training for aspiring female presidents. The research of the current study has identified several areas where training and mentorship programs would provide benefit to those interested in becoming a president. Time, fiscal, and change management are important factors that should be considered as a foundation for these innovative programs.

The biggest dissatisfying factor of both studies includes the lack of time for scholarly activities. Time management is an important facet of the presidency because of the wide range of responsibilities. However, governing boards and supervisors need to consider taking this

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concern and incorporating space and time for these teaching, researching, and writing to be

pursued by the female president.

As noted in the literature review, there continues to be limited work in the niche area of

overall career satisfaction of female presidents in higher education. Continuing this study in a

more routine time frame will benefit aspiring and current female presidents, legislators,

governing boards, and the institutions in which they lead or plan to lead. The result of the study

brings forward the current concerns and predictors of overall career satisfaction so they may be

addressed by the institution, training programs, and legislative agendas.

CONCLUSION

The replicated study proved a slight increase in overall career satisfaction with female

presidents during the past twenty-five years. The skillset needed for female presidents today is

varied, which is similar to the expectations in the original study. There is more emphasis today

on fiscal management as funding continues to be a concern for higher education. While the gap

between female presidents to male presidents continues to decrease, there remains a need for

a greater focus on diversity during presidential searches. Salaries remain to be an issue of

concern for female presidents. This item also remains stagnant in the general public as well.

The researcher suggests the focus of career satisfaction with female presidents continues in a

more consistent format with facets of personal beliefs added to the survey.

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APPENDIX A: ANOVA TABLE OF ADJUSTED QUESTIONS

```
##        x_data[, 1]      x_data[, 2]      x_data[, 4]

##           2.220509         2.103316         1.999807

##        x_data[, 6]      x_data[, 7]      x_data[, 8]

##           2.580495         2.164145         2.672763

##        x_data[, 9]     x_data[, 12]     x_data[, 13]

##           1.629950         1.781455         2.158712

##       x_data[, 14]     x_data[, 15]     x_data[, 16]

##           3.431342         2.950188         3.455982

##       x_data[, 18]     x_data[, 19]     x_data[, 22]

##           1.805406         2.093922         1.713897

##       x_data[, 24]     x_data[, 27]     x_data[, 28]

##           1.920030         1.913797         2.224895

##       x_data[, 29]     x_data[, 26]     x_data[, 30]

##           2.028519         1.811790         2.321559

##       x_data[, 33]     x_data[, 34]     x_data[, 35]

##           1.685755         2.411973         2.497411

##       x_data[, 37]     x_data[, 57]     x_data[, 59]

##           2.115161         1.734406         1.450469

##       x_data[, 61]     x_data[, 77] factor(x_data[, 81])

##           1.538159         1.425617         1.541758
```

APPENDIX B: ANOVA TABLE AFTER POWER TRANSFORMATION

```
## Response: y^(4)

##                      Df  Sum Sq Mean Sq F value    Pr(>F)
## x_data[, 1]           1 3342274 3342274 27.5922 1.538e-06 ***
## x_data[, 2]           1 1572272 1572272 12.9799 0.0005848 ***
## x_data[, 4]           1  803934  803934  6.6369 0.0121007 *
## x_data[, 6]           1  969026  969026  7.9998 0.0060972 **
## x_data[, 7]           1  339535  339535  2.8030 0.0985485 .
## x_data[, 8]           1  430500  430500  3.5540 0.0635530 .
## x_data[, 9]           1  606630  606630  5.0080 0.0284138 *
## x_data[, 12]          1    4469    4469  0.0369 0.8482438
## x_data[, 13]          1  329351  329351  2.7190 0.1036436
## x_data[, 14]          1  767707  767707  6.3378 0.0141105 *
## x_data[, 15]          1    1183    1183  0.0098 0.9215579
## x_data[, 16]          1   79657   79657  0.6576 0.4201534
## x_data[, 18]          1   43820   43820  0.3618 0.5494746
## x_data[, 19]          1   60124   60124  0.4964 0.4834448
## x_data[, 22]          1   87101   87101  0.7191 0.3993410
## x_data[, 24]          1   49326   49326  0.4072 0.5254698
## x_data[, 27]          1    3573    3573  0.0295 0.8641343
## x_data[, 28]          1  261641  261641  2.1600 0.1461264
## x_data[, 29]          1  112323  112323  0.9273 0.3388837
## x_data[, 26]          1   92531   92531  0.7639 0.3851032
## x_data[, 30]          1  280105  280105  2.3124 0.1328489
## x_data[, 33]          1  893251  893251  7.3742 0.0083276 **
## x_data[, 34]          1    1580    1580  0.0130 0.9094100
```

