5-2011

Components of Merit Compensation Systems for Faculty at Four-Year Universities

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B.A., Southern Illinois University Carbondale, 2003

A Research Paper
Submitted in Partial Fulfillment of the Requirements for the
Master of Public Administration.

Department of Political Science
in the Graduate School
Southern Illinois University Carbondale
May 2011

RESEARCH PAPER APPROVAL

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April 1, 2011

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Introduction

Public, four-year universities employ a vast number of people in various occupations. Universities have diversified interests and goals encompassing areas such as research and community service, but the general assumption is that teaching provides public schools with the necessary financial autonomy to carry out their mission. Assuming that teaching students is the primary purpose of a university, one might think of professors and instructors as the primary positions; however, while they serve a critical function, their service to the student body would not be possible without the presence of the various support positions throughout the campus. Universities require a wide array of employees, job titles, and classifications to support a national higher education industry that as of 2001 generated more than $124 billion annually (Lowenstein, 2001).

Glancing at the human resources' webpage of a typical, mid-sized state university such as Southern Illinois University Carbondale (SIUC) reveals job titles such as accountant, brick mason, cook, electrician, ironworker, nurse, office manager, painter, pipefitter, plumber, refrigeration mechanic, and sheet metal worker (SIUC, 2010a). Additionally, the university employs attorneys, physicians, engineers, police officers, custodians, groundskeepers, along with various other support staff and administrative personnel, yet all of these various positions fall under one of three categories: faculty, civil service, and administrative/ professional (SIUC, 2010a). In just a decade, the total number of employees at SIUC increased nearly 11% starting with 5,035 employees in 2000 and ending with 5,584 employees in 2009 (SIUC, 2010b).

These positions fulfill various needs of the university, but these needs originate with the students. State universities receive public funding to fulfill their mission of

education in addition to tuition and fees paid by the students, which at SIUC equated to $10,411 for the 2009-2010 academic year (SIUC, 2010b). Based on the assumption that the primary reason students attend universities is to receive their education, then state universities should remain cognizant of their public accountability to provide this service. Nonetheless, universities require various support staff in addition to professors in order to achieve their mission.

With so many varied job titles, managing personnel at a public university could arguably be one of the most challenging areas of public human resource management (HRM). Some institutions such as the University of Nevada Las Vegas (UNLV) have taken a collaborative approach to university HRM by partnering human resources with academic resource units to serve the needs of the institution, but the UNLV partnership tends to stand as an exception and not the rule in public university human resources (Connally & Neuman, 2006). While a similar collaborative partnership does not exist at SIUC, the Human Resources Department does act as a liaison between the employees and various state agencies impacting salary, retirement, and benefits (SIUC, 2010a).

While some in the field of human resources use phrases such as merit system and civil service synonymously (Berman, Bowman, West, & Van Wart, 2010), they refer to two different groups of employees in public universities. The two largest human resource constituencies at SIUC in terms of number of employees consist of the faculty and the civil service, with the largest percentage of the university's employees belonging to the civil service (SIUC, 2010b). Civil service employees compete for their positions through a process of competitive examinations to obtain positions free from the influences political patronage with an increased level of job security (Berman et al., 2010). The

origins of the modern civil service system stem from passage of the Pendleton Act which created the Civil Service Commission in 1883 following the assassination of President Garfield by a disgruntled job seeker (Nigro, 2006).

However, at the state level, civil service practices differ greatly as has been well documented in the literature with the cases of Florida, Georgia, and Texas (Kellough & Nigro, 2002; McEntee, 2006; Condrey & Battaglio, 2007). Georgia, being the most extreme example of the three states, has eliminated its civil service system, moving instead to at-will employment for new hires starting in 1996 through its GeorgiaGain program (Kellough & Nigro, 2002; McEntee, 2006). Likewise, this differentiation of civil service practices and reforms extends to the university systems. In the State of Wisconsin, the Division of Merit Recruitment and Selection (DMRS) oversees the human resource functions for the civil service positions in 40 state agencies and the 26 campuses in the University of Wisconsin system (Lavigna, 1996). In Japan, the university system reform measures mirror those implemented in GeorgiaGain, removing employees from the civil service system and ending guaranteed employment to the extent that even the faculty must compete for research funding (Cyranoski & Chou, 2004). The State of Illinois takes a slightly more decentralized approach to the civil service practices within its public universities (Pynes, Harrick, & Schaefer, 1997).

The Illinois General Assembly created the State Universities Civil Service System (SUCSS) as a separate government entity in 1952 “to develop, maintain, and administer a comprehensive and efficient program of human resource administration for the higher education community” (SUCSS, 2010, p. 3). The SUCSS maintains autonomy from other state agencies so as to create civil service policy specific to the needs of higher

education, yet the University System serves a combined 20 universities and other nonacademic institutions that each maintains its own human resources department, which can result in the execution of the same policy differently throughout the State of Illinois (Pynes et al, 1997).

Merit evaluations in the State University Civil Service System rely upon standardized performance evaluations, which are common across merit systems (Berman et al., 2010; SUCSS, 2010), yet faculty merit pay evaluations differ across universities (Cyranoski & Chou, 2004). With such great attention to the merit and civil service systems at both the state and university levels, less research exists on faculty merit compensation systems. In fact, Terpstra and Honoree (2009, p. 55) found that "little empirical data exists regarding the effectiveness and the nature of merit pay plans in higher education." As such, this study explores the following research question: What are the components of faculty merit systems at four-year universities?

