MEASURING IMPLEMENTATION SUCCESS OF PAY STRUCTURES

AND THE ROLE OF HUMAN RESOURCES IN PAY IN HIGHER EDUCATION

By

Derek S. Smith

Bachelor of Science-History
Hampton University
1994

Master of Science-Curriculum and Instruction
University of Wisconsin-Madison
1998

Master of Business Administration-Human Resources
University of Phoenix
2007

A doctoral project submitted in partial fulfillment
Of the requirements for the

Doctor of Philosophy-Workforce Development and Organizational Leadership

School of Public Policy and Leadership
Greenspun College of Urban Affairs
The Graduate College

University of Nevada, Las Vegas
August 2018

UNLV | GRADUATE COLLEGE

Dissertation Approval

The Graduate College
The University of Nevada, Las Vegas

July 23, 2018

This dissertation prepared by

Derek S. Smith

entitled

Measuring Implementation Success of Pay Structures and the Role of Human Resources in Pay in Higher Education

is approved in partial fulfillment of the requirements for the degree of

Doctor of Philosophy-Workforce Development and Organizational Leadership
School of Public Policy and Leadership

Lee Bernick, Ph.D.
Examination Committee Chair

Kathryn Hausbeck Korgan, Ph.D.
Graduate College Interim Dean

Jayce Farmer, Ph.D.
Examination Committee Member

Christopher Stream, Ph.D.
Examination Committee Member

Kendall Hartley, Ph.D.
Graduate College Faculty Representative

Abstract

Measuring implementation success of pay structures

and the role of human resources in higher education

by

Derek S. Smith

The purpose of this study was to determine if a new salary structure initiative for university staff employees would reduce variance in pay. The initiative was purposed to identify and describe the appropriate components of a pay plan that could be established by an HR unit in higher education. The treatment was tested with a quasi-experimental design using a before/after approach with classified personnel at a Midwestern university. The treatment was the implementation of the new pay plan. The final tool created was named the Pay Structure Initiative (PSI). The analysis showed that variance in pay was reduced after the introduction of the PSI.

Keywords: Change, Pay ranges, Quasi-experiment, University

Acknowledgements

This work would not have been possible without the guidance of the College of Urban Affairs and the School of Public Policy and Leadership. I am very appreciative of the patience and instruction I received from the Graduate College on how to navigate this exciting journey.

I am grateful to all of those with whom I have had the pleasure to work with on this project. Every one of my Dissertation Committee members (Dr. Chris Stream, Dr. Jayce Farmer, and Dr. Kendall Hartley) gave great professional guidance and encouragement to pursue research excellence. I am especially grateful for the time and advisement I was given by Dr. Lee Bernick, Professor of Public Policy, the chairman of my committee. He has been an excellent teacher and not enough can be said about what I have learned from him. Most importantly, I respect his opinion, wealth of knowledge, and positive manner.

I was very fortunate to have a great team of family members who supported my pursuit of this project. I am very thankful to my parents, who encouraged me to pursue excellence in whatever I decide to do. I would not be here without them. Most importantly I want to acknowledge my wife, Ericka, and my children Nile and Nelson whose abundance of inspiration encouraged me to strive for greatness under any and all circumstances.

Dedication

This project is dedicated to the friends and family who taught me through their words and actions both the right way and wrong way of doing things. I now know and believe that doing what is challenging may seem difficult in the beginning, but the rewards and experience that come from hard work always pay off in the end. Thank you for helping me hold my head high and for always looking towards the light at the end of the tunnel. It has been more than worth it.

Table of Contents

Abstract ... iii

Acknowledgements ... iv

Dedication ... v

Table of Contents ... vi

List of Tables ... viii

List of Figures ... ix

Chapter 1 Introduction ... 1

1.1 Problem Statement ... 4

1.2 Theoretical Understanding ... 5

1.3 Significance of the study ... 11

Chapter 2 Literature Review ... 15

2.1 Federal Regulation ... 15

2.2 Classified Personnel Staff in Higher Education ... 18

2.3 Pay Structure Designs ... 21

2.4 Strategic Implementation ... 29

Chapter 3 PSI Pay System ... 34

3.1 Pay Scale Initiative Implementation ... 34

3.2 Specifics of Pay Model ... 34

3.3 Implementation Setting of a New Compensation System ... 36

3.4 Developing the Initiative ... 39

3.5 Example of an employee being paid in different ways ... 41

Chapter 4 Methodology ... 49

4.1 Hypothesis ... 50

4.2 Dependent Variable ... 51

4.3 Comparative Market Ratio ... 52

4.4 Treatment/Independent Variable ... 53

4.5 Control Variable ... 54

Chapter 5 Results 60

Chapter 6 Discussion 69

Appendix 79

References 81

Curriculum Vitae 90

List of Tables

Table 1 Defining Pay Structures Employed in the Public Sector 33

Table 2 Living Wage Assumption 44

Table 3 Dependent Variable Categories 53

Table 4 Description of Position by Variable Category over Time 57

Table 5 Pre & Post PSI Market Ratio Levels 60

Table 6 Pre & Post PSI Market Ratio Levels/Org. Units 63

Table 7 Pre & Post PSI Market Ratio Levels/Pay grades 66

Table 8 Pre-PSI Market Ratio by Group/Pay grades 67

Table 9 Post PSI Market Ratio by Group/Pay grades 68

List of Figures

Figure 1 Managing Pay Within the Range 42

Figure 2 Job Requisition 47

Figure 3 Components for Paying In a Range 48

Figure 4 Comparative Market Ratio Example.....52

Chapter One

Introduction

Human resources (HR) offices are under pressure to implement and maintain a consistent structure for pay and progression in higher education. HR professionals must first conquer the task of deciding how to effectively create pay structures that present employees with sustainable opportunities for advancement and promotion. They then have the challenge of achieving success in implementing a new model.

The challenge for HR departments in higher education is that there are three different types of workers that make up the workforce for higher education. The three main types of workers are: classified staff, faculty, and administrative faculty. Classified staff are typically nonexempt hourly employees that are eligible for overtime pay; Faculty are employees who instruct classes or conduct research and can be tenured or non-tenured; and Administrative faculty are employees who have management and administrative positions and are usually salaried and exempt from overtime accrual.

The nature of the classified jobs, and the lower level of pay that most receive, compared to the other types of workers at a university, results in very little attention given to the rights and fair treatment of classified workers. This results in a group of employees that feel that they are second class citizens and neglected. To add to this neglected feeling, the employees of a public state university have a distinct nature and scope of work compared to other government state personnel. Unfortunately, state personnel rules do not take into account the distinct nature and work done by university employees compared to other state personnel, yet university employees are still governed by the same state laws. The opinion of these university state classified employees at times is that their needs appear to be ignored and not addressed or improved

(Rankin, 2015). Classified positions tend to have employees who are local and have less mobility to relocate to other towns or cities to seek other employment opportunities.

Classified staff at a university work in a unique environment. Classified staff work closely with professional and academic faculty whose salaries are significantly higher and variable (For example, two faculty members in the same department at the same level can have widely different salaries). Moreover, classified staff must adhere to very formal work schedules while faculty have greater flexibility in their work schedules. These nuances and differences create images of inequitable treatment for university classified staff.

The perceptions that classified staff have about inequity can create a number of negative outcomes. Inequity perceptions create low morale for their employees who may feel undervalued. Many HR Offices must address the complaints of staff and seem to only emphasize the bad things that are happening to them. In addition, the existence of widespread variation in pay for this group may create feelings of imbalance and covert agendas. The lack of transparency about decisions that impact the workplace makes the workers feel they cannot trust leadership. When employees feel they are being treated unfairly they become less productive because they believe the work they are given is not a fair deal (National Research Council 1981). Along with the inefficiencies and complaints, the number of Equal Employment Opportunity (EEO) issues rise in response to the negative work environment. These EEO issues revolve around work assignments and fair pay.

It is important to understand the background of HR in higher education to contextualize the unique challenges that are presented in this research. According to Arslan, Akdemir, & Karsli, (2013) before the middle of the 1940s, higher education faculty members were responsible for human resources roles. This practice changed in the 1950s with the requirements of federal

mandates and expansion of higher education organizations in growth. At this point, transactional roles such as hiring employees and processing payroll were given to non-faculty members, but other resource functions remained with academic deans.

Jim E. Kemper (2001) identified the trends that are impacting the efficiency of human resources management in higher education in his dissertation with the following statement:

> "Human resource professionals have faced the mass exiting of retiring faculty and staff along with other demographic changes. Other issues include the major impact of rapidly changing technology, the significant increases in health care costs, the increase in the unionization of faculty and staff, most notably in the public sector, and increasing public demand for accountability in university administration" (Kemper, 2001, p.1).

The need for efficiency and accountability for HR in higher education does not show a trend of slowing (Brault and Beckwith, 2003).

Smith and Ferris (1990) state, "the role of human resources in higher education is vital, and the management of those resources is becoming a critical issue" (p. 15). Ground-breaking authors Brault and Beckwith (2003) describe a need for a new overall approach to HR practices. The authors suggest HR in higher education needs to "define its place within the broader organization and secure a seat at the leadership table," (p. 9) which would transform higher education, implement more accountability, and create efficiency. Kemper (2001) points to one of the more specific transformational components of human resources management needed when he points out that "it is important for colleges and universities to have a well-articulated total compensation philosophy" (p. 40).

Smith & Ferris's (1990) study relied on the significance of evidence-based practices related to the formation of salary ranges for staff at a medium-sized Midwestern university.

Additionally, an environmental scan to measure the needs of higher education was examined. To make sense of how to reduce variance in pay, this research has tested and compared the data of a new compensation system compared to the data of the previous compensation system. While we are focusing on classified staff at universities, issues of compensation are an area of continued study across all organizations. In their study, Culpepper and Associates (2009) found that the market pricing method is the most common method used to design salary range structures. According to Leavitt & Morris (2008) the public sector has moved away from historical pay adjustments such as average general increases, cost of living increases and tenure to market-based pay strategies.

Problem Statement

Unacceptable variance in pay is signified by employee salary outliers that are either too low or too high compared to the market data. Employees need to be paid appropriately so that there is not a wide deviation in pay for those employees doing the same job. This is a problem because of the employee's perceptions of fair and equitable pay. In their study, Milkovich, Newman and Gerhart (2011) found that "Satisfaction with pay is directly related to the pay level: More is better. But employees' sense of fairness is also related to how others are paid" (p.241). Contrary to the need to incentivize employees to meet organizational goals, many higher education organizations do not have a clear pathway for career development and salary progression. However, new federal legislation on equal pay mandates reporting wages and maintaining consistent pay distribution which further emphasizes the need to implement a salary structure (U.S. Equal Employment Opportunity Commission, 2016). The problem for this study is to determine the extent of unacceptable variance in classified employee pay and then determine if a new salary system can reduce that variance

Creating an equitable salary structure has some important considerations. Human resources professionals must ascertain how to implement new pay systems and how to standardize job descriptions and job families to produce a progression that meets the federal internal and external demands and expectations for higher education employees (Foldesi, Smith and Toller, 2002). Authors Milkovich, Newman & Milkovich (2002) explain that the strategy for pay ranges is based on three approaches: leading the market prices for salary, matching the market prices for salary, or lagging the market prices for salary. The organizational compensation strategy for setting the parameters of pay ranges is influenced by the variables of market, industry, size, and organizational financial performance (Gerhart, Milkovich & Murray, 1992). The identification of outliers of the pay ranges that are at rates above market or below market requires the use of proven compensation methodology and analysis (Ehrenberg & Smith, 2016).

Purpose Statement

The purpose of this quasi-experimental study was to see if a new salary structure initiative (PSI, the Pay Structure Initiative) for university staff employees would reduce unacceptable variance relative to comparative market-based data. The treatment in this study was the establishment and implementation of the PSI by HR employees in higher education at a Midwestern university. The use of the PSI was intended to facilitate the implementation of appropriate pay ranges and reduce unacceptable variations of pay (lower than market range or higher than market range).

Theoretical Understanding

Compensation systems are important to the organization and to the individual. Fairness is important in compensation. Bregn (2008) emphasizes the importance of perceived fairness in pay and its connection to worker productivity and reciprocity. According to Milkovich, Newman and

Gerhart (2014) an employee's perception of the fairness of the salary administration procedures substantially impacts their acceptance of the pay determination. Milkovich, Newman and Gerhart (2011) remarked "employees and managers are more willing to accept low pay if they believe that the way this result was obtained was fair" (p.83).

How do we create a pay system that is perceived as fair? The pay system has to be transparent, systematic and has to provide equal pay for equal work. Which means we need to reduce compensation variability that results in pay outliers or that is not acceptable pay variance (Ehrenberg & Smith, 2016). The range of pay that is either 10% higher or lower than the average market wage is acceptable pay variance for the University used in this study (Foldesi, Smith, and Toller, 2002). The range of acceptable variance market pay allows for employers to have flexibility and consistency when making pay decisions. In their study Leavitt and Morris (2008) found that "From an organization's view, the goal of market-based pay is to determine how much pay is necessary to attract and retain a sufficient number of qualified employees" (p.179).

There are different ways to create compensation systems. Those different ways can make a difference in perceived notions of fairness and efficiency. In their study Leavitt & Morris (2008) found that "A market-based pay strategy focuses first and foremost on the external equity of employee pay. The concept of equity is closely related to the concepts of fairness and consistency, as perceived by employees" (p.179). Agencies have attempted to use various compensation systems. The PSI was designed to move away from the traditional compensation system that uses automatic step increases based on seniority to one that is based on the regional job market that applies a "broad banding" structure. This new broad banding market-based system gives both flexibility and more consistency. The PSI revolves around fair and equitable

distribution. The PSI construct was founded on the principles of fairness and consistency. These principles are voiced in the University's compensation philosophy and quantified in the new pay system (See Appendix).

Research Design

This quantitative study utilized **quasi-experimental research** to establish the cause and effect relationships among the treatment of the PSI (Independent variable) and the comparative market ratio (dependent variable). The impact of the independent variable on the dependent variable will be measured (Creswell, 1994). The researcher could not assign individuals to randomized groups. Instead pre-existing groups were taken from data that was from before and after the use of the treatment.

The background of information regarding The Equal Pay Act (1963) and other similar laws regarding employment issues was taken from Ehrenberg & Smith (2016). Equal Pay legislation and its impact on universities and colleges as employers is derived from research by the National Research Council (1981). The compensation concepts for this study are based upon the research carried out by Foldesi, Smith and Toller (2002) and Milkovich, Newman & Gerhart (2011). Authors Heneman Ledford, & Gresham (2002) provided further insight about the complexities, successes, best practices and challenges of implementing compensation plans. The newly created tool tested for reduced variation in pay was named the Pay Structure Initiative (PSI).

Weighting what is entailed in implementing a new salary structure required many considerations, which included factors within and outside the University. The scope of consideration was also dynamic in that this research needed to cover both micro and macro

organizational viewpoints, and the broader requirements of the federal government. The main concern of pay equity was reviewed frequently. Thus, the question for this research was as follows:

1. Does the PSI reduce inconsistencies in compensation for classified hourly staff?
    a. If there were still inconsistencies after implementation of the PSI, then what may account for those differences?

Assumptions

The testing of a new tool to reduce variance in employee pay was the main focus, but it relied on many assumptions:

1. A tool to identify the correct use of a pay range will clarify reasons for pay.
2. A tool for pay range usage will reduce variation in pay.
3. A broad band pay range will help provide internal equity.
4. The creation of pay ranges will align with strategies to help form equal pay.
5. Base pay is the most consistent pay to analyze for equity.
6. An organization owns the responsibility to create a fair and equitable environment.

Factors Impacting the Study

The means in which data was collected for this study may introduce limitations. A delimitation factor for this study included the geographic area of the study, selection of one region and institution permitted more flexibility with conducting the research, the geographic focus of the study may not reflect on other regions in the nation. The type of positions which were classified clerical positions was an additional delimitation factor. The size of the institution was another choice to keep some parameters to the research. Also, the selection of staff for

compensation ranges, instead of faculty compensation ranges, allowed for a considerably less amount of variety in disciplines per job. The delimitation to include staff, but not faculty, resulted in a more tangible timeline to complete the study. Several factors have both a positive and negative impact on the study. Thus, the selection of one region and institution permitted more control to conduct the research. The researcher could understand and manage the pay structure imitative process directly. On the other hand, the geographic focus and use of one institution may not permit as much general flexibility as one would like.

