

MERIT PAY

AT AN

INSTITUTION OF HIGHER EDUCATION

by

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(ABSTRACT)

This research sought to answer the question: "To what extent is the merit pay system at a state-supported university consistent with selected tenets of operant conditioning?"

The population for this study consisted of one state-supported institution of higher education in the Commonwealth of Virginia that has a merit pay system. Nine department chairmen and six faculty members (two per academic rank--assistant, associate, and full professors) from the nine departments were randomly selected and interviewed. Two structured interview schedules were developed by the investigator to elicit the characteristics and perceptions of the current merit pay system in order to assess the extent to which the six tenets of operant conditioning were being applied in the merit pay system. In analyzing and presenting the results, the findings were presented according to general salary policy, demographic data and salary information, and the objectives of the study.

The major findings of this study were:

1. The University does have a merit pay policy stated in the Faculty Handbook, but the investigator did not find evidence of a systematic procedure for determining faculty salary increases.

2. The department chairmen were better informed of the merit pay policy and procedures than the faculty members. In fact, faculty members were not familiar with the procedure for allocating merit increases.

3. A merit pay system was preferred by the majority of the department chairmen and faculty members over alternative salary policies.

4. The merit pay system at the University was not consistent with selected tenets of operant conditioning.

5. There were a limited number of rewards other than merit pay at the university that the department chairmen and faculty members believed were important. Some of the rewards that they considered important were tenure, promotion, reduced load, travel money, graduate or student assistant, release time, and good teaching schedules. Some rewards they desired to have at the University were parking space, free tuition for family, sabbatical leave, travel money, and release time.

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CHAPTER I

INTRODUCTION

No other phase of personnel management generates more attention and discussion than salary administration. Decisions on salary establish, in great part, a faculty member's future economic status. Faculty members and administrators are increasingly more sensitive to the salary reward structure within higher education as inflation escalates, numbers of college-age students decrease, budgets decline, state and federal controls increase, collective bargaining increases as an influential force, and the economic status of the academic profession compares poorly with that of other agencies of society. The current economic situation in the United States suggests that funds for higher education will continue to be insufficient to meet all needs (Belcher, 1980; Fincher, 1980; Robb, 1983).

Different kinds of salary decisions can be utilized in determining faculty salary adjustments. Salary decision-making processes may include cost-of-living increases, across-the-board increases, scheduled salary increases, inequity adjustments, merit increases, and/or a combination of these processes. As the economic situation creates pressures for policy makers to demand more for the dollar with faculty salary increases based on the quality of faculty performance, merit pay may ensure a better return for educational tax dollars in institutions of higher education.

This research is one view of faculty salary adjustments based on merit pay.

This section presents a review of pertinent literature on the concept of merit pay in higher education, research on merit pay, principles underlying merit pay plans, theoretical perspectives, operant conditioning principles and their application to behavior management within industry, theoretical perspective of the problem, a statement of the problem, the focus and objectives of the study, and the limitations of the study.

Merit Pay

"The slogan 'equal pay for equal work' has a competitor in many colleges and universities--'unequal pay for unequal effectiveness' " (Fenske, 1977, p. 1). Effort and merit deserve to be rewarded either financially, through incentives, or by a system for promotion of faculty (Keen, 1978). The institutions endorsing this philosophy have replaced salary schedules and across-the-board and cost-of-living increases with various merit plans. Merit pay is a method which presumes to reward faculty members in direct relation to the caliber of their job performance. For example, effective teachers are considered as more valuable to an educational program than ineffective teachers; the former group, therefore, deserves to be paid more for its services than the latter. The purpose of merit pay, then, is to provide a reward and an incentive which presumably will result in greater subsequent productivity on the part of the affected employees (Miller & Young, 1979). Considering the economic status of most institutions of higher education, the objective of a merit pay system is to dedicate scarce, ever-decreasing salary

dollars to reward and motivate outstanding job performance while implicitly providing negative sanctions to employees who do not produce.

The concept of merit pay is in keeping with good personnel management practices (Bouchard, 1980; Brown, 1982; VanFleet, 1972). Lawler (1973) believes that merit raises, which are based on individual job performances, constitute the most frequently used incentive plan. A good merit pay program is "the best motivator organizations have" (Farmer, 1978, p. 63). It has the capability of being developed to do the right job for both organizations and the employees. The main reason for the use of incentives is to increase productivity while decreasing unit labor cost which, in turn, increases profit (Davis, 1981). For employees, wage incentives provide more pay for more production. Under normal conditions, workers without incentive plans perform at a rate that can be increased with proper motivation.

Merit Pay in Higher Education

The appropriate application and administration of merit pay, especially in higher education, are extremely complex. An important issue confronting merit pay in higher education is the ambiguity of the term itself. The literature provides an indication of the diversity of judgment, formulae, policy, and politics that exists in the area of merit (Evans, 1980; Pfeffer & Taylor, 1978). Clearly there is no unanimity among higher educators on these pertinent matters. For some (DeLorme, Hill, & Wood, 1979; Gibson, 1961; Keen, 1978), teaching is central; for others (Breslin & Klagholz, 1980; Miller & Young, 1979; Seastone, 1971), scholarly research and publication should be predominant; for others (Braskamp, Muffo, & Langston, 1977; Fenske, 1977), the ability to

generate external funds by grants and contracts is to be emphasized; others (Fincher, 1980; Jabker & Halinski, 1978; VanFleet, 1972) look for evidence of program innovation and administration; and still others (Breslin & Klagholz, 1980; Conte & Mason, 1972; Faculty Salary Schedule, 1971-72; Keen, 1978; Rhodes, 1972; Weinrich, 1976) include all of these elements in their definition and subjective evaluation of merit pay increases. The multitude of merit pay definitions evidences the differences in opinion as to what constitutes merit pay. However defined, the concept of merit pay must be operationalized before an administrative structure is developed.

Milkovich, Richardson, and Weiner (1980) state that "the most critical flaw in academic pay systems, however, is that universities do not define the behaviors and accomplishments for which they wish to pay their faculty" (p. 2). Current university practices often require individual faculty members to guess the basis upon which their salaries were derived and how, if at all, performance, living costs, or market conditions were recognized. Any differential effects of the three components are not identified nor directly communicated to the faculty (Milkovich et al, 1980).

A key to an appropriate and successful merit pay system is to link goals and evaluation data with the compensation plan--rewards (Redfern, 1974). Evaluation and pay must not be considered to be different processes. They are two functions of a single process and must be viewed as complementary and integrative.

Most university administrators claiming to recognize meritorious performance have performance assessment procedures that are antiquated, obsolete, ambiguous, or nonexistent, and they are not linked directly to

the system of salary adjustment (Jabkner & Halinski, 1978; Milkovich et al, 1980; Miller & Young, 1979). Redfern (1974) and Forest (1978) point out that the failure of most merit pay plans usually has been attributed to the inability of the system to develop an adequate evaluation process. The concept of merit pay for teachers is based on the clear assumption that a distinction can be made between the performances of teachers on relevant dimensions. That, presumably, is the rationale for differentiated salaries. A true merit pay system requires that each faculty member be evaluated properly to identify a justifiable basis for salary adjustment. Each institution, then, must develop in advance specific criteria, objectives, and administrative procedures for awarding merit compensation (Breslin & Flagholz, 1980). Criteria must, of course, be related to the institution's mission and the individual's unique assignment, interest, and ability. In most comprehensive universities one's performance in the traditional areas of teaching, scholarship, and service is considered pertinent.

With performance evaluation being a critical part of any merit pay plan, those who evaluate performance against the criteria must be near enough to the work situation to produce an accurate and reliable judgment of:

1. the work that was performed;
2. its level of adequacy; and
3. a monetary value for differing levels of outstanding work.

In addition, the administrator has responsibility to:

1. develop those employees not doing acceptable work; and
2. manage the entire review process within given budgetary limitations (Goldberg, 1977).

Drucker (1973) believes that achievement has no meaning except in comparison to some specific, clearly defined criteria, or "targets," so that an individual knows exactly what his performance can be compared against. Lincoln and Guba (1980) state that performance can be compared against absolute standards and in a relative sense with the performance of others as well as against one's own previous performance.

Evidence points to the need for colleges and universities to establish a long-range salary and compensation policy that can guide the direction of annual salary adjustment procedures within the various schools and departments (Saupe, 1979). Such a long-range policy will increase consistency in the application of salary adjustments. Weinrich (1976) suggests a merit rating activity analysis that quantifies in a systematic way the activities of faculty members according to certain standards of performance. His analytic scheme suggests concern for five professional service areas: research publications, teaching, university service, research in progress, and community service. Each of these categories, criteria, and procedures for administrative implementation must be developed in advance for the awarding of merit pay.

Opposition to merit pay for teachers is usually not based on the philosophy of merit pay; the key issue is the extent to which the concept is applied objectively and appropriately (Forest, 1978; Mitchell, 1961; Redfern, 1974). Critics of merit pay (e.g., Conte & Mason, 1972; Delorme, Hill, & Wood, 1979; Hansen, 1979; Hooker, 1978; Katz, 1961; Megel, 1961; Miller & Young, 1979; Schowengerdt, 1975; Weissman, 1969) do not quarrel with the concept, but they do have concerns with implementation procedures.

Research on Merit Pay

Research on merit pay has indicated negative implications for the system. Liechti and Walker (1972) studied eight school systems with student populations between 50,000 and 77,000 with whom the National Education Association had negotiated some type of merit system. None of the school systems had implemented a true merit pay program. The study revealed that larger school systems found it more difficult than smaller districts to administer a merit plan.

In a study of 800 faculty members at a large university, Keene (1975) analyzed the relationship between the amount of merit increase and evaluation of performance. The categories of performance were clustered into three areas: (a) teaching, research, service, and adjustment for promotion and inequity; (b) workload assignment including teaching workload, research, academic advising and service; (c) chairman's evaluation of teaching effectiveness, research, advising, service, and general quality. Statistical analysis of the data indicates some doubt of the validity of the chairmen's evaluations as the best approach for recommending merit salary increases.

In a study on salary differentials and sex discrimination, Hoyt and Stewart (1976) found that:

1. the structure of a merit system is complicated by one's personal values;
2. difficulties exist in measuring faculty accomplishments;
3. faculty travel and professional development assistance are related to faculty accomplishment; and
4. sex discrimination is potentially influential in the application of salary adjustment rewards.

The findings of a study by Forest (1978) indicated three major problems: (a) the limited amount of funding available for the specific purpose of merit makes it difficult to implement a merit system effectively, empirically and fairly; (b) merit criteria have only been stated orally (if stated), and it has not always been clear in the past how these criteria were used; (c) there was no college system-wide policy to deal with the topic of merit pay. Other than considering merit as it relates to total salary and time within the rank, the decision as to the adjustments has to be subjective.

In a study of various merit pay systems, Conte and Mason (1972) concluded:

1. because of the human relations problems and complexities of most merit systems, teachers have to be prepared and trained to deal with these problems before any plan is implemented;
2. a successful merit system program is possible only if a fair and objective evaluation system is included; and
3. teacher morale is not primarily affected by a merit salary program (p. 24).

Principles Underlying Merit Pay Plans

Through the years, professionals have suggested guidelines for the development and administration of merit pay programs. Taking many of the guidelines from a list developed by Edmund Thorne, a former Superintendent of Schools in West Hartford, Connecticut, where a merit pay plan was initiated in 1953, Conte and Mason (1972) list the following principles of a good public school system merit pay plan. While their emphasis is

on instruction, they do in general appear to have considerable implications for higher education. The principles are as follows:

1. The prime principle underlying any merit pay plan should be the improvement of instruction--to help teachers succeed and improve in their work. The complete realization of this principle could, and probably should, eventually result in the advancement of the whole staff into the "superior service" category.

2. Merit awards should be based upon pre-determined criteria and not upon percentage quotas. No qualified teacher should be denied an award because of some arbitrary limitation.

3. A merit plan is not likely to succeed unless a good professional salary schedule is already maintained. A merit pay plan should not be an excuse for keeping the salaries of most teachers down.

4. A merit salary program should not be adopted until after sufficient study, and then only upon thorough understanding and acceptance by a substantial majority of the staff. Teacher cooperation and involvement in the study must be secured.

5. A merit pay plan should be adapted to local conditions. There is no universal pattern that can be transferred wholesale from one district to another.

6. Any merit pay plan should have the complete understanding and support of the administrative personnel, the board, and the public.

7. All personnel in the school system, including administrators and supervisors, should be rated.

8. There should be well-defined standards of evaluation agreed to and understood by those who are to be evaluated.

9. There should be ample opportunity for evaluation. From twelve to sixteen observations are needed for those teachers under the merit pay plan as compared to the two to four observation visits for other non-merit pay candidates.

10. Only those teachers who request it should be evaluated for merit pay purposes and, conversely, teachers should be allowed to withdraw from the procedure if they so desire.

11. Merit awards should be commensurate with the value placed upon superior service. They should be large enough to offer real incentive.

12. Teachers must have confidence in the competence and integrity of the administrative staff or others responsible for evaluating them for merit pay.

13. Sufficient personnel should be available to insure adequate time for evaluation.

14. Final selection of merit teachers should be entrusted to more than one individual. A rotating representative committee is recommended.

15. Individuals should be given the right to appeal.

16. Adequate budgetary safeguards should be established to provide continuity of the program from one year to the next.

17. Plans should be incorporated for the continuous re-evaluation of any merit pay plan in the light of new experience.

18. Provision should be made for informing new and potential staff members regarding the philosophy of the program, its application, and the rights and obligations of all for whom the program is intended (pp. 3 - 4).

Theoretical Perspectives

As a framework for the study of merit pay at the higher education level, several theoretical perspectives were explored by the researcher. Among the theories were these: money as a motivator, Maslow's need hierarchy theory, the Herzberg two-factor theory, needs gratification theory, expectancy theory, and operant conditioning.

Money as a Motivator. The researcher explored the literature related to the consequences of using dollars as a motivator (Belcher, 1980; Carnegie & Associates, 1978; Gellerman, 1963; Hill, 1979; Katzell & Yankelovic, 1976; Lawler, 1973; Massie & Douglas, 1981; Milbourn, 1980; Monczka, Foster, Reif, & Newstorm, 1977; Opsahl & Dunnette, 1966; Schneier, 1974; vonKaas, 1971; Whyte, 1955). The statement made by an anonymous person--"money isn't the only thing that interests me, but it's way ahead of whatever is in second place"--expresses the consensus of

some working people. Frederick W. Taylor, known as the father of scientific management, believed money was the sole form of incentive for motivating employees to work harder and to produce more (Opsahl & Dunnette, 1966).

Gellerman (1963) and Carnegie and Associates (1978) believe that money can be a motivator in its own right or a vehicle of other motivators. The need for money and desire for more money play an important role in motivating people to work. As material wants become satiated and individuals become confident in their ability to earn money, the money motive begins to decline unless money becomes a yardstick or symbol of achievement, prestige, power, or security. Gellerman (1963) describes people's reaction to money as a biographical summary to date: "his early economic environment, his competence training, the various nonfinancial motives he has acquired, and his current financial status" (p. 166).

Herzberg, Mausner, and Snyderman (1959) do not believe money is the dominant motivator. The Western Electric Studies of Elton Mayo in the late 1920s revealed that workers can be motivated by ways other than money.

Since a human being is not simply an economic person, but a complex social-economic animal with money motives varying from person to person and from time to time, the researcher continued to explore other theories.

Maslow's Need Hierarchy. Abraham Maslow's Need Hierarchy theory was reviewed (Dale, 1973; DuBrin, 1972; Landy & Trumbo, 1980; Strauss & Sayers, 1972). People work to provide for various needs and satisfaction from life. Pay can be instrumental in the satisfaction of a variety of needs, but it is likely to be more instrumental with respect to some needs than others. Maslow's need hierarchy illustrates

that employees' needs are diversified, and each need has a different value or degree of importance attached to it. Maslow based his theory on the principle that man is a wanting animal; once a need is satisfied, another appears in its place.

Carnegie, et al. (1978) summarized Maslow's need hierarchy as follows:

Physiological - "I want to live"

Safety - "I want to live tomorrow"

Social - "I want to be loved"

Egoistic - "I want to be important"

Self-fulfillment - "I want to contribute something worthwhile"

(p. 12).

Even though money is a necessary means of providing for one's needs, the kinds and intensity of needs manifested by individuals vary tremendously. The uncertainty and unpredictability of needs dictated the researcher's decision to pursue other theories.

Herzberg's Two-factor Theory. Consideration was given to the applicability of the Herzberg two-factor theory (Davis, 1981; Dunnette, Campbell & Hakel, 1967; Hampton, Summer, & Webber, 1968; Herzberg, 1966; Herzberg, Mausner, & Snyderman, 1959; Lawler, 1973). Herzberg (1966) concluded that certain factors thought of as motivators actually did little motivating, but were essential to work dissatisfaction. Those factors, which he called "hygiene factors," include: company policy, administrative practices, supervision, working conditions, salary, and interpersonal relationships. To the degree that they are absent, hygiene factors increase workers' dissatisfaction with their jobs. When present, they serve to prevent dissatisfaction, even though they do not result in

positive satisfaction and motivation. Hygiene factors are necessary, but not sufficient, conditions for satisfaction. Hygiene factors reflect a need for the avoidance of unpleasantness and are related to the context of the job. The other part of Herzberg's two-factor theory includes the motivating factors. Referred to as satisfiers, motivators, and job content factors, they include: achievement, recognition, responsibility, work itself, and advancement.

With one purpose of merit pay being to increase or improve future performance (an incentive or motivator), and with salary not being a motivator in Herzberg theory, this theory was not considered to be applicable for this research.

Need Gratification Theory. Need gratification theory builds upon the need hierarchy and motivation-hygiene theories of Maslow and Herzberg (Belcher, 1962; Hoy, & Miskel, 1978; Lawler, 1973; Lock, 1970). The basic concept of this theory is that salary acts as a motivator only when the employee sees a direct relationship between pay and job performance (DuBrin, 1972). Other authorities (Conte & Mason, 1972; DeLorme, Hill & Wood, 1979; Dressel, 1976; Johnson, 1978; Lawler, 1976; Miller & Young, 1979; vonKaas, 1971; Weinrich, 1976; Weissman, 1969) indicate that under certain conditions pay can be used to improve and motivate performance. According to Hampton (1977), pay (or other rewards) can motivate performance only if (a) people want pay and (b) people believe that performance is both possible and necessary to obtain pay.