Methodology

The methodology for this research study involves a combination of hermeneutics and content analysis, given the lack of empirical data. A hermeneutic approach allows for an interpretation of existing literature, while content analysis provides a researcher with a quantitative component of existing texts (McNabb, 2008). The analysis focuses on existing research studies on merit compensation systems. This framework allows the research to overcome the lack of empirical data. Furthermore, the methodology provides a system of establishing a conceptual framework of merit compensation systems in faculty members at four-year universities. An additional advantage of utilizing this framework stems from the need to focus the research towards merit compensation

systems in universities, in particular focusing the inquiry to obtain relevant variables unique to four-year universities.

Bernard acknowledged the susceptibility of this approach to researcher bias as a limitation (as cited in McNabb, 2008). The greatest limitation of this approach comes from the inability to generalize the findings of the study. However, the purpose of this content analysis is not to obtain generalizability of merit systems, but to provide an overview of existing information. Hence, the goal of the project is to provide a descriptive study on merit systems in four-year public universities.

In order to achieve this descriptive study, this paper aims to analyze the existing literature. Foremost, the research establishes the multiple uses of merit within four-year public universities. Upon establishing the dual merit systems within universities, the research examines the structure of merit compensation systems as they relate to university faculty. Regardless of the specifics of merit structures, pay-for-performance systems require certain conditions for success. The paper highlights these conditions presented in the existing literature as well as the psychological motivations of employees in such systems. Upon establishing the conditions for success and the motivations, the research examines the barriers to success of merit systems. Finally, the paper explores the link in the literature between the performance and pay, the faculty appraisal. The analysis of the existing literature thus establishes the framework to examine specific studies of merit systems and how they manifest themselves in actual universities.

Merit Pay in Higher Education

In a merit pay system or pay-for-performance system, a manager bases an employee's annual income adjustment upon the individual employee's performance

during the previous year (Kellough, 2006). The premise behind the merit based pay system presumes the prospect of increased pay will lead employees to put forth an increased effort (Kellough & Nigro, 2002). While this premise can appeal to both administrators and employees, the benefits of a merit compensation system differ between the two groups.

From an administrative standpoint, research reveals numerous operational advantages to implementing a merit compensation system (Sutton & Bergerson, 2001). Merit systems provide faculty with incentives to improve their productivity and to strive for excellence within their profession. Administrators view merit compensation as a means of raising the average salary in the university, which aids in attracting and recruiting new faculty members. Additionally, merit systems provide university administration with both more managerial discretion as well as an additional avenue of communication with faculty members.

Beyond these operational incentives for administrators, Hanley and Forkebrock (2006) identify merit compensation systems as a means of fostering competition to bring in additional funding to public university in times of decreasing assistance from the state. The relationship between state governments and public universities is a symbiotic association where institutions provide "an educated citizenry," while the state government "bear[s] the primary responsibility of funding postsecondary education" (Weerts & Ronca, 2006, p. 935). However, state appropriations for high education compared to overall spending decreased from 7.3% in 1977 to 5.3% in 2000 (Hanley & Forkenbrock, 2006). While the decrease only accounts for two percent of a state budget, public universities have experienced a 40% decrease in state funding from 1978 to 2006,

forcing universities to rely more heavily upon grants, donations, endowments, and student enrollment for income (Weerts & Ronca, 2006). From 1991 through 2003, state appropriations per full-time equivalent student decreased 7.3 percent (Hanley & Forkenbrock, 2006).

According to data obtained from the SIUC Budget Office's website, state appropriations accounted for 39.33% of the University's total funding in fiscal year 1998, yet that revenue source declined to only 28.01% of total funding by fiscal year 2010. During the same time frame, on-campus student tuition, including only tuition income from students registered for courses taught at SIUC's Carbondale campus and not including tuition from distance education or classes offered at off-campus locations, increased from 16.08% to 22.20% of total funding (SIUC Budget Office, 2010). These decreases in state funding are undoubtedly partially responsible for Wilson's findings that nationwide, faculty only received a 2.1% increase in salary from 2003 to 2004, the lowest annual faculty salary increase in 30 years (as cited in Hanley & Forkenbrock, 2006). Thus, university administrators have placed an elevated emphasis on the enterprising nature of research, rewarding faculty members with merit increases when they bring in contracts and grants that can replace state appropriated funding (Hanley & Forkenbrock, 2006).

In a paper presented to the Faculty Senate of Chaminade University of Honolulu, Fassiotto (1986) presented three, concise arguments in favor of merit from the faculty perspective. First, merit systems can reward faculty members for excellence in their profession such as poets laureate or Nobel Prize recipients. Second, a merit system can act as an incentive to faculty members. Third, merit compensation systems act as a

method of increasing salaries, and universities utilizing merit have higher average faculty salaries. While Fassiotto's arguments appear logical, they depend upon the structure of the merit system.

