

EMPLOYEE PREFERENCES FOR PAY SYSTEM CRITERIA:

A PAY SYSTEM SURVEY

by

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## Abstract

Performance-based pay is a reward system innovation in which individuals are compensated based on their productivity. In both the private and public sectors, there are numerous pay systems currently in place, but these pay systems rarely take into consideration the preferences of employees. The purpose of this study was to evaluate the factors that drive employees to select a pay system that incorporates criteria for pay that are preferred by employees. The results of the study supported three of the six hypotheses tested. In support of previous research, the results of this study indicated that educational background is a significant determining factor in people's preference for being paid based on their education level. This conclusion is logical given that higher education is a costly investment of both time and money, and highly educated people expect to be compensated for this investment through higher salaries. A second finding was that there is a significant difference in people's perception of their being paid on performance versus their desire for such a pay system. Another important conclusion of the study was that education level is a significant factor in determining people's preference for being paid based on performance, such that more highly educated individuals prefer to be paid based on performance.

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## CHAPTER 1: INTRODUCTION

### Background of the Problem

As the 21<sup>st</sup> Century progresses, the highly competitive environment in which organizations operate and recent events, such as the Dot.com failures and the terrorist attacks of 9/11, have caused numerous companies to downsize, lay-off employees, or reduce employee compensation, including GE, IBM, Citicorp, AT&T, Kodak, Goodyear, Exxon, Xerox, TRW, and GM (Bateman & Snell, 2004; Lawler, 2005). As a result, retaining the best employees and recruiting people with the greatest potential are vital to the success and survival of the organization (Lawler, 2003 & 2005). Reward systems can serve the strategic purpose of attracting, motivating, and retaining people; yet, a complex set of factors is used to determine an employee's compensation (Bateman & Snell, 2004).

For centuries, business leaders have been challenged with the search for the right mix of factors to effectively pay workers in order to reduce turnover and improve productivity, and numerous pay systems have been developed as a result (Milkovich & Newman, 2005). Today, as companies strive for competitive advantage in highly unstable and dynamic environments, managers must pay close attention to factors, such

as pay, that motivate employees in order to increase employee productivity, job satisfaction, and positive contributions to the organization. Therefore, managers need to focus on implementing the proper compensation package because a prime motivator for workers and, as a result, a mechanism for improving productivity, is rewarding employees for their efforts and achievements (Lawler, 2003).

The earliest forms of rewards for productivity were food, shelter, and protection, all of which are vital to survival. Yet, the origination of monetary systems caused pay to become the most common form of reward and money has become the medium of exchange for all commodities. The use of economic incentives to motivate people has been a common practice in many societies and has generated a myriad of speculation and a plethora of research (Milkovich & Newman, 2005).

Considered to be the father of scientific management, Frederick Taylor is credited with popularizing the use of money as a motivational work tool over a century ago (Bateman & Snell, 2004). Numerous theories that are relevant to the use of economic incentives to motivate workers are rooted in Taylor's scientific management, including Vroom's Expectancy Theory, Herzberg's Two-Factor Theory, Skinner's Reinforcement Theory, and Adams' Equity Theory (Lawler, 2000). In addition, there is

an abundance of research studies that have focused on performance-based pay, of which the most famous are the Hawthorne Studies. Edward E. Lawler furthered the evolution of economic motivation theory when he proposed that employees perform at higher levels when their pay is related to performance (1966 & 1971) and conducted studies to demonstrate that employees perform at higher levels when pay is related to performance (Cammann & Lawler, 1973).

It has been during the past four decades that pay satisfaction has become an intensive area of inquiry. Early pay satisfaction research focused on the antecedents of pay satisfaction, and this focus resulted in several theoretical models of pay satisfaction (e.g., Lawler, 1971). The development of the Pay Satisfaction Questionnaire (PSQ) by Heneman & Schwab (1985) led to considerable interest in the measurement of pay satisfaction, and research on the PSQ-dominated pay satisfaction research from the mid-1980s to the mid-1990s (Carragher & Buckley, 1996; Judge, 1993; Judge & Welbourne, 1994; Mulvey, Miceli, & Near, 1992; Orpen & Bonnici, 1987).