Expectancy Theory. Also known as the path-goal approach to management (Porter, 1973), this theory has been variously described as a motivationally-based (Luthans & Ottemann, 1973) or cognitive process theory (Luthans & Krietner, 1975; Miller, 1978). Expectancy theory

suggests that the level of motivation experienced is a function of the value placed on a particular outcome and the subjective probability that a particular behavior will result in that outcome. Porter and Lawler (1968) identified nine elements involved in expectancy theory: (a) the value of the reward; (b) the perceived effort required and probability of receiving the reward; (c) effort; (d) abilities and traits; (e) role perception; (f) performance; (g) intrinsic/extrinsic rewards; (h) perceived equity of rewards; and (i) satisfaction.

While expectancy theory and reinforcement theory differ on the major theoretical point of intervening cognitive variables, they have much in common (Frederiksen & Johnson, 1980). Expectancy theory is concerned with the measurement of overt behavior and appears to be one of the first management theories that examines the effect of environmental events on human behavior (Frederiksen & Johnson, 1980). As Luthans and Ottemann (1973) stated, ". . . expectancy models of motivation are similar to operant models when operationalized in actual practice. . ." (p. 56).

The models of motivation, discussed to this point, have been cognitive theories of motivation based on thinking. They relate to a person's inner self and how that person views the world. Individual characteristics--internal desires, need, and/or motives--change frequently and make the traits more difficult to control or predict. Cognitive models of motivation are not conducive to precise scientific measurement and observation. For this reason, the researcher elected to give attention to models that are more subject to scientific treatment. The principal model of this type is operant conditioning or behavior modification, as evolved from the work of B. F. Skinner. Its application in organizations may be called organizational behavior modification.

Operant Conditioning/Behavior Modification. Concerning the question, "What makes people act the way they do?" the theories known as behaviorism were explored. Neisworth and Smith (1973) state "Behaviors occur as they do to a large extent because an individual who possesses a certain group of characteristics at a specific moment in time interacts with an environment which also has a definite set of characteristics" (p. 33). They classify explanatory theories of behavior into four groups (see Table 1). A summary of Neisworth & Smith's (1973) examination of the content and implications of the approaches in each quadrant of the matrix follows.

The theories of behavior emphasized in Quadrant 1--Hypothetical-Internal Explanations--deal with the unseen, internal forces of needs and desires of individuals. These motivating factors and drives dwell within the individual and "cause" an observable behavior. The behavior is a "symptom" of the unseen inner workings of the person. Hypothetical constructs are invented in an attempt to account for behavior. The diversity and unpredictable nature of these constructs make it difficult to disprove the "states" of the constructs.

Quadrant 2--Actual-Internal Explanations--attempt to determine real internal factors to justify observable behaviors. In most instances these involve medically derived phenomena, such as blood characteristics, and neural enzymes; as such their characterization falls outside of the expertise of a behavioral scientist.

Quadrant 3--Hypothetical-External Explanations--are outside the individual, are theoretical and not subject to direct description and observation. "Authoritarian atmosphere," "permissive milieu," and "group

Table 1
FOUR APPROACHES TO EXPLAINING BEHAVIOR

LOCUS	OBJECTIVITY	
	Hypothetical	Actual
Internal	1	2
	Psychoanalysis	Neurology
	Drive Theories	Brain Chemistry
	Cognitive Theories	Genetics
External	3	4
	Social-pressure Theories	Psychophysics
	Role-expectation Theories	Operant Conditioning
	Group Sensitivity	Respondent Conditioning

Source: Neisworth & Smith, 1973, p. 37.

sensitivity" (Neisworth & Smith, 1973, p. 39) are illustrations of the vague, intangible, and hypothetical nature of these explanations.

Quadrant 4--Actual-External Explanation--activities that emphasize real and external environmental events as "cause" of behavior make up the fourth quadrant. The behaviors illustrated in Quadrant 4 can be observed, measured, and evaluated. A branch of psychology known as "behaviorism" deals with the measurable relationships that exist between specific behavior and discrete environmental events, or, more specifically, the experimental analysis of behavior.

With respect to researching the merit pay concept, wherein a reward (merit pay) is used to remunerate superior performance and to improve future performance (behavior), the principles of operant conditioning seem to have pertinence for this study.

Operant Conditioning Principles

Unlike the classical stimulus-response theory, Skinner's operant behavior--behavior that is voluntary, learned, and a function of its consequences--focuses on response and subsequent interaction with its environment (Massie & Douglas, 1981). What occurs after an individual behavior will determine the future strength and direction of that behavior. If a person experiences satisfaction or enjoyment from an outcome, it is more likely that the action or response will be repeated. If the consequences of a behavior are negative, the individual is likely not to repeat the action as often or as forcefully as initially manifested.

The most rapid conditioning of an operant response occurs when the desired response is reinforced positively. The frequency of a behavior, therefore, is a function of its consequences. The basic philosophy of

operant conditioning is that if the outcome of a behavior is pleasing to the individual, the probability of his/her subsequently repeating the response is increased. If the consequence is displeasing to the individual, the probability of its being subsequently repeated is decreased. The process of inducing such changes in the response rate is called operant conditioning (Massie & Douglas, 1981; Nord, 1969).

The primary goal of operant conditioning is to predict and manipulate the occurrence of a given behavior under a given set of environmental conditions; one of its major concerns is the state, or probability of occurrence, of the behavior under those conditions (Reynolds, 1975). Environmental consequences are classified into three types: positive reinforcers, negative reinforcers, and neutral stimuli (Reynolds, 1975). If the environmental consequence follows a given operant behavior and increases the rate of the response, it is a positive reinforcer. If an environmental consequence, by its disappearance, increases the frequency of response, it is a negative reinforcer. If it produces no change in the probability, the environmental event is considered to be a neutral stimulus (Jablonsky & DeVries, 1972). Skinner believes positive reinforcement is the most effective long-run strategy (Massie & Douglas, 1981).

The responses which an individual could make under a given set of conditions can be categorized according to the probability that they will be made (Reynolds, 1975). There are two basic strategies for getting an individual to make the desired response. First, one can attempt to reduce the probability of the unwanted responses. Second, one could attempt to increase the probability of the desired responses. Strategies

for changing the probability of a response can be implemented through the principles of operant conditioning.

Judging from the literature review, principles of operant conditioning are being used in a variety of organizations including business, industry, mental health, education, and health care. No research has been found that applied the principles of operant conditioning in an institution of higher education. If the behavior of disturbed persons and lower-level employees is subject to systematic modification and change, why not the behavior of the nondisturbed individuals and higher-level employees operating in their work setting?

Operant Conditioning and Behavior Management in Industry

In spite of the variety of available administrative tools to manage performance of employees, there continue to exist concerns among managers for the need to increase productivity and to deal with problems of high employee turnover. Because human performance affects the economic success of an enterprise, executives must appropriately evaluate and continuously insist on accountability of human resources.

In the work world, managers have great influence over the environment (Massie & Douglas, 1981). They influence the environment through managing the reinforcement factors--the consequences that follow a response. Managers may give positive reinforcement through reward sanctions (praise, money, more responsibility), thus increasing the probability that the behavior will be repeated. They may give negative reinforcement, an act that increases the probability that the desired behavior will occur by presenting an unfavorable consequence if it does not (Massie & Douglas, 1981). To decrease the probability of a behavior

recurring, punishment is a third strategy used by managers. Thinking that very little harm will come from the situation, some managers favor a "do-nothing approach," called extinction, believing that responses not reinforced will eventually disappear (Massie & Douglas, 1981). By basing decisions on observable behaviors and consequences, the manager can eliminate the inconsistencies of attitudinal measurement and interpretations. Behaviorism provides managers with a tool to judge by what employees do, not by what employees say they do.

The first visible evidence of behavior modification influence in organizational management began to emerge approximately twenty years ago. Aldis (1961) was one of the first contributors as he suggested the scientific study of varying schedules of reinforcement in industry. The development of the programmed instruction approach to training at the University of Michigan in the early 1960s was another significant force (Connellan, 1978).

As a number of individuals began applying the principles of behavior modification to organizational management, the "Emery Air Freight Studies," was probably the most publicized application of operant principles in business. Emery Air Freight Corporation increased its performance in a single day from 30 percent of standard to 95 percent of standard (New Tool: "Reinforcement," 1971). This increase in performance was accomplished by devising ways of informing each individual employee of how well he or she was accomplishing specific company goals. Improved performances were rewarded mainly through frequent praise and recognition. Elaborating on improved profits and performance and what he considers greater contentment on the part of the employees who know they are doing a good job, the vice-president states that positive reinforcement does

work and reported annual savings of approximately \$650,000 at the Emery Air Freight Company with the application of behavioral principles (praise and feedback) to improve productivity (New Tool: "Reinforcement," 1971).

Absenteeism and tardiness are problem areas that have received a great deal of attention in organizational behavior management. Nord (1969) conducted one of the earliest studies using a behavioral approach to control absenteeism. Employing a contingent lottery system to reward attendance, employees with perfect attendance for one of six months became eligible for lottery drawings. This plan resulted in leave payments being reduced 62 percent and absenteeism being decreased to approximately one-fourth its initial level.

Other types of interventions were evaluated to reduce tardiness and increase the amount of time involved in actual work behaviors (Kempen & Hall, 1977; Lamal & Benfield, 1978; Pedalino & Gamboa, 1974; Wallin & Johnson, 1976). Various studies were conducted to investigate reinforcement schedules (Sadd & Barling, 1977; Yukl & Latham, 1975; Yukl, Wexley, & Seymore, 1972), goal setting and feedback (Chandler, 1977; Dick, 1978; Runnion, Johnson, & McWhorter, 1978), and contingencies (Gupton & LeBow, 1971; Komaki, Waddell, & Pearce, 1977; Miller, 1977; Premack, 1963).

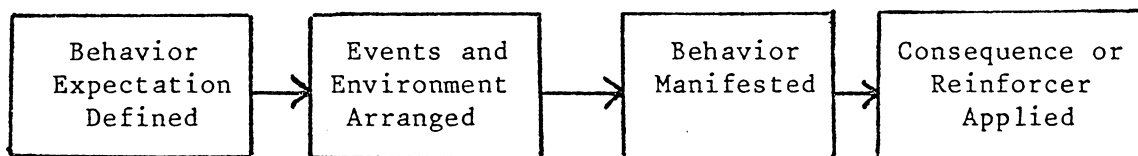
The principles of merit pay, operant conditioning, and organizational behavior management all have systematic procedures for the accomplishment of goals. Rotondi's (1976) seven-step procedure for behavior management seems to integrate these principles, and the researcher believes it to be relevant to summarize in table form his

behavior management procedure which appropriately connects the three concepts (see Table 2).

THEORETICAL PERSPECTIVE OF THE PROBLEM

The principles of operant conditioning provide an over-arching point of view that can be useful as a benchmark for the study of the application of a merit pay system. The following illustration summarizes the behavior management system in which the principles of operant conditioning can be used:

CONCEPTUAL MODEL



The tenets of operant conditioning are applicable to behavior management with pay used as the reward for performance. Both the tenets and the use of money for motivating performance (behavior) have been combined into the principal theme for this study. The six tenets selected for inclusion in the study are described in the following paragraphs.

Tenet No. 1: Specification of goals. Desired performance must be stated in operational terms for observation, measurement, and evaluation. To respond in a desired fashion, the faculty must know what is expected. Outstanding attainable results and minimum acceptable results need to be established. Once the performances have been identified, the faculty member has the opportunity to accomplish the level of performance according to his or her ability or desires. The identification of goals establishes the criteria for evaluation and salary determination.

Table 2

SEVEN-STEP BEHAVIOR MANAGEMENT PROCEDURE

Step	Behavior Principle	Procedure and/or Explanation for Applying
1	Create a consistent work environment.	For behavior modification to be effective, conditions conducive to harmonious working relationships must be created.
2	Determine the desired behavior of subordinates.	After noting the relationship between existing behavior and desired performance, specific desired behaviors in operational terms must be stated.
3	Determine the types of rewards to use.	Two categories of rewards include: general reinforcers--money, a positional promotion, verbal praise, time off from work--and special reinforcers--tailored to individual preferences. The main question to consider is: Does the reward work as positive reinforcement?
4	Clearly communicate desired behaviors and rewards to subordinates.	Clarity of understanding here is essential--to respond in the desired fashion, a person must know what is expected of him/her. Similarly, he/she should know the kind of reward he/she is likely to receive and when it is likely to be received.
5	Provide immediate rewards for desired behavior.	The immediacy of such a reward increases its effectiveness, stimulates employee's satisfaction with his/her achievement, and affirms the credibility of management.
6	Provide rewards on a variable-ratio schedule.	Laboratory experiments have shown that variable schedules can stimulate very high response rates from people. As the rewards are intermittent, people are apparently sustained in their effort by their expectation of reinforcement being "right around the corner."
7	Minimize the use of punishment.	Use punishment only as a last resort. Quite frequently, punishment does not produce the desired results, but it does produce unwanted side-effects.

Source: Rotondi, 1976, pp. 22-28.

Tenet No. 2: Establishment of operant level. Current level of performance must be determined in order to identify improved performance resulting in merit pay. As the job determines the salary range, the employee's performance determines the salary within the range and the salary increase per year. To determine the desired area of concentration and the degree of improvement needed, there must be a system of assessing the existing performance level of the faculty so that goals can be established and evaluated.

Tenet No. 3: Appropriateness of consequences. Consequence(s) received after a behavior must be considered important by the recipient. As the consequence controls the future occurrence of a behavior, it is imperative that the reward be of value to the recipient. Acting as a positive reinforcer, the performance will occur with greater frequency. In the operant approach, behavior (performance) is a function of its consequences (merit pay).

Tenet No. 4: Rewarding of successive approximation. Each task (or subobjective) leading to the ultimate goal should be reinforced. This encourages the faculty member to continue striving for the accomplishment of long-range goals. Identification, awareness and recognition of faculty accomplishments give the faculty a feeling of success; this motivates the person to continue performance in the same and/or improved manner.

Tenet No. 5: Immediacy of reinforcement. Reinforcement must follow the behavior immediately to be successful. Immediacy of rewards increases the effectiveness, stimulates employees' satisfaction with achievement, and affirms the credibility of the activity. Reinforcing the performance without a lapse of time assures that the productive

activity is being emphasized or reinforced. Rewards can effectively control desired behavior only if they are closely linked to the behavior they are meant to control.

Tenet No. 6: Patterns of reinforcement. The schedule (continuous or partial--ratio, interval, fixed, or variable) for delivery of the consequence will influence the rate pattern and duration of the behavior. As rewards are intermittent, people are sustained in their effort by their expectation of reinforcement being "right around the corner." Variable schedule of reinforcement can stimulate a high response rate from faculty.

A great deal of the empirical application of operant principles in the management of behavior has been conducted in mental and educational institutions. Such studies (Ayllon & Azrin, 1965; Ferster & Skinner, 1957; Wolf, Risley, & Mees, 1966) have focused on problems characteristic of mental patients, autistic children, some normal lower socioeconomic children, and lower level employees. Since it is realized that these observed behaviors are far less complex than the behavior of a typical working adult, retarded students have been taught reading, writing, and arithmetic by identifying tasks within a goal and rewarding the students for satisfactory performance of each part (Skinner, 1954). Classroom behavior problems (Hamblin, Bushell, Buckholdt, Ellis, Ferriter, Merrit, Pfeiffer, Shea, & Stoddard, 1967) including hyperactivity, severe disruptive behavior and aggressive behavior have been decreased, eliminated or controlled by reinforcement procedures. Personal and social behaviors such as toilet training, eating patterns or techniques, and saying "thank you" can be modified through operant conditioning principles.

The application of operant conditioning principles in the industrial world where people perform tasks that can be observed, directly quantified, and evaluated has an equally impressive history. Such areas as training and personnel development (Luthans & Lyman, 1973; Luthans & White, 1971), job design (New Tools, "Reinforcement", 1971), compensation and alternative rewards (Opsahl & Dunnette, 1966; Yukl & Latham, 1975), and organizational design (Adam, 1975; Luthans & White, 1971) have applied the tenets of operant conditioning.

A theoretical perspective upon which to base merit pay has not been established in the higher education literature. The principles of operant conditioning for behavior management have been applied successfully in other environments; therefore, selected tenets may be applicable to merit pay systems. These principles have empirical efficacy and utility. There is no question as to their validity; the question is the extent to which selected tenets of operant conditioning are and might productively be applied in higher education using differential salary adjustments as the consequence. And that is the thrust of the study.

STATEMENT OF THE PROBLEM

This research sought to answer the question: "To what extent is the merit pay system at a state-supported university consistent with selected tenets of operant conditioning?"

OBJECTIVES OF THE STUDY

The primary objectives of the study were:

1. To determine the department chairmen's and faculty members' perceptions of a merit pay system at a comprehensive, state-supported institution of higher education in the Commonwealth of Virginia;
2. To determine the extent to which this merit pay system and its procedures for implementation are consistent with selected tenets of operant conditioning; and
3. To determine rewards, other than merit pay, that are considered important by faculty members and department chairmen.

A secondary objective, to develop guidelines and to suggest procedures for a merit pay plan based upon selected tenets of operant conditioning, developed as the study progressed.

LIMITATIONS OF THE STUDY

Data for this study were provided by 54 faculty members and nine department chairmen from one comprehensive university in the Commonwealth. Findings refer only to the faculty members and department chairmen interviewed. The results may be limited by any one or more of the following factors:

1. The sensitivity of the topic may have prevented the interviewees from providing complete and accurate information. Because the researcher did not find evidence to verify the presence of certain factors does not eliminate the fact that those factors could have been present.
2. The manner in which the interviews were conducted along with the investigator's interpretation of the responses may influence the responses and findings of the study.

3. Six operant conditioning tenets believed to be applicable to merit pay were selected to be utilized in the study.

4. The guidelines presented at the end of the study are solely the investigator's ideas that resulted from this study. They have not been verified nor submitted to authorities for comments or criticisms.

5. Even though a highly structured merit pay system is being suggested for merit pay, it is recognized that professional judgments that are not quantifiable normally enter into the salary decision-making process in higher education.

CHAPTER II

METHODOLOGY

Data pertaining to the objectives of this study were collected on subjects who were employees at a state-supported institution of higher education in the Commonwealth of Virginia. The University is a co-educational, urban institution. A broad range of programs serve a student body of over 19,000, with a full-time faculty in excess of 1,320 and part-time adjunct faculty of nearly 1,000. The support staff numbers nearly 7,000 persons (Faculty Handbook, 1981). The University is ranked as a comprehensive doctorate-granting institution.