Structure of Merit systems

While both administrators and faculty find possible benefits from merit compensation systems, the success of the system depends upon the structure. A successful compensation system must benefit the faculty by enhancing personnel and professional development while simultaneously benefiting the institution by allowing for institutional and organizational development (Schaffner & MacKinnon, 2002). While the original faculty merit compensation system, developed during the Renaissance, no longer exists in modern public universities, similar systems exist where universities compensate athletic directors and coaches entirely based upon merit (Fassiotto, 1986). Modern merit compensation systems often combine meritorious increases along with a standard cost of living adjustment (COLA); however, Fassiotto (1986) cautions that a large merit percentage increase can create unrest amongst other faculty members only receiving the COLA, yet a small meritorious percentage increase does not create incentive to put forth additional effort. The COLA and merit increases involve step increases such that an employee's base salary increases, but a compensation system can also reward meritorious employees with a fixed dollar amount increase or one-time bonus (Hanley & Forkenbrock, 2006). Fassiotto (1986, p. 5) compares this one-time bonus to the "Christmas bonus" system sometimes found in the private sector. An additional area of unrest can exist for lecturers and non-tenure track faculty who are not subject to the publishing requirements of tenure track professors, but still undergo the same merit

evaluation (Schulz & Tanguay, 2006). Regardless of these structural issues, merit compensation systems have the potential to achieve success when they present certain conditions.

Conditions for Success

Regardless of which type of merit system a university uses, the literature reveals eight key conditions that must exist in order for it to achieve a measure of success: (Griffith & Neugarten, 1984; Sutton & Bergerson, 2001; Hanley & Forkenbrock, 2006).

1. Knowledge of goals
2. A link between performance and reward
3. Personal responsibility for achieving goals
4. A measure of influence or control over the criteria
5. A significant difference between merit pay and base pay
6. Worker protection from outside factors.
7. A belief that the system is fair
8. Minimization of negative consequences

Foremost, administrators must clearly define the institution's mission, vision, and goals to employees, and they must ensure that the employees know the goals of both the university and the department (Hanley & Forkenbrock, 2006). If the mission statement and compensation system do not coincide, the university should consider revising or completely rewriting the mission statement to express realistic goals (Diamond, 1993; Sutton & Bergerson, 2001).

Once faculty members are aware of the university's goals, they must believe that high performance or achieving the goals at a high level directly results in higher levels of pay (Griffith & Neugarten, 1984; Sutton & Bergerson, 2001). Additionally, each individual employee must accept some level of responsibility of achieving the goals and

the organizational mission (Hanley & Forkenbrock, 2006). While faculty members may not hold influence over a university's goals or mission statement, they must enjoy some level of control over the criteria used in the evaluation process (Sutton & Bergerson, 2001). However, this raises issues of faculty rights versus administrative discretion in the evaluation process that need addressing at each institution (Griffith & Neugarten, 1984).

Central to the success of pay-for-performance systems, high performing faculty members must earn compensation significantly beyond the base pay (Sutton & Bergerson, 2001). This tenet also assumes administrators will reward high achievers with relatively similar amounts of compensation (Griffith & Neugarten, 1984). The corollary to this tenet presumes that while exceptional faculty receive appropriate rewards, employees maintaining satisfactory performance must continue to receive standard adjustments to their salary (Hanley & Forkenbrock, 2006).

Another key condition to the success of merit compensation systems, the system should shelter individual workers from factors beyond their control, which is often problematic for public universities dependent upon funding from state appropriations (Griffith & Neugarten, 1984; Sutton & Bergerson, 2001). Likewise, all faculty members must believe that the system is fair and without bias, regardless of the outcome of their personal evaluations (Hanley & Forkenbrock, 2006).

Finally, a successful compensation system needs to contain a mechanism to minimize negative consequences of earning higher pay such as resentment from peers (Griffith & Neugarten, 1984; Sutton & Bergerson, 2001). While pay-for-performance systems depend upon these conditions set forth by the institution, their success also requires proper employee motivation.

Motivation

The success of a merit system hinges upon the successful motivation of employees. Schulz and Tanguay (2006) divide the psychological motivations between expectancy theory and equity theory while dividing the economic motivations between agency theory, implicit contract theory, and efficiency wage theory.

Expectancy theory stipulates that the visible linkage between performance and pay incentives determines the success of a merit system such that employees must identify rewards in advance in order to receive motivation from the expected reward (Kellough, 2006; Schulz & Tanguay, 2006). Equity theory centers on the earned merit pay matching the employee's effort (Schulz & Tanguay, 2006).

Agency theory acts as a measure of strategic human resource management, aligning the employees' monetary rewards with the overall organizational objectives (Becker & Huselid, 2006; Schulz & Tanguay, 2006). Likewise, implicit contract theory states that pay varies between employees just as job performance varies, which equates to a differentiated investment in employees based upon both their strategic value and their performance (Becker & Huselid, 2006; Kellough, 2006). Finally, efficiency wage theory proclaims that higher wages encourage employees to achieve maximum performance (Schulz & Tanguay, 2006).

Merit systems initially appear attractive to employees based on psychological and economic theories that appeal to employee's "conventional wisdom" (Berman et al., 2010, p. 214). However, in relying upon these theories, faculty merit compensation systems may fail to take into account the motivational needs of their intended recipients. In implementing pay-for-performance systems in higher education, university

administrators erroneously assume faculty members hold monetary compensation as their highest motivating determinant (Fassiotto, 1986). Ramirez (2001) examines research that identifies over 3,000 factors that either increase or diminish employee motivation. He concludes that factors such as recognition, achievement, responsibility, as well as career and professional development rank higher in motivating employees to achieve higher levels of performance than monetary compensation.