Further evidence has indicated that pay dissatisfaction is related to reduced levels of performance (e.g., Bretz & Thomas, 1992), as well as to a number of indicators of withdrawal, such as lateness (Koslowsky, Sagie, Krausz, & Singer, 1997), turnover

and turnover intentions (Sturman, Trevor, Boudreau, & Gerhart, 2003), absence (Weiner, 1980), and theft (Greenberg, 1993). As Heneman & Judge (2000) concluded, "Research has unequivocally shown that pay dissatisfaction can have important and undesirable impacts on numerous employee outcomes," (p. 85).

To minimize turnover, retain the most highly skilled employees, and improve employees' contributions to the organization, it is important that employers understand how best to pay their employees in order to optimally satisfy and motivate them (Lawler, 2003 & 2005). Since a good worker will define what he or she is worth and will go where he or she will get paid that amount, management can set up the pay system to attract the best workers and cause those workers to be highly motivated as well as highly productive (Sturman, Cheramie, & Cashen, 2005).

An important aspect of designing a successful pay system is determining the appropriate criteria to use. In 1997, Aminu Mamman studied Australian industry by conducting research that explored employees' attitudes toward some of the key criteria that usually determines pay. For his sampling frame, Mamman's (1997) research proved conclusively that an employee's choice of pay criteria is a function of factors such as education and age. In 1999, James Mirabella expanded on Mamman's research by

studying American employees, and his research confirmed Mamman's conclusions outside the boundaries of Australia.

This research study proposes to further investigate the choice of pay criteria by American employees in the 21<sup>st</sup> century, especially considering changes in workers' attitudes resulting from events since the turn of the century. Since the year 2000, numerous events, such as the terrorist attacks of 9/11, the bankruptcy of numerous large corporations, lay-offs, and downsizing have caused conditions in the business environment to become more and more unstable (Bateman & Snell, 2004). These unstable and highly dynamic conditions have resulted in numerous corporations seeking the most optimal way to operate, including how to appropriately compensate employees while minimizing costs (Lawler, 2003 & 2005). If employers want to optimally satisfy and motivate employees with a pay system, managers need to understand the attitudes and preferences of employees regarding the criteria used to determine pay systems.

#### Statement of the Problem

Numerous previous studies have researched the relationship between various pay systems and the relative impact on pay satisfaction or overall employee satisfaction (Currall, Towler, Judge, & Kohn, 2005). Empirical research studies have

demonstrated that many people prefer to use performance as a basis for rewarding others (Dyer, Schwab, & Theriault, 1976; Fossum & Fitch, 1985; Heneman, 1984; Heneman & Judge, 2000). Other researchers demonstrated that the preference to have pay contingent on performance is affected by several factors, including employee ability (Farh, Griffeth & Balkin, 1991; Sturman et al, 2005), age (Mamman, 1997; Mirabella, 1999), education (Mamman, 1997; Mirabella, 1999), and tenure (Dyer & Theriault, 1976; Dyer, Schwab & Theriault, 1976; Schwab & Wallace, 1974). Many factors have been analyzed to assess their influence on pay satisfaction, including quality of job performance (Lawler, 1966), gender (Lawler, 1971), skill level and training (Mamman, 1990), job responsibility (Mamman, 1990), mental effort and physical effort (Mamman, 1990).

Despite the overwhelming research on pay systems, one area that has generated limited research has been employees' preferences for the criteria used in these pay systems. In a study conducted in Australia, Aminu Mamman (1997) explored the similarities and differences in employees' attitudes toward some of the key criteria that usually determine pay. In 1999, James Mirabella confirmed Mamman's conclusions regarding employees' preferences for pay criteria and concluded that American and Australian workers had similar attitudes toward pay system

determinants. Yet, these results might not hold true for American workers since the turn of the 21<sup>st</sup> Century as a result of numerous events, such as the terrorist attacks of September 11, 2001 and subsequent terrorist activities, increased unemployment, and companies relying more heavily on consultants than full-time employees. All of these events have created an increased sense of uncertainty in employees and instability in the business environment (Bateman & Snell, 2004; Caudron, 2002). Therefore, it is important for managers to employ people that enhance the firm's opportunities for achieving competitive advantage, and a key to recruiting and retaining good employees is to design the most appropriate pay plan (Sturman et al., 2005).

The significance of this study is that it will continue Mamman's and Mirabella's work by exploring these theories in light of the changing attitudes of workers since the year 2000. In addition, this study will add to the knowledge base available for human resources management in the 21<sup>st</sup> Century by further illuminating the relationship between pay satisfaction and the criteria used to determine pay during times of increased uncertainty.