Second, the type of positions (classified, administrative, clerical staff) create more consistency. The analysis focuses on one type of position which should permit a greater comparability. However, one may not be able to know if the Pay Structure Initiative would be implemented in the same manner in other job categories.

Third, the use of a single university in this research again permitted more control. In addition, the University was large and diverse enough to employ and hire significant numbers of classified staff. What is unknown is whether the use of higher education institutions smaller size and narrower scope could see the same results.

Definition of Terms

Administrators - The individuals who manage and control the college or university business (non-academic) processes (Kemper, 2001, p.15).

Broad Banding – The pay system groups many jobs together, reduces the amount of pay grades allows more flexibility with pay, and aligns (Milkovich, Newman & Gerhart, 2011).

Business Knowledge Domain - Brockbank and Ulrich's (2003) competency domain that is the main part of performance for HR professionals. The domain is made up of value chain knowledge, value proposition knowledge, and labor knowledge.

Chief Executive Officer (CEO) - The principal director position at the college or university; the leader of the educational organization such as a president or chancellor (Kemper, 2001, p.16).

Chief Academic Officer (C) - The principal academic director position at the college or university provost or vice president for academic affairs (Kemper, 2001, p.16).

Chief Human Resource Officer (CHRO)- The highest-level human resources administrator; often an HR director, HR executive director, HR associate or assistant vice president, or HR vice president (Kemper, 2001, p.16).

College and University Professional Association for Human Resources (CUPAHR) - An organization for higher education HR professionals. The association focuses on current higher education workforce issues and trends and uses research and strategic approaches for use by colleges and universities. The organization has 23,000 human resources administrators at nearly 1,900 colleges and universities worldwide (Kemper, 2001, p.16).

Compression - The presence of small pay differences among jobs at separate organizational levels is usually caused by the wages given to new outside hires (frequently these are entry-level jobs) being higher than the internal pay structure (Milkovich, Newman & Gerhart, 2011 p. 678).

Comparative Market Based Ratio - The compa-ratio describes the relationship between the employee's pay and a specific reference point (Foldesi, Smith and Toller, 2002 p.47).

Equal Pay Act (EPA) of 1963 - A revision to the Fair Labor Standards Act of 1938 that bans pay differentials on similar positions that have the same variables such as skills, efforts, responsibility, and working conditions (Milkovich, Newman & Gerhart, 2011 p. 680).

FTE - Full-time equivalency is tantamount to a full 40-hour workweek, with a full-time permanent faculty or staff member (Kemper, 2001, p.16).

Outlier- An extreme value that may distort some measure of central tendency (Milkovich, Newman & Gerhart, 2011 p. 686).

Strategic Partner- An individual or group such as an office, department, or unit that collaborates with others to establish the future transformational administrative approaches for the organization (Kemper, 2001, p.17).

Strategic Plan - An administrative approach for an organization that is a tactical-based, long-term and high-level overview (Kemper, 2001, p.17).

Significance of the Study

Research suggests that higher education can connect job satisfaction to productivity and turnover (Oshagbemi, 1997). Pay satisfaction described by authors Gerhart, Milkovich & Murray (1992) shows the rationale for the creation of pay structure: "Pay level is a key attribute of compensation design and strategy because of its consequences for…attitudinal objective (p.495)." Heneman and Schwab (1985) supported pay level as an important factor when they stated, "The consistency of the pay level–pay satisfaction relationship is probably the most robust (though hardly surprising) finding regarding the causes of pay satisfaction (p.131)." However, Judge, Picollo, Podsakoff, Shaw and Rich (2010) concluded from their research that pay satisfaction only has a small contributing effect on overall job satisfaction when they stated, "The results suggest that, within studies, level of pay bears a positive, but quite modest, relationship to job and pay satisfaction (p.164)." Herzberg's Theory (1959) on hygiene (dissatisfies) and motivators (satisfies) explains that employees' perceived notions of pay satisfaction just plays a part – but only up to a certain point and level – for job satisfaction. The Herzberg Theory explains that pay is a hygiene factor, so when pay is not good it can lead to dissatisfaction. However, pay does not do as much as a job satisfier (Herzberg, Mausner, and

Synderman 1959). The assumption for this research is that creating an innovation map that provides equitable pay with little variance will decrease the number of employees that are dissatisfied about pay. This means that the input from different supervisors about equity that helped create the IC Map will help with decreasing dissatisfaction, but will not help increase satisfaction about employee pay.

This research is not testing job attitudes. However, it is important to note that the attitude factors about a job are recognition, achievement, possibility of growth, advancement, salary interpersonal relations, supervision, responsibility, company policy and administration, working conditions, work itself, factors in personal life, status, and job security (Herzberg et al., 1959). The purpose of designing a tool that has clear objectives and practices for using a pay range is to manage the pay expectations of employees so that concerns regarding pay can be dealt with ease and transparency through established university-wide compensation methods. This does not eliminate the dissatisfaction of the amount of salary that one receives, however, it addresses the concern that comparison of salaries of others in similar jobs in the organization are unfair. The tool is meant for internal equity comparisons and treating employees equally with regard to compensation not for determining employees' satisfaction with their salary levels overall. One noteworthy potential outcome of this study is the creation of a tool that helps organizations deal with the limited impact that pay satisfaction has on overall employee job satisfaction so that more focus can be given to the other contributing factors of job satisfaction. This outcome could be measured in future years by comparing the number of formal complaints and grievances around pay decisions pre and post implementation of the PSI.

Another impactful result of this study will be the strategic planning of HR in higher education. Evans & Chun (2012) share that "unlike private industry, higher education has been

slow to realize the role of strategic HR in the creation of a high-performance institution, despite the fact that human capital investments are the largest expenditure in higher education today, constituting two-thirds or more of institutional budgets (p.2)." This paper will emphasize the importance of aligning HR practices with strategic goals so that HR will move from more transactional priorities to more transformational priorities (Arslan, Akdemir, Karlsi, 2013).

The value-added of HR helping the organization be more consistent with pay decisions is the specific goal of this research. The instrument developed and tested in this research is designed to not only assist higher education with the use of pay ranges, but create greater efficiency. According to Ulrich (1997), the combination of strategic items within HR results in four new transformational functions. The transformational HR functions are: management of strategic HR; management of firm infrastructure; management of employee contributions; and management of transformation and change. If the PSI is successfully implemented, then the possible future impact could be changed from focusing on decreasing employee dissatisfaction about pay decisions to increasing overall employee satisfaction about their job and the organization.

Finally, this research is important because it is examining a new tool designed to help develop and justify pay ranges. The study will provide organizations with an approach and measure to support the understanding and assessing the merits of implementing pay ranges to produce relevant data that documents adherence to the proposed federally mandated equal pay changes (U.S. Equal Employment Opportunity Commission, 2016). The PSI tool will help document variations in pay both measured as successes and shortcomings of using pay ranges, which should be helpful with an organization's improvement of future pay decisions and their efficient use of compensation resources.

Research Organizational Overview

This dissertation is sectioned into six chapters. Chapter two is a literature review of the materials concerning the role of human resources and pay in higher education. The literature review includes the working of compensation logistics for pay ranges, human resources involvement in higher education, and federal laws relating to pay discrimination.

Chapter three discusses the PSI. This portion of the research goes into detail about how and why the compensation structure was created and implemented. The chapter also shows the practical use of the tool. Finally, this section of the research explains the timing of the two data samples.

Chapter four focuses on the methodological framework utilized for this research. This is inclusive of the data collection approaches and the procedures used for analysis of data. Chapter five describes and analyzes the data that was produced in this research. The research question will be discussed, and the two data sets of the study will be reviewed for comparison. A response about what insight was experienced through analysis will also be reported. Chapter six, consists of discussion, conclusions of the study, recommendations for future research and implications and limitations.

Chapter Two

Literature Review

This chapter has the four sections. First, the areas of federal legislation and its necessary application toward fair pay will be clarified. Second, the subject of classified administrative staff in higher education will be explained to better understand the jobs that were reviewed in this study. The third topic are the traditional conceptions of pay structure implementation, and the fourth area will describe the strategic implementation of compensation systems in higher education.

Federal Regulations

The topic of fair pay and discrimination comes from decades of American civil rights actions and changes. The issue of fair pay and discrimination has created an awareness about consistent pay practices. The 1963 Equal Pay Act was the first federal law to deal specifically with disparate pay practices among men and women (Ross & McDermott, 1974). Sullivan (1977) clarifies

> "The statutory prohibitions of sex discrimination are of course, not limited to discrimination against females. Nevertheless, in view of the general history of American employment and compensation structures, it is clear that women are the usual victims of a gender-biased market place and are the main beneficiaries of legislation prohibiting sex discrimination" (p.543).

The Employment Act of 1972, which was an amendment to Title VII of the Civil Rights Act of 1964, further extended protections of historically underrepresented groups by giving authorization to the Equal Employment Opportunity Commission (EEOC) to litigate for those

who may have received unequal treatment on the basis of race, color, religion, sex, or national origin (Sape & Hart, 1971). Discrimination allegations often refer to Title VII because "the job structure within a business or institution is substantially segregated by sex, race, or ethnicity, and workers of any suspect class are paid less than other workers who perform work that is of comparable value or worth to their employer" (Luna, 2006, p. 197).

The Equal Pay Act, 29 U.S.C. § 206(d) (1) (1982) was established to address gender inequities through formal reporting to the federal government. At this point the implementation of the federal guideline is unclear on whether traditional **Integrated Postsecondary Data System** (IPEDS) reporting will suffice for initial collecting of data and reporting. The Department of Labor publicly commented on the use of IPEDS in the Higher Education consideration when it stated:

> OFCCP is considering requiring institutions of higher education to file the Equal Pay Report if they are required to file IPEDS reports with the Department of Education, have a contract, subcontract, or order amounting to $50,000 or more that covers a period of at least 30 days, including modifications, and have more than 100 employees. (DOL, Government Contractors, Requirement to Report Summary Data on Employee Compensation, 2014)

A 2016 update to the Equal Pay Act gives impetus for the need to establish pay ranges (U.S. Equal Employment Opportunity Commission, 2016). The Act requires that organizations have reporting capabilities about the individual outliers in the pay range. This is intended to determine if pay for individuals is consistent and clustered within the pay range or if there are a number of employees who are being paid above or below the range. More specifically, one of the ways the Federal government reviews equal pay is through audits. The promotion criteria

that fundamentally involves the use of a pay grade. According to USDA Civil Rights Compliance Review Guide (2011) the criteria for determining equal pay and promotional opportunities per traditionally underrepresented groups is by "Reports for the last three (3) fiscal years for employee promotions and time in grade" (p.18-19).

Barbezat (2002) recommends that higher education take preemptive actions regarding equal pay and compliance issues. Euben (2001) recognized the pervasiveness of pay inequities in higher education when he declared that, "gender-based salary inequity in higher education appears alive and well" (p.31). Lyons (2012) purports that "because pay inequality is incredibly pervasive, it necessarily requires a sweeping, transformative legal intervention. Such an intervention must get at the root of the problem in order to be truly effective: it must disrupt and reconstitute the widespread social norms that shroud pay in secrecy" (p.364). Ehrenberg & Smith (2016) assert that hiring at rates above market or below market require rationale and adjustment. Ehrenberg & Smith (2016) indicate the necessity to observe and calculate the supply and demand of the labor market and to adjust or account for any anomalies that may occur.

A major obstacle for Human resources implementation of a new salary structure is the absence of acceptability (Davis and Sauser, 1993). The adoption of change, which is an intentional choice to use a new practice, is a decisive component toward the fidelity of any type of implementation (Proctor, Raghavan, Hovmand, Aaron, Bunger & Hensley, 2011). Perceptions of the practice's appropriateness are also a part of the ideas, culture and atmosphere that influence an implementation (Klein and Sorra, 1996). One characteristic of a successful implementation is the concept of appropriateness. Proctor, Raghavan, Homan, Aaron, Bunger & Hensley (2011) describe appropriateness as what may be deemed acceptable and may fit or be a relevant way to deal with implementation.

Classified Personnel Staff in Higher Education

The group of Higher Education workers that this research focuses on are classified employees, non-instructional, hourly, and often unionized staff. Classified staff in higher education are an important part in serving students (Hong, 2011). Classified workers are typically non-instructional staff that are non-exempt hourly workers not in the classification of high level administrators, directors, managers, or faculty. These employees have core job duties such as custodial services, facilities, technologies, admissions, lower level administrative responsibilities, clerical tasks, curricular activities training, and academic and learning support for the campus (Bauer, 2000). In many circumstances classified employees have the initial interaction with new and returning students helping them with registration and financial aid (Hong, 2011).

Clearly university classified workers have important jobs and make a significant and positive impact on students and faculty (Bauer, 2000). Unfortunately, there is documentation that classified and at will workers have reported the highest number of mistreatment in the workplace compared to other employee types (Spratlen, 1995). Additionally, compared to other employee types in higher education (Faculty, Administrators, executives) classified employees are studied the least (Bauer, ll 2000). The combination of important jobs, feelings of mistreatment and lack of attention from others creates trust and equity issues for classified employees (Rankin & Associates, 2015). According to Vander Putten, McLendon, and Peterson (1997) union-affiliated staff members see the work setting as more undesirable compared to those that are non-union staff (which are predominately not classified). Johnsrud (2002) explained the lack of support for classified staff when stating:

> Colleges and universities are labor intensive; that is, they depend on hundreds of employees—including support staff—to create a culture and climate conducive to their academic mission. But colleges and universities are also weak in human resource management; senior administrators could do far more to demonstrate that they value workers who support the academic mission. (P.116-117)

Johnsrud and Rosser (1999) explained the administrative staff's negative feelings about the university environment when they stated:

> In addition, perceptions about the lack of recognition (which includes perceptions of trust, guidance, expertise, communication, performance, mentoring, and the authority to make decisions) and working conditions which include perceptions regarding salary, parking, university reputation, resources, and environment contribute negatively to turnover intentions. (p.13)

The combination of all the classified university support staff's perceptions about the work environment presumably has an impact on retention and efficiency of those workers.

According to a study by Barrett, Vander, Putten, Peterson, and Cameron, (1995) non-instructional staff listed compensation as one of their top concerns. Research conducted by Hong (2011) indicated that pay structure for classified staff members is different than other university employees. The pay structure for classified staff typically consists of ranges and steps that have not created a motivating work environment. Each year an employee moves to a higher step (unless they have unsatisfactory performance). Each step is a higher level of pay. The rules of the classified pay system mean that semiautomatic step increases in pay are the same for any employee who is excellent or average. The rules of the step system explain why existing classified pay practices are not associated with performance management. This means there is

not a monetary incentive for classified staff to do good work, but just encouragement to do mediocre work. Hong (2011) recommends changing pay practices for classified workers by linking their salary increases to performance evaluations.

Part of the challenge for compensation for university staff is the different personnel systems. Classified staff have their own personnel rules and are often the group of employees with lower levels of education, experience, pay, and location in the hierarchy (Johnsrud, 2002). One of the major causes of a different personnel system for classified staff is the unionization of employees who are held to rules and standards agreed upon in collective bargaining (Johnsrud, 2002). Although unionization in the past has been mainly for blue collar jobs, in the last few decades there has been an expansion of clerical administrative workers in Union occupations (Vander Putten, McLendon and Peterson, 1997). Issues are further complicated for classified staff by special state laws that dictate the employees' rights regarding layoffs, hiring, classification and compensation (West Virginia Senate Bill 499, 2016). The aforementioned union bargaining agreements complicates the compensation options and makes it difficult to have similar outcomes for all employee types. Fairness is a key issue in compensation.