Its mission includes the provision of:

A scholarly climate which will inspire in the student a lifelong commitment to learning and service; which will develop in the student competence and motivation to work toward the realization of individual and community potentials; and which will set for the student an example of excellence.

An environment of educational excellence which values diversity and enables faculty to pursue their work in accordance with the highest standards and to serve as exemplary role models.

Educational services for the adjacent urban community through flexible scheduling and for adults and professionals in adjacent regions through continuing education programs.

Educational experience away from the metropolis for selected programs so that graduates are prepared to serve the Commonwealth in diverse locales.

Research and educational activities in all disciplines to develop and communicate new knowledge, to improve the quality of life, and

to promote the best use and general understanding of human and environmental resources. (Faculty Handbook, 1981, p. 3)

Concentrating on the "Academic Campus," 20 percent of the departments in four schools and one college were selected for inclusion in the study. Listed below are the number of departments in each college/school and the number of departments selected:

<u>College/Schools</u>	<u>No. of Departments</u>	<u>No. of Depts. Selected</u>
Arts	13	2
Humanities and Sciences	19	3
Business	8	2
Community and Public Affairs	4	1
Education	4	1
Social Work	1	0

All college/schools were included in the study except one. The School of Social Work was excluded from the study because of its unique structure. It is organized by programs--Baccalaureate and Ph.D.--instead of by departments. The entire faculty (35 members) is viewed as one department. A college/school having one department does not provide for a random selection.

Certain criteria were determined a priori for the indication of subjects of the study. Departments must have been chaired by persons with a minimum of two years of service in the present position at the institution. Each department had at least two faculty members in each of the academic ranks of assistant, associate, and full professors, respectively. The departments within the college/schools were randomly selected.

Six faculty members (two per academic rank--assistant, associate, and full professors) from each department were randomly selected. Names of faculty members from each department by academic rank were written on slips of paper and deposited into a container. Two faculty members per academic rank were drawn randomly from each group.

Interview Schedules Development

Two structured interview schedules were developed to elicit the characteristics and perceptions of the current merit pay system in order to assess the extent to which the six tenets of operant conditioning were being applied. The interview schedule for department chairmen was designed to collect information about the currently used merit pay system. The interview schedule for faculty members was designed to ascertain their perceptions of the merit pay system. Both interview schedules were structured, but a general conversational approach was used. A response form was incorporated in the interview forms to record information from each interview (see Appendix B).

The interview schedules were tested initially with three division chairmen and three faculty members at Richard Bland College. After some revision, the interview schedules were pilot tested. Comments and suggestions from both preliminary efforts were used to modify the data collection procedures.

Interviewing Procedure

Conferences with University officials (vice-president for academic affairs and deans) were held to obtain permission to conduct the study and to describe the purposes and procedures of the investigation. Each dean supplied a list of departments within each college or school that

were chaired by a person who had been in the position for two years and that had two faculty members in the academic ranks of assistant, associate, and full professors, respectively. Interviews were scheduled and conducted with nine department chairmen. During the interview with the department chairmen, names of faculty members from each academic rank were received. Two faculty members from each academic rank were randomly selected using the process previously described. Appointments were made and interviews by the principal investigator were conducted with 54 faculty members. The structured interview forms were used as a guide for questioning and as a tool for recording the data.

Data Analysis

Information received during the conferences with the vice-president for academic affairs, the deans, and the responses received from the two interview forms were categorized, tabulated, analyzed, summarized, and reported. The findings have been presented according to the general salary policy, demographic data and salary information, and the objectives of the study.

General Salary Policy. The vice-president for academic affairs described the salary policy and procedure for the University during the initial conference. The deans of the college/schools explained their goals and procedures for implementing the University's merit pay policy. This information has been summarized for presentation in Chapter III.

Demographic Data and Salary Information. Demographic data and salary information were requested from department chairmen and faculty members. This information has been analyzed and summarized for presentation in Chapter III.

Objectives of the Study. With the first objective being to determine the perceptions of department chairmen and faculty members regarding their merit pay system, it was imperative for the investigator to become thoroughly familiar with the administration of the merit system in operation. The interview schedule for the department chairmen allowed the investigator the opportunity to assess the current merit system; likewise, the interview schedule for the faculty members provided an opportunity to assess their perceptions of the merit pay system.

To accomplish the second purpose of the study, questions were asked in order to determine the extent to which merit pay was consistent with selected tenets of operant conditioning. The six tenets and the key indices within each were:

Tenet No. 1: Specification of Goals.

1. Are goals for teaching, research, and service defined in operational terms, communicated, and agreed upon by department chairmen and faculty?

2. Are the goals defined in terms that allow the behavior to be observed, measured, and evaluated?

3. Are performance levels (outstanding, satisfactory, and unsatisfactory) identified and quantified for teaching, research, and service?

4. Are goals for teaching, research, and service identified and related to the mission of the institution, college/school, department, and other faculty?

5. Are the goals monitored according to expectations and accomplishments?

6. Are the goals and performances linked to the amount of salary increase?

Tenet No. 2: Establishment of Operant Level.

1. Is the evaluation system appropriate for assessing current baseline performance?

2. Is there a procedure for maintaining a record of performance for evaluation?

Tenet No. 3: Appropriateness of Consequences.

1. Is merit pay considered to be important?

2. What are the effects of merit pay on performance?

3. Are there other rewards that are important?

4. Did the merit pay increase reflect performance?

5. Is merit pay accomplishing its goal?

Tenet No. 4: Rewarding Successive Approximation.

1. Are subgoals identified and rewarded upon the completion of the performance?

2. Are faculty members aware of the target points for receiving rewards?

Tenet No. 5: Immediacy of Reinforcement.

1. Is a salary increase given immediately after an outstanding performance?

2. Are other rewards given immediately after an outstanding performance?

Tenet No. 6: Patterns of Reinforcement.

1. How often is merit pay granted?
2. How often are other rewards given?

The number of "yes" responses was tallied and reported. The items having a majority of the responses in the affirmative are assumed to indicate that the questioned item or the tenet is present, at least in the minds of the majority of respondents.

To determine rewards other than merit pay that faculty members and department chairmen considered important, a list of rewards was requested and ranked, including merit pay, according to their preference. An analysis of the department chairmen and faculty member ranking merit pay as their first choice was presented. From the list of rewards identified, the rewards were categorized according to choices--first, second, third, and others--of the department chairmen and faculty members.

Development of Guidelines.

As the literature was researched, information that would contribute to the development of a merit pay plan was constantly being sought. Suggestions were solicited from interviewees as the study was conducted at an institution of higher education. As a result of these activities, the researcher attempted to incorporate the findings into suggested guidelines for a merit pay system based on tenets of operant conditioning, which are presented in Chapter IV.

CHAPTER III

PRESENTATION AND ANALYSIS OF DATA

This chapter focuses on the merit pay system for faculty at a state-supported institution of higher education in the Commonwealth of Virginia. Data were collected by conducting 63 structured interviews with nine department chairmen and 54 faculty members at the selected University. The responses from the interviews were reported according to the University salary policy, demographic data and salary information, and the three primary objectives of the study.

This research sought to answer the question: "To what extent is the merit pay system at a state-supported university consistent with selected tenets of operant conditioning?" The primary objectives of the study were:

1. To determine the department chairmen's and faculty members' perceptions of a merit pay system at a comprehensive, state-supported institution of higher education in the Commonwealth of Virginia;
2. To determine the extent to which this merit pay system and its procedures for implementation are consistent with selected tenets of operant conditioning; and
3. To determine rewards, other than merit pay, that are considered important by faculty members and department chairmen.

A secondary objective, to develop guidelines and to suggest procedures for a merit pay plan based upon selected tenets of operant conditioning, developed as the study progressed. These guidelines are presented in Chapter IV.

GENERAL SALARY POLICY

The University's Salary Policy and General Procedures

As stated in the University's Faculty Handbook, "The sole basis of salary increases in all schools with the exception of the School of Medicine is merit, or on occasion, by an across the board increase approved by the State government" (p. 18). The vice-president for academic affairs supplied the following information regarding salary policy and general procedures.

The University is an institution in which salary increases are based exclusively on merit. The total amount of money for merit pay depends upon the General Assembly's appropriations level each year. Generally, the institution's appropriation for salary increases is a certain percentage of the total faculty's salaries at the institution.

Once the salary appropriation has been made for the institution, an amount (for example, \$1,000 for professors, \$800 for associate professors, and \$600 for assistant professors) is allocated for promotions and a small percentage of the appropriation is reserved by the vice-president for academic affairs for special adjustments. The remaining funds are distributed to the deans according to the number of faculty and their salary levels. The deans decide upon the criteria for merit pay in their

respective colleges. Based upon an evaluation designed by the deans and/or department chairmen, the amount of merit pay for each faculty member is determined at the departmental level. The department chairmen make their recommendations to the deans, and the deans make their recommendations to the vice-president for academic affairs. Promotions, equity adjustments, and merit, then, are the principal components of the annual salary adjustment process.

The College/Schools' Policy and Procedures

The School of the Arts. The Dean's Office has developed and disseminated an "Evaluation Procedure" which was intended to reflect the operating methods and goals of the school. The procedure does not recommend a set of evaluative characteristics, but it provides a chronological listing of activities and dates for the academic year that are part of the department's overall evaluation system. The department chairmen and the faculty members develop, discuss, and agree upon a professional plan for the year. Throughout the year, short meetings are held between the department chairmen and faculty members for the purpose of evaluating and renegotiating the agreed-upon activities.

Using the annual report of activities submitted for the academic year by the faculty members to the chairmen, the department chairmen review the performances of each faculty member. Where performance of an individual faculty member is low, department chairmen suggest strategies for improvement. Where performance is above average, department chairmen praise the faculty members and give some indication as to whether he or she will be recommended for a merit increase.

The chairmen recommend salary adjustments to the dean according to each faculty member's performance in teaching, research, and service. The department chairmen must have data to justify their recommendations. If money remains at the college level after recommendations by the departments have been considered, the dean has latitude to make additional adjustments. The dean then meets with the vice-president for academic affairs to secure final approval.

The School of Business. The School of Business has developed guidelines to be considered for the purposes of faculty development and faculty evaluation. This document informs the faculty of the criteria used for the determination of salary, promotion, retention, and tenure. Each department develops its specific outline of procedures that enable the department to use some discretion, creativity, and flexibility. Management by objectives (MBO) is the approach used for planning and evaluation. Each faculty member and department chairman decides in the fall upon the objectives for the year and the percentage of time for each category--teaching, research, and service. The amount of time allocated for teaching and research can range from 35 to 60 percent each, and the amount of time for service can range between 5 and 20 percent of the faculty member's total responsibility.

Upon the completion of the professional activity reports, including the faculty members' evaluation of the extent to which that year's objectives were accomplished, the department chairmen review and assess the faculty members' performance for the past year. Based upon the evaluation, the department chairmen make salary recommendations to the dean of the School of Business. The dean meets with the vice-president for academic affairs to discuss and agree upon the faculty members' salaries.

The School of Community and Public Affairs. The School of Community and Public Affairs disseminates to the department chairmen "Faculty Salary Change Forms." The established general procedures enable the department chairmen within the school the freedom to proceed both separately and together. In each department during the spring, the faculty members list their activities and self-evaluation elements and submit them to the department chairmen. After the chairmen have read and made written comments, each faculty member and department chairman discusses the evaluation. Faculty members are allowed to write additional comments before submission of the evaluation to the dean.

Once the salary appropriation has been allocated to the school, the dean prorates the money according to the department's proportion of total salaries allocated to the department. The department chairmen make salary recommendations to the dean. In addition to merit, equity (a need to adjust the salary for some historical inequities) is also considered. At the time of salary recommendations to the dean, the department chairmen justify why a merit increase was or was not suggested. Then the dean has a conference with the vice-president for academic affairs to present the salary recommendations from the School for final adjustment and approval.

The School of Education. The dean of the School of Education distributes to both the department chairmen and faculty members a memorandum stating guidelines for faculty evaluation and salary recommendations. The evaluation/merit-pay process includes the completion of a faculty activity report listing faculty activities within the categories of teaching, research/scholarly activities, service, and

personal/professional development completed during the academic year. A brief self-evaluation narrative by faculty members, assessing the goals agreed upon for the year and the implications for the future, is required. The division chairmen review and evaluate the faculty members' contributions for the year and prepare written evaluations for each faculty member. After the department chairmen's final written evaluation, faculty members have the option of providing any additional statements that will be appended to the materials transmitted to the dean's office. The dean carefully reads, and then discusses with each department chairman, all written materials from this process. As soon as the salary appropriations have been determined, the department chairmen prepare tentative salary increase recommendations. The dean and each department chairman meet to discuss salary recommendations and formulate the salary package. The salary recommendations are transmitted to the vice-president for academic affairs for discussion and/or approval.

The College of Humanities and Sciences. Before a decision is made on the percentage of increase to be allocated to the departments, the salaries of the entire College are studied to determine if there are problems that might suggest a larger salary increase for some departments than others due to equity, marketability, what the department is doing as a whole, and salaries in other departments and institutions. Once the College receives its appropriation, the dean keeps an amount for special requests and allocates the other funds to the departments according to the base salaries for the department. After conducting a faculty evaluation, including a faculty review form prepared by each faculty member, the department chairman submits to the dean a list of recommendations for

salary increases within guidelines provided previously. The chairmen meet with the dean and present their suggested salary increases along with appropriate rationale for the recommendation. Then the dean confers with the vice-president for academic affairs to finalize the salary increases for the faculty members.

DEMOGRAPHIC DATA AND SALARY INFORMATION

Demographic Data

The interview process was designed, in part, to elicit demographic data about faculty and department chairmen. The department chairmen were interviewed prior to the interviews with the faculty members of their department. All department chairmen interviewed were white males with terminal degrees in their discipline. The average years of service was nine. Demographic data describe the department chairmen included in the study and summarized in Table 3.

In addition to including an equal number of faculty per academic rank, the random sampling provided representation of faculty from both races and sexes. Of the 54 faculty members interviewed, two were black and 11 were female (see Table 4). Fifty percent of the faculty interviewed in two departments--Division of Educational Services and Department of Sociology and Anthropology--were female. Three departments had no females included in the study. The Division of Educational Services and the Department of Sociology and Anthropology also had one black faculty member each, both of whom were included in this study.

Table 3
DEMOGRAPHIC CHARACTERISTICS OF
DEPARTMENT CHAIRMEN

COLLEGE/SCHOOL Department	Race		Sex		Terminal Degree	Average Years of Service
	B	W	M	F		
ART						
Communication Art and Design		X	X		X	12
Music		X	X		X	2
BUSINESS						
Accounting		X	X		X	11
Business Administration & Management		X	X		X	11
COMMUNITY AND PUBLIC SERVICE						
Rehabilitation		X	X		X	14
EDUCATION						
Division of Educational Services		X	X		X	8
HUMANITIES AND SCIENCES						
Chemistry		X	X		X	10
Mass Communication		X	X		X	12
Sociology and Anthropology		X	X		X	3

Table 4

DEMOGRAPHIC CHARACTERISTICS OF FACULTY MEMBERS BY
COLLEGE/SCHOOLS AND DEPARTMENTS

COLLEGE/SCHOOL Department	Race		Sex		Tenured (%)	Terminal Degree (%)	Average Years of Service	Average Age
	B	W	M	F				
ART								
Communication Art and Design	0	6	4	2	5 (83)	5 (83)	10	44
Music	0	6	5	1	4 (66)	3 (50)	10	50
BUSINESS								
Accounting	0	6	6	0	3 (50)	4 (66)	9	48
Business Admini- tration & Management	0	6	6	0	4 (66)	6 (100)	12	47
COMMUNITY & PUBLIC SERVICES								
Rehabilitation	0	6	5	1	5 (83)	5 (83)	11	46
EDUCATION								
Division of Educa- tional Services	1	5	3	3	6 (100)	6 (100)	11	44
HUMANITIES & SCIENCES								
Chemistry	0	6	6	0	4 (66)	6 (100)	9	42
Mass Communication	0	6	5	1	4 (66)	3 (50)	9	50
Sociology & Anthropology	1	5	3	3	4 (66)	6 (100)	9	45
AVERAGE/TOTAL	2	52	43	11	39 (72)	44 (82)	10	46

Seventy-two percent of the faculty were tenured. Of this percentage, one black (50 percent of the blacks and two percent of the total faculty) was tenured and five females (45 percent of the females and nine percent of the total faculty) were tenured. The Division of Educational Services was the only department having all tenured faculty. The Accounting Department had three tenured faculty members, and the other departments had either four or five tenured faculty included in this study. All the associate professors were tenured with the smallest number of tenured faculty being assistant professors.

Eighty-seven percent of the faculty had received terminal degrees in their disciplines. Of this number, all the blacks and 91 percent of the women had received terminal degrees. The one female without a terminal degree was in the School of the Arts, holding a Bachelor of Fine Arts Degree.

The average years of service for the faculty interviewed was 10, with the average age being 46. The longer the faculty member had been employed and the older the faculty member was, the higher the academic rank, as would be expected.

The demographic characteristics of faculty members are summarized in Table 5. All the blacks and 82 percent of the women were assistant professors. Two (four percent) of the associate professors were female; there were no female professors.

Salary Information

The average salary of the faculty members interviewed was \$29,185. The two departments with the highest average salary were in the School of Business. Four departments--Accounting, Business Administration and Management, Rehabilitation, and Mass Communication--had salary averages

Table 5

DEMOGRAPHIC CHARACTERISTICS
OF FACULTY MEMBERS BY
ACADEMIC RANK

Academic Rank	Race		Sex		Tenured (%)	Terminal Degree (%)	Average Years of Service	Average Age
	B	W	M	F				
Professor	0	18	18	0	16 (88)	14 (78)	14	48
Associate Professor	0	18	16	2	18 (100)	16 (89)	11	53
Assistant Professor	2	16	9	9	5 (28)	14 (78)	4	38
AVERAGE/TOTAL	2	52	43	11	39 (72)	44 (82)	10	46

above the University average. In all cases, the faculty in the higher academic ranks earned a higher average salary.