The motivational theories presented by Becker and Huselid (2006), Kellough (2006), and Schulz and Tanguay (2006) contradict the assumptions presented by Ramirez (2001) and Fassiotto (1986). Faculty members have already distinguished themselves educationally, yet merit pay systems make assumptions based on antiquated management philosophies that only a few will put forth professional effort worthy of meritorious recognition (Fassiotto, 1986). In organizational theory, concepts of the merit compensation system originated with Frederick Taylor's development of scientific management theory where he penalized workers who underperformed while paying bonuses to those who exceeded expectations (Tompkins, 2005).

Ramirez (2001) examines merit systems in relation to Abraham Maslow's hierarchy of needs. This examination results in the belief that systems, which solely focus on lower-level needs such as compensation and benefits, may drive educators out of their profession. Hanley and Forkenbrock (2006, p. 111) acknowledge that "most faculty of public research universities did not choose their vocation on the basis of anticipated remuneration." Furthermore, few universities, especially public universities, can afford to pay faculty members a salary equivalent to the marketable value of their

skills (Fassiotto, 1986). Systems focusing on the lower level needs highlight one of the first barriers to success of merit systems.

Barriers to Success

While proponents of merit pay systems in public universities expound upon the potential of the practice to align faculty contributions with the research, teaching, and service goals of the institution (Schulz & Tanguay, 2006), critics point to numerous barriers to successful implementation. Foremost, the concept of merit pay evaluations creates multiple non-industry-specific implementation difficulties. Berman et al. (2010, p. 214) acknowledge that in order to have a successful merit pay system, preconditions such as "trust in management, a valid job evaluation system, clear performance factors, meaningful and consistent funding, and accurate personnel appraisal" must already exist within the organization. The dependency upon the appraisal system alone offers numerous possibilities for errors described by Kellough (2006) including the halo effect where evaluators rate an employee who performs well in one dimension high in other areas, the first-impression error where supervisors base subsequent evaluations on their first impression of the employee, or the central tendency error where evaluators mark all employees as average.

Furthermore, even when organizations meet the preconditions, merit pay systems have the potential to erode teamwork and camaraderie by placing greater emphasis on individual achievement (Berman et al., 2010). This emphasis on the individual may act as a barrier working against expectancy theory as dependency upon teams breaks the linkage between an employee's individual performance and an expected monetary reward

(Kellough, 2006). Moreover, pay-for-performance systems inadvertently forgo long-term benefits while focusing on immediate returns, set limits on expectations, and direct attention to more easily measured tasks regardless of their relevance to organizational objectives (Berman et al., 2010; Kellough, 2006; Kellough & Nigro, 2002).

The greatest critique of pay-for-performance in public university faculty concerns the weight placed upon research (Barclay & York, 2003; Schulz & Tanguay, 2006; Terpstra & Honoree, 2009). Evaluators certainly take teaching performance and service into consideration, yet they place a disproportionate amount of weight on research (Schulz & Tanguay, 2006). This raises an issue of validity as to what the weight placed upon research is actually measuring. Furthermore, the disproportionate emphasis placed on research in current public university merit systems may work to the detriment of both the faculty member under evaluation and the university. This system forces faculty to concentrate on research at the expense of teaching and service, which carry different weights in tenure evaluation than they do in merit pay appraisals, and if the faculty are placing too much emphasis on research, then the university could experience fewer numbers of enrolling students along with fewer donations from the community (Barclay & York, 2003). The current practice reinforces the "publish or perish" doctrine while devaluing the "teacher scholar" model (Schulz & Tanguay, 2006, p. 81). The research-teaching dichotomy surfaces again in faculty appraisal systems.

Faculty Appraisal

The common-sense logic behind the motivational theories results in an increasing number of public universities implementing some version of a pay-for-performance system (Schulz & Tanguay, 2006). However, the implementation of merit pay systems

may not make sense in all sectors of public institutions. More specifically, universities interested in these systems typically employ them with their faculty (Schulz & Tanguay, 2006; Terpstra & Honoree, 2009).

The success of merit pay systems in public universities or any other industry depends greatly upon the ability of management to link performance to pay via the appraisal and evaluation process (Kellough, 2006). A successful appraisal system should contain specific criteria which provide both guidance to faculty on the expectations of the administration and flexibility to the administration to evaluate total accomplishments of individual faculty members (Schaffner & MacKinnon, 2002). However, in order for the merit criteria to guide faculty members, they must be aware of the criteria. In fact, Anderson (1992) recommends that the faculty have a voice in the design of the appraisal system and in the selection of the criteria used in the evaluation. The absence of information relating to performance criteria increases the tension level in a department, compounding the natural anxiety associated with the evaluation process (Schaffner & MacKinnon, 2002).

Nicklin points to a ruling against Kent State University on August 25, 2000 in which a judge ruled in favor of a female faculty member partially due to the opaqueness of the school's merit system (as cited in Schaffner & MacKinnon, 2002). This ruling validates Anderson's argument for allowing faculty involvement in deciding upon criteria. The amount of influence faculty members have in the creation of evaluation criteria differs across institutions. When faculty members have influence in the criteria, the spectrum of involvement ranges from mere consultation to total discretionary authority over the criteria (Griffith & Neugarten, 1984).