In their study, Bregn (2008) found that "It is indicated that perceived fairness and intentions affect how a given wage is evaluated" (p.86). According to Leavitt and Morris (2008) "The values of fairness and equity have replaced the traditional value of merit in public sector human resource management" (p.179). Bregn (2008) explains that public sector employee salaries in Organization for Economic Co-operation and Development (OECD) countries are widely available to the general public. Bregn (2008) continues to explain that "Right of access to documents in the public sector, as in most OECD countries (OECD, 2005: 35ff.), means that

employees in the public sector have possibilities to compare their wages with colleagues in their own organization" (p.87).

Pay Structure Designs

Conventional pay structure practices rely on a few different elements to assist in determining the appropriate level of compensation. These factors include using an individual's knowledge, skills and abilities, as well as experience, external competition, internal equity, the amount of responsibility, job hazards and the education needed for a job (Pynes, 2009). The literature from several authors (e.g., Becker & Gerhart, 1996; Becker & Huselid, 1998; Huselid & Becker, 2000) indicates that human resource pay-decisions and compensation structures (Banker, Lee, Potter, & Srinivasan, 1996; Becker & Gerhart, 1996; Becker & Huselid, 1998; Shaw, Gupta, & Delery, 2002) are connected to an employee's present and historic performance within an organization. Traditionally, organizations also utilize pay levels as a representation that compares their own structure to other rival organizations (Foldesi, Smith and Toller, 2002).

All of these elements have been used in a variety of methods to connect the work, the individual, and the compensation. This portion of the chapter will focus on three approaches employed by governments to compensate employees: job-based pay, skill-based pay and broad banding pay. Each of these has taken a different approach for how organizations should compensate their employees (See Tae 1 for a brief description).

Job Based Pay

Milkovich, Newman & Gerhart (2011) indicate that the analysis of job-based pay is used to create equity among employees and align job structure by paying for the task being completed. Job based pay relies on the content or nature of the work activities. A job-based pay is often

referred to as a single rate. Foldesi, Smith and Toller (2002, p.55) stated "All jobs in a grouping are paid the same rate, regardless of the employees' experience, years of service or performance." This single rate of pay for a particular group serves as a real advantage because it is easier to administer and to budget (Milkovich, Newman & Gerhart 2011). Heneman, Ledford & Gresham (2002) described the traditional job-based pay systems when they stated:

> The amount paid to each job is based on an assessment of its internal and external worth. Internal worth is established through the use of job evaluation systems, while external worth is established using market surveys. A pay structure is established to set boundaries on pay, based on the results of the job evaluation and market survey. Movement takes place with the pay structure based on time spent by the individual in the job category, or by "merit" (p.45).

The tasks and job duties of job-based pay are distinct and matched to the corresponding salary or hourly rate, and often occur in consistent mass production environments (Lawler, 1990; Mahoney, 1989). The job-based approach utilizes the approach that a job's worth can be determined by the job duties and can set pay limitations to the person doing the job as it is worth only as much to the organization as the job duties are worth (Lawler, 1990). Job based pay is often linked to Taylorism and is one of the longstanding pay systems around, its application has been diminishing for several decades due in part to the modernization of work organizations (Cannell & Long 1991).

Job based pay was used to motivate workers to whom were required to do repetitive tasks in a short time in environments like assembly line systems that offer little innate rewards. Milkovich, Newman & Gerhart (2011) state "A job-based structure relies on the work content-

tasks, behaviors, and responsibilities" (p.77). The core of job-based pay is that employees will lack a sense of purpose and employers will not trust the employees to be productive unless there is an immediate incentive offered that will help the business. This view stems from a stereotypical opinion that management and employee interests are widely different. The view enforces the notion that employees are self-serving (Lingard & Rowlinson, 1997). The view also insinuates that management and employee interests can be aligned by using incentive pay. The job-based pay tactic is typically favored by organizations, but not often favored by employees (Lawler, 1981 & 1990). According to Foldesi, Smith and Toller (2002) "Sometimes employees are not fully aware of the extent to which their duties affect their own and other departments. Hence, they overestimate, or more typically, underestimate the scope of their jobs" (p.12). Yet, job-based pay is distinctive of manual labor working class jobs or that have lower compensation levels (Coz, 2000; Mahoney, 1989).

Thompson and Lehew (2000) lay out ideas to implement a theoretical model that uses environmental factors such as emerging trends, crises, competitions, certifications, unions, managerial attitudes, and organizational tendencies to establish parameters for organizational pay. According to Pynes (2009), the creation of pay ranges is dependent upon the employer establishing the current market rate for jobs. This includes matching market with a minimum, a midpoint and a maximum pay range. Milkovich, Newman & Gerhart (2011) note that "A job structure orders jobs on the basis of internal factors (reflected in job evaluation or skill certification). The pay structure, on the other hand, is anchored by an organization's external competitive position and reflected in its pay-policy line" (p.288). The use of external markets to bring in new hires may run the risk of creating compression. Pynes (2009) explains "Compression results when salaries for jobs filled from outside the organization are increasing

faster than incumbent wages" (p.262). There is considerable discussion about the efficacy of job-based pay systems on organizational effectiveness (Penner, 1983) since they do not reward high performers (Llorens, 2015). Llorens also claims that job-based pay is unresponsive to market rates for pay (Llorens, 2015).

Skill/Competency-Based Pay /Person Based Pay

A second conventional pay model is skill/competency-based pay, and/or person-based pay. As noted in Table 1, compensation is derived from the skills, knowledge and competencies an employee has developed to be sufficient at a job or task (Pynes, 2009). The recognition of competencies is tied to the organization's strategy and leadership's decision making (Milkovich, Newman & Gerhart, 2011). Competencies are also identified by researching the elements that distinguish the high performers and the low performers and then the differences are used to recognize, incentivize, and promote employees or future prospects (Briscoe & Hall, 1999; Spencer & Spencer, 1993). Competency rating is a tool that has been used to leverage other areas other than compensation such as employee development and employee selection (Spencer & Spencer, 1993). Milkovich, Newman & Gerhart defined a competency-based system as a "Compensation approach that links pay to the depth and scope of competencies that are relevant to doing the work" (p.677). Zingheim, & Schuster (2009) explain "A common competency pay system has a career track associated with salary bands and the individual's scorecard result is reflected in the size of any base-pay adjustment granted" (p.8). Skill based/competency pay plans take into account skills achieved through certification and competency mastery (Milkovich, Newman & Gerhart, 2011).

Skill Based has three different approaches (see Table 1). The first approach is the depth of skill. Using the depth of skill system rewards employees for being more knowledgeable in their area of expertise. This helps organizations monetarily incentivize workers to increase their skill level in their current positions so that they do not have to leave their current positions for managerial positions (Shareef, 1994). According to Gore (1993) a problem encountered with some classification systems is that the top public-sector employees leave their area of expertise to enter the managerial ranks. The second system used is the Breadth of skills. This approach rewards the employees for acquiring skills that are multi-faceted (Shareef, 1994). Some of the benefits from breadth of skills are the employees become more flexible, productive and have increased levels of self-management (Ledford, Tyler and Dixey, 1990). The final approach is the Vertical skills system. According to Shareef (1994, p.62) "*Vertical Skills*-These are self-management skills such as scheduling work, leading group problem solving meetings, training, consulting and coordination other groups." These are abilities that are typical for many managers and professional staff. While much has been written concerning skill-based pay, research on its implementation has found it wanting. Shareef (1994) found that it did not get implemented in a way to produce the expected benefits.

Broad banding

Another technique to compensate employees is broad banding. Broad banding has a history of being used by the federal government as a response to the traditional and perceived inflexible nature of the federal compensation and classification system (Risher & Schay, 1994). This approach can utilize job-based pay, but it consolidates many salary ranges into a smaller number of ranges, but with much more width between the minimum and maximum of a salary range (Foldesi, Smith and Toller, 2002). Broad banding is used to group many jobs together so

that less time is spent distinguishing between jobs and more is used to seek out objective criteria for performance management (Milkovich, Newman & Gerhart, 2011). One of the perceived benefits of broad banding is flexibility in pay to leverage performance. Foldesi, Smith and Toller (2002) stated "Movement in the band is typically based on skill attainment and performance" (p.55). Kepes, Delery & Gupta believe (2009) "Broad bands give managers more discretion in assigning pay. Discretion, of course, can be used effectively or idiosyncratically. Nevertheless, broad banding is proposed to be a way of improving organizational performance" (p.498).

Broad banding is a different direction from traditional pay models because it does not rely solely on experience and education (Heneman, Ledford & Gresham, 2002). The main difference in implementing a successful broad banding system compared to other pay systems is that broad banding relies on the use of a well-planned performance management system (Milkovich, Newman, and Gerhart, 2011). Pynes (2009) commented "Advocates of broad banding claim that it simplifies pay administration, helps to facilitate career development, creates a performance driven-culture and links compensation with SHRM" (p.265). Broad banding systems are typically market driven in construct (Gilbert & Abosch, 1996). Arnold & Scott (2002) emphasized the intended impact for employees was to be able to gain new skills and make lateral movements through cross training, all done through a culture and premise of continuous improvement. According to Pynes (2009) "Broad banding grants managers the discretion to offer a variety of starting salaries and rewards employees with pay increases or different job assignments as needed to fulfill the agency's mission" (p.265).

According to Milkovich, Newman & Gerhart (2011) "Broad bands are often combined with more traditional salary administration practices by using midpoints, 'zones' or other control points with bands" (p.286). Thompson and Lehew (2000) lay out ideas to implement a

theoretical model that uses environmental factors such as emerging trends, crises, competitions, certifications, unions, managerial attitudes, and organizational tendencies to establish parameters for organizational pay. According to Pynes (2009), the creation of pay ranges is dependent upon the employer establishing the current market rate for jobs. This includes matching market with a minimum, a midpoint and a maximum pay range. Milkovich, Newman & Gerhart (2011) note that "A job structure orders jobs on the basis of internal factors (reflected in job evaluation or skill certification). The pay structure, on the other hand, is anchored by an organization's external competitive position and reflected in its pay-policy line" (p.288). The use of external markets to bring in new hires may run the risk of creating compression. Foldesi, Smith and Toller (2002) explained what external markets are when they commented "The end result of a market analysis is accurate pay information about other employers with whom the college or university competes for talent. The Information is systematically collected, typically via salary surveys, and analyzed to ensure that findings accurately represent the landscape of market pay" (p.35). Pynes (2009) explains

> Because the distance between the minimum pay level and maximum pay level with each pay grade is small, usually around 40 percent, it may be difficult to use competencies to move employee's pay within the pay grade on the basis of competency mastery. Consequently, broad banding is often used with competency pay. Under this approach, the number of pay grades is reduced, and the distance between the minimum and maximum is increased. Movement with the broad band is then based on mastery of competency sets rather than on performance (p.174).

Many organizations that use the guiding factors for setting a pay structure are led by the notion that applicants are mostly attracted to an organization by its pay and benefits

(Buckingham Coffman, 1999). This is not to say that there are no other influences for setting up a pay structure. In fact, recent federal legislation on equal pay mandates reporting salaries and maintaining consistent pay distribution, which further emphasizes the need to implement a salary structure (U.S. Equal Employment Opportunity Commission, 2016).

The comparison to peer organizations and the resulting adjustment has created a common distinction of categories defined as lagging, leading or matching the job market (Milkovich & Newman, 2002). An organization's decision to take lead in the job market means it is willing to offer a higher than normal wage. The strategy of using lagging in the job market means using a lower than normal wage compared to the rest of the market. The matching approach that other organizations have adopted means equaling the market price (Milkovich & Newman, 2002). Combining past employee performance patterns and predictive modules of pay for similar work in the market is a strategic plan in many organizations (Mintzberg, 1987). According to the methodology at Catholic University of America Compensation (2018), the process of determining the appropriate use of salary relies upon the use of quartiles to ensure consistency.

The research on broad banding has little evidence to claim outright success for the issue as a beneficial compensation system. Whalen and Guy (2008) studied the implementation of broad banding in three state governments and came away with a very sanguine analysis of broad banding to make a significant difference in compensation. It should also be noted that little research on broad banding has focused on its ability to reduce variance in compensation within an organization.

In sum, the three compensation systems employed have come under considerable scrutiny over the years and, to date, there are both arguments for and against each system. However, it is

clear that the research on the three systems has provided little evidence on the merits of any of the three systems to reduce variance in pay among workers within an organization while at the same time providing a compensation program that fares well relative to the market place. This research is an attempt to reduce that deficiency by studying the implementation of a broad banding approach to compensation among administrative personnel at a Midwestern university. Our review of the literature turns now to understanding how to successfully implement a new compensation system.

Strategic Implementation

According to Smith & Ferris's (1990) research about strategic HR and talent management in higher education, public research universities have not utilized HR strategy and methods in relation to creating and maintaining compensation plans for faculty and staff. However, proven HR compensation programs utilize market data as well as niche areas, specialized jobs, and discipline information to recruit and retain employees (Strategic HR and Talent Management in Higher Education, 2012). While there is a clear need for higher education HR professionals to be more intentional in how they handle staff compensation, Evans & Chun (2012) share that "unlike private industry, higher education has been slow to realize the role of strategic HR in the creation of a high-performance institution, despite the fact that human capital investments are the largest expenditure in higher education today, constituting two-thirds or more of institutional budgets" (p.2).

One way to overcome the obstacles in implementing a new salary structure is to become more strategic. Milkovich (1988) states "the importance of a strategic perspective on compensation rests on three fundamental tenets" (p.2). Milkovich's first tenet is that there are

many variations in compensation practices and policies among different groups. This means an organization's compensation policy can follow a variety of approaches such as being market competitive, internally competitive, flexible or rigid. The selection of which compensation approach an organization should select is situational and depends upon the company's needs and resources.

Milkovich's (1988) second tenet is that the variables of compensation practices are dependent upon the decisions of managers and employees. The pay conclusions that are made by the employees and managers are factors in the organizational compensation strategy, but do not discount the external factors. The voices of the internal workers and supervisors apply pressure to the direction of organizational compensation strategy.

Milkovich's third and final tenet is that matching compensation practices to surrounding structural circumstances begins transformations (Milkovich, 1988). This means organizations that are cognizant of their external and internal dynamics are positioned to make changes to their compensation goals. The external factors are created by environmental and organizational conditions. Specifically, these conditions are influenced by the organization's goals and its efforts to retain award, and attract a productive workforce (Buckingham Coffman, 1999).

Compensation strategy has its origins in executive pay (Cooke, 1976, Ellig, 1981, Salter, 1973). Strategic objectives were centered on total compensation and the goals and missions of the institutions. Total compensation is considered to include not just pay, but includes other variables such as incentives, benefits and perks (Kaplan, 2007). Middle managers were later focused upon, (Kerr, 1985; Broderick, 1985) along with technical contributors such as scientists

and engineers (Balkin & Gomez-Mejia, 1987), and eventually the strategy was extended to all employees (Lawler, 1981; Carroll, 1987).

Colleges and Universities have other complexities that need to be considered when strategizing. Lerner (1999) asserted "To ensure success of the strategic planning effort, universities need to adjust the "business strategy model" to higher education" (p.10). Higher Education has an unusual participative make up of administration and faculty. This makes strategic planning in the university environment dissimilar from the corporate culture (Rowley & Sherman, 2004). In particular, shared governance does not happen in the business world; while unanimity is vital in the world of academia where administration and faculty are both apart of governing the organization. According to Lerner (1999) "Change is especially difficult to accept at the universities, because by nature universities are about preservation" (p.10). Higher Education is a unique industry which means that use of strategic planning should consider the need to "retain the stability that planning brings to an organization … while enabling it to respond quickly to external changes in the environment" (Mintzberg, 1994, p. 184). As recognized by Rowley & Sherman (2004) the collaborative methods involving budgeting initiatives and HR management systems (HRM) to attain change are some of the most efficient ways to solve higher education issues.

Summary

The Equal Pay Act indicates the importance of pay ranges (U.S. Equal Employment Opportunity Commission, 2016). This federal law sets up the expectation that the Universities should review the fairness of their pay structure. Compliance is only one of the factors for having an equitable pay system. As Gerhart, Milkovich & Murray (1992) explained there are

benefits to an established pay structure that serves both as a form of comparison internally and a measure toward external competitors.