A distinct difference in the average salaries among the academic ranks was apparent (see Table 6). Between assistant and associate professors there was an average difference of \$3,622; between the associate and full professors, a \$6,192 average difference. The nine-month salaries of the faculty interviewed ranged from \$19,200 to \$43,000. Each faculty member received a salary increase during the 1982-83 academic year. The amount of salary increase ranged from \$500 to \$5,700, with the average of \$1,749 (see Table 7). The percent of salary increase ranged from one percent to 17 percent, with an average of 5.98.

The School of Business had the two departments granting the largest amounts in salary increase in dollars and percent of salary. The four departments receiving a salary increase above the average were: Accounting, Business Administration and Management, Chemistry, and Sociology and Anthropology. The associate professors received a larger average amount of dollar adjustment than those at the other two academic ranks, whereas, the assistant professors received a larger average percent of salary adjustment. The professors in the two departments in the School of Business received a smaller amount and percentage of dollar increase than the assistant and associate professors in that department. The professors in the School of Business received the lowest percentage of salary increase of all the academic ranks within the other college/schools. The department of Communication Art and Design rewarded the assistant professors with an average salary increase higher than the associate and full professors. The faculty members in the Accounting Department received

Table 6

AVERAGE SALARY OF FACULTY MEMBERS INTERVIEWED
BY DEPARTMENTS IN EACH ACADEMIC RANK

COLLEGE/SCHOOL Department	Assistant Professor	Associate Professor	Professor	Overall Average
ART				
Communication Art and Design	24,700	26,350	30,550	27,200
Music	21,630	24,300	27,700	24,543
BUSINESS				
Accounting	28,350	35,850	41,050	35,083
Business Adminis- tration & Management	28,100	33,100	38,300	33,167
COMMUNITY & PUBLIC SERVICES				
Rehabilitation	27,250	27,825	32,600	29,225
EDUCATION				
Division of Educa- tional Services	23,000	26,900	30,700	26,866
HUMANITIES & SCIENCES				
Chemistry	22,200	26,650	33,250	27,367
Mass Communication	25,550	25,800	39,750	30,367
Sociology & Anthropology	<u>21,575</u>	<u>28,175</u>	<u>36,783</u>	<u>28,844</u>
AVERAGE	24,706	28,328	34,520	29,185

Table 7

AVERAGE AND PERCENT OF SALARY INCREASE FOR FACULTY INTERVIEWED
BY DEPARTMENT AND ACADEMIC RANK

COLLEGE/SCHOOL Department	Assistant Professor (Percent)	Associate Professor (Percent)	Professor (Percent)	Average (Percent)
ART				
Communication Art and Design	1,850 (7.5)	1,450 (5.5)	1,550 (5.0)	1,617 (6.0)
Music	1,330 (6.3)	1,250 (5.0)	1,350 (4.5)	1,310 (5.3)
BUSINESS				
Accounting	2,350 (8.5)	3,600 (10.5)	1,300 (3.0)	2,417 (7.3)
Business Adminis- tration & Management	1,900 (6.5)	2,550 (8.0)	1,500 (3.5)	1,983 (6.0)
COMMUNITY & PUBLIC SERVICES				
Rehabilitation	1,363 (5.0)	1,475 (5.0)	1,900 (5.5)	1,579 (5.2)
EDUCATION				
Division of Educa- tional Services	1,250 (5.0)	1,700 (6.0)	2,100 (7.0)	1,683 (6.0)
HUMANITIES & SCIENCES				
Chemistry	2,100 (10.0)	1,050 (3.5)	2,250 (6.5)	1,800 (6.7)
Mass Communication	1,250 (5.0)	1,300 (5.0)	2,200 (5.5)	1,583 (5.2)
Sociology & Anthropology	1,375 (6.5)	2,125 (7.5)	1,813 (5.0)	1,771 (6.3)
AVERAGE	1,641 (6.7)	1,833 (6.2)	1,774 (5.0)	1,749 (6.0)

the largest average percent of salary increase whereas, the department of Mass Communication and Rehabilitation received the smallest average percent of salary increase. The assistant professors received the largest average percentage of salary increase, whereas the professors received the smallest average percentage of salary increase. Because of the large base salary, the professors' salary increases resulted in a larger average dollar amount of salary increase.

A summary of the average salary, salary increase, and percent of increase by departments is portrayed in Table 8. The Accounting Department, having the highest salaries, also was granted the largest amount and percentage of salary increase. The Music Department, having the lowest salaries, also was granted the smallest amount and one of the smallest percentages of salary increase. There were four departments with an average salary increase above the average increase. The average salary increase per department ranged from \$1,310 to \$2,416.

Summary

Of the 63 interviews conducted, nine of the persons were department chairmen and 54 were faculty members of the nine departments. Six faculty members (two per academic rank--assistant, associate, and full professors) per department were interviewed.

All department chairmen interviewed were white males with the average years of service being nine. All department chairmen had a terminal degree in their related discipline.

Of the 54 faculty members included in this study, two were black and 11 were female. All the blacks and nine (82 percent) of the women were assistant professors. There were no black or women professors. In two

Table 8

SUMMARY OF AVERAGE SALARY, AVERAGE SALARY INCREASE, AND
AVERAGE PERCENT OF INCREASE BY DEPARTMENT
FOR FACULTY INTERVIEWED

COLLEGE/SCHOOL Department	Average Salary	Average Amount of Increase	Average Percent of Increase
ART			
Communication Art and Design	27,200	1,617	6
Music	24,543	1,310	5
BUSINESS			
Accounting	35,083	2,416	7
Business Administration and Management	33,167	1,983	6
COMMUNITY & PUBLIC SERVICE			
Rehabilitation	29,225	1,579	5
EDUCATION			
Division of Educational Services	26,866	1,667	6
HUMANITIES AND SCIENCES			
Chemistry	27,367	1,800	6.6
Mass Communication	30,367	1,583	5
Sociology & Anthropology	<u>28,844</u>	<u>1,771</u>	<u>6</u>
AVERAGE	29,185	1,748	5.98

departments--Division of Educational Services and Department of Sociology and Anthropology--three females (50 percent of the department included in the study) were interviewed. Each of these two departments had one black faculty member included in the study. Three of the nine departments had no female faculty included in the study.

Seventy-two percent of the faculty were tenured. Of this percentage, one black (50 percent) was tenured and five females (45 percent) were tenured. All associate professors were tenured with the smallest number of assistant professors (5) not tenured.

Eighty-seven percent of the faculty had received terminal degrees in their disciplines. Included in this percentage, all blacks and 91 percent of the women had earned terminal degrees.

The average salary of the faculty members interviewed was \$29,185. The average amount of faculty salary increase for the 1982-83 academic year was \$1,748; the average percent of salary increase was six. The average years of service for the faculty was 10, with the average age being 45.

The remainder of this chapter will analyze data relating to the three primary objectives of the study.

OBJECTIVES OF THE STUDY

To accomplish the objectives of the study, the investigator became acquainted with the merit pay system and its administration. The interview schedules were designed to collect information which would allow for the assessment of the current merit pay system and relate it to the six basic tenets of operant conditioning.

Perceptions of Merit Pay System (Objective No. 1)

The first objective of the study was to determine perceptions regarding the merit pay system. Data for this objective are summarized in Table 9. Interviews were conducted with department chairmen and faculty members to obtain their overall perception of merit pay. Questions were asked to obtain the definition, purpose, and procedures utilized in the merit pay system at the University. Fifty-nine percent of the faculty believed that merit was pay for performance as opposed to an increase based on cost of living, seniority, or outstanding performance which exceeds the "normal" workload; 44 percent of the chairmen cited the same definition. Fifty-six percent of the chairmen defined merit as pay for outstanding (above average) performance and 39 percent of the faculty gave the same definition. Thirteen (24 percent) of the faculty giving their definition of merit pay prefaced their statement with doubt as to whether the institution really had merit pay.

As the purpose of merit pay was discussed, the majority (78 percent) of the chairmen believed it to be "a reward for past performance," and the majority (54 percent) of the faculty believed the purpose to be "to motivate future performance" (an incentive). Thirteen percent of the faculty and 11 percent of the chairmen cited other purposes for merit pay. Some of the other purposes mentioned were to "keep the power structure," "for administrators to control," "to reward their peers and cultivate friendship," "to give what is really expected by faculty," and "to purchase loyalty;" and others did not know the purpose.

Considering the differences in the definition and purpose of merit pay as stated by department chairmen and faculty members within the same

Table 9 Continued

ITEM	Department Chairmen		FACULTY WITHIN NINE DEPARTMENTS										Summary	
	#	%	1	2	3	4	5	6	7	8	9	#	%	
8. Determinant of Merit Pay														
a. University Level														
Vice-president	9	100	1	2	5	4	3	1	1	5	2	24	44	
Do not know			5	4	1	2	3	5	5	1	4	30	56	
b. College/Schools Level														
Dean	9	100	4	3	5	6	4	1	3	5	5	36	67	
Do not know			2	3	1	0	2	5	3	1	1	18	33	
c. Department Level														
Chairmen	9	100	6	6	6	6	4	5	6	6	5	50	93	
Do not know							2	1			1	4	7	
9. Merit Pay for														
a. 12 months	9	100	4	5	4	4	4	6	5	6	5	43	80	
b. Longer period			0	1	2	1	0	0	1	0	0	5	9	
c. Do not know			2	0	0	1	2	0	0	0	1	6	11	
10. Relationship of evaluation and salary increase														
a. Totally related	9	100	1	1	3	1	0	2	0	0	0	8	15	
b. Highly related			0	0	2	5	3	1	1	3	2	17	31	
c. Somewhat/minimally related			2	1	0	0	1	0	1	1	0	6	11	
d. Not related			1	0	0	0	0	0	0	1	0	2	4	
e. Do not know			2	4	1	0	2	3	4	1	4	21	39	
11. Race and sex role in merit pay determination														
a. None	6	67	1	1	2	2	1	1	2	4	3	17	31	
b. Yes	1	11	3	0	0	0	0	2	0	0	0	5	9	
c. Yes for sex	1	11	0	0	1	0	0	0	0	1	0	2	4	
d. Do not know			1	5	2	4	5	2	4	1	1	25	46	
e. Other	1	11	1	0	1	0	0	1	0	0	2	5	9	
12. Performance data collected by														
a. Faculty members	6	67	6	6	6	6	3	6	5	6	5	49	91	
b. Department chairmen	3	33	0	0	0	0	3	0	1	0	1	5	9	

institution and departments, these findings support the literature that the concept of merit pay is ambiguous and defined differently by various people. There appeared to be little consistency between the perceptions stated by the department chairmen who administer the merit pay policy and the faculty members who perform within the system.

All faculty members received a salary increase during the 1982-83 academic year. When asked the question of whether their salary increase was based on merit, 56 percent of the faculty stated "yes," 11 percent said "no," and 33 percent did not know. Even though all the department chairmen judged that salary increases were meritorious, one-third of the faculty were not aware of the type of system used in determining increases.

In response to the question of whether the institution has a written university policy, all chairmen stated "no," whereas, 72 percent of the faculty said "no," 24 percent did not know, and four percent said "yes." All the department chairmen and the majority of the faculty members believed the institution had a merit pay policy, but it was not in writing. Even though they believed the policy was unwritten, 48 percent of the faculty indicated that the policy was communicated by the department chairmen, conferences, meetings, grapevine, faculty conversations, memorandum, and faculty manual. Thirty-seven percent of the faculty stated that the policy was not communicated and 15 percent was unaware of the procedure for communicating the policy. The department chairmen stated that the merit pay policy was communicated to the department chairmen at the college/school level by the deans, and it was communicated to the faculty by the department chairmen.

Responding to whether the department had written procedures for implementing merit pay increase, one department chairman stated "yes," one

faculty member said "yes," and all other responses from both faculty and chairmen were "no." When asked to describe the procedure used in allocating merit pay to faculty, 81 percent of the faculty did not know the procedure, 15 percent said it was subjective and judgmental, and 4 percent thought it was ranked according to levels (outstanding, average, and below average) of performance. Sixty-six percent of the department chairmen stated that they allocated merit pay increases according to the level of performance. After all faculty activity reports had been evaluated, the faculty were ranked and rewarded as outstanding, average, and below average performers. Thirty-three percent of the chairmen said that there was "nothing in concrete." One department chairman (11 percent) was unable to specify his procedure for salary distribution. Ninety-eight percent of the faculty indicated that the procedure for allocating merit pay was not communicated to them. All department chairmen stated that the procedure was communicated. No one provided a written procedure for administering merit pay, but the researcher was given evaluation procedures and faculty activity report forms. No department provided a description or document explaining or illustrating the connection between the evaluation and merit pay increase.

All department chairmen stated that they determined the salary recommendation at the department level, the dean adjusted and/or approved the salary recommendation at the college/school level, and the vice-president for academic affairs adjusted and/or endorsed the salary recommendation at the University level. The faculty members were not as informed of the decision-making process as were the department chairmen. While 93 percent of the faculty members knew that the department chairmen determined the

salary at the department level, 67 percent perceived the dean to have input at the college/school level, and 44 percent believed the vice-president for academic affairs had input at the institutional level. The other faculty members did not know who made the decision.

All department chairmen stated that the merit pay increase was based on the preceding twelve months or academic school year. Eighty percent of the faculty agreed with the department chairmen, but nine percent thought the considerations for merit pay included a longer period of time. Eleven percent did not know what period of time was included.

All faculty interviewees believed they were evaluated (or department chairmen evaluated faculty) in the three areas of teaching, research, and service. All department chairmen, compared with 15 percent of the faculty, believed that salary increases were related totally to the evaluation procedure. Thirty-one percent of the faculty stated that merit pay was "highly" related and 11 percent believed it to be "somewhat," or "minimally," related to the evaluation process. The other 43 percent believed it to be unrelated or they did not know if or how the evaluation related to their salary increase.

In response to the question "What role does race and/or sex play in the determination of salary adjustments?" 67 percent of the chairmen and 31 percent of the faculty replied "none." Eleven percent of the chairmen stated that sex and race did play a part in determining salaries as they related to the past inequalities. Nine percent of the faculty believed race and sex had a role in salary determination; 11 percent of the chairmen and four percent of the faculty expressed a belief that sex made a difference. Eleven percent of the chairmen and 55 percent of the faculty

did not know whether sex and race played a part in determining salary increases.

Summary

The perceptions of merit pay reported by the department chairmen and faculty member were not consistent. The basic problem contributing to the inconsistency in the perceptions of merit appeared to be the lack of an institutional, as well as college/school and departmental, definition of merit. The definition and purposes of merit pay between department chairmen and faculty members within and among departments were different. Merit pay was not defined, and its purposes were not identified and communicated.

The merit pay policy was stated in the Faculty Handbook, but the department chairmen and 96 percent of the faculty members indicated that the institution's policy was not in writing. The department chairmen and one-half of the faculty believed there was a merit pay policy, but it was not in writing. Even though the department chairmen believed the faculty members were informed of the policy, less than half (48 percent) of the faculty stated that the policy was communicated. The faculty who were knowledgeable received their information from the department chairmen, conferences, meetings, grapevine, faculty conversations, memoranda, and the Faculty Handbook.

Procedures for allocating merit pay increases at the department (or any other level) were not in writing, and they were not known by the faculty. Sixty-six percent of the department chairmen ranked faculty according to levels of performance (outstanding, average, and below average) and rewarded the faculty accordingly. The performance levels were

not defined so as to indicate the expectations of each level. The ranking procedure described had no method of connecting levels of performance to amounts of merit pay.

The department chairmen stated and the faculty members agreed that the faculty were evaluated in the areas of teaching, research, and service. All department chairmen and 15 percent of the faculty believed the evaluation (based on performance during the preceding academic year) and the salary increase were directly related. Race and sex, as indicated by 67 percent of the chairmen and 31 percent of the faculty, were perceived to have played no role in the determination of merit increase.

The department chairmen were better informed of the merit pay policy and procedures for implementation than the faculty members. No one questioned the philosophy of merit pay, but the procedure for implementation was not understood by the faculty.

Merit Pay and Operant Conditioning Tenets (Objective No. 2)

The second objective of the study was to determine the extent to which the merit pay system and its procedures for implementation at a state university were consistent with selected tenets of operant conditioning. Data for this objective are summarized in a repository table in Appendix A. Specific questions were asked during the interview to accomplish this objective. The six tenets identified as being applicable to the concept of merit pay were:

Tenet No. 1: Specification of Goals

Tenet No. 2: Establishment of Operant Level

Tenet No. 3: Appropriateness of Consequences

Tenet No. 4: Rewarding of Successive Approximation

Tenet No. 5: Immediacy of Reinforcement

Tenet No. 6: Patterns of Reinforcement

To determine the extent to which the tenets of operant conditioning were present in the merit pay system at the institution, there were indices identified for each tenet. The information collected for this objective was analyzed according to the tenets and their indices.

Tenet No. 1: Specification of Goals. Goals and desired performances must be identified and stated in behavioral terms so they can be observed, measured, and evaluated. This process enables both the performer and evaluator to be knowledgeable of expectations and provide the basis upon which to evaluate performance. Upon evaluation of the current situation to determine the existing behavior and identify optimum performance, the difference between the two behaviors will be the desired performance for the future. These are the goals that should be defined in behavioral terms for communication to all involved.

As questions were explored with both department chairmen and faculty members, the following indices were the focal points of the interview.

1. Are goals for teaching, research, and service defined in operational terms, communicated, and agreed upon by department chairmen and faculty?

Seventy-eight percent of the chairmen and 66 percent of the faculty members stated that the goals for teaching, research, and service were defined, but through further questioning, the researcher discovered that the goals were not defined in behavioral terms which would enable them to be observed, measured, and evaluated. The goals were stated in general ambiguous terms which could not be quantified. For example: In teaching,

the faculty member will demonstrate quality in teaching, considering such factors as knowledge of subject, ability to organize, appropriate teaching techniques, ability to communicate and impart knowledge, efficacy in developing intellectual and creative abilities of students, concern for students, development of teaching or curricular innovations, utilization of a fair, impartial means of student evaluation, maintaining academic and ethical standards, and effective student advising. The desired outcomes were not stated, nor were the rewards identified.

Fifty-seven percent of the faculty stated that they had goals conferences with the chairmen at the beginning of the school year (a few during the spring evaluation for the following year) to plan their activities for the year. Usually before and sometime during the conference, objectives for the year were prepared, and generally agreed upon. During the spring semester evaluation process, 51 percent of the faculty, contrasted to 89 percent of the chairmen, stated that conferences between faculty and department chairmen were held. During the conference they reviewed and discussed the activity report to assess the accomplishments of the goals and activities and to make recommendations for improvement if necessary.