The Association for the Study of Higher Education (2001) points towards Towson State University (now Towson University) as an example of a university successfully implementing performance criteria in a merit system. A member of the University System of Maryland, Towson is the second largest university in the state behind the flagship school, University of Maryland at College Park. In 1990, the University System of Maryland required each member institution to revise its mission statement. In the process of revising its mission statement, Towson also redesigned its faculty compensation system. The development of the new compensation system required seven years to complete; however, the end result was a merit system with four critical elements. First, Towson provided each faculty member with a guidebook describing the faculty's role and reward system. Second, the new merit system provided teaching incentives and aid to faculty to develop their teaching ability. Third, the faculty governing body developed the resulting system. Finally, each department under the new merit compensation system has control over the criteria utilized to evaluate faculty members within the unit.

In higher education, administrations generally base faculty appraisals upon three criteria: teaching, research, and service (Schulz & Tanguay, 2006; Terpstra & Honoree, 2009). Additional accepted criteria include a professor's administrative ability as well as the number of contracts and grants he/she received over the course of the academic year (Griffith & Neugarten, 1984). While the appraisal systems for merit reviews and for tenure reviews use similar criteria, annual merit pay reviews differ greatly from the latter in variability of the results and in the number of faculty evaluated at one time (Barclay & York, 2003).

Beyond the mere existence of criteria, the criteria must have identifiable and measurable aspects, and the faculty must have adequate variation in their performance criteria (Barclay & York, 2003; Kellough, 2006). The literature on merit pay in higher education concurs unanimously that faculty evaluations place the greatest emphasis on research; however, speculation remains on whether the evaluations grade research on quantity or quality (Barclay & York, 2003; Schulz & Tanguay, 2006; Terpstra & Honoree, 2009). Questions of quality and quantity aside, Hanley and Forkenbrock (2006) acknowledge scholarship as the most easily measured criterion in terms of the number of scholarly publications produced within a given time frame; however, evaluators inherently face greater difficultly in objectively and reliably evaluating either teaching or service.

The evaluations typically place the second greatest weight upon teaching, but teaching measurement instruments vary between student evaluations, peer evaluations, or a combination of the two (Schulz & Tanguay, 2006). Hanley and Forkenbrock (2006) claim that evaluations often skew teaching performance measures toward measuring the process of teaching rather than the desired outcomes. Teaching evaluations too often look towards the inputs of education such as available office hours, contact hours with students, or time taken returning graded assignments instead of student learning (Fairweather, 2002). Ideally, merit compensation systems should analyze both inputs and outcomes in evaluating teaching performance (Hanley & Forkenbrock, 2006). The evaluation process typically places the least emphasis on service, largely due to the debate over what constitutes service: participation at committee meetings versus

contributions to the university or professional community (Schulz & Tanguay, 2006; Terpstra & Honoree, 2009).

Moreover, merit pay systems differ in who conducts the evaluation process. A survey conducted by Terpstra and Honoree (2009) found that department chairs conduct slightly over half of all evaluations while peer committees conduct an additional 20% of evaluations, with deans or higher-level administrators also conducting 20% of merit based evaluations. While the source of the evaluation appraisal may intuitively seem important, the aforementioned study found no significant difference in the outcome of the appraisal based upon the source.

Case Studies

In the discussion of motivation, both the motivational theories presented by Becker and Huselid (2006), Kellough (2006), and Schulz and Tanguay (2006) as well as the assumptions on university faculty presented by Ramirez (2001) and Fassiotto (1986) make logical arguments regarding motivation and merit compensation systems. Determining the validity of either theoretical position requires examining exisiting merit systems. As previously mentioned, the current literature lacks significant data on faculty merit compensation systems, yet the existing studies illustrate both the structure and the effectiveness of merit systems in practical settings. While the following studies provide insight to current pay-for-performance systems and share some common characteristics, they only provide a narrow view of the uses of merit pay in higher education. As such, one should not accept these commonalities as generalizable results.

University of California

In her study of the University of California, Ellen Switkes (1999) found the institution's merit review system similar to those of other universities. However, she determined that the California system as more defined with reviews conducted on a more frequent and regular basis. She examined the entire University of California (UC) system consisting of nine campuses with five schools of medicine, three law schools, five business schools, two dental schools, two Schools of Public Health, a School of Pharmacy, Optometry, and Veterinary Medicine, and other graduate and professional programs. At that time, the campus at Merced, which opened in 2005, was under development. When Switkes (1999) published her study, the UC system enrolled over 165,000 students and employed more than 14,000 faculty members, of whom nearly 7,200 were eligible for the merit system. In the UC system, only tenure-track professors receive merit evaluations, thus the approximate 6,800 lecturers and non-tenure-track faculty were ineligible.

Collaboratively developed between the University President and faculty in the 1920s, the UC peer review system stands as one of the oldest in the country. The University utilizes the system for merit, promotion, as well as tenure reviews. The UC ranks academic personnel on a ladder system with 20 formal steps. Instructor is the lowest ranking step and while employees in the position are eligible for meritorious increases, they are not eligible for promotion increases. The next step on the ladder is Assistant Professor I; there are six total Assistant Professor steps, followed by five Associate Professor steps, and eight steps categorized as Professor. The UC peer review system evaluates faculty at steps Assistant Professor I through Associate Professor III

every two years and faculty at steps Associate Professor IV through Professor IV every three years. Most academic personnel plateau at Professor V with steps Professor VI through VIII reserved for the University's most distinguished scholars. While a faculty member can request deferment of the review process, no academic personnel can go more than five years without a peer review. Abiding by this schedule, approximately one-third of all faculty members come under review each year.