Specifically, broad banding is a compensation approach that allows equity as well as flexibility (Heneman, Ledford & Gresham, 2002). As Gilbert & Abosch (1996) explain the Broad banding systems are typically market driven and allow organizations to remain competitive in recruiting and retaining employees. Broad banding is intended to generate more employee progression and development through organizational effectiveness activities (Arnold & Scott, 2002).

The research about classified workers and their unique and somewhat ambiguous position at a university was examined to understand the work environment and expectations of new hires who are the subject matter of this research (Vander Putten, McLendon and Peterson, 1997). The background of Higher Education (Lerner, 1999) was another subject reviewed to understand the setting of this study. A review of compensation systems was provided to understand the problems and opportunities in studying compensation at a public university. Finally, this research is an attempt to study the impact of introducing a new compensation system into a university which necessitated a review of the literature on implementing HR initiatives. We now turn to Chapter 3 which will explain how the PSI, the treatment, was designed and implemented.

Table 1 Defining Pay Structures Employed in the Public Sector

Pay Structure	Definition	Characteristics	Advantages	Disadvantages
Job Based Pay	"uses work being performed, performance, and responsibilities (Llorens, 2015).	pay is tied to the job description and classification. There are grades within a job category with almost as many ranges as there are types of jobs. Annual step increases are given. Compensation characterized by centralized decisions making. (Llorens, 2015)	"Based on job performed/market...Clear expectations sense of progress pay based on value of work performed" (Milkovich, Newman and Gerhart, 2011, p.194)	"Potential bureaucracy potential inflexibility". (Milkovich, Newman and Gerhart, 2011, p.194)
Skill/Competency-Based Pay /Person Based Pay (SBP)	Employees receive compensation for the range, depth, and types of skills. Paid for skills they are capable of using not for the jobs performed (Milkovich, Newman and Gerhart, 2011).	3 types of SBP Depth of skill, Breadth of skill. and Vertical Skills. Characterized by decentralized decision making (Shareef, 1994).	Bolsters participative culture creates horizontal development, has a quantifiable compensation (Ledford, Tyler and Dixey, 1990).	Increase may be provided for new skills learned, training, skill assessments and certifications. Harder to administer. Question of effectiveness. (Briscoe & Hall, 1999; Spencer & Spencer, 1993).
Broad banding	Replaces narrow job classifications with large bands. Also known as *paybanding*, it collapses salary grades into wider pay bands (Foldesi, Smith and Toller, 2002).	Simplifies complex, outdated job classifications. Greater flexibility for managers to move workers from one job to another. Eliminates status distinctions among team members who are in different pay grades (Pynes, 2009).	In theory, improved flexibility and organizational effectiveness. Allows greater discretion for managers and simplifies the hiring and promotion process (Kepes, Delery & Gupta, 2009)	Success is contingent upon updates to other connected parts such performance pay. Assumes sufficient funds to implement (Foldesi, Smith and Toller, 2002)

Chapter Three

Pay Scale Initiative Implementation

Specifics of the Pay Model

The impact of the Pay Scale Initiative (hereafter referred to as the Initiative) serves as the major focus of this study and, in essence, the treatment**.** The purpose of this chapter is to provide an understanding and background on the Pay Scale Initiative. The specifics of the pay model will be explained so the reader can understand the objectives and strategies that the model was based upon. The Initiative's settings, historical and geographical, will be described. How the Initiative was developed will also be detailed. Examples of how employees being paid at different levels will be clarified. Finally, the training of University staff and how the staff worked with the initiative will be described.

It is important to properly detail the implementation of this initiative to understand the internal and external demands, and expectations among higher education employees (Foldesi, Smith and Toller, 2002). The Initiative's several elements that aid in its development should also be understood. Pay banding is one such element and it has been utilized in many areas of federal government (Thompson, 2007). The creation of bands, mechanisms identifying the variants among them, are useful to determine the scale of critical parts involved in an enhanced implementation. Milkovich, Newman & Gerhart (2011) state:

> Perhaps the most important difference between the grades-and-ranges and broad banding approaches is the location of the controls. The grade-and-range approach has guidelines and controls designed right into the pay system. Range

minimums, maximums, and midpoints ensure consistency across managers (p. 286).

A second element in constructing the Initiative is the comparison to external markets. Heneman, Ledford & Gresham (2002) establish that job evaluations, market surveys, pay structures, and person-based pay are the beginning parts to creating and implementing pay ranges. Milkovich, Newman & Gerhart (2011) stated "The objective of market pricing is to base most, if not all, of the internal pay structure on external rates, breaking down the boundaries between the internal organization and the external forces" (p.289). Heneman, Ledford & Gresham (2002) continue to explain "Organizations may need to be more open in sharing pay intervention data if they wish to retain control of the pay plan interventions that they prefer to implement" (p.24). Research by Rouzer (2000) emphasizes the importance of being transparent with pay ranges for more effective organizations. Sutton & Bergerson (2001) indicated that universities can use compensation as a way of connecting to their mission. This connection is done through cost control, performance, and institutional quality (Sutton & Bergerson, 2001).

Gerhart, Milkovich & Murray (1992) attest that historical associations also use levels of pay as a form of comparison internally to external competitors. A compensation strategy is also contingent upon an organization's status in the life cycle (e.g., Balkin & Gomez-Mejia, 1987) or an organization's configuration of various holdings (e.g., Kerr, 1985). Total rewards going beyond base was emphasized by Gerhart, Milkovich & Murray (1992) when they stated:

> On the other hand, at any particular pay level, an organization can deliver pay with any number of different programs (e.g., merit pay, team awards, profit-

sharing). Thus, pay mix decisions may not be subject to the same degree of product and labor market constraints. (Gerhart, Milkovich, & Murray, 1992, p.4)

Foldesi, Smith and Toller (2002) explain that the market cost of labor and the market price point for a product are variables that rationalize a significant part of the variety in how employees are paid. Groshen (1988) rationalizes efficiency-based wages, which entails leading the market with higher rates of compensation by incentivizing employees to gain greater efficiency. Gerhart, Milkovich, & Murray (1992) explain that because of economic market stresses, organizations now have flexibility with their pay decisions. The choice that different organizations have for pay guidelines depends on their internal and external surroundings (Gomez-Mejia & Balkin, 1992; Lawler, 1990; Milkovich, 1988; Weber &. Rynes, 1991).

The Implementation Setting of a New Compensation System

The Initiative was implemented at a medium-sized Midwestern university. The University had a history of not using parameters for pay. Up until 2016, the University never had consistent pay ranges for all university staff. The University's adjustment to use the newly implemented pay ranges for both classified and professional staff and apply it in a fair and consistent manner was the goal of the University. There was an ongoing and significant shift in culture for the University under investigation. For several decades, the University did not use any restrictions, criteria, and/or attempt to manage expectations for salaries.

The classified salaries used had previously followed annual step increases, but, eventually for years, the step approach and salary range structure were abandoned with the exception of starting salaries. The University took an open-ended approach for pay limits for both top and bottom salaries expected to be earned in staff positions (AON Hewitt, 2013). This

meant that administrators had no steadfast rules for staff pay and staff did not know what to expect for their own pay. In addition to the lack of structure there was a lack of funds to create increases which created morale issues (Rankin & Associates, 2015). The University went through several key leadership changes during the course of implementing a new compensation system. Although there was a transitional period of leadership for the University, the commitment to support the initiative remained unchanged.

The origin of the Pay Structure Implementation Initiative was result of a perceived pay inequity of University staff. The perception was based on what employees saw as inconsistent pay practices. In 2013 industry consultants Aon Hewitt suggested a broad look and revamping of the compensation structure (Aon Hewitt, 2013). Additionally, a few years later, a climate study by Rankin & Associates revealed compensation issues at the University. Rankin (2015, p.10) described "respondents who indicated that the process for determining salary increases was unclear and inconsistent across colleges and departments as a lack of salary clarity."

The University has a group of internal stakeholders (employees and supervisors) that were dissatisfied with the University's pay practices. In the past, the only known factor the University used for pay increases was longevity. The University wanted to move beyond just longevity pay and started looking at implementing a common pay methodology that went beyond the sole variable of seniority. According to Foldesi, Smith and Toller (2002) "Employees must perceive the job evaluation system as fair in both design and administration" (p.10). Moreover, the University had gone a number of years without pay increases, yet there was seemingly still a considerable amount of variance in pay that could not readily be explained. Foldesi, Smith and Toller (2002) explained that "We have observed that employee perception of inequity in pay can cause dissatisfaction in and disruption of an otherwise productive work environment" (p.70).

The University administration pay system implementation was impacted by employee dissatisfaction, the corresponding retention of staff and staff development (Aon Hewitt report).

In addition to the internal discontent, the University's inability to recruit for vacant or new positions was a challenge because of the pay structure. The University is the area's largest employer. However, the low wages being paid at the University made it challenging to attract and hire talent. The University also wanted to establish a system that was consistent with market values for similar jobs to appease both internal and external stakeholders.

The University, in 2016, finally realized that changes in compensation practices had to come about. In thinking of how to make changes, the University recognized the concerns and established aspirations that were immortalized in their official compensation philosophy (See Appendix). Foldesi, Smith and Toller (2002) stated "The compensation philosophy must reflect the specific values and culture of the institution" (p.3). The University's compensation philosophy was vetted through several employee groups, senates, administrators, colleges, departments, campuses and affinity groups. The University's compensation philosophy was based on being more competitive, equitable, compliant and forward thinking. The consensus was to measure the University with the current labor market and continue to examine market rates with the University and adjust the rates as needed over time.

Another University concern was to look at equity among employees. The equity issue was important because of perceived ideas of fairness at the University and how the pay rates were being applied in conjunction with employment and demographics such as gender, race and ethnicity. Finally, the administration was attentive to the University adhering to existing federal equal pay legislation.

The University's primary goal in implementing its new compensation philosophy was to move as many employees as close as possible to the middle of their given salary range. The market salaries for jobs were slotted into the closest salary grade. Foldesi, Smith and Toller (2002) verified this approach when they stated "The ranges are generally established to be consistent with the institution's desired market position. If the institution wants to have its salaries equal to either the average or the median of market salaries" (p.55). The success rate of the university's salaries being similar to the average market rate is referred to as a comparative market ratio (Foldesi, Smith and Toller 2002). A hundred percent comparative market ratio means the salary is equal to market. A seventy-five percent comparative market ratio means that an employee's salary is twenty five percent less than market. A hundred and twenty-five percent comparative market ratio means that the employee's salary is twenty-five percent higher than the market average (Milkovich, Newman & Milkovich 2002).

Developing the Initiative

This section describes how the Initiative implemented and includes the relevant information will detail how the Initiative was used and the relevant information pertaining to the instrument including the standards for compensation practices, rationale for each decision, the categories for each decision, the timing of implementation, and other information pertinent to the understanding of the study and the instrument (e.g., number of items, distribution of a range). The University administrators were the original contributors to the development of the Initiative's components. The collaboration was intended to: identify and assess the lucidity of the components and the variation on the Initiative by the administrators, confirm the proper use of terminology in its components, and ensure that the structure was comprehensive.

As explained by Milkovich, Newman, and Milkovich (2002), there may be a lack of consistency in the data as organizational structure, job types, disciplines, and market factors may vary. A wide variety of samples were used to identify and explain the variations in the research. The USDA Civil Rights Compliance Review Guide (2011) is at the core for implementing pay grades as a part of federal regulation. The source of components and variations of Initiative was based upon federal government mandates about pay equity for new hire placement (United State Department of Labor,1963).

Milkovich, Newman and Milkovich (2002) also emphasized other variants for the use of a pay range: "1. Recognize individual performance. 2. Meet employees' expectations that their pay will increase over time, even in the same job. 3. Encourage employees to remain with the organization" (p.282). Factors for placing individuals within the pay range – whether they are external hires, internal promotions, and/or pay increases – are often reflective of considerations of individual performance and experience (Banker, Lee, Potter, & Srinivasan, 1996; Becker & Gerhart, 1996; Becker & Huselid, 1998; Shaw, Gupta, & Delery, 2002). All of the aforementioned variants were used as a part of the factors for placement in the University's new pay structure.

Other important concepts tied to the Initiative were the communication, training, and application of the new system. Employees of the University were distrustful of any changes to impacting them with regard to pay because of a lack of transparency in the past. The required documentation of the pay practices for employees was helpful in dealing with the historical pay transparency issues. The development of the Initiative was contingent upon a shared understanding about how to utilize a pay range. The expected use of the pay range was documented within the organization so that there was some consistency among users. As

recommended by Foldesi, Smith and Toller (2002) a variety of communication methods were used to convey the compensation plan and its technical application. The University's documentation of pay range utilization did occur both in online and in person trainings.

The compensation philosophy and methodology were distributed with intent to make the organization aware of the typical hiring range and progression range (see Figure 1) that were being used at the institution. The compensation philosophy was formulated by using a University wide survey and soliciting feedback through several meetings with senates, colleges, affinity groups, and campuses. The results showed that the organization wanted a new compensation system that was focused on transparency, flexibility, external competitiveness, internal compatibility and recognition (See appendix).

Example of an employee being paid at different levels

Each pay range has 4 quartiles (see Figure 1). The first quartile of the paygrade is the minimum up to the 25th percentile. The second quartile is the 25th percentile up to the 50th percentile. The third quartile is the 50th percentile up to the 75th percentile. The fourth quartile is the 75th percentile up to the maximum of the range.

Figure 1 Managing Pay Within the Range

Example Pay Grade A-8: Min: $36,674 Mid: $46,759 Max: $56,845 Determining compensation based on differences in qualifications, performance, experience, and budget availability.	Minimum	1st Quartile	2nd Quartile	Midpoint	3rd Quartile	4th Quartile	Maximum
		$36,674-$41,717	$41,718-$46,759		$46,760-$51,802	$51,803-$56,845	
		Meets minimum qualifications	Possesses qualifications that are equal to or slightly better than minimum requirements		Meets all preferred qualifications	Subject Matter Expert—'Rockstar' in their field	
		Has little or no related experience in the field	Demonstrated ability to perform duties		Demonstrated ability to perform duties independently	Exhibits broad and deep knowledge of job and related areas	
		Requires additional training to build knowledge and skills	May need additional training to perform duties independently		Consistently exhibits core competencies	Serves as expert resource, role model, or mentor to others	
		Entry Level	Experienced		Seasoned Professional / Mid-Career	Senior-Level Job Expertise	
		Typical Hiring Range			Typical Progression Range		

Ideally a new hire who has very little experience (rookie), but just meets the minimum of the job qualifications is paid within the first quartile. An employee who has a vast amount of experience, education and accolades that not only exceed the minimum qualifications, but also all of the preferred qualifications (highly skilled veteran) would ideally be paid within the fourth quartile.

There are some possible outliers for not following the rationale of valuing the education, experience, and certifications of new hires in Figure 1 in the designated quartiles. An example of an outlier that would not fall within the typical quartiles range is when a position is "hard to fill" (see Figure 3). A hard to fill position is a position that has very few qualified applicants or has remained unfilled for a significant amount time due to there being no current employees or applicants able to perform the job (Milkovich, Newman & Gerhart, 2011). The urgency or need to fill the position may mean paying a less skilled or experienced employee at higher level, or

close to the maximum of the pay range, because the availability of competent individuals is scarce.

Another exception would be if limited resources are available to pay above the middle of the range. In cases like this, a highly skilled employee may be hired and paid lower than the fourth quartile. The third and fourth quartile would only be used as an incentive for future pay and progression.

The new pay system was vetted through the departments before implementation. Data on salary and positions were distributed to unit leadership. Leadership then shared information with department heads and supervisors. The human resources department designated liaisons and budget managers to work with the implementing units. Implementers went through a comprehensive training activity and discussions about the guidelines for managing staff pay was conducted. Additionally, online training and compensation management resources were made available for reference.

The training for pay decisions that were conducted by in person presentations and online were followed up with surveys to test the participants' understanding of the University's new compensation practices. All elements of the training provided to the administrators included feedback circles to answer questions, concerns and to hear comments.

The training consisted of going through the timeline of how the University has responded to pay decisions in years past. The training also explained the different phases of implementation as the framework for building the compensation structure. The rationale and benefits were listed about utilizing the compensation system which were topics about consistency, flexibility, budgeting, competitive analysis, compliance, wise stewardship of funding and similar pay for similar duties.