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```
## x_data[, 35]          1   13712   13712   0.1132 0.7375405

## x_data[, 37]          1  256022  256022   2.1136 0.1504653

## x_data[, 57]          1   33556   33556   0.2770 0.6003220

## x_data[, 59]          1  261869  261869   2.1619 0.1459536

## x_data[, 61]          1   20760   20760   0.1714 0.6801487

## x_data[, 77]          1  417001  417001   3.4426 0.0677478 .

## factor(x_data[, 81])  1  239781  239781   1.9795 0.1638662

## Residuals           70 8479174  121131

## ---

## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

    ## [1] 0.5933988 0.4191412
```

APPENDIX C: ANOVA TABLE FOR FINAL MODEL

```
## Response: y^(4)

##                      Df  Sum Sq Mean Sq F value    Pr(>F)
## x_data[, 1]           1 3342274 3342274 27.5922 1.538e-06 ***
## x_data[, 2]           1 1572272 1572272 12.9799 0.0005848 ***
## x_data[, 4]           1  803934  803934  6.6369 0.0121007 *
## x_data[, 6]           1  969026  969026  7.9998 0.0060972 **
## x_data[, 7]           1  339535  339535  2.8030 0.0985485 .
## x_data[, 8]           1  430500  430500  3.5540 0.0635530 .
## x_data[, 9]           1  606630  606630  5.0080 0.0284138 *
## x_data[, 12]          1    4469    4469  0.0369 0.8482438
## x_data[, 13]          1  329351  329351  2.7190 0.1036436
## x_data[, 14]          1  767707  767707  6.3378 0.0141105 *
## x_data[, 15]          1    1183    1183  0.0098 0.9215579
## x_data[, 16]          1   79657   79657  0.6576 0.4201534
## x_data[, 18]          1   43820   43820  0.3618 0.5494746
## x_data[, 19]          1   60124   60124  0.4964 0.4834448
## x_data[, 22]          1   87101   87101  0.7191 0.3993410
## x_data[, 24]          1   49326   49326  0.4072 0.5254698
## x_data[, 27]          1    3573    3573  0.0295 0.8641343
## x_data[, 28]          1  261641  261641  2.1600 0.1461264
## x_data[, 29]          1  112323  112323  0.9273 0.3388837
## x_data[, 26]          1   92531   92531  0.7639 0.3851032
## x_data[, 30]          1  280105  280105  2.3124 0.1328489
## x_data[, 33]          1  893251  893251  7.3742 0.0083276 **
## x_data[, 34]          1    1580    1580  0.0130 0.9094100
```