### Purpose of the Research

The purpose of this study is to evaluate the factors that drive employees to select pay system criteria that would motivate them while maximizing performance and minimizing turnover. Frequently companies utilize more than one pay system in order to compensate different management levels and different job types according to different criteria, but these systems are usually preset and frequently do not consider the employee's motivations (Bateman & Snell, 2005; Milkovich & Newman, 2005). Yet, a number of incentive systems have been devised to encourage and motivate employees to be more productive (Bateman & Snell, 2004).

This study addresses the pay system criteria preferences of a diverse sample of American workers. The sampling frame will span multiple organizations and include employees in graduate and undergraduate schools of varied age, tenure, and skill groups. In testing the hypotheses found significant by Mamman (1997) and Mirabella (1999), this study verified if their results still hold true given the changes in employee attitudes associated with unemployment trends that have occurred over the last five years, and should further management's understanding of employee preferences for pay system determinants during times of uncertainty.



### Research Questions

The following research questions were investigated: (1) Is there a significant difference between people directly or indirectly affected by unemployment in their rating of any of the criteria traditionally used to determine pay systems? (2) Is there a significant difference between older and younger employees in their rating of "length of service" as a criterion for pay systems? (3) Is there a significant difference between older and younger employees in their rating of "performance" as a criterion for pay systems? (4) Is there a significant difference between respondents with low and high educational qualifications in their rating of "education" as a criterion for pay systems? (5) Is there a significant difference between respondents with low and high educational qualifications in their rating of "performance" as a criterion for pay systems? (6) Is there a significant difference between how respondents rank their current pay system in its use of "performance" as a criterion versus their rating of "performance" as a preferred pay criterion?

### Research Hypotheses

The research hypotheses for this study are derived from research studies conducted by Aminu Mamman (1997) and James Mirabella (1999), in which they assessed people's preferences for the factors used as pay system determinants. These hypotheses are tested under a new set of economic conditions and are expanded upon by assessing the impact of recent unemployment on the criteria preferred by the employees. The six hypotheses in the null and alternative forms are listed in Chapter III.

### Definition of Terms

The following terms are defined for the purpose of this study:

COMPENSATION is the all-inclusive phrase embodying both the intrinsic and extrinsic rewards of employment. Compensation not only includes salary, but also bonuses and fringe benefits.

COST OF LIVING is defined as the expenses associated with living where the job is located.

DIRECTLY ADVERSELY AFFECTED are employees that have become unemployed in the last six years as a result of events such as 9/11, lay-offs, downsizing, or bankruptcy.

EDUCATION LEVEL comprises both the number of full years of college as well as the degrees completed. For the purpose of

this study, the degrees are stated as Associates, Bachelors, Masters and Doctorate, and the number of years is computed based on the credits completed as opposed to time spent in school.

INDIRECTLY ADVERSELY AFFECTED are employees that have had those near to them (co-workers, friends, or family) become unemployed in the last six years as a result of events such as 9/11, lay-offs, downsizing, or bankruptcy.

JOB RESPONSIBILITIES are defined as the level of importance of one's position. This is often correlated to the degree of risk involved with decisions at that level.

MARKET FORCES is defined as the external factors that may affect one's pay, to include a shortage in the job field.

PAY is the concrete value of monetary compensation. It is synonymous with salary.

PERFORMANCE is defined in terms of employee output. It is rooted in Taylor's Scientific Management, which was based on a manufacturing environment. Since many people are in a service industry where output is not as visible, it is left to the employee's discretion to define performance, as it is usually the basis of appraisals.

SKILLS are defined as the specialized abilities an employee has that differentiate him from other employees.

TENURE is the length of service an employee has given to his current organization and is expressed in years for the purpose of this study.

### Summary

In today's highly competitive business environment, it is more important than ever that managers find the most effective methods of paying workers. The purpose of this study is to determine the relationships between employee preference for pay system criteria and job characteristics and personal factors. The conceptual framework for this study is rooted in Lawler's (1966) core theory on pay satisfaction and is based on Mamman's (1997) research in Australia and Mirabella's (1999) research in Jacksonville, Florida.

This proposal is presented in three chapters. Chapter I - Introduction, illustrates the background of the problem, purpose of the study, statement of the problem, research questions, and definitions of terms. Chapter II - Review of Literature, presents relevant literature to the pay-for-performance systems and pay satisfaction in general. Chapter III - Methodology, describes the population, the research hypotheses, and the research design, including the survey instrument, the data

collection protocols, and data analysis procedures. Chapter IV - Data Collection and Analysis, presents the statistical analysis of the data, demographics of the sample, and interpretations of the findings. Chapter V - Findings, Conclusions, and Recommendations, includes a summary of the findings, conclusions, and recommendations for future research. Relevant references, bibliography, and appendices are also presented.