2. Are the goals defined in terms that allow the behavior to be observed, measured, and evaluated?

Even though the interviewees stated that the goals in teaching, research, and service were defined, they were not defined in behavioral terms including the criteria of an operational definition. A sound objective should:

- a. Be measurable, and usually quantitative

- b. Be specific
- c. Identify expected results
- d. Fall within the power of the individual
- e. Be realistic and obtainable
- f. Clearly state time limits for completion. (Massie & Douglas, 1981, pp. 153-154)

3. Are performance levels (outstanding, satisfactory, and unsatisfactory) identified and quantified for teaching, research, and service?

Both the department chairmen and faculty members agreed that the performance levels were not identified nor quantified for teaching, research, and service. The faculty were not informed as to what activities and degree of proficiency were required for their performance to be rated as outstanding, satisfactory, or unsatisfactory.

4. Are goals for teaching, research, and service identified and related to the mission of the institution, college/school, department, and other faculty?

As evidenced from the discussions and handouts received during the interviews with the vice-president for academic affairs, the mission of the institution, college/school, and departments filtered to the faculty, but not in a systematic way. Information concerning the mission was disseminated through such means as memorandums, faculty meetings, and conferences. Being knowledgeable of the institution's mission and goals at various levels ensured the information necessary to relate individual faculty goals to the general mission of the institution. With each faculty member being a part of the whole, with his or her unique characteristics and abilities, the goals established by individual

faculty members complement the goals of the other faculty members and contribute to the total system.

Even though it appeared that the goals for teaching, research, and service were identified and related to the mission of the institution, college/school, and department, the manner in which they were stated forced the researcher to conclude that the goals were not identified and related to the mission of the institution, college/school, and department. Goals were not defined in behavioral terms.

5. Are the goals monitored according to expectations and accomplishments?

The system's evaluation includes two formal scheduled conferences--a goal setting conference at the beginning of the school year and an evaluation at the end of the school year. Between these periods of time, no formal plans for monitoring the faculty activities and accomplishment were apparent. In case of problems, both the department chairmen and faculty members were at liberty to consult each other. Goals not accomplished by the annual evaluation were discussed and modified. If an unaccomplished goal was found worthy, it could be continued for another year.

6. Are the goals and performances linked to the amount of salary increase?

Goals and performance levels were not defined in behavioral terms so they could be observed, measured, and evaluated; therefore, they had no apparent basis for connecting them to amounts of salary increase.

When department chairmen allocated the amount of salary increase to faculty members, they did not inform faculty members as to how the amount of increase was determined. Faculty members are, therefore, not aware of

the activities the department chairmen considered important as they converted performance into pay.

Summary. According to the principles of operant conditioning, Tenet No. 1: Specification of Goals, was not being implemented. The goals and objectives were not stated in behavioral terms that could be observed, measured, and evaluated.

Tenet No. 2: Establishment of Operant Level. To determine if the operant level of performance could be established, the indices considered were:

1. Is the evaluation system appropriate for assessing current baseline performance?

The faculty evaluation was subjective, with no criteria nor commonality upon which to judge faculty performance. Faculty members prepared individual annual activity reports stating goals and activities (which were not quantifiable), but no instrument surfaced that would measure their performance, relating individual goals to the merit pay system.

Although all faculty members and chairmen indicated that goals for teaching, research, and service were not quantifiable, all the department chairmen and all except two of the faculty members (99 percent) stated that they were evaluated in the three areas. When asked "how accurately they believed their evaluation system determined their performance on a scale of one to five, with one being the lowest and five the highest," the chairmen indicated they believed that the accuracy of the evaluation system for determining performance was 4 (above average) for teaching, research, and service. With "3" being average, the faculty rated the evaluation system as "3.26" for teaching, "3.4" for research, and "3.21"

for service. The department chairmen believed the evaluation system to be more accurate than the faculty perceived it to be.

2. Is there a procedure for maintaining a record of faculty performance for evaluation?

Individual faculty members were the major source of maintaining and reporting their annual activities and accomplishments for the academic year. During the spring, faculty members prepared a self evaluation for presentation to the chairmen. Occasionally department chairmen deposited in the faculty member's personnel file pieces of information that would contribute to the evaluation of that faculty member. An accumulation of the annual review is kept in the faculty member's personnel folder.

Summary. Without an instrument with criteria upon which to judge performance, effective evaluation is difficult, if not impossible, to accomplish with validity and in a reliable manner. With the present system, operant level of performance cannot be established; it can only be approximated.

Tenet No. 3: Appropriateness of Consequences. To determine the appropriateness of consequences, the indices considered were:

1. Is merit pay considered to be important?

The department chairmen and the faculty members thought merit pay was important. Eighty-nine percent of the department chairmen and 83 percent of the faculty named merit pay as their first choice of rewards. Eighty-five percent of the faculty and 89 percent of the department chairmen did not prefer having another method of determining salary adjustments.

2. What are the effects of merit pay on performance?

Twenty-six percent of the faculty and 33 percent of the chairmen believed merit pay affected performance. Forty-one percent of the faculty and 33 percent of the chairmen stated that merit pay has no effect on performance. The others believed that merit pay had a limited effect or did not know the effects of merit pay on performance.

3. Are there other rewards that are important?

There were other rewards that the department chairmen and faculty members believed to be important. Some of the rewards named were: tenure, promotion, autonomy, flexibility and trust, scholarship, travel money, recognition among peers, teachers' awards, parking space, free tuition for family, reduced load, student or clerical assistance, research leave and money, off-campus teaching, and expressions of gratitude.

4. Did the merit pay increase reflect performance?

Thirty-one percent of the faculty and all the department chairmen believed that salary adjustments were tied directly to objectives and performance levels. Sixty-nine percent of the faculty did not believe or did not know if their salary adjustment was connected to performance. When asked the question "How well did merit adjustments reflect performance?" using a scale of one to five (poor to excellent), the faculty responded to the question with a rating of "3" (average), whereas the department chairmen rated the question with a "4.78" (between above average and excellent).

5. Is merit pay accomplishing its goal?

In response to the question, "How well did the merit adjustments accomplish the purpose of merit pay as stated at the beginning of the

interview?" Using the scale from one to five (poor to excellent), the mean rating for faculty members was a "2.7" (between below average and average) and the department chairmen rated it "3.5" (between average and above average).

Summary. The pay was neither rewarding past performance nor motivating future performance. There was no discernible link between merit increases and job performances.

Tenet No. 4: Rewarding Successive Approximation.

1. Are subgoals identified and rewarded upon the completion of the performance?

Short-term accomplishments or subgoals were not defined; therefore, they were not rewarded immediately after their completion. All department chairmen and faculty members indicated that subgoals were not defined nor rewarded at the institution. Each year faculty members prepared a plan of activity which included their goals for the academic year. If subgoals were stated, they were listed as a part of the annual goals, and they were rewarded once a year ostensibly according to the accomplishment of those goals.

2. Are faculty members aware of the target points for receiving rewards?

There were no subgoals; therefore, there were no target points for receiving rewards in this regard. The faculty members were aware that they were eligible to receive a merit adjustment once a year.

Summary. The identification and rewarding of subgoals were not parts of the merit pay system at the institution. Goals were developed for the academic year at the beginning of the fall semester. Faculty

evaluation was conducted during the latter part of the spring semester. Merit increases were awarded once a year between the evaluation and the end of the school year.

Tenet No. 5: Immediacy of Reinforcement.

1. Is a salary increase given immediately after an outstanding performance?

Merit adjustments are not made immediately after an outstanding performance. All department chairmen and faculty members agreed on this point. Salary increases are given only annually. The frequency of salary adjustments is due to the budgetary system that is in effect. The Commonwealth of Virginia makes salary allocations only once a year.

2. Are other rewards given immediately after an outstanding performance?

Two percent of the faculty and 22 percent of the department chairmen stated that faculty were rewarded immediately after their performances in other ways. Some of the rewards were a "thank you," a pat on the back, public recognition in faculty meetings, and news articles.

Summary. Outstanding performances are not rewarded immediately after the performance. Merit pay adjustments were made annually.

Tenet No. 6: Patterns of Reinforcement.

1. How often is merit pay granted?

Merit pay is granted once a year during the latter part of the spring semester. The pattern of reinforcement is fixed interval.

2. How often are other rewards given?

Other rewards are granted at the discretion of the administrators. When given they are awarded immediately after the performance using a variable ratio pattern of reinforcement.

Summary. The pattern of reinforcement for rewarding outstanding performance was not consistent with the principles of operant conditioning. Merit pay was determined in the spring with awarded dollars beginning in the fall. Other rewards, if granted, were issued immediately after the performance.

Summary of Objective No. 2.

The second objective of the study--to determine the extent to which the merit pay system and its procedures for implementation at a state-supported institution were consistent with the principles of operant conditioning--has been analyzed according to six tenets identified as being applicable to the concept of merit pay. The summary of the six tenets follows:

Tenet No. 1: Specification of Goals. Even though the interviewees stated that the goals in teaching, research, and service were defined, goals were not defined in behavioral terms stating what behaviors were expected, the level of performance, and the expected reward. Given the fact that the definition of goals did not include the necessary criteria, it was determined that the goals were not defined according to the principles of operant conditioning.

Tenet No. 2: Establishment of Operant Level. The interviewees stated that faculty members were evaluated in the three areas of teaching, research, and service, but they also indicated that goals and performances at the institution had not been quantified. If performances have not been quantified to provide for measurability, then the operant level of performance cannot be determined.

Tenet No. 3: Appropriateness of Consequences. Merit pay was considered to be an appropriate reward as evidenced by 89 percent of the department chairmen and 83 percent of the faculty members naming merit pay as their first choice of rewards. Eighty-nine percent of the department chairmen and 85 percent of the faculty members did not prefer another method of determining salary adjustments.

But as attention was devoted to the ultimate goal of merit pay--improved performance--41 percent of the faculty and 33 percent of the chairmen stated that merit pay has no effect on performance, whereas 26 percent of the faculty and 33 percent of the department chairmen believed merit pay affects performance. A larger percentage of the interviewees believed merit pay had no effect on performance. Most of the interviewees endorsed the concept of merit pay, but did not understand nor agree with its procedure of implementation.

Tenet No. 4: Rewarding Successive Approximation. Short-term accomplishments or sub-goals were not defined and, therefore, could not be rewarded immediately upon their completion. There was an annual plan of activities prepared by the faculty either during the beginning of the school year or at the end of the academic year during spring evaluation. The annual evaluation assessed the annual goals and activities without a formal plan to monitor, evaluate, and reward performances between the two targets. Merit pay increases were determined soon after the evaluation--usually prior to May 31.

Tenet No. 5: Immediacy of Reinforcement. Salary adjustments were made only once a year; therefore, merit pay was not an immediate reinforcer. Twenty-two percent of the chairmen and two percent of the

faculty indicated there were other rewards issued immediately after the performance. They were a "thank you," a pat on the back, public recognition in faculty meetings, and news articles.

Tenet No. 6: Patterns of Reinforcement. The salary increases are determined annually during the spring near the end of the second semester. Since the time to expect the merit pay increase is known, the pattern of reinforcement is a fixed interval.

The researcher's general conclusion for the second objective of the study is that the merit pay system and its procedures for implementation at the state-supported institution were not consistent with the principles of operant conditioning.

Rewards Other Than Merit Pay (Objective No. 3)

The third objective of this study was to determine rewards other than merit pay that were considered important by faculty members and department chairmen. To do this, the researcher requested the faculty members and department chairmen to itemize rewards available at the institution. They were asked to rank these rewards, including merit pay, according to their personal preferences.

The rewards enumerated by faculty members and department chairmen were classified according to their first through third choices. The department chairmen's responses reflected their preference as it related to improved performance, merit pay being the first choice of rewards by 89 percent of the department chairmen and 83 percent of the faculty members. The next highest first choices were promotion, as indicated by 11 percent of the department chairmen, and promotion and tenure as indicated by 5.5 percent of the faculty members (see Table 10).

Table 10

REWARDS RANKED AS FIRST CHOICE BY
DEPARTMENT CHAIRMEN AS DECISION MAKERS AND
FACULTY MEMBERS AS RECIPIENTS

Chairmen		Faculty			
	#	%		#	%
Merit Pay	8	89	Merit Pay	45	83.1
Promotion	1	11	Promotion	3	5.5
			Tenure	3	5.5
			Autonomy	1	1.8
			Flexibility and trust	1	1.8
			Teaching Scholarship	1	1.8
TOTAL	9	100		54	99.5*

*Does not equal 100% due to rounding errors.

An analysis of the second choice of rewards revealed 33 percent of the department chairmen and seven percent of the faculty members believed travel money to be highest or one of the highest second choice of rewards. Seven percent of the faculty cited "reduced load" and "merit pay" as their second choice of rewards. Twenty-two percent of the department chairmen believed good teaching schedules and release time would have second preference. The other rewards listed as second choices were named by one or two faculty members and department chairmen. These data are summarized in Table 11.

The third choices of rewards by department chairmen and faculty members are summarized in Table 12. The highest percentage (nine) of the third choice rewards as indicated by the faculty was merit pay. Five percent and four percent of the faculty members named travel money and a student assistant respectively as being their third choices of rewards. Other rewards listed were named by one department chairman or faculty member (see Table 12).

As illustrated by Tables 10, 11, and 12, a limited number of rewards other than merit pay were granted or considered to be important by the department chairmen and faculty members. Persons who were not aware of existing rewards other than merit pay named rewards they deemed desirable. The responses are presented in Table 13. At this urban institution, parking seemed to hold a high priority as 20 percent of the faculty listed parking as a desired reward. The next three rewards with the highest percentages listed by faculty members were: free tuition for family, sabbatical leave, and travel money. Other rewards were mentioned by one or two persons.

Table 11

REWARDS RANKED AS SECOND CHOICE BY
DEPARTMENT CHAIRMEN AS DECISION MAKERS AND
FACULTY MEMBERS AS RECIPIENTS

Chairmen			Faculty		
	#	%		#	%
Travel money	3	33	Travel money	4	7
Release time	2	22	Merit pay	4	7
Good teaching schedule	2	22	Reduced load	4	7
Tenure	1	11	Graduate or student assistant	2	4
Recognition among peers	1	11	Promotion	2	4
			Award nomination	2	4
			Better schedule	1	1.5
			Research leave	1	1.5
			Release time	1	1.5
			Paper writings	1	1.5
			Research money	1	1.5
			Work from grants	1	1.5
			Off-campus teaching	1	1.5
			Thank you	1	1.5
			Teaching, research, service award	1	1.5
			Equipment	1	1.5
TOTAL	9	99*		28	48**

*Does not equal 100% due to rounding errors.

**Not 100%--all faculty members did not have a second choice of rewards

Table 12

REWARDS RANKED AS THIRD CHOICE BY
DEPARTMENT CHAIRMEN AS DECISION MAKERS AND
FACULTY MEMBERS AS RECIPIENTS

Chairmen			Faculty		
	#	%		#	%
Merit pay	1	11	Merit pay	5	9
Conference for papers	1	11	Travel money	3	5
Attend conference	1	11	Student assistant	2	4
Easy teaching load	1	11	Secretary help	1	1.5
Travel	1	11	Promotion	1	1.5
Promotion	1	11	Teaching scholarship	1	1.5
			Work from grant	1	1.5
			Tenure	1	1.5
			Outstanding award	1	1.5
			Teachers award	1	1.5
			Named researcher	1	1.5
			Lighter teaching load	1	1.5
			Space	1	1.5
TOTAL	9	66*		20	34*

*Do not equal 100% as all department chairmen and faculty members did not have a third choice of rewards

Table 13
 OTHER DESIRED REWARDS BY
 FACULTY MEMBERS

Rewards	#	%
Parking space	8	20
Free tuition for family	6	14
Sabbatical leave	5	12
Travel money	5	12
Release time	4	9
Student and/or clerical assistance	3	7
Research opportunities	2	4
Book allowance	1	2
Course selection	1	2
Increased fringe benefits	1	2
Reduced schedule	1	2
Research money	1	2
Rug on the floor	1	2
Tax shelter plans	1	2
Teachers' awards	1	2

Summary

Merit pay is, by far, the most preferred reward; tenure and promotion were listed as the next two preferred choices by the department chairmen and faculty. Other rewards listed by department chairmen and faculty members as being provided by the institution were: reduced load, travel money, a graduate or student assistant, release time, and good teaching schedules.

Parking space, free tuition for family, sabbatical leave, travel money, and release time were among the most frequently named rewards listed by faculty members as being rewards the institution did not have and they would desire at the University.

A limited number of other rewards were disseminated or considered important by the interviewees of the institution studied.

CHAPTER IV

SUMMARY

All aspects of this study are summarized in this chapter. The chapter includes: the problem and procedure of the study; major findings and observations; guidelines and suggested procedures for institutions utilizing merit pay plans; and recommendations.

THE PROBLEM AND PROCEDURE

The Problem and Objectives of the Study

This research sought to answer the question: "To what extent is the merit pay system at a state-supported university consistent with selected tenets of operant conditioning?"

The primary objectives of the study were:

1. To determine the department chairmen's and faculty members' perceptions of a merit pay system at a comprehensive, state-supported institution of higher education in the Commonwealth of Virginia;
2. To determine the extent to which this merit pay system and its procedures for implementation are consistent with selected tenets of operant conditioning; and
3. To determine rewards, other than merit pay, that are considered important by faculty members and department chairmen.

A secondary objective, to develop guidelines and to suggest procedures for a merit pay plan based upon selected tenets of operant

conditioning, developed as the study progressed. These guidelines and suggested procedures are presented later in this chapter.

Subject of the Study

This study involved one state-supported institution of higher education in the Commonwealth of Virginia. The University is a co-educational urban institution proclaiming to have a merit pay system of salary increase.

Nine departments, representing 20 percent of the departments in four schools and one college, were included in the study. To be eligible for inclusion in the study, the departments were chaired by persons with a minimum of two years of service in their present position at the institution. The departments had at least two faculty members in the academic ranks of assistant, associate, and full professor. The departments within the college/schools were randomly selected. Six faculty members (two per academic rank--assistant, associate, and full professor) from the nine departments were randomly selected.