```
## x_data[, 35]          1    13712    13712   0.1132 0.7375405

## x_data[, 37]          1   256022   256022   2.1136 0.1504653

## x_data[, 57]          1    33556    33556   0.2770 0.6003220

## x_data[, 59]          1   261869   261869   2.1619 0.1459536

## x_data[, 61]          1    20760    20760   0.1714 0.6801487

## x_data[, 77]          1   417001   417001   3.4426 0.0677478 .

## factor(x_data[, 81])  1   239781   239781   1.9795 0.1638662

## Residuals           70  8479174   121131

## ---

## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

    ## [1] 0.5933988 0.4191412
```

APPENDIX D: IRB APPROVAL LETTER

Date: February 20, 2020

To: Susan DeCamillis, EdD, Rebecca Duncan-Ramirez
From: Gregory Wellman, R. Ph, Ph. D, IRB Chair
Re: IRB Application *IRB-FY18-19-241 TX 2019*

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, *TX 2019(IRB-FY18-19-241)* and approved this project under Federal Regulations Exempt Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).
Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

Your protocol has been assigned project number IRB-FY18-19-241. Approval mandates that you follow all University policy and procedures, in addition to applicable governmental regulations. Approval applies only to the activities described in the protocol submission; should revisions need to be made, all materials must be approved by the IRB prior to initiation. In addition, the IRB must be made aware of any serious and unexpected and/or unanticipated adverse events as well as complaints and non-compliance issues.

This project has been granted a waiver of consent documentation; signatures of participants need not be collected. Although not documented, informed consent is a process beginning with a description of the study and participant rights, with the assurance of participant understanding. Informed consent must be provided, even when documentation is waived, and continue throughout the study.

As mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) the IRB requires submission of annual status reports during the life of the research project and a Final Report Form upon study completion. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let us know if the IRB can be of any future assistance.

Regards,

Gregory Wellman, R. Ph, Ph. D, IRB Chair
Ferris State University Institutional Review Board

APPENDIX E: HEP CONTRACT

2020 HED

To: Becky Duncan-Ramirez
From: Jodi Mondragon
Date: December 17, 2019
Re: Electronic Version of the **2020 HED**

Following is a price quote for the data file that you requested.

Title Codes: 01 & 02 (Presidents)
Criteria: Pull female only
Version: Version 5 (Administrator Name & Title, School Name & State, E-mail Address)
Add'l. Fields: No additional fields
Quantity: 1,067 records/emails

Total Cost: ▮▮▮▮▮▮▮▮▮▮▮▮

E-mail file to: ▮▮▮▮▮▮▮▮▮

Format: X Excel ___Access ___Ascii Comma Delimited ___Ascii Tab Delimited ___DBF

Prepaid by: ▮▮▮▮▮▮▮▮▮

Expiration Date ▮▮▮ Name(s) on the card ▮▮▮▮▮▮▮

Billing address of cardholder: ▮▮▮▮▮▮▮

Credit Card Number ▮▮▮▮▮▮▮

Please sign the attached Licensing Agreement and return it with your credit card information or by mail with a check. Thank you for your order.

Attachment:
    Licensing Agreement

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Licensing Agreement

2020 HED

between

Becky Duncan-Ramirez

███████████████
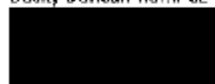
and

Higher Education Publications, Inc.
1801 Robert Fulton Drive, Suite 380
Reston, VA 20191
(571) 313-0478

governing the usage of the **Higher Education Publications' (HEP)** 2020 **Higher Education Directory (HED)** data as follows:

1,067 records/emails (deduped count is 456 emails). Title Codes 01 & 02 (Presidents);
Version 5 plus no additional fields; Pull female only.

We understand the information contained in the 2020 HED is the property of HEP and is subject to all intellectual property rights including copyright. We also agree to the following:

1. The information will be used for the sole purpose of the named person, corporation, organization, association or other legal entity who shall hold HEP harmless from any liability arising from use of this information.

2. The information will not be reproduced or made available in any form to be leased, rented, or distributed for re-use by anyone except the named user. Unless otherwise stipulated in this agreement, this is a **Single Site/Single-User License**. If a distribution vendor is used for mailing or marketing purposes, the 2020 HED may be used for the licensee only.