A part of the rationale used in training was the Living Wage Assumption. Milkovich, Newman and Gerhart define a living wage as "Pay legislation in some U.S. cities that requires wages well above the federal minimum wage. This often applies only to city government employees" (p. 684, 2011). This formula takes the average household size of the county, the poverty level algorithm, and the living wage multiple of poverty and cost of living multiple to arrive at a living wage (Table 2).

Table 2 Living Wage Assumption

County	Average Household Size	Poverty Level Algorithm	Living Wage Multiple of Poverty	Cost of Living Multiple	Living Wage
A	2.45	17,802	1.50	99.3	26,516
B	2.51	18,052	1.50	95.7	25,913
C	2.45	17,802	1.50	92.7	24,745

During these trainings, multiple choice compensation scenarios were given with answers as well as dialogue about why those answers were selected.

Both current employees and vacant /new positions were reviewed by departments for alignment within each department's internal structure. After the department review was concluded the classifications and pay ranges were established in the departments. HR, supervisors and employees discussed the new compensation system and the plans for existing employees, future job vacancies and newly created positions. All existing, new and vacant jobs were placed in the salary structure by HR. The components for paying in a range (see Figure 3) were shared and implemented by the administration.

Working with the Initiative

The timeline for the initiative was as follows; during the spring of 2017 new pay system training for University administrators took place. Next the pre-implementation data from October 2016 and April 2017, was collected. Then the post-implementation data from May 2017 until October 2017 was collected. Finally, Fall of 2017 to Spring of 2018 an analysis took place to analyze and compare the levels of unneeded variance between the pre-implementation phase and the post-implementation phase.

After the managing staff pay training was completed, a new approach and new automated forms were used for the new pay system. One of the differences was that initiating a job requisition for a vacant or new position required a job classification to be confirmed. The job classification was automatically tied to a pay grade. Each pay grade had a range that included a minimum level of pay, a midpoint of pay and a maximum level of pay (See Figure 3.2). The system also reinforced the expectations to use the parameters of pay and discuss pay expectations as well as the potential impact of decisions.

Any position that had been reviewed for classification within a year's time framed did not need to be reviewed again and could be accelerated to the next parts of the process (budget approval and then recruitment). This new approach decreased redundant efforts in the approval process for new hire pay. The new automated forms were placed at the beginning of the job requisition process so that discussions about pay happened as soon as possible.

Overall there were many changes for determining compensation for vacant position. The first change was involving HR in compensation for vacant positions at the beginning of the job requisition approval process. In the past HR was only involved in the requisition process at the end of the job requisition approval process.

The second change was establishment of pay parameters built in the requisition approval process. In the past there was not a pay range. Past practices only allowed for one starting pay rate for newly hired classified employees. In the past, newly hired non-classified professional staff had neither a minimum or maximum pay limitations.

The third change was the acceleration of a newly classified position. A position that was classified less than a year ago was considered newly classified. If a vacant position was considered newly classified and had not changed, then the hiring department had the option to fast track the requisition through the system. This meant the job requisition could be moved forward to be submitted for budget approval and then even further processed for recruitment.

Finally, the standardization of job description for all positions was a shift from past practices. In the past, each time a job was posted the hiring department would have to create a new job description or rewrite the old job description. This resulted in a multitude of job description for similar jobs. Instead, the new compensation system controlled the number of job descriptions to ensure consistency. The generic job descriptions that had ranges automatically tied to them were created with intention to minimize variation and over time increase equity and transparency of pay decisions.

Figure 2 Job Requisition

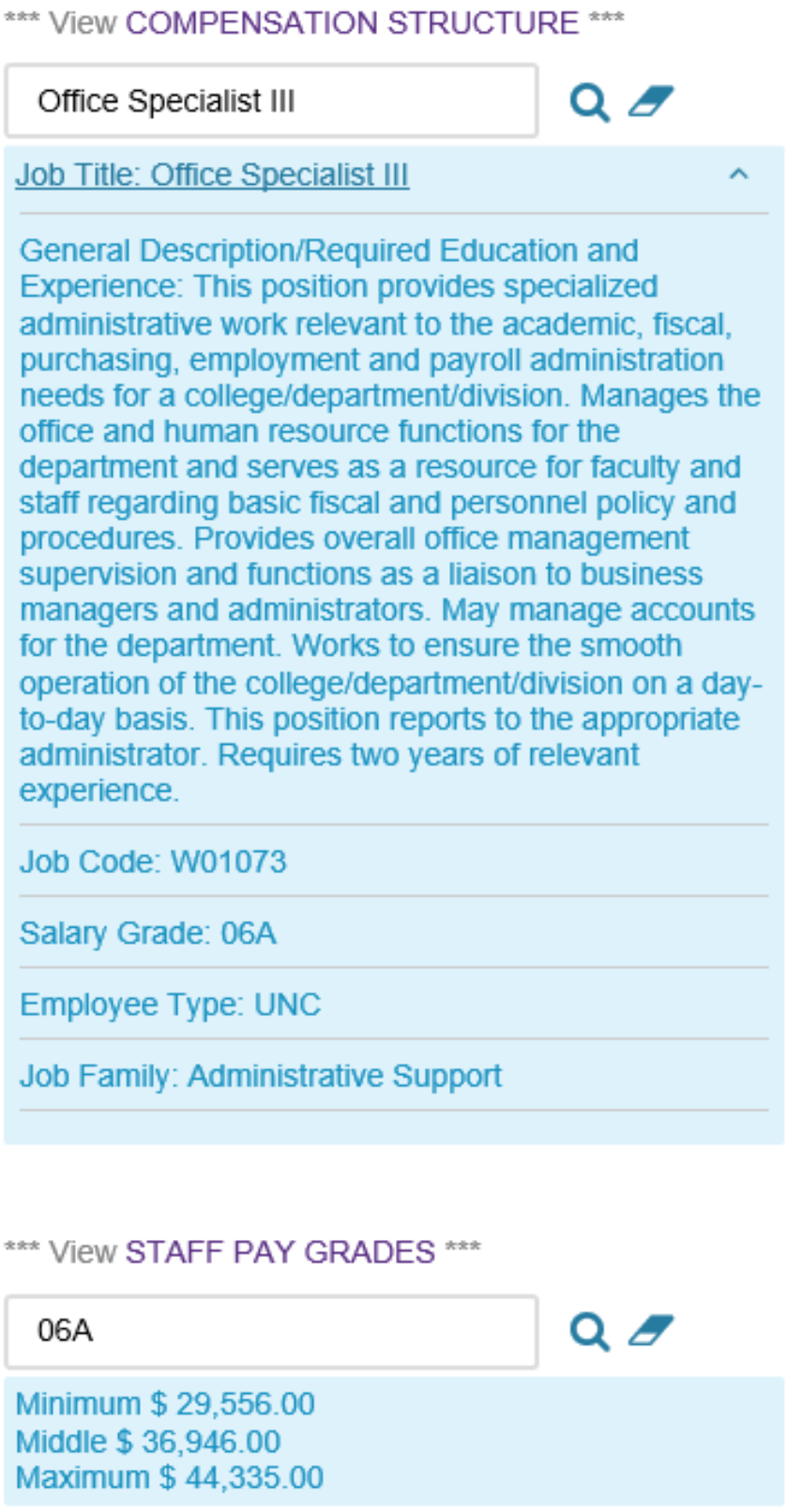
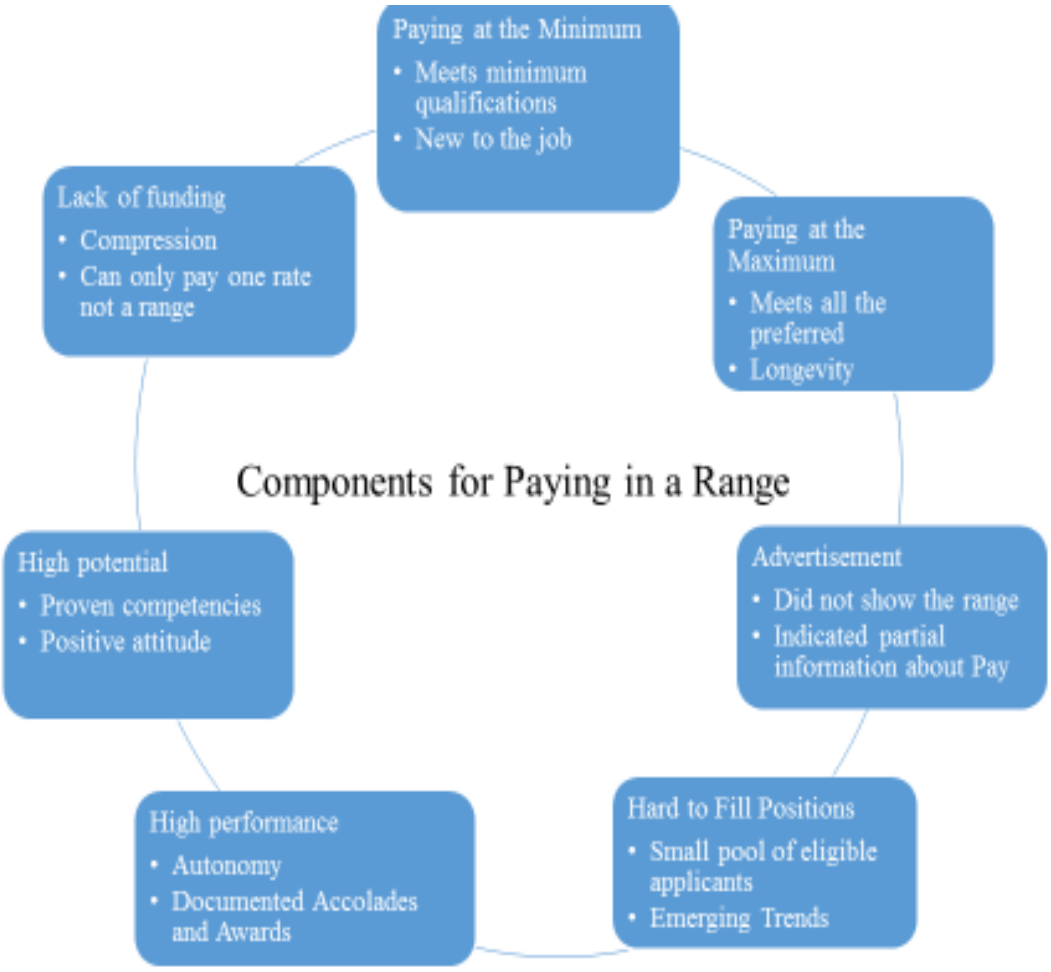


Figure 3 Components for Paying in a Range



Summary

The initiative was designed to make pay practices more consistent and reduce inequities. Prior to implementation, the University's administration was trained on the tactical steps and strategic methodology for the new pay structure. If this initiative is implemented correctly it should reduce the unneeded variance in pay. In the next chapter, the focus will be on the initiative and how it works and if it reduced variance in pay. Afterwards an examination will be conducted on the salary data derived from the pre-implementation of the Initiative compared to the data taken from the post-implementation.

Chapter Four

Methodology

In this chapter, the components of the methodology and analysis are explored including a restatement of the research question, the development of hypotheses, a definition for the dependent variable, the independent variable, and the control variables. The source and nature of the data are delineated.

The primary research question for this study was, "Does the PSI/ Initiative reduce inconsistencies in compensation for classified hourly staff?" The study is a quasi-experimental design. A quasi-experiment compares the effect of a treatment on a population (Cook, Campbell and Shadish, 2002). There are many similarities to an analysis of covariance experimental design and a quasi-experimental design. The significant difference between a covariance experiment and a quasi-experiment is there is not a random group assignment in the quasi-experimental experiment (Creswell, 1994). Cook, Campbell and Shadish's (2002):

The real-world evaluation of an existing treatment (the PSI/ Initiative) would not permit a random assignment of cases. It is recognized that this research could have used a different quasi-experimental design. For example, if one were to use months as the time-period, one could have used a monthly "time series" analysis. However, too few hires were completed on a monthly basis to permit months as the time period. It was determined that an extended time period would be necessary. As a result, data is treated at two-time periods: before and after the implementation of the treatment. Thus, this research is a simple before/after design. According to the National Research Council, (1981) claiming a casual effect should take into account the contextual factors of the inquiry process in order to generalize the findings. The

interpretation of quasi-scientifically oriented research is highly dependent upon the depiction of the variables such as the subjects, action, and setting. This is an additional reason that a quantitative quasi-experimental design was used with a number of control variables.

Hypotheses

In quasi-experiments, the researcher has to enumerate alternative explanations one by one, decide which are plausible, and then use logic, design, and measurement to assess whether each one is operating in a way that might explain any observed effect. The difficulties are that these alternative explanations are never completely enumerable in advance, that some of them are particular to the context being studied, and that the methods needed to eliminate them from contention will vary from alternative to alternative and from study to study (Cook, Campbell, Shadish, 2002).

The first hypothesis for this study was:

H_1 The implementation of a new compensation structure will reduce the variance in pay rates among new hires.

Prior to the PSI implementation the supervisors had less clarity on how to determine salaries. Thus, supervisors with little guidance were left to their own judgement to determine what salary to recommend. However, with the PSI it was thought that supervisors would be provided greater flexibility in developing proposed salaries, while at the same time having more structure on how to determine the appropriate level of the salary in the range of salaries.

It is expected that differences in comparative ratios existed within the organization and that those differences might have been a function of the location of the position and the nature of the position. As a result, two control variables (Organizational unit and Job Level) were used in this analysis to determine their impact on compensation.

As noted elsewhere, there was considerable dissatisfaction relative to the fair treatment of personnel with regard to compensation across the University. While universities are widely seen as academic institutions, which they are, they are also made up of a diverse set of organizational units that serve to carry out a university's mission and goals. These units differ in their scope and environment and, as a result, were hypothesized to differ in their orientation toward compensation.

H_2 Work Units will have different market rates in the Pre-treatment setting.

Therefore, the treatment, (Initiative) should result in no differences in compensation by work units.

Public entities classify positions by the nature of the work and the level of responsibility. It was thought that different job levels would be treated differently (the rationale for this is discussed later). While those differences existed pre-treatment, it was expected that the introduction of the PSI would reduce the differences found prior to its introduction.

H_3 Differences in compensation will exist within pay grades in the Pre-treatment setting.

Similar to the work unit control variable, the introduction of the Pay Initiative should reduce variance within a pay grade.

Dependent Variable

The dependent variable in this research is the comparative market ratio. The employee pay rate is the annualized amount the employee makes in a calendar year (Milkovich, Newman and Gerhart, 2011). The market rate is the average amount that other similarly situated jobs at other organizations are paid (Foldesi, Smith and Toller, 2002).

An example of a comparative market ratio (see Figure 4) would be as follows: the market rate for an Office Specialist 1 is $30,484. If a University Office Specialist I earned $30,484 the comp ratio is 100%. If a University Office Specialist I earned $26,208 they would have a market comp ratio of 86%. If a University Office Specialist I made $34,445 their market comparison ratio would be 113%.

Figure 4 Comparative Market Ratio Example

$30,484	$26,208	$34,445
1.00 = At Market	.86 = Below Market	1.13 = Above Market
$\frac{\$30,484}{\$30,484}$	$\frac{\$26,208}{\$30,484}$	$\frac{\$34,445}{\$30,484}$

The expectation is that the dependent variable would have some variance in pay. In addition, there would be outliers that are both high and low relative to the market rates, but a mean can indicate a typical pay rate. The high rates are those that compared to the market ratio are a higher quantitative value. In contrast to the high rates, the low rates in comparison to the market ratio are a lower quantitative value. According to best practices derived from Milkovich, Newman and Gerhart (2011) which were used to implement the University's compensation system, it was expected that organizations' pay ranges for office and production work would range somewhere between 5% to 15% lower than market and 5% to 15% higher than market. According to Foldesi, Smith and Toller (2002, p.60) "Range progression values typically vary between 10 percent and 25 percent." This common practice assists organizations to anticipate the variation in skill levels of employees combined with market factors and also to incentivize employee skill development through salary progression within the pay range. All other rates outside of the approximate 10% variance would be considered outliers that indicate either very

inexperienced employees or highly skilled and/or experienced employees compared to market (Foldesi, Smith and Toller, 2002). In this research, a +/- 10 percent range is used to indicate the level of variance in the market comparison ratio that would be considered appropriate. Thus, any ratio below 90 or above 110 would be considered out of range. As a result, we have created a three-level categorical variable: below market range, within market range, and above market range. Table 3 displays the definitions for each category of a pay range.