Each step on the ladder corresponds to a particular salary; however, the system contains enough flexibility as to allow for off-scale increases. Departments use off-scale salaries when hiring or promoting faculty under "special market conditions" such as award recipients (Switkes, 1999, p. 41). The result is typically a 1.5 step increase. In contrast, departments also assign off-scale increases to faculty members who did not demonstrate enough meritorious performance to warrant a complete step increase, but still deserve recognition due to smaller accomplishments.

The review process in the UC system initiates in the spring semester when the University notifies the department. The following fall the faculty member assembles a file containing all the accomplishments since the last review along with a letter outlining the work and any pending work. A committee from the department initially reviews the file before sending it to the department chair. The chair makes his/her recommendation and forwards the file to the dean. Upon completion, the dean sends the file to the campus' Committee on Academic Personnel (CAP). The committee then makes the final recommendation to the chancellor.

The UC peer review system evaluates faculty on the basis of teaching, research, and service. However, the system determines the distribution of weight for each criterion

based upon the professor's workload. Therefore, the system does not penalize faculty with greater administrative responsibility or faculty involved with critical campus committees for lower teaching or research contributions.

This study presents a major limitation in the analysis of the effectiveness of merit systems. Just as Hanley and Forkenbrock (2006) criticized teaching evaluations for their focus on the process and not the outcome, Switkes (1999) focuses her work on the structure and processes of the UC system. She does not consider the outcomes or outputs from the perspective of the faculty or the administration.

Florida State University System

Kristine Anderson (1992) focused her study on faculty perceptions of the Florida State University System (FSUS) merit evaluation program. While Anderson's analysis certainly provides valuable insight to faculty attitudes, one must first understand the limitations of her data set that raise questions of the study's internal and external validity. Foremost, Anderson presented her findings at annual meeting of the Association for the Study of Higher Education on November 1, 1992, but collected her data from a 1988 survey, thus the age of the study causes concern for its applicability over two decades later. Furthermore, Anderson did not design the questionnaire, and the original survey author sought to examine the faculty members' attitudes toward bargaining priorities, not the merit pay system. Additionally, the data collected did not fully represent the FSUS faculty in 1988 nor would it be representative of the modern workforce. The FSUS system consisted of nine campuses in 1988 as compared to the modern system containing eleven institutions. Of the nine universities, Anderson (1992) based her study on eight as one school hand-tabulated the survey results. While the FSUS employed 5,777 faculty

members in 1988, the survey only resulted in 954 usable returns for a 16.5% response rate. Based on her comparison of the survey results with the university system profile, Anderson (1992) determined the following:

> Underrepresentation occurs for those at the assistant professor and instructor ranks, faculty in the sciences, math and engineering, and faculty at the older research universities (UF, FSU). Union members, as one would expect, are overrepresented in the sample, with about 45% of the sample claiming union membership, vs. a population figure at the time of about 30% across the system. (p. 13)

The relevance of Anderson's work comes from its proximity to the enactment of the Florida State University System's merit system. The FSUS Board of Regents and the union representing the faculty first agreed to the merit compensation system in 1984. While the Board insisted upon discretionary merit raises, the union prevailed in the negotiation. The resulting agreement allowed each department to draft its own merit criteria specific to the needs of its faculty. Once the department drafted the criteria, the faculty members voted to approve the drafted criteria and evaluation process, and the department sent the results to the university administration for final approval. Departmental control over the criteria selection resulted in great disparity as the merit process in departments at any one institution and across the FSUS varied greatly "in complexity as well as in criteria" (Anderson, 1992, p. 11).

In her analysis of the questionnaires, Anderson (1992) divided the FSUS universities into three categories: research universities, large regional universities, and small regional universities. Her results revealed that faculty at the research and large

regional universities were more aware of their department's merit criteria, while nearly 20% of faculty members at the smaller regional universities believed that their departments did not have merit criteria. Likewise, the faculty members at the small regional universities were more likely to disagree or strongly disagree with the concept that the university fairly distributed the merit funding.

Overall, the study found mixed attitudes towards the merit system. Only 69% of respondents knew their department had established merit criteria even though the FSUS system requires formalized procedures. Furthermore, 11% of faculty respondents were certain that their departments did not have criteria and another 20% were unsure if merit criteria existed for their departments. The library staff members were the most cognizant of the merit criteria for their department, and 90% of faculty surveyed in the academic areas of education, liberal arts, and behavioral sciences were aware of the criteria for their respective departments. However, these academics were the least supportive of the merit system.

In contrast, Anderson (1992) found that professors in the areas of business and the sciences were the least aware of the existence of merit criteria, yet the most likely to believe that the administration distributes merit raises fairly. Across all disciplines, full and associate professors were more aware of their departments' merit criteria than assistant professors or instructors. Forty-seven percent of all respondents believed that merit consideration should constitute a smaller proportion of the overall raise package, and only 10% wished to shift away from across-the-board raises to merit increases. Anderson (1992) concluded that the perception of merit criteria is critical in determining faculty support as employees are more likely to support merit compensation systems

when they are aware of the criteria, believe the criteria are used in the allocation of merit rewards, and feel the administration provides equitable distribution of the merit awards.