Interview Schedules Development

Two structured interview schedules were developed to elicit the characteristics and perceptions of the current merit pay system to assess the extent to which the six tenets of operant conditioning were being applied in the merit pay system. The interview schedule for department chairmen was designed to collect data descriptive of the current merit pay system, whereas, the faculty interview schedule was designed to ascertain the faculty members' perceptions of the merit pay system. Both interview schedules were structured; they utilized a general

conversational approach and yet afforded a system for recording the information.

The interview schedules were tested initially with three division chairmen and three faculty members at Richard Bland College. After revisions the interview schedules were used in the Pilot Study administered at the institution where the final study was conducted. The comments and suggestions received from both institutions were used to modify the data collection procedure.

Interviewing Procedure

Conferences with officials (vice-president for academic affairs and deans) were conducted to secure permission to conduct the study and to describe the general objectives and procedure of the study. The deans supplied a list of the departments within their college or schools that were chaired by a person who had been in the position for two years and that had two faculty members in the academic ranks of assistant, associate, and full professor. Interviews were scheduled and conducted with nine chairmen. During the interview with the department chairmen, names of faculty members from each department by academic ranks were received. Two faculty members from each academic rank were randomly selected using the procedure previously described. Appointments were made and interviews were conducted with 54 faculty members. All interviews were conducted by the researcher. The structured interview forms were used as a guide for questioning and as a tool for recording the data.

Data Analysis

Information received during the conferences with the vice-president for academic affairs, the deans, and the responses received from the two

interview forms were categorized, tabulated, analyzed, summarized, and reported. The findings were presented according to the general salary policy, demographic data and salary information, and the objectives of the study.

General Salary Policy. Conferences were held with the vice-president for academic affairs and the deans of the five college/schools included in the study. During the conferences the vice-president for academic affairs described the salary policy and procedure for the University. The deans of the college/schools explained their goals and procedures for implementing the University's merit pay policy. This information was summarized and presented in Chapter III.

Demographic Data and Salary Information. Demographic data and salary information were requested from department chairmen and faculty members. This information was analyzed and summarized for presentation in Chapter III.

Objectives of the Study. The major thrust of this study was focused on the analysis of the objectives of the study. With the first objective being to determine the perception of department chairmen and faculty members regarding their merit pay system, it was imperative for the investigator to become thoroughly familiar with the administration of the merit system in operation. The interview schedule for the department chairmen allowed the investigator the opportunity to assess the current merit system; likewise, the interview schedule for the faculty members provided the researcher the opportunity to assess their perceptions of the merit pay system. The data were analyzed, compared, and reported.

To accomplish the second objective of the study, questions were asked in order to determine the extent to which merit pay was consistent with the principles of operant conditioning. The six tenets and the key indices within each were:

Tenet No. 1: Specification of Goals.

1. Are goals for teaching, research, and service defined in operational terms, communicated, and agreed upon by department chairmen and faculty?

2. Are the goals defined in terms that allow the behavior to be observed, measured, and evaluated?

3. Are performance levels (outstanding, satisfactory, and unsatisfactory) identified and quantified for teaching, research, and service?

4. Are goals for teaching, research, and service identified and related to the mission of the institution, college/schools, department, and other faculty?

5. Are the goals monitored according to expectations and accomplishments?

6. Are the goals and performances linked to the amount of salary increase?

Tenet No. 2: Establishment of Operant Level.

1. Is the evaluation system appropriate for assessing current baseline performance?

2. Is there a procedure for maintaining a record of performance for evaluation?

Tenet No. 3: Appropriateness of Consequences.

1. Is merit pay considered to be important?

2. What are the effects of merit pay on performance?
3. Are there other rewards that are important?
4. Did the merit pay increase reflect performance?
5. Is merit pay accomplishing its goal?

Tenet No. 4: Rewarding Successive Approximation.

1. Are subgoals identified and rewarded upon the completion of the performance?
2. Are faculty members aware of the target points for receiving rewards?

Tenet No. 5: Immediacy of Reinforcement.

1. Is a salary increase given immediately after an outstanding performance?
2. Are other rewards given immediately after an outstanding performance?

Tenet No. 6. Patterns of Reinforcement.

1. How often is merit pay granted?
2. How often are other rewards given?

The number of "yes" responses was determined and reported. The items having a majority of the responses in the affirmative were assumed to indicate that the questioned item or the tenet was present, at least in the minds of the majority of respondents.

To determine rewards other than merit pay that faculty members and department chairmen consider important, a list of other rewards was requested and ranked, including merit pay, according to their preference. An analysis of the department chairmen and faculty members ranking merit pay as their first choice was presented. From the list of rewards

identified, the rewards were categorized according to choices--first, second, third, and others--of the department chairmen and faculty members.

Development of Guidelines

As the literature was researched, information that would contribute to the development of a merit pay plan was sought. Suggestions were solicited from interviewees as the study was conducted at the institution of higher education. As a result of these activities, the researcher attempted to incorporate the findings into guidelines and suggested procedures for a merit pay system based on tenets of operant conditioning.

FINDINGS AND OBSERVATIONS

The major findings of this study were as follows:

1. The University does have a merit pay policy stated in the Faculty Handbook, but the investigator did not find evidence of a systematic procedure for determining faculty salary increases.
2. The department chairmen were better informed of the merit pay policy and procedures than the faculty members. In fact, faculty members were not familiar with the procedure for allocating merit increases.
3. A merit pay system was preferred by the majority of the department chairmen and faculty members over alternative salary policies.
4. The merit pay system at the University was not consistent with selected tenets of operant conditioning.
5. There were a limited number of rewards other than merit pay at the University that the department chairmen and faculty members believed were important. Some of the rewards that they considered important were

tenure, promotion, reduced load, travel money, graduate or student assistance, release time, and good teaching schedules. Some rewards they desired to have at the University were parking space, free tuition for family, sabbatical leave, travel money, and release time.

These findings support the literature review which revealed the diversity of definition, judgment, formula, policy, procedure, and politics that exist in the area of merit pay. Individual faculty members and department chairmen indicated their unique perceptions as to what the merit pay system is and should be at the University. There was no evidence that unanimity existed among the faculty and department chairmen concerning those factors. Critics of merit pay generally agreed with the philosophy of merit pay, but they did have concerns with its procedure for implementation; the faculty members and department chairmen expressed similar concerns.

In order for merit pay to accomplish its goals, the literature revealed it must be linked to performance with clearly defined goals and criteria, an evaluation system and a procedure for its implementation. Even though the researcher acknowledges the fact that these factors could have been parts of the merit pay system, the responses received from the department chairmen and faculty members did not indicate their presence. The faculty members appeared not to have been familiar with the procedure and factors which determined their salary increase. In spite of this, the faculty, as well as the department chairmen, preferred the merit pay system for salary adjustment over the other methods of granting faculty salary increases.

The findings of the study by Forest (1978) indicated three major problems that the interviewees cited as they discussed ways to improve their merit pay system. These problems were: (a) the limited amount of funding available for the specific purpose of merit makes it difficult to implement a merit system effectively, empirically and fairly; (b) merit criteria have only been stated orally (if stated), and it has not always been clear in the past how these criteria were used; (c) there was no systematic college-wide policy to deal with the topic of merit pay. Other than considering merit as it relates to total salary and time within the rank, the decision as to the adjustments has to be subjective.

Saupe (1979) recommended an establishment of a long-range salary and compensation policy that can guide the direction of annual salary adjustment procedures. Weinrich (1976) suggested a merit pay rating activity analysis that quantifies in a systematic way the activities of faculty members according to certain standards of performance. Lincoln and Guba (1980) stated that performance can be compared against absolute standards and in a relative sense with the performance of others as well as against one's own previous performance.

Even though the institution studied did not appear to have had long-range salary policy and procedure nor did it appear to have had a quantifiable evaluation system including standards of performance, the majority of the department chairmen indicated that salary adjustments were determined by ranking faculty members according to their performance. Several studies (Hoyt & Stewart, 1976; Keene, 1975; Liechti & Walker, 1972) expressed difficulty in evaluating the performance of

faculty members. This was also a concern of the department chairmen at the institution studied.

Gellerman (1963) and Carnegie and Associates (1978) believed that money can be a motivator in its own right or a vehicle of other motivators, whereas, Herzberg et al believed that money is not a motivator or satisfier. The majority of the faculty members did not believe their merit pay increase had an effect upon (motivated) their performance, but merit pay was their first choice of rewards. The merit pay system did not appear to be accomplishing its goals as it was not sufficient to reward past performances nor did it link performance to pay in order to motivate future performances.

GUIDELINES AND SUGGESTED PROCEDURES

After having researched the literature concerning the concept of merit pay and having surveyed department chairmen and faculty members at an institution of higher education which awarded salary increases on the bases of merit, the following generalizations were derived. These generalizations incorporate selected tenets of operant conditioning and the concept of merit pay into what might be thought of as a set of guidelines for a merit pay plan. Following the guidelines is a set of suggested procedures for an institution desirous of implementing or improving its merit pay system.

Guidelines

1. An institution proclaiming to have or desirous of having a salary adjustment system that is totally based upon merit should reward faculty according to the caliber of performance.

Merit pay based upon performance provides salary adjustments ranging from no increase to the highest amount of increase available. Those faculty members not receiving an increase are the ones who have not performed according to the goals and activities identified. Faculty members receiving an average salary increase are performing according to standards and expectations. Those faculty members receiving above average increases are performing at an above average level to outstanding level.

A merit pay salary adjustment system can provide a salary increase to all deserving faculty and, at the same time, communicate to the faculty member the value of his or her contributions. A person worthy of employment should be making a contribution to the institution and should merit a salary increase in proportion to his or her contributions to the mission of the institution. If no salary increase is received, this should indicate to the employees that they have serious problems and their performance needs to improve, whereas, receiving a large percent of increase says to the employees that they are making exemplary contributions to the organization. For the merit pay system to convey these types of implications, the system must be defined and communicated to produce faculty understanding and results.

2. There should be a well defined and developed merit pay plan communicated to all involved.

As the merit pay plan (a) defines the merit pay system, (b) identifies the institution's (college/schools, department, and/or faculty) long- and short-range goals, (c) selects strategies and policies for achieving those goals, (d) allocates resources; and (e) develops long- and short-range activities and procedures for achieving the goals, the

merit pay plan establishes the desired performances necessary to accomplish the mission of the institution. Within the plan is the link between where the institution is at the present and where the institution wants to go in the future. The basic University merit pay plan include the foundation for the development of annual salary increase plans for the college/schools, departments, and individual faculty members. It is the basic working reference for guiding performance in the future; faculty members can see how they are to proceed and where they should be after the execution of the plan.

After the merit pay plan has been developed, it must be communicated to all persons involved. The best plan possible may fail because of the lack of communication. An unknown plan can not be implemented.

3. Faculty members, in concert with the department chairmen, should develop individual plans of activities defining and quantifying to the extent feasible and possible, their annual goals, activities, and rewards.

Goals--the ultimate performances toward which faculty aim--identify and define expectations or name the end product. Once the desired outcome is identified, procedures are developed to accomplish these outputs. Goals and objectives establish performances that can be set at the beginning of the year, used during the year, and evaluated at the end of the year. Therefore, goals should be stated in operational terms so they can be observed, measured, and evaluated.

During the time the faculty members' annual plans of activities are prepared and agreed upon by the department chairmen and the individual faculty members concerned, target points for receiving rewards and the amount of the reward should be identified according to established goals, criteria, and performance levels.

4. There should be an evaluation system with well-defined, measurable standards agreed upon and understood by the faculty; performance levels (outstanding, average, and below average) should be quantifiable in order to provide salary increases accordingly.

To determine faculty current performance (operant level) and to know when the institution/faculty has accomplished its goal in this regard (future performance), an evaluation system has to be available to assess the faculty member's performance. The merit pay concept is based on the assumption that quantitative and qualitative differences in the performance exist between faculty members; therefore, an evaluation system to determine the difference must be implemented or developed for implementation. Being knowledgeable of the criteria utilized in the evaluation process, these criteria can be used as goals or targets for accomplishments.

Although the literature reveals that it is very difficult to develop clearly defined procedures to assess the quality of faculty performance effectively, a merit pay plan should not be attempted until such procedures are developed and agreed upon. If differences in levels of performance cannot be determined, a merit pay plan is not in existence. Recognition of superior performance or rewards according to performance is a legitimate element of higher education.

The faculty evaluation system should be a continuous process of monitoring and assessing faculty performance. This will ensure the desired or an approximation of the desired performances, and the faculty can be rewarded for performances accordingly.

5. Merit pay should be linked to performance.

In order for merit pay to accomplish its purposes--reward past performance and improve future performance--merit pay must be connected to performance. Faculty members must be informed of the types and sizes of rewards that will result (or have resulted) from specific performances. Knowing what performances are expected (are accomplished) and knowing the monetary reward for accomplishing the objective link merit pay to performance; therefore, merit pay can accomplish its goals. Faculty members will have the opportunity to perform at the level to earn a salary increase according to their individual desires and/or needs.

6. The reward should be deemed important to the recipient; it should represent the value placed on performance and should be large enough to be an incentive.

For a reward to act as an incentive, the reward must be considered pertinent to the faculty member. The reward should be large enough to make a difference so that the faculty member will be motivated to work harder. Individuals are motivated to accomplish according to their wants and needs.

7. Performances should be rewarded immediately, using positive reinforcement.

Rewarding performance immediately upon completion ensures that the desired performance will be reinforced instead of other performances between the time of the accomplishment and award. Behaviors reinforced immediately are more likely to continue for a longer period of time at a higher frequency. Since merit pay cannot be granted immediately after a performance, another form of reward should be given, emphasizing that

merit pay will be forthcoming in the annual salary adjustment. In this way, the pattern of reinforcement will be "variable ratio," even though the pattern of reinforcement for merit pay might be "fixed interval." Working with human beings (unlike lower animals) who have the capability to think and reason, administrators can emphasize immediately the value of the faculty's performance, informing them of the merit pay which will be received at a future date.

8. A procedure for merit pay allocation based on the faculty evaluation should be developed and communicated to the faculty.

As the percentage of salary increase available for merit pay differs each year, a basic model for an equitable dissemination of funds among recipients should be developed. An example of merit pay allocation is as follows:

Assume that \$60,000 has been appropriated for merit increases. After the evaluation/merit assessment process has been completed, the following information is available:

	Number Obtaining	
Score Range	Score	Weight
100 - 150	55	1
151 - 200	20	2
201 - 250	10	3
251 - 300	5	4

Let x represent the amount to be awarded each person in the group obtaining scores in the range 100 - 150. Then:

$$55x + 20(2x) + 10(3x) + 5(4x) = \$60,000$$

$$x = \$413.80$$

Merit pay amounts according to each score range would be as follows:

<u>Score Range</u>	<u>Amount of Merit Increase</u>
100 - 150	\$ 413.80
151 - 200	827.60
201 - 250	1,241.40
251 - 300	1,655.20

9. The merit pay decision, along with its justification, should be communicated in writing to each faculty member.

Communication is an important step in understanding the salary adjustment system. In addition to linking merit pay to performance, the written documentation can serve as a future reference of accomplishments and deficiencies. Recommendations for improvement, if necessary, should be made at this time.

The end product, merit pay, finalizes the entire process of defining goals, performing identified activities, and evaluating performances. It is the factor which communicates to the faculty members their success or failure for the academic year.

Suggested Procedures

To make the general guidelines proposed in the previous section operational at an institution similar to the one studied, an illustration of activities for an academic year follows:

1. Vice-president for academic affairs, deans, department chairmen, and/or faculty are to identify, define, and quantify desired goals and

activities in the three areas of teaching, research, and service as they relate to the mission of the institution and the goals of the college/school and department. Elements in Table 14 illustrate examples from a model of these kinds of goals and activities. Goals and activities are to be stated in behavioral terms so they can be observed, measured, and evaluated. For an example--to increase the rating on the student evaluation from 3.9 to 4.0 within this school year. Once the goals and activities are defined in operational terms, they serve as guidelines and provide direction for faculty action and evaluation.

Target points for receiving rewards are to be identified and defined. Points are to be assigned to criteria or goals, and/or performance levels are to be identified and quantified to reflect their relevance and importance.

2. Faculty members and department chairmen are to prepare in concert an annual individualized plan of goals and activities for faculty at the beginning of the school year using the goals and activities model as a guide.

3. A minimum of two conferences between the department chairmen and faculty members are to be held during the school year so that the faculty's goals and activities can be monitored, adjusted, and/or rewarded. Department chairmen should be available for assistance (conference) at all times.

4. A system that rewards faculty members for "outstanding accomplishments" (the level and character of which have been described a priori) is to be structured by the deans and department chairmen by:

- a. Establishing a special "fund for excellence" from contributions made by alumni, friends, and/or concerned persons to reward

Table 14
 SAMPLE MODEL OF ANNUAL GOALS AND ACTIVITIES
 WITH QUANTIFIABLE INDICATORS

Criteria	Performance Qualitative Indicator	Minimum Standard Quantitative	Maximum Points
<u>TEACHING</u>			
Teaching performance	Documentation of performance of duties applicable to teaching	Student evaluation--3.8 on a 5-point scale	20
Consistent high student achievement	Instruction significant to promote student performance in educational career advancement Documentation demonstrating improved student achievement	Three or more students receiving awards, graduate fellowships, over a period of 5 years	15
:	:	:	:
:	:	:	:
:	:	:	:
Continue this process to a "Total Points"			100
<u>RESEARCH, PUBLICATION, AND CREATIVE WORKS</u>			
Papers presented at local, regional, national and professional meetings, workshops and/or seminars	Documentation of a paper(s) presented at local, regional, national professional meetings, workshops, and/or seminars	At least one presentation a) National 5 b) Regional 3 c) Local 2	10
Other research/performance	Documentation of performance or creation recognized at the regional, state, or national level	At least one research/performance a) National 12 b) Regional 10 c) State 8	30
:	:	:	:
:	:	:	:
:	:	:	:
Continue this process to a "Total Points"			100
<u>PROFESSIONAL, UNIVERSITY, AND COMMUNITY SERVICES</u>			
Special projects or administration	Documentation of special projects or administration	Rating on faculty evaluation--3.8 on a 5-point scale	20
Professional awards and honors received	Any professional award and/or honors received	At least one award and/or honor	10
:	:	:	:
:	:	:	:
:	:	:	:
Continue this process to a "Total Points"			100

outstanding performance at strategic points in times: and

b. Identifying other rewards that can be disbursed to faculty members immediately upon the accomplishment of a goal, subgoal, or outstanding performance.