Table 3 Dependent Variable Categories

Category of a Pay Range	Definition
Below the market range	89.9% and below
Within the market range	90% - 110%
Above the market range	110.1% and above

Treatment/Independent Variable

The independent variable is a factor that can create a change or impact on a dependent variable (implementation of the classification and compensation system at the University) which is the PSI (Creswell, 1994, Glesne, 1999). In this experiment the independent variable is the PSI. The independent variable is the quasi-experimental treatment (the PSI) for employee pay. The design of the PSI was intended to improve the consistency in employee pay.

Previously, the attitudes about a centralized pay system had mixed reviews. The University employees voiced opinions about inequity whenever pay comparisons on campus were discussed but, there needed to be some level of consistency of comparability. The supervisors talked about their need for autonomy and flexibility with pay decisions. The supervisors also rationalized that they knew best how and what work needed to be done and therefore should know how to pay the new hires. To meet the supervisors needs of autonomy

and the University's need for consistency a compromise was needed. The compromise was the creation of the PSI. This new pay system had a goal of aligning the different colleges and departments in a University wide compensation philosophy. It was widely debated whether the PSI would make improvements in pay equity. The direct comparison of the new PSI and previous University pay practices was seemingly the only thing that could prove a more consistent approach was being utilized.

The pay system both before and after the treatment is what is used in this research to understand if variance in pay was reduced. The before treatment and after treatment periods permits the researcher to determine the effect of the independent variable on the dependent variable. The independent variable has been deliberately used as an adjustment to see its impact on the dependent variable (comparison ratio).

Control Variables

The control variables are factors that should remain constant. If the control variables do not stay unchanged then the experiment would have its validity compromised (Creswell, 1994, Glesne, 1999). However, in field experiments it is often the case that the control variables are not constant. In fact, there are differences in these variables and those differences are controlled statistically. In this experiment there were several control variables that were expected to impact the role of the treatment/independent variable. Those control variables were the nature of the hiring department and the type of positions being filled.

The type of hiring department/unit may have an impact on the decision to recommend a salary level for a position. The size of the unit could affect its flexibility to hire individuals - - the larger the unit the greater the flexibility. Moreover, larger units should have larger budgets giving them greater opportunities to fund higher salaried positions. The hiring departments/unit

are also indicative of other traits that could impact how positions are compensated including management style, tenure, and complexity. Finally, a hiring department/unit's leadership may bring their own biases toward the positions being compensated. One individual might look at a position and think that an individual was lucky to have a job and not worry about fair compensation. Another supervisor might think that compensating at the highest level possible reflects positively on her/his personnel skills. The type of hiring department/unit is categorized into three different groups. The first group is Support services. Support services are instrumental in helping faculty and students with services that cover things like registration, human resources, and facilities. The second group is Academic. The Academic group is focused on classes and curriculum for students. These groups are typically the different colleges at a university such as English, Architecture, and Chemistry. The third and final group is Administrative/Research. This group does not work directly with students but deals more specifically with research that is tied to industry and community extension programs. A few examples of an Administrative research group were Extension Field Operations, Clinical Sciences, and research institutions.

Another factor that was thought to possibly impact the decision to recommend pay levels was the type of position. Different positions, in this research, are defined by pay grade. There were four different pay grades in this study - - four different types of positions. The pay grades are signified with a letter and a number. The letter stands for the general category of work. The letter "A" is for the administrative staff pay structure. The number signifies the level of the pay range (A-4, A-5, A-6, and A-7)[1]. In other words, the level and type of position indicates the

[1] The A-4 pay range has a minimum starting point of $23,439 and a maximum of

level of responsibility and complexity of the job. Jobs with greater complexity and responsibility may be harder to fill and, thus, encourage supervisors to seek higher than normal salaries. Conversely, lower level jobs generally have less flexibility, are under greater supervision, and are generally perceived as easier to fill. Thus, supervisors might feel that for these positions there was less of a need to compensate the positions at a competitive rate. In other words, the nature of the position could impact salary decisions.

Table 4 Description of Position by Variable Category over Time (in actual numbers)

	Time 1		Time 2
Number of Position	239		240
Work Units			
Administrative/Research	41		48
Facilities/Support Services	51		49
Academic Units	146		140
Missing Data		5	
Total	238		237
Pay Structure/Classification			
A-4	31		25
A-5	119		132
A-6	63		62
A-7	26		22
	239		241
Dependent Variable Market Ratio Grouped			
Below Range	88		54
Within Range	98		138
Over Range	53		49
	239		241

$35,158. The A-5 pay range has a minimum starting point of $25,783 and a maximum of $38,674. The A-6 pay range has a minimum starting point of $29,005and a maximum of $43,508. The A-7 pay range has a minimum starting point of $31,991and a maximum of $49,586.

Source of the Data

The study was conducted at a large Midwestern Public Land Grant university for the time period from 2016 to 2017. The data was collected from the University's Human Resource Department and consisted of 479 Office Specialist positions. In general, all of the positions were comparable in that they came from the same classification series - - Office Specialist. The intention of this research study was to examine the salary data of new hires collected both prior and post implementation of the PSI Initiative system. The pay range concepts and conceptual basis for analyzing pay plans were derived from Foldesi, Smith and Toller (2002) and Milkovich, Newman and Milkovich (2002). Approximately half of the positions (n = 239) were collected between October 2016 and April 2017. This was before the implementation of a new compensation structure. The post treatment time period ran from May 2017 until October 2017. During this time period 240 positions were filled. That is to say, there were a comparable number of pre and post treatment positions.

Approach to Data Analysis

The dependent variable is categorical as is the treatment (before/after PSI Initiative system). In addition, our two control variables were both categorical. With these facts in mind, the analysis proceeded using a series of cross-tabulation tables. First, the analysis explored differences in the dependent variable before and after implementation of the PSI Initiative system. Second, the analysis sought to determine if the PSI Initiative had a positive impact on compensation by reducing the variance in pay among the type of unit (3 groups) and within pay grades. Finally, the analysis explores the impact of the work unit on pay grade for the before and

after conditions. Throughout the analysis the chi square statistic was used to determine if significant differences existed pre and post treatment and within work units and pay grades.

Summary

To summarize, the focus of this research was to use a quasi-experimental approach to determine if a newly created PSI reduced the variance in hourly employee compensation. If the PSI was a successful treatment and reduced variance than more positions should fall into the "within market range" category after the introduction of the system than were "within range" prior to the introduction of the PSI Initiative system.

The methodology procedures for this experiment identified the independent, dependent and control variables for pay connected with the works of Foldesi, Smith and Toller (2002) and Milkovich, Newman and Gerhart (2011). Rationale used for domains placement within a pay range found that the research of Foldesi, Smith and Toller (2002) and Milkovich, Newman and Gerhart (2011) offered the foundations for the creation of the three-category dependent variable. Type of work unit and the level of job complexity were two factors that were thought to potentially impact the effects of the treatment on the dependent variable.

The outline of protocol and procedures was derived from the materials by Creswell, (1994) and Glesne (1999). The subsequent quasi-experiment established a basis of comparison of the pre-treatment data and post treatment data affected by the PSI.

Chapter Five

Results

There is one major research question for this research and a potential follow-up question. The major research question was:

> Does the PSI reduce inconsistencies in compensation for classified hourly staff?

A potential follow-up question was developed if the answer to the first question was not clearly delineated. If the results of the analysis showed continued variance in pay, then:

> If there were still inconsistencies after implementation of the PSI, then what may account for those differences?

The hypothesis tested in this research was that the PSI would reduce variance in the pay of new hires. The assumption is that if the PSI (the treatment) was used properly there would be a measurable change between pre and post-treatment in the number of positions out of the pay range. The expectation is that the use of a PSI will reduce outliers to market range for each

Table 5 Pre and Post PSI Market Ratio Levels

Market Level	Pre PSI	Post PSI
Below Market Range	37	22
Within Market Range	41	57
Above Market Range	22	20
Totals	100% N=239	99%* N=240

x^2 =15.07 df=2 $p < .001$

*Does not equal 100% because of rounding.

position; resulting in less jobs being paid below and above market range, and more jobs being paid within the market range.

Table 5 compares the percentage of positions in the three categories of pay levels before and after the implementation of the PSI. As you can see in Table 5, Pre-implementation of the PSI, 37% of the positions were below the market range, 41% of the positions were within the market range, and finally, 22% of the positions were above the market range. In other words, most of the positions were either above or below the range prior to treatment. However, when one looks at the post treatment, we can see that the majority of the positions (57%) were within range. When we look at column two, post-implementation of the PSI, we see a drop of (15 points) in those below market from 37% to 22% and a small decrease (2 points) in those above the range.

The data shows that the post-treatment percentage levels compared to pre-treatment percentage levels among new hires who were hired below market (89% comparative market ratio or less) was 15 points lower. Additionally, the percentage of those within the market range (90% to 110% comparative market ratio) increased by 16 points after post-treatment was applied. Finally, the percentage of those above market (110% comparative market ratio and higher) decreased slightly by two percent. These changes were significant as can be seen by Chi-Square of 15.07 with 2 degrees of freedom at the .001 level. This would seem to indicate that the implementation of the PSI made a difference.

We know that there are differences between Pre and Post implementation of the PSI. It is important to understand they were consistent across the University and across all types of jobs. In table 6 we control for the type of work unit these positions were in. The sixth table

demonstrates the pre-treatment and post-treatment on the type of unit. The control variable, unit, is utilized to better understand how each unit implemented the PSI.

The number of men above market decreased by 7 points. If the total number of male new hires in this study was a larger sample size (26) then the post PSI data would have made a bigger impact. The number of men below market decreased by 23 points. The number of men hired within the market range increased by 31 points.

In Table 6 there is a significant number of positions below the market range Pre-PSI implementation across all 3 units. The Chi-Square Tests of all units was not a significant at $p < .225$. There is also some difference in the above the market group by unit. The Administrative units had the highest percentage of positions above range (27%) while the Facilities units had the lowest percentage above range (18%).

The first type of unit was the Administrative research unit. After treatment, the Administrative research units decreased the amount below market by 16 points while the amount above market decreased by 10 points. The results of these changes were an increase of 26 points within the appropriate market range for the Administrative research units.

The second set of units examined were those labeled the Facilities Support Services group. After treatment to the Facilities Support Services units decreased the amount below market by 13 points. The amount above market decreased by 3 points. The percentage within the appropriate market range for the Support services units increased by 16 points.

Academic units were the final group examined. After treatment, the Academic units decreased the amount below market by 14 points, the percentage within the appropriate market range for the Academic units increased by 12 points. The amount above market increased by 2 points.

The pre-treatment Chi Square for level of comparative market ratio and organizational units was not statistically significant. Which means the groups of people were not being paid differently before implementation, although the groups are being paid similarly there were sizable percentages of positions being paid below market across all three units. There were some differences per each, but for the most part every unit had similar levels below market and above market before implementation of the PSI. The only units that came close to being within market range pre-PSI for most of their employees were the Academic units (45%). The Administrative and Facilities units had a sizable number less in the market range (around 34% for each). While it is not statistically significant, it would seem that the units compensated within the existing pay

Table 6 Pre and Post PSI Market Levels /Org. Units

Market Level	Pre-PSI			Post-PSI		
	Unit				Unit	
	Administrative	Facilities	Academic	Administrative	Facilities	Academic
Below Market Range	39	49	32	23	37	18
Within Market Range	34	33	45	60	49	58
Above Market Range	27	18	22	17	14	24
Totals	100% N= 41	100% N= 51	99%* N=146	100% N=48	100% N=49	100% N=14

Pre-PSI x^2 =5.67 Df= 4 p < .225 Post-PSI x^2 =8.57 Df= 4 p < .073

system were slightly different. We see major shifts at the below market level and at the above market level for a some of the units.

After implementation of the PSI we see a different picture. Post PSI, more positions were moved into market range. The percentage numbers of within market range for Facilities lagged behind the Administrative Research and Academic units but, for the most part, across all

units the new hires were paid similarly. There was not a significant difference in pay across organizational units but there was a higher number of new hires being paid with the market range across all units. This means that by the measure of organizational units the PSI was successfully implemented and used in the way it was intended. The PSI decreased variance in new hire pay among the different organizational units.

We now know that there were differences between Pre and Post implementation of the PSI for the different units which improved new hire starting pay. We now can exam the different levels of hierarchy for the Office specialist jobs by pay grade. In Table 7 we control the pay grade that these positions are in both pre and post PSI implementation. Table 7 provides the results of the pre-treatment and post-treatment by paygrade level. The control variable is the pay grade and is utilized to better understand the post PSI impact by grade.

In Table 7 all of the paygrades had at least a third of the positions below the market range Pre-PSI implementation. In fact, paygrade seven had 69% below market range. There are some differences above market range by grades, Pre-PSI implementation for the first three pay grades had around the same amount above the market range. Except paygrade 7 had very few above the market range. However, given the large percentage below market range, it was not expected that pay grade 7, had very few above the market range. As can be seen, only the lower paygrades, A-4, had a majority of positions within the appropriate paygrade. The differences in pay were significantly different by pay grade. Different pay grades were treated differently with higher grades being more likely to be below market.

Post-PSI implementation pay ranges results were different by pay grade. While pay grades 4 and 6 do not differ in the below market category, pay grades 5 and 7 decreased the number of positions below market post treatment. Pay grades 5 and 7 saw an increased number

of positions' pay levels falling into the within range category. The post PSI within market range results for pay grades 4 and 6 did not change much compared to the Pre-PSI levels. Post-PSI treatment there is still a majority of positions that are below the market range in paygrade 7 however it did go from 69% to 53%. Overall, Post-PSI grades 6 and 7 had less than half of the new hires within market range. Post-PSI grades 4 and 5 had the majority of new hires within the market range. The process did help reduce some of the variance, however, the higher pay grade levels (A-6 and A-7) did not move as many positions within range compared to the lower level positions (A-4 and A-5).

The grade that was most impacted by the PSI was pay grade 5. The data for grade 5 showed a 23-point decrease for those being paid below the market after implementation of the PSI. Grade 5 also increased the percentage of those within the appropriate range for market by 27-points. The significance level of the Chi Square score of 34.38 was significant at the .000. The statistically significant Chi square for post implementation indicates there were still significantly statistical differences in how positions were compensated by grade. However, those differences mask the fact that the new system had an effect of reducing inequalities in the largest pay grade which was A-5. The majority of all positions in the post PSI implementation were the in pay grade A-5 and this group went from a large number of positions below market to having a majority of positions within market. This means that after implementation of the PSI created more equitable payments for the largest group of employees.

Table 7 Pre and Post PSI Market Ratio Levels/Pay grades

Market Level	Pre PSI				Post PSI			
	Pay Grade				Pay Grade			
	4	5	6	7	4	5	6	7
Below Market Range	33	32	35	69	31	9	36	53
Within Market Range	52	41	43	23	54	68	42	44
Above Market Range	15	27	22	8	15	23	23	4
Totals	100% N=31	100% N=117	100% N=63	100% N=26	100% N=25	100% N=130	100% N=62	100% N=23

Pre-PSI x^2 =16.03 Df= 6 p < .01 Post-PSI x^2 =34.38 Df= 6 p < .000

Table 8 displays the Pre-PSI comparative market ratio for units by pay grades and Table 9 shows the Post PSI market ratio level for units by pay grades. The number of cells (grades within each organizational unit) is very small. In many cases the number of positions was less than 5. The results tell us that there is a difference in market ratio by grade but not a difference in market ratio pay by grade per unit. Which means that the differences that are found by paygrade are not a function of what organizational unit the positions were located.