## CHAPTER 2: REVIEW OF LITERATURE

The review of literature related to the proposed research is divided into the following five categories: (a) recent events that have significantly influenced employees, (b) overview of pay-for-performance, (c) overview of employee motivation theories, (d) pay and employee satisfaction, and (e) pay systems and employee choices.

### Recent Events Significantly Influencing Employees

#### *The Terrorist Attacks of 9/11*

Since the terrorist attacks on the World Trade Center towers, there has been a shift in attitudes and behaviors of workers across America (Kondrasuk, 2004). The events of 9/11 resulted in numerous factors that have increased the stress level of American workers (Leonard, 2002). The increased level of stress experienced by workers and the understanding that there is potential for acts of terrorism in the future have caused a paradigm shift in the attitudes of employees (Kondrasuk, 2004; Leonard, 2002). In fact, workers have demonstrated a higher level of work force commitment since the attacks (Caudron, 2002). This shift in employees' attitudes may include changes in their choice of criteria used in pay systems.

In the 1990s, it was commonplace for workers to take new positions with different organizations on a frequent basis, simply for increased pay and/or benefits (Bateman & Snell, 2004; Lawler, 2001; Robbins, 2004). Since the events of 9/11, this trend has decreased and employees are more committed to their job and the organization (Caudron, 2002; Kondrasuk, 2004). "Now, 54 percent of workers say they would remain with organizations even if offered a similar job with slightly higher pay elsewhere," (Caudron, 2002, p. 26). The concept of remaining with an organization rather than jumping from one job to another is a large shift in the mindset of employees (Kondrasuk, 2004).

Changes in the mindset of employees may be manifold and could include the criteria that are used in determining their pay. Human resources (HR) managers must be prepared to deal with these post-9/11 attitudes of employees regarding compensation and performance (Lincoln, 2002). Thus, continued investigation into employee preferences for pay system determinants is a necessity in order to provide much needed information to HR managers.

*Unemployment*

Another factor that has also altered the attitudes and behaviors of employees is unemployment, resulting from companies going bankrupt, downsizing, or replacing full-time employees with consultants (Bateman & Snell, 2004; Lawler, 2003). From the year 2000 to the middle of 2005, the unemployment rate increased 2% (National Bureau of Labor, 2005). Starting in 1999, numerous corporations have declared bankruptcy, and an increased number of organizational restructuring efforts have been oriented around downsizing or hiring consultants rather than full-time employees (Lawler, 2003 & 2005).

These kinds of corporate actions have adversely affected numerous people directly and indirectly (Lawler, 2005). Those directly affected have lost their jobs and those indirectly affected may exhibit survivor's syndrome. Survivor's syndrome occurs as a result of employees struggling with heavier workloads, wondering if they will lose their jobs, trying to figure out how to survive, losing commitment to the company and faith in their bosses, and becoming narrow-minded, self-absorbed, and risk-adverse (Bateman & Snell, 2004).

All these changes within the work place have created a sense of fear and uncertainty in employees that may result in them viewing compensation in a greatly different way (Milkovich



& Newman, 2005). Furthermore, this shift in employee attitudes since the year 2000 may play an important role in the choice of pay criteria preferred by workers, and is the focus of this study.

## Overview of Pay-for-Performance

### *History of Pay-for-Performance*

Pay-for-performance systems and incentives are not new concepts, having been documented as early as the 18th century BC. The Babylonian King Hammurabi, who reigned from 1792 BC to 1750 BC, codified a set of laws that were designed to protect the weak from the strong (Halsall, 1998). The Code of Hammurabi safeguarded the rights of the individual since it was based on equal punishment and treatment for all people. Therefore, it affected all aspects of Babylonian life, including trade, farming, wages, and working conditions. Under the Code of Hammurabi, tradesmen were paid in food based upon their performance or output, making these piece rate plans one of the earliest recorded forms of incentives (Halsall, 1998). This incentive system resulted in higher quality and/or output by tradesman, yet was a short-lived success.

Unfortunately, during the Middle Ages, feudalism repressed the use of incentives because production workers were not paid until the work was satisfactorily completed. Feudalistic systems resulted in workers being discouraged from adopting regular hours of production or labor (Mirabella, 1999). The resulting lack of motivation caused most workers to exert minimal effort to produce more than was required. Over the last four thousand years, attempts to tie rewards to performance among the various civilizations resulted in simple incentive plans that were spontaneous, short-lived, and localized in nature.