An unnamed university

Schulz and Tanguay (2006) examined the faculty perceptions regarding merit compensation at a large, public eastern research university. They distributed web-based and hard copy surveys to all 2,617 full-time faculty members included in the 2001-2002 collective bargaining agreement with the university. The research team collected a sample of 486 respondents, an 18.6% response rate. The respondent sample was 70% male and 87% Caucasian. While the authors did not find a statistical difference between the gender and racial diversification of sample as compared to the population, they acknowledge that the low number responses from the campus's African American and Hispanic faculty members as a limitation of the study by "restricting statistical power when analyzing race-based differences" (Schulz & Tanguay, 2006, p. 75). An additional limitation of the study stems from the underrepresentation of assistant professors in the sample; only 19% came from the assistant professor ranks. The plurality of responses came from professors, at 45% of the sample, with an additional 32% of responses from associate professors and 4% from full-time lecturers.

The study analyzed the responses across four areas: the receipt of merit pay, merit step increases, support of merit pay, and performance improvement. Schulz and Tanguay (2006) found 71% of respondents received merit pay rewards in the 2000-2001 academic year. The 341 recipients of merit compensation received an average $1,800 in awards with the self-reported range for the sample being between $300 and $6,000. While merit evaluation systems typically focus on research, teaching, and service, Schulz and

Tanguay (2006) found that all three factors positively related to the receipt of merit pay, but research activities were the only statistically significant variable. The study found that faculty with between six and 24 years of service at the university were the most likely to benefit from the merit plan in comparison to either the faculty group with 25 or more years or the group with 5 or fewer years of service. The logistic regression analysis found significant negative relationships for both faculty with 5 or less years of service and for faculty with 25 or more years.

In addition to asking respondents about dollar amounts, the survey also inquired as to the number of merit step increases. With the number of merit steps as the dependent variable, Schulz and Tanguay (2006) found both research and teaching as significantly positive indicators. However, in contrast to the previous test with merit dollars as the dependent variable, those with the fewest years experience at the university were more likely to receive greater merit step increases than those with six to 24 years service. Faculty members with 25 or more years at the institution had a significant negative relationship with the number of merit step increases. Likewise, the model also revealed that associate professors had "significantly higher merit step increases relative to full professors" (Schulz & Tanguay, 2006, p. 78).

When Schulz and Tanguay (2006) examined support for merit pay as the dependent variable, they only found two significant independent variables. Professors in the business school were significantly supportive of the merit plan in comparison to faculty in the arts and sciences. Female faculty members significantly opposed the university's merit compensation system in comparison to their male counterparts. Likewise, when the study examined performance improvement since the implementation

of the merit system, female faculty members responded significantly and negatively to improvement based on neutral or poor evaluations. As previously discussed, merit based pay systems rely upon the intuitive logic that relates work to a desired reward. However, the study conducted by Schulz and Tanguay (2006) revealed that female faculty members are significantly and negatively opposed to pay-for-performance systems in comparison to their male counterparts. This opposition would negate any of the psychological and economic motivational theories. Schulz and Tanguay (2006) speculate that female faculty members perceive the process as unfair, which would thus preclude the necessary preconditions established by Berman et al. (2010).

A multiple university study

Where previously discussed studies examined single universities or single university systems, Terpstra and Honoree (2009) combined data from multiple universities. From a list of 1,400 universities, the researchers randomly selected 600 schools of which 219 agreed to participate in the study. However, only 135 of the 219 utilized merit compensation. The research team then randomly selected 20 faculty members from each university to e-mail an electronic survey. They received 490 completed surveys for an 18.1% response rate. While Terpstra and Honoree (2009) attempt to contribute empirical data to the study of the impact of merit compensation plans on faculty motivation, their methodology presents multiple limitations. Foremost, the study appears to suffer from selection bias given the combination of the number of institutions from the random sample that opted out of the survey and the limited number of faculty survey at each institution. Moreover, given the wide degree of variance in merit systems and their implementation, the study may have issues with internal and

external validity. An addition limitation stems from the authors' use of self-reported data in linking an individual's motivation with his/her compensation. Finally, the study does not address whether or not merit systems actually result in an increase in faculty productivity. While Terpstra & Honoree (2009) measure faculty perceptions, they do not measure or the outputs or the outcomes produced by university professors.

Even with these limitations in mind, the study still provides a valuable depiction of merit systems. First, merit plans only result in small to moderate increases in pay, with 57% reporting increases between two and three percent while 28% of respondents reported an increase of one percent or less. Likewise, 86% report small to moderate distinctions between the merit increases given low and high performers. Department chairs conducted 51% of merit evaluations with peer committees conducting 20% of evaluations. Regardless of who conducts the evaluation, 78% of respondents reported receiving some form of formal feedback. In 66% of institutions with merit evaluations and compensation, the university does not make the information on pay increases publicly available. Only 25% of universities conducting merit evaluations take past appraisal periods into consideration. Sixty percent of respondents believed that the general salary level at their institution fellow below the national average while only 13% believed that their university paid above average salaries. A striking 80% of the sample worked at a university without the presence of a union or collective bargaining agreement.