Table 8 Pre-PSI Market Ratio by Group /Pay grades

Group	Administrative Research				Facilities Support Services				Academic			
Pay grade	4	5	6	7	4	5	6	7	4	5	6	7
Below Market Range	50	10	50	40	62	38	38	78	25	8	36	54
Within Market Range	50	71	40	40	25	38	38	22	50	67	41	41
Above Market Range	0	19	10	20	12	24	23	0	25	25	23	4
Totals	100% N= 2	100% N= 31	100% N= 10	100% N= 5	99% N= 8	100% N= 21	99% N= 13	100% N= 9	100% N= 16	100% N= 75	100% N= 61	99% N= 54

Pre-PSI x^2 =3.00 df= 4 $p < .55$

Table 9 Post PSI Market Ratio by Group /Pay grades

Group	Administrative Research				Facilities Support Services				Academic			
Pay grade	4	5	6	7	4	5	6	7	4	5	6	7
Below Market Range	33	33	46	67	50	12	55	75	33	32	35	69
Within Market Range	67	38	27	0	50	67	27	25	50	41	43	23
Above Market Range	0	29	27	33	0	21	18	0	17	27	22	8
Totals	100% N=3	100% N=24	100% N=11	100% N=3	100% N=6	100% N=24	100% N=10	100% N=8	100% N=30	100% N=119	100% N=63	100% N=88

Post-PSI x^2 =5.11 df= 4 p < .276

Summary

A dependent variable, comparative market ratio, was created and tested. The analysis looked at the impact of the treatment (PSI). The results showed some differences from the Pre-PSI data compared to Post-PSI data. In other words, there is some evidence that the PSI made a difference; it reduced the variance in pay. There were some marginal differences across organizational units. However, the significant differences of how new hires were paid was more evident by paygrade and less so by organizational unit.

Chapter Six

Discussion and Conclusion

The hypothesis that the implementation of a new compensation structure will reduce the variance in pay rates among new hires was supported. The results of the analysis compared the pre-treatment to the post treatment and showed there was a decrease in the employees below the market range, an increase in those within range, and a decrease in those above market range. There were some exceptions, particularly by grade, and further examination by organizational unit showed some trends. In this section, a productive speculation for the context of the results of this research will be offered.

The second hypothesis was that the work units would have different market rates in the Pre-treatment setting. Therefore, the treatment, (Initiative) should have resulted in no differences in compensation by work units, but it was not supported. In reviewing the data for the organizational units, it was concluded that some of the organizational units were more in line with expectations to pay employees within the market range, while other organizational units were less likely to pay within the range. Furthermore, all organizational units (Administrative research, Facilities Support services, and Academic clericals) paid around 50% of their new hires within range, however, the Administrative research unit applied this practice more consistently (60%) than the other units (Facilities=49%, Academic 58%).

One reason for this difference may be the attitudes about fair pay. The faculty members in both Administrative research and Academics showed a propensity to pay more equitability. This equitable pay approach for classified office specialists could be due to the higher and more consistent salaries of their faculty supervisors. If supervisors are the recipients of fair wages they may see more of the value of the PSI tool. Facility supervisors on the other hand do not

necessarily receive consistent and fair wages and may not want to help their subordinates until their own supervisor salaries reflect fair and equal pay. Additionally, the understanding of the Federal Equal Pay Act and the ramifications of not following the federal law may resonate more with researchers and faculty than with facility management.

A second reason may be the lack of funding in the facility units. The receipts that generate most of the funding for facilities comes from student services such as housing, dining and recreation. This funding is largely dependent upon enrollment and discretionary spending by students with some of the funding coming from the General University accounts that are shared by the vast majority of all University employees. The funding for facilities may fluctuate from year to year which can create a bit of uncertainty for the Facilities administration to invest in the huge and ongoing costs of a new hire's salary.

The Administrative research units and the Academic support units have more diversity than student receipts and general University funds. The majority of Administrative units and many of the Academic units receive grant money. The grant money in many cases can be set up for several years which helps provide more financial stability. In addition to the grant money that Academic units receive, the receipts from students are more stable than Facility units because the expenses that are paid for are not discretionary student spending. Students generate receipts for Academic units through lab services, orientation fees, tech fees, and other instructionally related activities fees. Although the aforementioned academic fees are dependent upon enrollment they are not optional like living on campus, buying a meal ticket from the University cafeteria, or getting a University gym membership.

The third hypothesis was that differences in compensation would exist within pay grades in the Pre-treatment setting. Similar to the work unit control variable, the introduction of the Pay

Initiative should reduce variance within a pay grade. The data did not support this third hypothesis and it revealed that there were differences of pay equity by pay grade. The grades that benefitted from the treatment the most were grades 7 and 5. The other two grades (4 and 6) showed very little change. The type of work for each pay grade seems to coincide with both the type of unit and the experience level of each new hire.

In pay grade 4 the type of clerical work that is performed is general administrative support duties. These tasks are things such as answering phones, data entry, and greeting visitors. Very little experience is required, and therefore, it is considered an entry level position. In the minds of many supervisors this position may not be highly valued, but is required to fulfill mundane tasks.

In pay grade 5 the duties are more engaging and requires more experience. This role is typically a lead worker, but in some circumstances, may not be the official supervisor of record. The duties range from processing time sheets, payment vouchers and arranging travel. From a supervisor's perspective a clerical worker that is helping keep track of their money as well as setting up business trips has a significant impact on the organization. This may be why the pay for new hires in pay grade 5 improved after the treatment was applied.

In pay grade 6 the work has more specialized functions. These duties consist of fiscal and personnel policy and procedures. The position provides office management supervision of lower office specialist positions. This is the entry level supervisory position. The supervisors of these positions may think that the work is significant, but that most of the new hires in these roles may be very junior in experience and that the more experienced workers qualify, apply for, and are hired at a higher-level position.

In pay grade 7, the office specialist is a high-level administrative technical support title. The position often advises staff on procedures and processes. This position is seen as a problem solver. The incumbent not only supervises the other three levels of office specialist, but is known as the last level of escalation among the office staff for resolution. This position often handles many of the problems before they go to the higher executive levels and may benefit by having an equitable compensation level because of the associated impact the position has on those administrators making hiring and pay decisions.

One final aspect that may be related to the low pay of paygrades 4 and 6, and the in range pay of paygrades 5 and 7, could be the compression of salaries with current employees. Compression is usually caused by the wages given to new outside hires (Milkovich, Newman & Gerhart, 2011). The rationale of supervisor's pay in level 7 being higher than level 6 may be to create a comfortable distance in compensation between subordinate and supervisor. Additionally, employees in a pay grade 5 lead worker role, may have received priority for increased pay over the lower level subordinate roles.

An alternative view about the equity levels in pay grades 4 and 5 may be because of the living wage formula introduced during training. The living wage attempted to demonstrate how the annual salaries of employees were not enough to make ends meet in the region. Speculatively, the hiring managers may have made decisions based on the living wage of approximately $26,000 as a threshold that was too low for employees. The living wage may have become the priority for pay equity actions. This may be why the majority of new hires post-PSI in both pay grades 4 and 5 were paid closer to market.

A living wage is approximately $26,000 annually and depends on which county the University employee resides. As previously stated, a below market salary for paygrade (A-4)

was $26,208. The two issues of salaries being both below market value and lower than a living wage may have incentivized managers to increase salaries.

The data shows some promising applications of the PSI. In the cases where the data was not reflective of appropriate use of a range, further discussion about the causation should occur. Milkovich (1987) recommends that organizations participate in matching compensation practices to surrounding structural circumstances in order to begin organizational transformations (Milkovich, 1987). As described before, this means organizations have to recognize their external and internal dynamics so that they can make a positive impact with their compensation goals. Foldesi, Smith and Toller (2002) also recommend that organizational pay levels should be comparable to their own structure and to be competitive with other rival organizations

The understanding of how broad banding works may need to be revisited. Foldesi, Smith and Toller (2002) indicated that movement within the broad banding should be consistent and transparent so that the employees' pay is understood both by employee and manager. Kepes, Delery & Gupta (2009) explain that the use of broad bands gives managers more flexibility and discretion in assigning pay. This discretion should follow the general methodology that is used throughout the organization and is common business strategy and knowledge.

Similar to the broad band discussion, a robust discussion regarding the Equal Pay Act is necessary. Although, it is an assumption that many of the outliers could be the result of experience and skill level differences, it should be re-established and reiterated that there is a legal obligation that the University has to follow federal laws. According to Ehrenberg & Smith (2016) the rationale should be well documented and consistent with organizational policy. Barbezat (2002) recommends that in addition to the application of fair pay a discussion regarding the penalties for not abiding to the federal law should also occur.

Brockbank and Ulrich (2003) suggest that the business knowledge domain and the competencies around labor knowledge and employee value proposition knowledge are instrumental in implementing a cohesive strategic plan. Sutton & Bergerson (2001) emphasized that universities use compensation as a method of linking to their mission. This linkage is a way to attract, retain and manage staff in higher education through extrinsic rewards. The A-5 lead workers in the office specialist positions were unanimously seen as the priority for equity pay. Over time, the other office specialist pay grade levels could receive similar prioritization. The initial response to changing a pay system at a university with a number of years absent of any type of pay structure appears to be gradual change, but a change none the less.

Limitations of the work

A limitation to this work was each organizational unit's understanding of the compensation models and the application of those ideas. The consensus of concise meanings of market and having parameters of market being anywhere from 10% below to 10% above market was a challenge for organizational units. An example of the conflicting viewpoints was that the perceived ideas of equity, both internally and externally, varied and had different influencing factors. Specifically, the idea of entry-level pay was applied differently even if the job responsibilities, new hires experience, and education were the same. This was an instrumental part of how the PSI works.

The adjustment of budgets over a longer time period could show different results. If the study was conducted over several years instead of just one year the amount put aside for salaries may have been different. External funding factors for the year that was used in this experiment could have been unusually restrictive for giving equitable pay to new hires. The other internal obligations such as merit increases or market adjustments for current employees may have

restricted the ability to pay new hires within the market range. On the other hand, additional years may have had even more budget restraints.

There was very little research on compensation systems for classified employees in higher education. The information for hourly workers in an environment like higher education are nuanced and created some challenges for comparisons. Also, this study may have missed some of the undocumented background, history and insights about classified workers in higher education that could have been contributing factors for pay decisions.

This was only a study of office personnel. Those positions were predominately filled by women. It may be easier to implement an equitable pay structure when almost all of the positions are gender specific. Moreover, in jobs that consist mainly of just one gender there is not a big enough sample size of the other gender to determine if there was gender pay bias. Other positions that have more balance of men and women could help with understanding if the PSI decreased the gender pay gap. If the project were in a work field where men and women are in equal numbers would the system have been less successful in reducing variance?

Finally, the number of positions hired per organizational unit were very small. In some cases, the organizational units hired less than 5 positions post-PSI implementation. This may have impacted the ability to find a significant relationship between units and its effect on the comparative market ratio. The small sample size for each organizational unit per pay grade resulted in data that was not statistically significant by organizational unit but was found to be statistically significant by paygrade.

Suggestions for Future Research

In the future a longer time period may want to be considered to do research on the PSI. In particular, looking at the trends of each organizational unit by pay grade may be considered. This longer time frame would mostly likely increase the sample size of the research. A larger sample may have a direct impact on the significance of the study. This would allow further investigation into the relationship between organizational unit and its effect on the comparative market ratio per pay grade.

A new study could also look at the results of organizational units after dialogues about the results of this study. During this study the comparisons between pay grades and units were not shared with the organization. The pay decisions by organizational units may change after each examine the data from this study. Follow up with the University's CEOs, CAO and CHRO about the strategic plan and the involvement of all strategic partners would help clarify how the dialogue about equity was rolled out and implemented.

As stated in the limitations section, the sample size for men was not large enough because of the positions under investigation. To understand the effects of PSI on the ability to reduce potential gender, race, and ethnicity bias one would have to expand the type of jobs being evaluated. For example, a future study would have to find positions that are equally likely to have men and women being hired. After dialogue with strategic partners, another study using a different sample of positions could be conducted. The results of the newly proposed study could be compared to the results of this initial research to see if the PSI reduced the number of positions out of pay range.

Another study could be a cross comparison of other university's doing similar projects. One approach could be to use CUPA data (College and University Professional Association) to

draw comparisons for staff pay levels. This can also be utilized for other types of jobs of universities going through similar transformations. The CUPA data is collected on a yearly basis and is typically submitted by each university's HR compensation experts.

Finally, a retention study connected with the PSI's post implementation may be helpful. More specifically, not just turnover of employees who left the organization, but reviewing transfers. Did any employees transfer to organizational units that paid their employees more equitably? In exit interviews studying if compensation was a topic mentioned as a reason for leaving would be informative.

Summary

This research demonstrated the ability of the PSI to change how new hires were compensated. The PSI did reduce some variance in new hire pay. The pay across organizational units was not significantly different, however, the number of new hires being paid within the market range increased by organizational unit. The PSI was successfully implemented and used in the way it was intended by organizational unit.

The variance that did occur was a result of how pay grades were treated differently. The Post-PSI data for grades 6 and 7 resulted in less than half of the new hires being within market range. Post-PSI data for grades 4 and 5 resulted in having the majority of new hires being within the market range. Variance was reduced by the treatment, however the higher pay grade levels (A-6 and A-7) did not have the majority of positions within range. The implementation of the treatment of the lower level positions (A-4 and A-5) resulted in the majority of the new hires being within market range. Organizational units all had the same tendency to focus on the pay equity for office specialist who were lead workers (A-5). The total number of new hire A-5 lead worker positions (130) post-PSI was a larger amount than grades A-4, A-6, and A-7 (110) new

hires combined. These lead worker positions were shown to be the priority by administrators in the first year Post-PSI.

The University had significant leadership changes during the Pay Structure Initiative, including a new president and CHRO. Regardless of the University's transitions, the overall support for the PSI was consistent. Furthermore, it was apparent that the administrative officers needed to be firmer about implementing higher and more equitable pay levels across all pay grades. It looked as though there were not enough resources to compensate new hires. In the case of the highest levels of office specialists, A-6 and A-7, it appeared that either there was a lack of funding for market level compensation or a disbelief that there was a consistent application of the PSI applied to both the A-6 and A-7 positions. Nonetheless, the results of the lower level positions (A-4 and A-5) demonstrated that market level pay could be achieved.

More training and resources are key, but buy-in and follow through on a university plan cannot be emphasized enough. It was evident that the University had data and a compensation philosophy (see appendix) to lead them to a more market equitable environment, but the results were mixed. As previously stated, many factors could have played into what happened. At the current pace of changing variance in pay, the PSI will continue to increase equity and decrease variance. However, to be more effective, retain staff, attract new hires, and be compliant, pay practices need to change more rapidly and be more widespread. Time will tell if measuring the implementation of the PSI will help expedite the decrease of pay variance in the future. This is a longer process that is gradually changing pay. Implementation of the PSI can help provide a more equitable compensation system over time.

Appendix
University's Compensation Philosophy

The University is committed to providing a fair and competitive total rewards program — i.e., base pay, benefits, perquisites, work environment — that will attract, retain and reward a high-performing and diverse employee community at all levels.

The University is also committed to providing a competitive total rewards package that will lead to the achievement of both individual and, when appropriate, group results as we seek to meet our vision and mission.

It is the University's policy to pay salaries over time that are market equitable and reflect the duties and responsibilities of the position, as well as the complexity and quality of the work performed, in comparison with other university employees.

It is also the intention of the university to take an incremental approach for achieving a set of dynamic salary ranges that provide competitive pay opportunities comparable with the relevant labor markets.

The compensation program is designed to adhere to values, which are measured by the following:

We value transparency and will provide managers and employees information about job-related content, pay guidelines, and salary ranges.

We value flexibility and will support a diverse organization to accommodate differences and changes in job requirements, job markets, and supply and demand factors, and the economy.

We value compensation programs that are externally competitive and reflect total rewards for comparable jobs within the relevant labor market, which could be local, regional, national, or international.

We value internal comparability and will provide pay guidelines that ensure disciplines and/or programs are paid equitably across the organization.

We value the opportunity for recognition of the workforce for extraordinary performance through flexible and varied recognition programs.

We value the opportunity to honor the workforce for longevity through varied appreciation programs.