Since the industrial revolution, however, there has emerged a logical rationale for associating higher rewards with greater performance (Lawler, 1971, 2000, 2005). In the late 1700s, Adam Smith published his classical economics book, *The Wealth of Nations*, in which he equates the wages of labor with the production level of industry. Smith concluded that high wages result in more active, diligent and expeditious workers than low wages (Briggs, 1969). Smith's conclusion was accurate but overly simplistic, yet it was a beginning for pay-for-performance theory.

A century later, in 1885, American economist Edward Atkinson proposed the concept that the most cost-effective labor

is the best-paid labor. Atkinson's 1885 assertion is based on the observation that output is low when an employer pays low wages, but output tends to be high and overall output costs are lower when workers are paid well (Mirabella, 1999). Numerous researchers have observed that production increased when the worker was rewarded for that increase in production (Denton, 1991; Lawler, 2003; Peach & Wren, 1992). This understanding of the role of the worker in determining the productivity of the firm changed management's view toward employee pay systems (Milkovich & Newman, 2005; Sturman et al., 2005).

#### *Scientific Management and Pay-for-Performance*

One hundred years ago, Frederick Taylor proposed the theory that money can be used as a management tool to motivate workers in an industrial setting (Bateman & Snell, 2004). Taylor suggested that a system in which management paid the person and not the position would improve employee production because employees that are rewarded for their efforts are more willing to put more effort into their job.

In his 1911 book, *The Principles of Scientific Management*, Taylor proposed the concept of a large daily bonus used to motivate the worker to complete work expeditiously and follow

instructions from superiors (Bateman & Snell, 2004). According to Edwin Locke (1982a, 1982b), Taylor claimed that the worker was most interested in money, and he argued that the worker should be paid higher wages for regularly completing all assigned tasks and learning to employ the principles of scientific management while completing these tasks.

The concept of paying individuals and not positions was designed mainly to reward workers for their efforts rather than their class of work (Sturman et al., 2005). With regard to the incentives, the principle tenet of Taylor's scientific management theory is that workers will perform at a higher level in order to receive monetary rewards that are contingent upon their performance (Sundby et al., 1996; Wren, 1994). This scientific management approach makes the fundamental assumption that all workers are motivated by monetary rewards.

One limitation of scientific management is that its principles are based on the belief that workers were interchangeable with machines, implying that the workers had little to contribute to the workplace beyond a strong back and arms (Robbins, 2004). Under Taylor's scientific management scenario, human resource management did not deal with a worker's emotions. The wage programs that were set in place were designed to buy an employee's time with an hourly wage, provided

no incentive for workers to perform at a higher level, and considered neither skill nor performance as a factor in determining pay (Risher, 1997).

For many years and in many industries, the theoretical underpinnings of Taylor's scientific management theory were inadequately implemented and incentives were overlooked as a key to employee motivation and performance (Lawler, 2000). Today, performance-based pay systems are among the most widely advocated reward systems and are argued by many to be most effective and equitable to both employees and the organization (Lawler, 2003 & 2005). Researchers have argued that employees perform at higher levels when their pay is related to performance (Cammann & Lawler, 1973; Lawler, 1971, 1995, & 2000). Through empirical studies, researchers have demonstrated that many people prefer to use performance as a basis for rewarding others (Dyer, Schwab, & Theriault, 1976; Fossum & Fitch, 1985). Implied in this view is the notion that employees prefer their pay to be determined first and foremost by performance. Over the last century, Taylor's theories have helped transform hourly jobs into positions where workers are paid for their skill or their performance.

*Motivation Studies, Performance, and Pay*

Most of the motivational research conducted in the years following Frederick Taylor's teachings minimized the importance of pay in motivating (Bateman & Snell, 2004). Conducted in the 1920's, the purpose of the Hawthorne studies was to determine what factors influence employee motivation and job satisfaction, which were the first studies to consider factors associated with human relations as motivators of workers (Robbins, 2004).