3. The information from the 2020 HED will not be used to produce a directory in any form as an alternative to the Higher Education Directory, nor will the information be used to collect data to build a database for the purpose of producing a printed directory or electronic database as an alternative to the HED.

4. Use of E-mail addresses shall comply with the "CAN SPAM" Act.

5. The agreement period is for one year from December 2019 to December 2020.

6. Use of the data shall cease at the end of this agreement with the exception of data used in the creation of derivative works. Future updates will be provided upon renewal of this agreement.

By: _Becky D. Rmm_

Title: _Student - Ferris State University_

Date: _12-17-19_

By: _Jodi L. Mondragon_

Jodi L. Mondragon
Higher Education Publications, Inc.

Date: December 17, 2019

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APPENDIX F: INITIAL EMAIL CORRESPONDENCE

FERRIS STATE UNIVERSITY
Department of Community College Leadership
1201 S. State Street
Big Rapids, Michigan 49307

March 5, 2020

Good morning:

As a doctoral student in the Ferris State University Community College Leadership program, I am completing the requirements of my dissertation by replicating the study of Dr. Lee Ann Nutt (1996) concerning the overall career satisfaction of female college and university presidents. Via the replicated survey research, I am investigating and comparing the degree to which female college and university presidents are satisfied with various facets of their career and attempting to determine the best predictors of career satisfaction for this population. As a member of this growing population, your response to the Comprehensive Career Satisfaction Survey (CCSS) would be most appreciated.

This career satisfaction study is relevant for three reasons. First, the number of female presidents in American higher education institutions continues to grow. Secondly, the average amount of time college and university presidents/chief executive officers spend in office has decreased overall and while this is not reflective of a certain demographic, specifically females, this phenomenon is worthy of research. Finally, a greater understanding of career satisfaction for female presidents could have further implications for policy and practice in higher education.

Your response to the survey is very important. Though every female college and university president in the United States will be e-mailed the same survey you are receiving, a high response rate is of utmost importance in order to make valid inferences and comparisons from the results of this study. Given the relatively small size of the population, every response is needed. Confidentiality will be maintained. In no way will your name be revealed, nor will you be identified in the results of the study. The survey has been coded to protect your identity.

The CCSS is an electronic survey via *Formstack* that will take approximately 10-15 minutes to complete. Please complete the survey by clicking the hyperlink provided here https://ferrisstateuniversity-bfekv.formstack.com/forms/comprehensive_career_satisfaction_survey . If you would like a summary of the results, please indicate so in the last question at the end of the survey. Thank you for your participation in this research.

Sincerely,

Rebecca Duncan-Ramirez, Doctoral Candidate

APPENDIX G: INFORMED CONSENT WAIVER

Informed Consent
Waiver – Survey

Project Title: Overall Career Satisfaction of Female Presidents of American Higher Education Institutions: A Comprehensive Description and Analysis of Predictors- Replicated Study

IRB Approved Project #: IRB-FY18-19-241
Principal Investigator: Susan L. DeCamillis, Ed.D., Ferris State University
   Email: decamis@ferris.edu   Phone: xxx-xxx-xxxx
Co-Investigator(s): Rebecca L. Duncan-Ramirez, doctoral student, Ferris State University
   Email: duncanr7@ferris.edu   Phone: xxx-xxx-xxxx

You are invited to participate in a voluntary survey about the career satisfaction in female presidents of American higher education institutions. As a female college president, the researchers are interested in your career satisfaction perceptions. The study will assess and compare the overall career satisfaction of American female presidents and the predictors that determine career satisfaction. Information will be collected by a confidential and electronic survey. We estimate that it will take approximately 15-20 minutes to answer the survey questions and your participation will be complete when the survey is submitted. Information collected may potentially benefit the subjects as recommendations for policy and procedural changes will be stated in the final document. Risks or discomforts from this research include questions on the survey that address job satisfaction, racial or ethnic backgrounds, and marital status.