We value providing growth opportunities for employees through career enhancements, career paths, and training and development programs.

We value the development of leaders who coach, mentor, and guide employees and others to realize their full potential and contribute as high-performing employees.

We honor institutional knowledge and value the retention of a workforce that continuously learns, grows, and contributes to the vision and mission.

We value and will recognize contributions to scholarly research and/or those who devote significant time mentoring others.

We value and will invest in the development of a performance management system that provides processes, systems, structures, tools and leadership development to support the delivery of a fair and competitive total rewards program.

References

Aon Hewitt, (2013). *Human Capital Services Final Assessment Report-Kansas State University.* Retrieved from https://www.k-state.edu/2025/documents/RP002JW_Human-Capital-Services-Assessment-Final-Report.pdf

Arnold, E. W., & Scott, C. J. (2002). Does broad banding improve pay system effectiveness? *Southern Business Review*, *27*(2), 1.

Arslan, H., Akdemir, A., & Karsli, M. D. (2013). How human resource operations work in higher education institutions. *Procedia-Social and Behavioral Sciences*, *99*, 742-751.

Balkin, D.B. & Gomez-Mejia, L.R. (1987). Toward a contingent theory of compensation strategy. *Strategic Management Journal*, 8, 169-182.

Banker, R. D., Lee, S. Y., Potter, G., & Srinivasan, D. (1996). Contextual analysis of performance impacts of outcome-based incentive compensation. *Academy of Management journal*, *39*(4), 920-948

Barbezat, D. A. (2002). History of pay equity studies. *New Directions for Institutional Research*, *2002*(115), 9-40.

Bauer, K. W. (2000). The front line: Satisfaction of classified employees. *New Directions for Institutional Research*, *2000*(105), 87-97.

Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of management journal*, *39*(4), 779-801.

Becker, B. E., & Huselid, M. A. (1998). Human resources strategies, complementarities, and firm performance. *SUNY Buffalo: Unpublished manuscript*.

Brault, A. T., & Beckwith, C. A. (2003). *Human resources adding value in higher education*. Knoxville, TN: College and University Professional Association for Human Resources.

Bregn, K. (2008). Management of the new pay systems in the public sector—some implications of insights gained from experiments. *International Review of Administrative Sciences*, *74*(1), 79-93.

Briscoe, J. P., & Hall, D. T. (1999). An alternative approach and new guidelines for practice. *Organizational dynamics*, *28*(2), 37-52.

Broderick, R.F. (1985) *Pay policy, organization strategy and structure: A question of "fit"*. Paper for the Research Symposium of the HARP Society, Wharton School.

Brockbank, W., & Ulrich, D. (2003). Competencies for the new HR. *Ann Arbor, MI: University of Michigan, Society of Human Resource Management, and Global Consulting Alliance*.

Buckingham, M. A. R. C. U. S., & Coffman, C. (1999). Break All the Rules. *London: Simon & Shuster*.

Cannell, M., Long, P., & Holden, L. (1991). What's Changed about Incentive Pay?

Carroll, S. (1987). Business strategies and compensation systems. In D.B. Balkin & L.R. Gomez-Mejia, New Perspectives in Compensation, pp. 343-355, *Prentice Hall.*

Catholic University of America Compensation. (2018). *Salary Structure FY19.* Retrieved from http://humanresources.cua.edu/compensation/structures.cfm

Cook, T. D., Campbell, D. T., & Shadish, W. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston: Houghton Mifflin.

Cooke, F. (1976). Strategic compensation. Fredrick W. Cooke Associates.

Coz, A. (2000). The importance of employee participation in determining pay system effectiveness. *International Journal of Management Reviews*, *2*(4), 357-375.

Creswell, J. W. (1994). *Research design: Qualitative & quantitative approaches*. Sage Publications, Inc.

Culpepper and Associates. (2009, September 9). 2010 salary increase budgets projected to rise worldwide. Retrieved from http ://www.shrm.org/hrdisciplines/ compensation /Articles/Pages SalaryBudgets.aspx

Davis Jr, K. R., & Sauser Jr, W. I. (1993). A comparison of factor weighting methods in job evaluation: Implications for compensation systems. *Public Personnel Management*, *22*(1), 91-106.

Ellig, B.R. (1981). Compensation elements: market phase determines the mix. *Compensation Review*, Third Quarter, 30-38.

Ehrenberg, R. G., & Smith, R. S. (2016). *Modern labor economics: Theory and public policy*. Routledge.

Equal Pay Act of 1963-EPA- 29 U.S. Code Chapter 8 § 206(d) Retrieved from https://www.eeoc.gov/laws/statutes/epa.cfm

Euben, D. R. (2001). "Show me the money": Pay equity in the academy. *Academe*, *87*(4), 30.

Evans, A., & Chun, E. (2012). Special Issue: Creating a Tipping Point-Strategic Human Resources in Higher Education. *ASHE Higher Education Report*, 38(1), 1-143.

Foldesi, R., Smith, S. P., & Toller, J. M. (2002). *Fundamentals of higher education compensation practices*. College and University Professional Association for Human Resources

Gerhart, B. A., Milkovich, G. T., & Murray, B. (1992). Pay, performance, and participation.

Gilbert, D., & Abosch, K. S. (1996). *Improving organizational effectiveness through broad banding* (Vol. 2). World at work.

Gomez-Mejia, Luis R. &. Balkin, David B. (1992). Compensation. organizational strategy. and rum performance. Cincinnati: *South-Western*.

Groshen, E.L. (1988). Why Do Wages Vary Among Employers? Economic Review. 24, 19-38.

Ham, C. and Hill, M. (1984) *The Policy Process in the Modern Capitalist State*. London: Wheatsheaf.

Heneman, R. L., Ledford Jr, G. E., & Gresham, M. T. (2002). The changing nature of work and its effects on compensation design and delivery. *Strategic reward management: Design, implementation, and evaluation*, 35-73.

Heneman III, H. G., & Schwab, D. P. (1985). Pay satisfaction: Its multidimensional nature and measurement. *International journal of Psychology*, *20*(2), 129-141.

Herzberg, F. M., & Mausner, B. (1959). & Snyderman, B. (1959). *The motivation to work*. (London, Staples Press).

Hong, T. (2011). *Motivational attributes of classified staff at nine California community colleges*. California State University, Fullerton.

Huselid, M. A., & Becker, B. E. (2000). Comment on "Measurement error in research on human resources and firm performance: How much error is there and how does it influence effect size estimates?" by Gerhart, Wright, Mc Mahan, and Snell. *Personnel Psychology*, *53*(4), 835-854.

Johnsrud, L. K. (2002). Measuring the quality of faculty and administrative work life: Implications for college and university campuses. *Research in Higher Education,* 43(3):379–395.

Johnsrud, L. K., and Rosser, V. J. (1999). College and university mid-level administrators: Explaining and improving their morale. *Review of Higher Education,* 22(2): 121–141.

Judge, T. A., Piccolo, R. F., Podsakoff, N. P., Shaw, J. C., & Rich, B. L. (2010).

The relationship between pay and job satisfaction: A meta-analysis of the literature. *Journal of Vocational Behavior,* 77(2), 157-167.

Kaplan, S. L. (2007). Business strategy, people strategy and total rewards. *Benefits & Compensation Digest*, *44*(9), 12-19.

Kemper, J. E. (2001). The role of the human resource office in the collegiate environment and the necessary components of being a strategic partner. *Digital Dissertations International,* 62(3), 863. (UMI No. 3007462).

Kepes, S., Delery, J., & Gupta, N. (2009). Contingencies in the effects of pay range on organizational effectiveness. *Personnel Psychology*, *62*(3), 497-531.

Kerr, J.L. (1985). Diversification strategies and managerial rewards: An empirical study. *Academy of Management Journal*, 28: 155-179.

Klein, K. J., & Sorra, J. S. (1996). The challenge of innovation implementation. *Academy of management review*, *21*(4), 1055-1080.

Lawler, E.E. III. (1981). *Pay and organizational development*. Addison-Wesley Publishing.

Lawler, E.E. III. (1990). *Strategic pay*. San Francisco: Jossey-Bass.

Leavitt, W. M., & Morris, J. C. (2008). Market-based pay in action: Municipal strategies and concerns in the cities of Hampton Roads. *Review of Public Personnel Administration*, *28*(2), 178-189.

Ledford Jr, G. E., Tyler, W. R., & Dixey, W. B. (1991). Skill-based pay case number 3: Honeywell ammunition assembly plant. *Compensation & Benefits Review*, *23*(2), 57-77.

Lerner, A. L. (1999). *A strategic planning primer for higher education*.

Lingard, H. & Rowlinson, S. (1997). Behavior-based safety management in Hong Kong's construction industry. *Journal of Safety Research,* 28, 243-256.

Llorens, J. J. (2015). Fiscally driven compensation reform and threats to human capital capacity in the public sector. *International Journal of Organization Theory & Behavior*, *18*(1), 22-46.

Luna, A. L. (2006). Faculty salary equity cases: Combining statistics with the law. *The Journal of Higher Education*, *77*(2), 193-224.

Lyons, S. (2012). Why the law should intervene to disrupt pay-secrecy norms: Analyzing the Lilly Ledbetter Fair Pay Act through the lens of social norms. *Colum. JL & Soc. Probs.*, *46*, 361.

Mahoney, T. A. (1989). Multiple pay contingencies: Strategic design of compensation. *Human Resource Management*, *28*(3), 337-347.

Milkovich, T., Newman, M., & Gerhart, B. (2011). *Compensation*. (Ed.). New York: McGraw-Hill -Irwin.

Milkovich, G. T., Newman, J. M., & Milkovich, C. (2002). *Compensation* (Vol. 8). T. Mirror (Ed.). London: McGraw-Hill.

Milkovich, G.T. (1988). A Strategic Perspective on Compensation Management. *Research in Personnel and Human Resource Management*, 6, 263-288.

Mintzberg, H. (1994). The fall and rise of strategic planning. *Harvard business review*, *72*(1), 107-114.

Mintzberg, H. (1987). Crafting strategy. July, August, 66-75. *Harvard Business Review*.

National Research Council. (1981). *Women, work, and wages: Equal pay for jobs of equal value*. National Academies Press.

Organisation for Economic Co-operation and Development Staff. (2005). *OECD factbook 2005: economic, environmental and social statistics*. Paris: OECD.

Oshagbemi, T. (1997). Job satisfaction and dissatisfaction in higher education. *Education+ Training*, *39*(9), 354-359.

Penner, M. (1983). How Job-Based Classification Systems Promote Organizational Ineffectiveness. *Public Personnel Management*, *12*(3), 268-276.

Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A.& Hensley, M. (2011). Outcomes for implementation research: conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health and Mental Health Services Research*, *38*(2), 65-76.

Pynes, J.E. (2009). *Human resources management for public and nonprofit organizations*. San Francisco, California: John Wiley &

Sons.

Rankin, S. (2015). Kansas State University Climate Survey Committee Report. *Rankin & Associates*

Risher, H. H., & Schay, B. W. (1994). Grade banding: the model for future salary programs? *Public Personnel Management*, *23*(2), 187-199.

Ross, A. H., & McDermott Jr, F. V. (1974). The Equal Pay Act of 1963: A Decade of Enforcement. *BC Indus. & Com. L. Rev.*, *16*, 1.

Rouzer, P.A (2000). Adding Salary Ranges to Internal Job Postings. *HR Magazine 45(8), 107.*

Rowley, D. J., & Sherman, H. (2004). *From strategy to change: Implementing the plan in higher education*. John Wiley & Sons.

Salter, M.A. (1973). Tailor incentive compensation to strategy. *Business Review*, 51, 94-102.

Sape, G. P., & Hart, T. J. (1971). Title VII Reconsidered: The Equal Employment Opportunity Act of 1972. *Geo. Wash. L. Rev.*, *40*, 824.

Shareef, R. (1994). Skill-based pay in the public. *Review of Public Personnel Administration*, *14*(3), 60-74.

Shaw, J. D., Gupta, N., & Delery, J. E. (2002). Pay dispersion and workforce performance: Moderating effects of incentives and interdependence. *Strategic Management Journal*, *23*(6), 491-512

Spencer, L. M., & Spencer, S. M. (1993). Competency at work. *New York: John Wiley & Sons*, *5*.

Spratlen, Lois Price. "Interpersonal conflict which includes mistreatment in a university workplace." *Violence and victims* 10, no. 4 (1995): 285.

Smith, C.S., & Ferris, G.R. (1990). Human Resources Strategy and Planning in Higher Education. *Human Resource Planning,* 13(1), 13-25.

Sullivan, C. A. (1977). The Equal Pay Act of 1963: Making and Breaking a Prima Facie Case. *Ark. L. Rev.*, *31*, 545.

Strategic HR and Talent Management in Higher Education. (2012). *ASHE Higher Education Report, 38(1), 45-67.*

Sutton, T. P., & Bergerson, P. J. (2001). *Faculty Compensation Systems: Impact on the Quality of Higher Education. ASHE-ERIC Higher Education Report, Volume 28, Number 2. Jossey-Bass Higher and Adult Education Series*. Jossey-Bass Publishers, Inc., 350 Sansome Street, San Francisco, CA 94104-1342.

Thompson, J.R. (2007). *Designing and implementing performance-oriented pay band systems*. Washington, DC: IBM Center of the Business of Government. www.buisnessofgovernment.org.

Thompson, J.R., & Lehew, C.W. (2000). Skill-base pay as an organizational innovation. *Review*

of Public Personnel Administration, 20(1), 20-40.

Ulrich, D. (1997). Human resources champions: The next agenda for adding value and delivering results. Boston: President and Fellows of Harvard College.

U.S. Equal Employment Opportunity Commission. (2016). Laws & Guidance. Retrieved from https://www.eeoc.gov/laws/index.cfm

U.S. Department of Agriculture, Natural Resources Conservation Service. (2011) *Civil Right Compliance Review Guide.* Retrieved from https: // www. nrcs. usda.gov /Internet/FSEDOCUMENTS/stelprdb1046364.pdf

Vander Putten, J., McLendon, M. K., & Peterson, M. W. (1997). Comparing union and nonunion staff perceptions of the higher education work environment. *Research in Higher Education*, *38*(1), 131-149.

West Virginia Senate Bill 499 (2016)

Weber, C. & Rynes, S. (1991). Effects or Compensation Strategy on Job Pay Decisions. Academy of Management Journal, 34 (I), 86-109.

Whalen, C., & Guy, M. E. (2008). Broadbanding trends in the states. *Review of Public Personnel Administration*, *28*(4), 349-366.

Zingheim, P. K., & Schuster, J. R. (2009). Competencies replacing jobs as the compensation/HR foundation. *World at Work Journal*, *18*(3), 6-20.

August 1, 2018

Curriculum Vitae

Derek S. Smith

EDUCATION:

Ph.D., University of Nevada, Las Vegas, expected 2018

Concentration: Workforce Development and Organizational Leadership

Dissertation: Measuring implementation success of pay structures

and the role of human resources in higher education

Dissertation Examination Committee:

Chairperson, Lee Bernick, Ph.D.

Committee Member, Jayce Farmer, Ph.D.

Committee Member, Chris Stream, Ph.D.

Graduate Faculty Representative, Kendall Hartley, Ph.D.

M.B.A., University of Phoenix

Major: Human Resource Management

M.S., University of Wisconsin-Madison

Major: Curriculum and Instruction

B.A., Hampton University

Major: History

CERTIFICATIONS:

P.H.R. Human Resources Certification Institution

SHRM-CP Society of Human Resources certification

Six Sigma Yellow Belt SSA & Company

Leadership Architect Korn Ferry Products

Shodan 1st degree Black Belt USSD

PROFESSIONAL HISTORY;

Assistant Vice Chancellor

University of Pittsburgh

Senior Compensation Project Administrator

University of Pittsburgh

Senior Director, Planning and Operations

University of Missouri System

Director, Compensation and Organizational Effectiveness

Kansas State University

Manager, Compensation, Classification and Salary Administration

University of Nevada Las Vegas

Manager, Recruitment

University of Nevada Las Vegas

Analyst, Recruitment and Classification

College of Southern Nevada

Executive Team Leader, Human Resources

Target Corporation