Terpstra and Honoree (2009) analyzed how these factors influenced scholarly research, teaching, and service. Respondents reported both significantly higher levels of teaching motivation and higher quality of research when the merit plan made adjustments

for past appraisal periods in comparison to plans not making such modifications. Similarly, faculty members were significantly more likely to have higher levels of service when the university did not make the merit plan public. Likewise, merit evaluations that provide feedback to employees resulted in significantly higher levels of research motivation, teaching motivation, and service motivation than plans that did not provide feedback.

While Terpstra and Honoree (2009) conclude based on their analysis that merit plans positively affect employee performance in four-year universities, it is important to note that their respondents do not share that opinion. This perplexing distinction results from the researchers asking both direct and indirect questions regarding merit. When asked directly about their own institution's merit plans, respondents felt that the systems "had no effect on their individual motivation to engage in better teaching, more or better research, or more or better service" (2009, p. 68). However, when the study asked for an indirect measure of performance of faculty at the institution:

> Respondents perceived that their merit plans had a somewhat positive effect on the overall teaching effectiveness of their faculty, the overall quantity of research of their faculty, the overall quality of research of their faculty, and the overall level of service of their faculty. (Terpstra & Honoree, 2009, pp. 68-69)

Likewise, the results indicate that merit compensation plans have the greatest effect upon the quantity of research. Moreover, the findings indicate that faculty believed merit plans had no impact upon their individual levels of motivation.

Conclusion

Stafford Beer described public agencies as "exceedingly complex probabilistic" institutions (as cited in Tompkins, 2005), and that description certainly applies to public universities. Managing the human resource needs of a public, four-year university can pose enormous challenges. Not only do public universities employ a wide array of classifications and job titles, but they also face the preponderance of employment issues of any public agency while competing with private colleges and other areas of commerce (Lowenstein, 2001). In times of shrinking budgets and fiscal pressure to scale back, the collaborative efforts between human resources and academic resources shines as an example of one possible solution to meeting these challenges (Connally & Neuman, 2006). This type of collaboration could allow merit pay systems to work as intended, aligning the scholarship, teaching, and service of universities with the goals of the faculty (Schulz & Tanguay, 2006; Terpstra & Honoree, 2009).

As previously discussed, universities are increasingly seeking modifications, including merit compensation, to their existing faculty salary systems (Hanley & Forkenbrock, 2006). However, moving in this direction poses both advantages and disadvantages for universities and their employees. Foremost, these practices provide faculty with the opportunity to compete for higher levels of compensation. Likewise, the systems place universities in better positions to recruit and retain the best faculty members. An additional advantage of merit systems and their evaluations is that they provide university administrators with a metric to evaluate faculty. While this may act as an advantage, James Wilson (1989) might argue that these evaluations attempt to run public universities more like private enterprises, forcing a metric upon a coping agency

whose operators, the faculty members, perform activities with outputs and outcomes that are not always observable or measurable. This clearly emphasizes the critique that merit systems overemphasize research, which is easy to measure, with too little emphasis on teaching or service, which are both more difficult to define and measure. Working to find an equitable means of measuring research, teaching, and service could pose one of the key challenges for merit systems in public universities.

Once a system can identify an equitable means of evaluating research, teaching, and service, then it must communicate this measurement to the faculty. Since the success of merit depends upon both the system itself and the motivation of faculty, administrators and faculty must communicate during the formation of the criteria. Furthermore, these two groups must work together to find rewards beyond monetary compensation, such as increased time for research while on sabbaticals, additional funding and additional graduate assistants for research. Likewise, universities could attempt to appeal to professors higher-level motivational needs, such as providing recognition in the form of naming a room, lab, hallway, or wing after a high-achieving faculty members. If faculty members at public universities do not enter their profession for the level of compensation, then in order to create success, merit systems must couple monetary rewards with other motivators as determined by the faculty at the institution.

While the content analysis of this research is not generalizable, it reveals distinct areas for future research exploring merit compensation systems. First, analyzing data on the effectiveness of pay-for-performance requires data from all affected groups. In multiple instances, researchers lacked data on assistant professors. One could speculate that this group feels the most pressure to publish, and also carries a higher course load

than their tenured peers; therefore, they are less likely to take the time to complete a survey. Likewise, the field needs additional exploration of how merit evaluations affect those with the rank of professor. Furthermore, additional research should focus on gender and merit. Female professors in the multiple studies were less trusting of merit systems than their male counterparts. Thus, the issue requires additional research exploring the validity of these concerns. Finally, researchers should take the variations and nuances of merit systems into account when designing their analysis. Comparing survey data from faculty at different universities, even different universities within the same system, may not lead to valid conclusions if the institutions differ in size, scope, or other characteristics.

While the current literature addresses the issues of effectiveness with merit systems by measuring perceptions, future research should explore the relationship between merit and productivity. Answering the question of whether or not merit systems increase faculty productivity requires one to first define the outputs and outcomes by which one will measure productivity. However, Wilson (1989) claims that education is a coping industry, lacking measurable outputs and observable outcomes. Does teaching improve when rewarded? Does either the amount or quality of research vary when rewarded with merit? Proponents of merit compensation systems would certainly answer these questions affirmatively, but once cannot validate those claims given the current lack of empirical data.

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