The survey data will contain information that can personally identify you. Information will be collected by an electronic survey. Information you provide in this study will be maintained and secured by the study team for three years. You may refuse to answer any question you do not wish to answer or you may exit the survey at any time. Participation or nonparticipation in this study will not impact your standing with Ferris State University or your institution in any way.

If you have questions about this study, please contact the Principal Investigator, Susan DeCamillis, listed above. If you have questions or concerns about your rights as a participant, contact the Ferris State University Institutional Review Board (IRB) for Human Participants at: 1010 Campus Drive, FLITE 410G, Big Rapids, MI 49307 (231) 591-2553 or IRB@ferris.edu.

By clicking NEXT, I am indicating my understanding of this information and give my consent to participate in this study.

APPENDIX H: COMPREHENSIVE CAREER SATISFACTION SURVEY

| Comprehensive Career Satisf... ✏ | Build | Conversion Kit | Settings | Share | Submissions | Analytics |

| Build | Style | 🟢 Changes saved | View live form |

↶ Undo   ↷ Redo   🕑 History   ↧ Reorder Content   • Form Extras

▼ Form Settings

SUBMIT BUTTON LABEL

| Submit Form |

Welcome Message ✏

-------------------- PAGE BREAK --------------------

============ SECTION ============

| Comprehensive Career Satisfaction Survey |

🔴

| First Name | Last Name |

⬤ (HIDDEN) Email

⬤

The items in this section refer to the job of President: How satisfied are you with the following job related variables?

	Very Dissatisfied	Dissatisfied	More Dissatisfied than Satisfied	More Satisfied than Dissatisfied	Satisfied	Very Satisfied
Time required to fulfill duties	○	○	○	○	○	○
Autonomy	○	○	○	○	○	○
Influence	○	○	○	○	○	○
Task Variety	○	○	○	○	○	○
Challenge	○	○	○	○	○	○

	Very Dissatisfied	Dissatisfied	More Dissatisfied than Satisfied	More Satisfied than Dissatisfied	Satisfied	Very Satisfied
Skill and ability utilization	○	○	○	○	○	○
Time for scholarly activities	○	○	○	○	○	○
Degree of job security	○	○	○	○	○	○

●

How satisfied are you with the following compensation related variables?

	Very Dissatisfied	Dissatisfied	More Dissatisfied than Satisfied	More Satisfied than Dissatisfied	Satisfied	Very Satisfied
Salary	○	○	○	○	○	○
Fringe benefits	○	○	○	○	○	○
Leave time	○	○	○	○	○	○

●

How satisfied are you with the quality of the professional relationships you have with the following?

	Very Dissatisfied	Dissatisfied	More Dissatisfied than Satisfied	Satisfied	Very Satisfied
Students at your institution	○	○	○	○	○
Faculty at your institution	○	○	○	○	○
Administrators at your institution	○	○	○	○	○
Male members of the governing board	○	○	○	○	○
Female members of the governing board	○	○	○	○	○
Male presidents of other institutions	○	○	○	○	○
Female presidents of other institutions	○	○	○	○	○
Community Leaders	○	○	○	○	○
Legislators	○	○	○	○	○

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	Very Dissatisfied	Dissatisfied	More Dissatisfied than Satisfied	Satisfied	Very Satisfied
Alumni	○	○	○	○	○

The items in this section refer to your own skills and abilities as president: How satisfied are you with your performance in each of the following areas?

	Very Dissatisfied	Dissatisfied	More Dissatisfied than Satisfied	Satisfied	Very Satisfied
Vision	○	○	○	○	○
Leadership	○	○	○	○	○
Decision making	○	○	○	○	○
Communication	○	○	○	○	○
Conflict resolution	○	○	○	○	○
Political acuity	○	○	○	○	○
Financial management of the institution	○	○	○	○	○
Fundraising	○	○	○	○	○

The items in this section refer to your own skills and abilities as president: How satisfied are you with the following institutional variables?

	Very Dissatisfied	Dissatisfied	More Dissatisfied than Satisfied	Satisfied	Very Satisfied
Mission	○	○	○	○	○
Culture	○	○	○	○	○
Climate	○	○	○	○	○
Status	○	○	○	○	○
Facilities	○	○	○	○	○
Financial condition	○	○	○	○	○
Operating policies and procedures	○	○	○	○	○
Organizational structure	○	○	○	○	○