5. Data are to be collected from appropriate sources for each criterion or activity for submission to the department chairmen, dean, and/or vice-president for academic affairs during the evaluation process.

6. A summary or critique of faculty members' yearly performance or accomplishments is to be prepared by the faculty members and forwarded to the department chairmen and other appropriate administrators.

7. Department chairmen are to evaluate the faculty members according to the agreed upon annual plan of goals and activities and the self evaluation including the supporting documentation.

8. Merit pay is to be determined by the department chairmen contingent upon the approval of the dean and vice-president for academic affairs. The procedure is to be developed and communicated to all involved.

9. Merit is to be recognized immediately upon the completion of an "outstanding performance" or subgoal and pay awarded during the annual review process.

10. Merit pay recommendations with justification are to be communicated to each faculty member in writing. Deficiencies along with recommendations for improvement are to be described.

RECOMMENDATIONS

Based on the results of this study, the following recommendations are made to administrators at the institution which was studied:

1. That the merit pay policy and purposes be defined and procedures for implementation be developed and communicated in writing to all who are involved;

2. That the merit pay decision be based on the evaluation system, and that the decision/criteria upon which merit pay was based and recommended be communicated to faculty members.

3. That the University consider utilizing other rewards to supplement merit pay since the Commonwealth of Virginia appropriations for salaries are allocated once a year and they are not sufficient to keep up with the increases in the cost of living.

In a more general sense, the following studies should be conducted to determine:

1. Why are people satisfied with merit pay when they do not understand it?

2. Which is more important to faculty, the dollar amount of the salary increase or the percent of the salary increase in relationship to peers and colleagues?

3. Do the suggested guidelines for implementing/improving a merit pay system and the suggested procedure for the implementation of merit pay have efficacy?

4. Are the selected tenets utilized in this study of equal importance to merit pay systems?

BIBLIOGRAPHY

BIBLIOGRAPHY

- Adam, E. E., Jr. Behavior modification in quality control. Academy of Management Journal, 1975, 18(4), 662-679.
- Aldis, O. Of pigeons and men. Harvard Business Review, 1961, 39, 59-63.
- Ayllon, T., & Azrin, N. H. The measurement and reinforcement of behavior of psychotics. Journal of the Experimental Analysis of Behavior, 1965, 8, 357-383.
- Belcher, D. W. Pay and performance. Compensation Review, 1980, 12(2), 14-20.
- Belcher, D. W. Wage and salary administration (2nd ed.). Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1962.
- Bittel, L. R. Business in action. New York: Gregg Division McGraw-Hill Book Co., 1980.
- Bouchard, R. A. Personnel practices for small colleges. Washington, D. C.: The College and University Personnel Association, 1980.
- Braskamp, L. A., Muffo, J. A., & Langston, I. W., III. Determining salary equity--policy, procedures, and problems. Journal of Higher Education, 1977, 48, 231-245.
- Breslin, R. D., & Klagholz, L. F. Paying faculty members what they are worth. Educational Record, 1980, 61, 43-44.
- Brown, W. S. Merit pay in the university environment. The Journal of the College and University Personnel Association, 1982, 3(1), 27-31.
- Carnegie, D., & Associates. Managing through people. New York: Simon and Schuster, 1978.
- Chandler, A. B. Decreasing negative comments and increasing performance of a shift supervisor. Journal of Organizational Behavior Management, 1977, 1, 99-103.
- Clewis, J. E. People management in the 80's. The Journal of the College and University Personnel Association, 1981, 32(4), 14-21.
- Connellan, T. K. How to improve human performance: Behaviorism in business and industry. New York: Harper & Row, 1978.

- Conte, A. E., & Mason, E. R. Merit pay: Problems and alternatives, perspectives. Trenton, N. J.: New Jersey State Department of Education. April 1972. (ERIC Document Reproduction Service No. ED 064 791)
- Dale, E. Management: Theory and practice (3rd ed.). New York: McGraw-Hill Book Co., 1973.
- Davis, K. Human behavior at work--organizational behavior (6th ed.). New York: McGraw-Hill Book Co., 1981.
- DeLorme, D. C., Jr., Hill, R. C., & Wood, N. J. Analysis of a quantitative method of determining faculty salaries. Journal of Economic Education, 1979, 7(1), 20-25.
- Dick, H. W. Increasing the productivity of the day relief textile machine operator. Journal of Organizational Behavior Management, 1978, 2, 45-57.
- Dressel, P. L. Handbook of academic evaluation. San Francisco, CA: Jossey-Bass Publisher, 1976.
- Drucker, P. F. Management: Tasks, responsibilities, practices. New York: Harper & Row Publishers, 1973.
- DuBrin, A. J. The practice of managerial psychology. New York: Pergamon Press, Inc., 1972.
- Dunnette, M. D., Campbell, J. P., & Hakel, M. D. Factors contributing to job satisfaction in six occupational groups. Organizational Behavior and Human Performance, 1967, 2, 143-147.
- Evans, J. E. Issues of merit pay in higher education: A selective bibliography. 1980. Washington, D. C.: Department of HEW. (ERIC Document Reproduction Service No. ED 185 943)
- Faculty salary schedules in colleges and universities 1971-72. Washington, D. C.: NEA., 1972, 30-35. (ERIC Document Reproduction Service No. ED 072 726)
- Farmer, C. R. Merit pay: Viable? Personnel, 1978, 57, 57-63.
- Fenske, R. H. Conflicting pressures in postsecondary education. Sixteenth Annual Forum in Los Angeles. Tallahassee, Fla: Florida State University, 1977. (ERIC Document Reproduction Service No. ED 145 745)
- Ferster, C. B., & Skinner, B. F. Schedules of reinforcement. New York: Appleton-Century-Crofts, 1957.

- Fincher, C. (Ed.). Linking faculty evaluation and faculty rewards in the university. Issues in Higher Education, April 1980, 1-6.
- Forest, R. F. A plan for the development of policies governing administrative merit for faculty at Castleton State College. (Practicum, NOVA University, 1978). (ERIC Document Reproduction Service No. ED 183 123)
- Frederiksen, L. W., & Johnson, R. P. Organizational behavior management, to appear in Hersen, M., Eisler, R., and Miller, P. (Eds.). Progress in Behavior Modification. New York: Academic Press, 1980.
- Gellerman, S. W. Motivation and productivity. New York: American Management Association, Inc., 1963.
- Gibson, R. C. Paying for pedagogical power. Phi Delta Kappan, 1961, 42, 148-151.
- Goldberg, M. H. Another look at merit pay programs. Compensation Review, 1977, 9, 52-60.
- Gupton, T., & LeBow, M. D. Behavior management in a large industrial firm. Behavior Therapy, 1971, 2, 78-82.
- Hamblin, R. L., Bushell, O. B., Buckholdt, D., Ellis, D., Ferriter, D., Merritt, G., Pfeiffer, C., Shea, D., & Stoddard, D. Learning problem children and a social exchange system. Annual Report of the Social Exchange Laboratories, Washington University, and Study Behavior Laboratory, Webster College, St. Louis, Mo., August 1967.
- Hampton, D. R. Contemporary management. New York: McGraw-Hill, Co., 1977.
- Hampton, D. R., Summer, C., & Webber, R. A. Organizational behavior and the practice of management. Glenview, Illinois: Scott Foresman and Co., 1968.
- Hansen, W. L. Academic compensation: Myths and realities. Presentation of the Fourth Annual Academic Planning Conference, 1979. New York: Academic Press. (ERIC Document Reproduction Service No. ED 181 822)
- Herzberg, F. Work and the nature of man. New Jersey: The American Library, Inc., 1966.
- Herzberg, F., Mausner, B., & Snyderman, B. B. The motivation to work (2nd ed.). New York: John Wiley & Sons, Inc., 1959.
- Hill, F. S. The pay-for-performance dilemma. Personnel, 1979, 58, 23-31.
- Hooker, C. A behavior modification model for Merit U. Phi Delta Kappan, 1978, 59(7), 481.

- Hoy, W. K., & Miskel, C. G. Educational administration: Theory, research, and practices. New York: Random House, 1978.
- Hoyt, D. P. & Stewart, M. O. Faculty rewards, faculty accomplishments, and sex discrimination. Paper presented at the annual forum of the Association for Institutional Research. May 1976. (ERIC Document Reproduction Service No. ED 131 753)
- Hugh-Jones, E. M. (Ed.). Wage-structure in theory and practice. Amsterdam: North-Holland Publishing Co., 1966.
- Improving faculty evaluation: A trial in strategy. A report of SREB Faculty by Evaluation Project, 1979. Atlanta, Georgia: Southern Regional Education Board, 1979.
- Jabker, E. H., & Halinski, R. S. Instructional development and faculty reward. The Journal of Higher Education, July-August 1978, 49, 316-328. (ERIC Document Reproduction Service No. ED 142 139)
- Jablonsky, S. F., & DeVries, D. L. Operant conditioning principles extrapolated to the theory of management. Organizational Behavior and Human Performance, 1972, 7, 340-358.
- Johnson, J. J. Merit pay for college faculty. Compensation Review, 1978, 10, 62-72.
- Johnston, J. J. Duncan, P. K., Monroe, C., Stephenson, H., & Stoerzinger, A. Tactics and benefits of behavioral measurement in business. Journal of Organizational Behavior Management, 1987, 1, 164-178.
- Katz, I. A teacher sounds off--why I oppose selective merit pay. Phi Delta Kappan, 1961, 42, 137-138.
- Katzell, R. A., & Yankelovic, D. Pay vs work motivation and job satisfaction. Compensation Review, 1976, 8, 54-66.
- Keen, J. A. Characteristics of merit rating based salary plans at a number of small private American colleges. Sparkill, N. Y.: St Thomas Aquinas College, 1978. (ERIC Document Reproduction Service No. ED 153 554)
- Keene, T. W. Faculty salary increases and evaluation of selected performance variables. Florida: University of South Florida, 1975, (ERIC Document Reproduction Service No. ED 119 546)
- Kempen, R. W., & Hall, R. V. Reduction in industrial absenteeism: Results of a behavioral approach. Journal of Organizational Management, 1977, 1, 1-21.

- Komaki, J., Waddell, W. M., & Pearce, M. G. The applied behavior analysis approach and individual employees: Improving performance in two small businesses. Organizational Behavior and Human Performance, 1977, 19, 337-353.
- Lamal, P. A., & Benfield, A. The effect of self-monitoring on job tardiness and percentage of time spent working. Journal of Organizational Behavior Management, 1978, 1, 142-149.
- Landy, F. J., & Trumbo, D. A. Psychology of work behavior. Illinois: The Dorsey Press, 1980.
- Lawler, E. E., III. Effective pay programs--an interview with Edward E. Lawler, III. Compensation Review, 1976, 8, 14-27.
- Lawler, E. E., III. Motivation in work organization. Monterey, California: Brooks Cole Publishing Co., 1973.
- Liechti, C. D., & Walker, R. E. 1971-72 survey of merit pay plans in public school systems, March 1972, 5-7. (ERIC Document Reproduction Service No. ED 070 197)
- Lincoln, Y. S., & Guba, E. G. The distinction between merit and worth in evaluation. Educational Evaluation and Policy Analysis. 1980, 2(4), 61-70.
- Lock, E. (Ed.). Guide to management techniques. New York: John Wiley & Sons, 1970.
- Locke, E. A. The myths of behavior mod in organization. Academy of Management Review, 1977, 12, 543-553.
- Luthans, F., & Kreitner, R. Organizational behavior modification. Glenview, Il.: Scott, Foresman, 1975.
- Luthans, F., & Lyman, D. Training supervisors to use organizational behavior modification. Organizational Behavior Modification. September-October 1973, 41, 38-44.
- Luthans, F., & Ottemann, R. Motivation vs. learning approaches to organizational behavior. Business Horizons, December 1973, 55-62.
- Luthans, F., Schweizer, J. OBMod. in a small factory: How behavior modification techniques can improve total organizational performance. Management Review, September 1979, 43-50.
- Luthans, F., & White, D. Behavior modification: Application to manpower management. Personnel Administration, 1971, 34(4), 41-47.
- Massie, J. L., & Douglas, J. Managing--A contemporary introduction (3rd. ed.). Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1981.

- McAdam, J. Behavior modification: A human resource management technology. Management Review, October 1975, 24-30.
- Megel, C. J. Merit rating is unsound--the AFL-CIO position. Phi Delta Kappan, January 1961, 42, 154-156.
- Milbourn, G., Jr. The relationship of money and motivation. Compensation Review, 1980, 12(2), 33-44.
- Milkovich, G. T, Richardson, R., & Weiner, N. A systematic approach to university faculty compensation. Compensation Review, 1980, 12(2), 61-65.
- Miller, J. R., & Young, J. I. Merit-pay: An unexamined concept in higher education. CUPA Journal, 1979, 30, 7-14.
- Miller, L. M. Improving sales and forecast accuracy in a nationwide sales organization. Journal of Organizational Behavior Management, 1977, 1, 39-51.
- Miller, L. M. Behavior management: The new science of managing people at work. New York: John Wiley & Sons, 1978.
- Miller, R. I. Developing programs for faculty evaluation. Washington: Jossey-Bass Publishers, 1974.
- Mitchell, J. B. Merit rating: Past, present, and perhaps. Phi Delta Kappan. January 1961, 42, 139-142.
- Monczka, R. M., Foster, L. W., Reif, W. E., & Newstrom, J. W. Pay satisfaction: Money is not the only answer. Compensation Review, 1977, 11, 21-26.
- Neisworth, J. T., & Smith, R. M. Modifying retarded behavior. New Jersey: Houghton Mifflin Co., 1973.
- New Tool: "Reinforcement" for good work. Business Week. December 18, 1971, 76-77.
- Nord, W. R. Beyond the teaching machine: The neglected area of operant conditioning in the theory and practice of management. Organizational Behavior and Human Performance, 1969, 4, 375-401.
- Nord, W. R. Improving attendance through rewards. Personnel Administration, 1970, 33(6), 37-41.
- Opsahl, R. L., & Dunnette, M. D. The role of financial compensation in industrial motivation. Psychology Bulletin, 1966, 66, 94-118.
- Pedalino, E., & Gamboa, V. U. Behavior modification and absenteeism: Intervention in one industrial setting. Journal of Applied Psychology, 1974, 59, 694-698.

- Pfeffer, A., & Taylor, P. Teacher evaluation--a pluralist approach. Teaching Political Science, 1978, 5(3), 283-294.
- Porter, L. W. Turning work into nonwork: The rewarding environment. In M. D. Dunnette (Ed.). Work and Non-work in the Year 2000. Monterey, Ca.: 1973, 113-133.
- Porter, L. W., & Lawler, E. E. Managerial attitudes and performance. Homewood, IL: Irwin-Dorsey Press, 1968.
- Premack, D. Predictions of the comparative reinforcement values of running and drinking. Science, 1963, 139, 1062-1063.
- Redfern, G. B. Appraising managerial performance for salary purposes. Speech at the American Association of School Administrators 106th Annual Convention, 1974. (ERIC Document Reproduction Service No. ED 087 123)
- Reynolds, G. S. A primer of operant conditioning (Rev. ed.). Oakland, N. J.: Scott, Foresman and Company, 1975.
- Rhodes, E. Merit pay--where we stand. Evaluation and Merit Pay Clinics. Albany, New York: New York State Board Association, 1972. (ERIC Document Reproduction Service No. ED 089 419)
- Robb, C. S. Remarks at an Agency Head Conference. Richmond, Va., March 31, 1983.
- Rotondi, T., Jr. Behavior modification on the job. Supervisory Management. February 1976, 22-28.
- Runnion, A., Johnson, T., & McWhorter, J. The effects of feedback and reinforcement on truck turnaround time in materials transportation. Journal of Organizational Behavior Management, 1978, 1, 110-117.
- Saad, L., & Barling, J. I. Relating pay incentives to work performance: Effects of fixed ratio (group and individual contingent) versus fixed interval reinforcement in industry. Psychologia Africana, 1977, 17, 135-142.
- Saupe, J. L. The politics of faculty salaries. Paper presented at the conference of the University of Southern California Office of Institutional Studies on Ethical and Economic Issues in Academic Salaries and Supplemental Income, 1979. (ERIC Document Reproduction Service No. ED 152 163)
- Schneier, C. E. Behavior modification in management: A review and critique. Academy of Management Journal, 1974, 17(3), 528-548.
- Schowengerdt, R. N. How reliable are merit rating techniques? Personnel Journal, 1975, 54(7), 390-392.

- Seastone, D. A. Toward an optimal university salary system. Alberta: The University of Calgary, Sept. 1971. (ERIC Document Reproduction Service No. ED 072 728)
- Skinner, B. F. The Science of learning and the art of teaching. Harvard Educational Review, 1954, 24, 86-97.
- Strauss, G., & Saylers, L. R. Personnel--The human problems of management (3rd ed.). New Jersey: Prentice-Hall, Inc., 1972.
- VanFleet, D. D. Salary administration in higher education: A tentative plan. AAUP Bulletin, Winter 1972, 58, 413-418.
- vonKaas, H. K. Making wage incentives work. New York: American Management Association, Inc., 1971.
- Wallin, J. A., & Johnson, R. D. A positive reinforcement approach to controlling employee absenteeism. Personnel Journal, 1976, 55(8), 390-392.
- Weinrich, J. E. Appraising faculty performance for merit increases. Improving College and University Teaching, Autumn 1976, 247-248. (ERIC Document Reproduction Service No. EJ 153 856)
- Weissman, R. Merit pay--what merit? Educational Digest, 1969, 34, 16-19.
- Whyte, W. F. Money and motivation. New York: Harper & Row Publishers, 1955.
- Wolf, M. M., Risley, T., & Mees, H. Application of operant conditioning procedures to the behavior problems of an autistic child. Control of Human Behavior, Glenview, Ill.: Scott, Foresman, 1966.
- Yukl, G. A., & Latham, G. P. Consequences of reinforcement schedules and incentive magnitude in employee performance: Problems encountered in a trial setting. Journal of Applied Psychology, 1975, 60, 294-298.
- Yukl, G. A., Wexley, K. N., & Seymore, J. D. Effectiveness of pay incentives under variable ratio and continuous reinforcement schedules. Journal of Applied Psychology, 1972, 56, 19-23.