How satisfied are you as a president overall?

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- Very dissatisfied
- Dissatisfied
- More dissatisfied than satisfied
- More satisfied than dissatisfied
- Satisfied
- Very satisfied

Please express the degree of satisfaction you experienced with each of the following prior to the attainment of your current position.

	Very Dissatisfied	Dissatisfied	More Dissatisfied than Satisfied	More Satisfied than Dissatisfied	Satisfied	Very Satisfied
Previous institution/organization	○	○	○	○	○	○
Previous job	○	○	○	○	○	○
Previous compensation package	○	○	○	○	○	○
Previous professional relationships	○	○	○	○	○	○
Previous performance	○	○	○	○	○	○
Previous overall career satisfaction	○	○	○	○	○	○

Age

- less than 35
- 36-45
- 46-55
- 56-65
- more than 65

Religious Preference

- Catholic
- Protestant
- Jewish
- None
- Other:

Are you a member of a religious order?

- Yes
- No

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Race or Ethnic Group

☐ American Indian ☐ Asian Pacific ☐ Black
☐ Hispanic ☐ White
☐ Other:

[   ]

Current marital status

☐ Single, never married
☐ First marriage
☐ Remarried
☐ Separated
☐ Divorced
☐ Widowed

Number of school-age children living with you

☐ None ☐ One ☐ Two ☐ Three
☐ Four ☐ Five or more

How long have you been president at your current institution?

[   ]

Counting all appointments, how long have you been a president?

[   ]

What is the highest degree you have earned?

[   ]

Why did you become a president? (Mark only one answer)

☐ It was always my professional goal.
☐ It became my goal as I moved up the administrative ladder.
☐ I did not want to be president, but I grew to like it.
☐ I did not want to be president, and I still don't.
☐ A colleague/friend/mentor suggested it to me.

☐ I was asked by a search committee or search consultant to be a candidate.

Please give your best estimate of the average number of hours per week you spend on each of the following:

⬤ Working off campus, in town (hours per week)

⬤ Working on campus (hours per week)

⬤ Fulfilling job responsibilities (hours per week)

⬤ Working out of town (hours per week)

⬤ Working alone (hours per week)

⬤ Meeting with others (hours per week)

Please respond to the following statements by typing your best answer:

○

In how many professional associations do you hold membership?

[   ]

○

In how many professional associations do you hold an office?

[   ]

○

In how many campus committees do you actively participate?

[   ]

○

In how many local committees do you actively participate

[   ]

○

In how many regional committees do you actively participate?

[   ]

○

In how many statewide committees do you actively participate?

[   ]

○

In how many national committees do you actively participate?

[   ]

○

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Please rate how often you interact with each of the following by marking the most appropriate column.

	Never	Occasi onal	Freque ntly	Daily
Students	○	○	○	○
Faculty	○	○	○	○
Administrators	○	○	○	○
Governing board	○	○	○	○
Alumni	○	○	○	○
Legislators	○	○	○	○
Parents	○	○	○	○
Other external constituents	○	○	○	○

Please give your best estimate of the average number of hours per week you spend on each of the following:

● Exercising (hours per week)

● Volunteering (hours per week)

● Enjoying leisure activities or hobbies (hours per week)

● Spending time with family or friends (hours per week)

● LOGIC

How often do you personally meditate or pray?

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- [ ] Never
- [ ] Less than 6 times per year
- [ ] Greater than 6 times per year
- [ ] Once a month
- [ ] Once a week
- [ ] More than once a week
- [ ] Daily

How often do you attend a religious worship service?
- [ ] Never
- [ ] Less than 6 times per year
- [ ] Greater than 6 times per year
- [ ] Once a month
- [ ] Once a week
- [ ] More than once a week
- [ ] Daily

How accepting is your institution of you as a female president?
- [ ] Not accepting
- [ ] Somewhat accepting
- [ ] Accepting
- [ ] Very accepting

What is your current annual salary (this amount does NOT include your compensation package of housing, car allowance, or other compensation rewards)?
- [ ] Less than $100,000
- [ ] $100,000-$149,999
- [ ] $150,000-$199,999
- [ ] $200,000-$249,999
- [ ] $250,000-$299,999
- [ ] Greater than $300,00

Are you the first female president of your institution?
- [ ] Yes
- [ ] No
- [ ] Do not know

Would you like the results from this study?
- [ ] Yes
- [ ] No