APPENDICES

APPENDIX A
SIX TENETS AS PERCEIVED BY DEPARTMENT CHAIRMEN
AND INDIVIDUAL FACULTY MEMBERS
IN THE NINE DEPARTMENTS

Table 15
SIX TENETS AS PERCEIVED BY
DEPARTMENT CHAIRMEN AND INDIVIDUAL FACULTY MEMBERS IN THE NINE DEPARTMENTS

ITEM	Department Chairmen		FACULTY WITHIN NINE DEPARTMENTS									Summary	
	#	%	1	2	3	4	5	6	7	8	9	#	%
TENET NO. 1: SPECIFICATION OF GOALS													
1. Goals													
a. Defined for													
Teaching	7	78	2	4	5	6	4	6	1	6	0	34	63
Research	7	78	2	5	6	6	4	6	1	6	0	36	67
Service	7	78	2	5	6	6	4	6	1	6	0	36	67
b. Agreed upon													
In writing	6	66	3	1	5	5	6	6	0	6	0	32	59
c. In writing													
Quantifiable	2	22	2	0	6	3	4	5	0	3	0	23	43
d. Quantifiable													
Quantifiable	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Performance levels													
a. Identified													
Identified	0	0	0	0	0	0	0	0	0	0	0	0	0
b. Quantifiable													
Quantifiable	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Goals evaluated in													
a. Teaching													
Teaching	9	100	6	6	6	6	6	6	6	6	6	54	100
b. Research													
Research	9	100	6	6	6	6	6	6	6	4	6	52	96
c. Service													
Service	9	100	6	6	6	6	6	6	6	6	6	54	100
4. Goals, performance, & evaluation linked to merit pay													
Goals, performance, & evaluation linked to merit pay	0	0	0	0	0	0	0	0	0	0	0	0	0
5. Goals similar for all faculty													
Goals similar for all faculty	8	89	2	1	3	3	4	2	2	3	5	25	46
6. Conference before (evaluation) & after (salary) salary determination													
a. Yes													
Yes	2	22	3	4	0	0	0	1	0	0	1	9	17
b. Prior													
Prior	5	56	0	0	3	1	3	5	3	0	0	15	28
c. After													
After	1	11	0	0	1	1	1	0	0	0	0	3	6
7. How well expectations are understood on a scale of 1 to 5 with 1 = poor, 2 = below average, 3 = average, 4 = above average, & 5 = excellent													
a. Teaching													
Teaching	3.78		3.6	3.8	4	2.8	4.5	4	4.3	4	3.5	3.83	
b. Research													
Research	4		3.5	4	4.5	4.5	4	4.6	4.3	4.3	3.6	4.14	
c. Service													
Service	3.78		3.6	4	4.5	4.5	4.1	4.3	4.3	4	3.3	4.07	

Table 15 Continued

ITEM	Department Chairmen		FACULTY WITHIN NINE DEPARTMENTS									Summary	
	#	%	1	2	3	4	5	6	7	8	9	#	%
TENET NO. 2: ESTABLISHMENT OF OPERANT LEVEL													
8. Evaluation conducted for													
a. Teaching	9	100	6	6	6	6	6	6	6	6	6	54	100
b. Research	9	100	6	6	6	6	6	6	6	4	6	52	96
c. Service	9	100	6	6	6	6	6	6	6	6	6	54	100
9. Accuracy of evaluation system on a scale of 1-5													
a. Teaching	4		3	2.6	3.8	2.6	4.1	3.6	3.1	3.5	3	3.26	
b. Research	4		3.1	2.6	3.5	2.5	4.1	3.6	3.1	4.5	3.6	3.4	
c. Service	4		3.1	2.6	3.5	2.5	4.1	3.6	3.1	3.3	3.1	3.21	
TENET NO. 3: APPROPRIATENESS OF CONSEQUENCES													
10. Salary adjustments = performance level & objective													
a. Yes	9	100	2	0	4	2	0	2	0	4	3	17	31
b. Somewhat			1	0	0	1	0	0	2	1	0	5	9
11. How well merit pay accomplished its purpose on a scale of 1 - 5	3.56		2.5	2.5	2.9	3	2.7	3.1	3	3	4	2.97	
12. How well merit pay reflected performance on a scale of 1 - 5	4.78		2.3	1.8	3.4	3.6	2.7	3.5	3.8	3.3	4	3.16	
13. How fairly was merit pay administered on a scale of 1 - 5	5		2	3	4	3.6	3.5	4	3.5	4	4	3.52	
14. Preferred another pay system	1	11	0	1	0	0	2	1	1	0	2	7	13
15. Effects of merit pay on performance													
a. It affects	3	33	2	0	3	2	0	3	1	2	1	14	26
b. No affect	3	33	1	5	0	3	4	1	2	3	3	22	31
c. Limited amount	1	22	3	0	3	1	1	2	2	0	2	11	26
d. Did not know	2	22	0	1	0	0	1	0	1	1	0	4	7
TENET NO. 4: REWARDING OF SUCCESSIVE APPROXIMATION													
16. Subgoals defined	0	0	0	0	0	0	0	0	0	0	0	0	0
17. Subgoals rewarded	0	0	0	0	0	0	0	0	0	0	0	0	0
TENET NO. 5: IMMEDIACY OF REINFORCEMENT													
18. Immediate salary adjustment after performance	0	0	0	0	0	0	0	0	0	0	0	0	0
19. Immediate rewards in other ways	2	22	0	0	0	0	0	0	0	0	1	1	2

Table 15 Continued

ITEM	Department Chairmen		FACULTY WITHIN NINE DEPARTMENTS									Summary		
	#	%	1	2	3	4	5	6	7	8	9	#	%	
TENET NO. 6: PATTERNS OF REINFORCEMENT														
20. Frequency of merit pay rewards														
Annually	9	100	6	6	6	6	6	6	6	6	6	54	100	

APPENDIX B
STRUCTURED INTERVIEWS:
Department Chairmen
Faculty

STRUCTURED INTERVIEW

DEPARTMENT CHAIRMEN

Date: _____

College or School: _____

Department: _____

Respondent: _____

Mr. Jones, I am investigating the concept of merit pay as it is being implemented here at your University. Since salary adjustments in your department are based on merit, I appreciate your taking time to describe your approach to merit pay.

General Questions

1. How do you define merit pay? What is it?

___ a. Respondent's definition:

___ b. Pay according to the caliber of performance

___ c. Pay for outstanding performance which exceeds the "normal" workload

2. What do you believe to be the most important purpose of merit pay at this University?

___ a. Respondent's purpose:

___ b. Reward for past outstanding performance in (1) teaching, ___

(2) research, ___ (3) services, ___ or (4) all of the above ___.

___ c. As an incentive to encourage better performance

3. Was the amount of all salary increases based on meritorious performance last year? YES NO

If "NO": What other considerations were used, and what were their approximate percentage relationships?

___ a. Cost-of-living ___ c. Promotion ___ e. Other
 ___ b. Across-the-board ___ d. Past inequity

4. Is there a written institutional merit pay policy? YES NO

If "YES": a. What are its main elements?

b. How is the policy communicated to the faculty?

c. Do you have a copy of the policy? YES NO

If "YES": May I have a copy? Received ___

If "NO": How are you and the faculty informed of the institution's concept of merit pay?

5. Are there written procedures for allocating merit pay in your department? YES NO

If "YES": a. Tell me the procedures that are used.

b. How are these procedures communicated to the faculty?

c. Do you have a copy of the procedures? YES NO

If "YES": May I have a copy? Received ___

If "NO": How is merit pay determined in the department?

6. How and by whom is the amount of merit pay determined at the

a. University level?

b. College or School level?

c. Department level?

7. Is merit restricted to the preceding 12 months' performance or is merit based on a longer period of time?

Tenet No. 1: Specification of Goals

8. Are the goals for teaching___, research___, and service___ defined?

If "YES": a. How is this done?

b. Is an annual plan of activities prepared for each faculty?

c. Do you and the faculty member reach an agreement with the goals, objectives, and activities?

d. Are the goals quantifiable (defined in behavioral terms) with reinforcement targets? For example: With a student rating of 3.5, you will receive \$500.

e. Is the activity plan in writing?

If "YES": May I have an example of one? Received___

If "NO": a. How is a faculty member informed of the expected performance in teaching, research, and service?

b. Are objectives and activities subsequently defined?

9. Can you provide illustrations of performance levels (outstanding, satisfactory, and unsatisfactory) and the approach you use in defining and quantifying these levels of performance? YES NO

If "YES": a. How are the performance levels defined and quantified?

Outstanding:

Satisfactory:

Unsatisfactory:

b. How are they evaluated?

c. Are there specific types or amounts of rewards according to each level of performance? If "YES": Explain

If "NO": How do you determine the magnitude of the salary increase?

10. How do you evaluate

Teaching?

Research?

Service?

a. What factors are considered?

b. How frequently?

c. By whom?

d. What part does the annual plan play in evaluating performance?

e. Is the evaluation formal or informal?

If formal and in writing, may I have a copy of the procedure?

11. To what extent does the evaluation determine the magnitude of salary increase?

a. What process is used in the final deliberations?

b. How is the amount of merit pay determined? By:

% _____ or \$ Amount _____

c. What role does racial or sexual equity play in these determinations?

12. How are performance data gathered and maintained?

13. Prior to or after salary adjustments are made, do you conduct a conference with each faculty member to discuss his or her evaluation?

If "YES": a. What takes place during those meetings? (i.e., what do you expect to accomplish?)

b. During your conversations, do you compare the performances of other faculty members and establish the relative level of performance and salary with his or her peers? YES NO

If "NO": a. When and how do you inform each faculty member about his or her salary increase?

b. Are salary data available to faculty members? YES NO

If "YES": Who makes it available?

14. Are goals in teaching, research, and service similar for all faculty members at the various ranks? YES NO

If "NO": How do they differ and for whom?

15. On a scale of 1 to 5: 1 = poor, 2 = below average, 3 = average, 4 = above average, and 5 = excellent, how well do you think each faculty member understands what is expected of him or her in teaching___, research___, and service___?

Tenet No. 2: Establishment of Operant Level

16. Using the scale of 1 to 5, how accurate is the evaluation system in determining performance in teaching___, research___, and service___?

Tenet No. 3: Appropriateness of Consequences

17. In addition to merit salary adjustments, are other rewards provided to faculty who excell? YES NO

If "YES": a. What are they?

b. How would you rank these rewards according to your preference including merit pay?

c. Does a faculty member have an opportunity to choose among the various rewards? YES NO

If "NO": Is it possible to manipulate rewards other than merit pay as a department head? YES NO

If "YES": How is this done?

18. Is the level of salary adjustment tied directly to performance levels and objectives? (i.e., low performance = low adjustment; high performance = high adjustment? If it is, how is it done?

19. How does the amount of salary adjustment affect faculty performance?
For example: large adjustment = higher performance, low adjustment = lower performance, or no change in performance.
20. Using the scale of 1 to 5:
- ___ a. How well did the merit adjustments last year accomplish the purpose of merit pay stated at the beginning of the interview?
 - ___ b. How well did merit adjustments reflect performance?
 - ___ c. How fairly was merit pay administered?
21. Would you prefer having another method of determining salary adjustments? YES NO
- If "YES": What method would you suggest? Explain

Tenet No. 4: Rewarding of Successive Approximation

22. Are short-term accomplishments or subgoals defined for faculty members? YES NO
- If "YES":
- a. Are they rewarded for accomplishing subgoals?
 - b. How are they rewarded?
 - c. What is the procedure for reporting the accomplishment of subgoals?

Tenets No. 5 and 6: Immediacy of Reinforcement and Patterns of Reinforcement

23. Once faculty members excell, is an immediate adjustment in pay provided?
YES NO

If "YES": How is it done?

If "NO": a. Can it be done?

b. How or why not?

c. Are faculty whose performance excels rewarded immediately in other ways? YES NO

If "YES": (1) How and by whom?

(2) Give examples of past practices

(3) Do faculty know about this?

(4) Are promises made for the future or is a guarantee given on the spot?

Recommendations

24. What recommendations do you have for the merit pay system here at the University?

STRUCTURED INTERVIEW

FACULTY

Date: _____

College or School: _____

Department: _____

Respondent: _____

Mrs. Jones, I am investigating the concept of merit pay as it is being implemented here at your University. Since salary adjustments in your department are based on merit, I appreciate your taking time to describe your concept of merit pay.

General Questions

1. How do you define merit pay? What is it?

___ a. Respondent's definition:

___ b. Pay according to the caliber of performance

___ c. Pay for outstanding performance which exceeds the "Normal" workload

2. What do you believe to be the most important purpose of merit pay at this University?

___ a. Respondent's purpose:

___ b. Reward for past outstanding performance in (1) teaching___,
(2) research___, (3) service___, or (4) all of the above___.

___ c. As an incentive to encourage better performance

3. Did you receive a salary increase last year? YES NO

If "YES": What was the amount? _____ and the percentage? _____

4. Was the amount of your salary increase based on meritorious performance last year? YES NO

If "NO": What other considerations were included, and what were their approximate percentage relationships?

____ a. Cost-of-living ____ c. Promotion ____ e. Other
 ____ b. Across-the-board ____ d. Past inequity

5. What is your current salary? _____

Is this a 9 - 10 month salary? YES NO

6. What is your academic rank? _____

7. What is your age? _____

8. Do you have a terminal degree? _____

9. How long have you been employed at the University? _____

10. Are you tenured? YES NO (M F B W O)

11. Is there a written institutional merit pay policy? YES NO

If "YES": a. What are its main elements?

b. How is the policy communicated to the faculty?

c. Do you have a copy of the policy? YES NO

If "YES": May I have a copy? Received _____

If "NO": How are you and the faculty informed of the institution's concept of merit pay?

12. Are there written procedures for allocating merit pay in your department? YES NO

If "YES": a. Tell me the procedures that are used.

b. How are these procedures communicated to the faculty?

c. Do you have a copy of the procedures? YES NO

If "YES": May I have a copy? Received _____

If "NO": How is merit pay determined in the department?

13. How and by whom is the amount of merit pay determined at the

a. University level?

b. College or School level?

c. Department level?

14. Is merit restricted to the preceding 12 months' performance or is merit based on a longer period of time?

Tenet No. 1: Specification of Goals

15. Are the goals for teaching___, research___, and service___ defined?

If "YES": a. How is this done?

b. Is an annual plan of activities prepared by you? YES NO

c. Do you and the chairman reach an agreement concerning the goals, objectives, and activities? YES NO

d. Are the goals quantifiable (defined in behavioral terms) with reinforcement targets? For example: With a student rating of 3.5, you will receive \$500.

e. Is the activity plan in writing? YES NO

If "YES": May I have an example of one? Received___

If "NO": a. How are you informed of the expected performance in teaching, research, and service?

b. Are objectives and activities subsequently defined?

16. Can you provide illustrations of performance levels (outstanding, satisfactory, and unsatisfactory) and the approach used in defining and quantifying these levels of performance? YES NO

If "YES": a. How are the performance levels defined and quantified?

Outstanding:

Satisfactory:

Unsatisfactory:

b. How are they evaluated?

c. Are there specific types or amounts of rewards according to each level of performance? If "YES": Explain

If "NO": How is the magnitude of the salary increase determined?

17. How are you evaluated for
Teaching?

Research?

Service?

a. What factors are considered?

b. How frequently?

c. By whom?

d. What part does the annual plan play in evaluating performance?

e. Is the evaluation formal or informal?

If formal and in writing, may I have a copy of the procedure?

18. To what extent does the evaluation determine the magnitude of salary increase?

a. What process is used in the final deliberations?

b. How is the amount of merit pay determined? By:

% _____ or \$ Amount _____

c. What role does racial or sexual equity play in these determinations?

19. How are performance data gathered and maintained?

20. Prior to or after salary adjustments are made, does the chairman conduct a conference with you to discuss your evaluation? YES NO

If "YES": a. What takes place during those meetings? (i.e., what do you expect to accomplish?)

b. During the conversation, does the chairman compare the performances of other faculty members with yours and establish the relative level of performance and salary with your peers? YES NO

If "NO": a. When and how are you informed about your salary increase?

b. Are salary data available to you? YES NO

If "YES": Who makes it available?

21. Are goals in teaching, research, and service similar for all faculty members at the various ranks? YES NO

If "NO": How do they differ and for whom?

22. On a scale of 1 to 5: 1 = poor, 2 = below average, 3 = average, 4 = above average, and 5 = excellent, how well do you understand what is expected of you in teaching___, research___, and service___?

Tenet No. 2: Establishment of Operant Level

23. Using the scale of 1 to 5, how accurate is the evaluation system in determining performance in teaching___, research___, and service___?

Tenet No. 3: Appropriateness of Consequences

24. In addition to merit salary adjustments, are other rewards provided to faculty who excell? YES NO

If "YES": a. What are they?

b. How would you rank these rewards according to your preference including merit pay?

c. Does a faculty member have an opportunity to choose among the various rewards? YES NO

If "NO": a. Should there have been rewards other than merit pay?

If "YES": What should they have been?

b. Do you think department chairmen can manipulate other rewards as they do merit pay? YES NO

If "YES": How can it be done?

25. Is the level of salary adjustment tied directly to performance levels and objectives? (i.e., low performance = low adjustment; high performance = high adjustment? If it is, how is this done?

26. How does the amount of salary adjustment affect your performance? For example: Large adjustment = higher performance, low adjustment = lower performance, or no change in performance.

27. Using the scale of 1 to 5:

___ a. How well did the merit adjustments last year accomplish the purpose of merit pay stated at the beginning of the interview?

___ b. How well did merit adjustments reflect performance?

___ c. How fairly was merit pay administered?

28. Would you prefer having another method of determining salary adjustments? YES NO

If "YES": What method would you suggest? Explain

Tenet No. 4: Rewarding of Successive Approximation

29. Are short-term accomplishments or subgoals defined for faculty members? YES NO

If "YES": a. Are you rewarded for accomplishing subgoals?

b. How are you rewarded?

c. What is the procedure for reporting the accomplishment of subgoals?

Tenets No. 5 and 6: Immediacy of Reinforcement and Patterns of Reinforcement

30. Once faculty members excell, is an immediate adjustment in pay provided?

YES NO

If "YES": How is it done?

If "NO": a. Can it be done?

b. How or why not?

c. Are faculty whose performance excels rewarded immediately in other ways? YES NO

If "YES": (1) How and by whom?

(2) Give examples of past practices

- (3) Do faculty know about this?
- (4) Are promises made for the future or is a guarantee given on the spot?

Recommendations

31. What recommendations do you have for the merit pay system here at the University?

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