One of the Hawthorne studies was a series of experiments directed primarily at analyzing the effects of working conditions on employee output or performance. Initially designed to be a basic stimulus-response test, the study expanded to encompass how employee productivity is affected by snacks breaks, rest periods, reduced hours, and altered workdays, in addition to variable rates of compensation (Bateman & Snell, 2004). In a short time period, the experiments demonstrated that there was an immediate increase in performance when the study participants had their pay tied to their performance (Mayo, 1933). Thus, pay serves to motivate employees when it is tied to performance. People are more satisfied with their pay when they feel that it is based on their performance. Lawler (1971) states, "It is significant

that the same condition that motivates employees also leads to higher pay satisfaction," (p. 257). This fact strengthens the argument that pay should be tied closely to performance.

Another of the Hawthorne experiments concluded that productivity was affected not only by pay, but also by feelings of belonging to a group and by the supervisor's attitudes toward the worker (Robbins, 2004). Consideration of the employees by the supervisors improved working conditions, which caused workers to be more content (Roethlisberger & Dickson, 1939). Basically, the Hawthorne studies incorporated research relating to employee attitudes and motivation on the job into scientific management's focus on technical efficiency. Since then, the majority of research on job satisfaction and motivation has focused mainly on factors other than pay.

#### *Merit Pay Systems*

Performance-based pay plans called merit pay systems facilitate greater work motivation by differentially rewarding top performers over marginal performers (Milkovich & Wigdor, 1991). Studies have shown that a discriminating pay system can increase employees' motivation to perform by as much as 40% (Lawler, 1995 & 2000). All incentive plans have two fundamental

things in common, defining the appropriate measures of performance and setting the rate of payment per unit. When workers believe rates to be randomly set, workers assume that increased productivity will result in a corresponding rate cut; thus rate setting has to appear to be objective (Peach & Wren, 1992). Also, fundamental to a fair merit pay system is the use of credible, appropriate measures of performance (Lawler, 1990; Milkovich & Wigdor, 1991). If input measures are problematic, the input-outcome ratio will likely be compromised.

When employees consider measures inappropriate, the implication is that supervisors either are not evaluating certain job facets that are important for an employee's success or are not using measures that capture critical job facets well (Pettijohn, Pettijohn, & Taylor, 2000). For example, although customer orientation and satisfaction may be relevant measures of performance, organizations may focus exclusively on sales volume when making pay-raise decisions (Lawler, 1995). Another negative consequence of inappropriate measures is performance incongruence, whereby employees' evaluations of their performance are not congruent with their supervisor's evaluations (Ramaswami, 1996), which results in lower procedural fairness perceptions. Thus, the more appropriate the performance measures that are used in merit pay rewards, the



greater are an employee's perceptions of both procedural fairness and distributive fairness (Ramaswami, 1996).

In a merit pay context, employees who experience distributive fairness are likely to exhibit greater satisfaction (Moorman, 1991; Netemeyer, Boles, McKee, & McMurrian, 1997). According to equity theory, the greater the discrepancy between the amount employees believe they should receive and the actual amount they receive, the greater is their tension or dissatisfaction (Lawler, 1995 & 2000). Moreover, job satisfaction is likely to be positively associated with the degree to which the merit pay system adheres to the employee's sense of procedural fairness (Roberson, Moye, & Locke, 1999). For example, employees who perceive that procedures are unfair may entertain feelings that they would have obtained a higher merit pay under a procedure that was "fairer" and consequently might feel angry and dissatisfied (Folger & Konovsky, 1989).

Furthermore, employees' perceptions of interactional fairness may be associated with how employees perceive management's evaluation of their contribution, thereby affecting job satisfaction (Moorman, 1991). Although similar value judgments can be communicated through formal procedures, the quality interactions with the supervisor in pay decisions

provide compelling evidence of an individual employee's worth on the job.

#### *Pay-for-Performance Summary*

Linking pay and performance has been a cornerstone of employee compensation (Lawler, 1971, 2000, & 2005). However, this ideal often is not achieved, because organizational rewards may be based on several factors beyond performance, including budget availability, political behavior, seniority, supervisor-employee dependence, and other extra-role behaviors (Bartol & Martin, 1989; Podsakoff & MacKenzie, 1994). Yet, studies consistently show that people value pay raises more than any other performance reward, including promotion opportunities, fringe benefits, and recognition awards (Chonko, Tanner, & Weeks, 1992; Churchill, Ford, & Walker, 1979; Cron, Dubinsky, & Michaels, 1988; Ford, Churchill, & Walker, 1985; Ingram & Bellenger, 1983; Money & Graham, 1999). Thus, performance-based pay systems have potential to create employee satisfaction.

Despite the recognition of pay affinity for employees, dissatisfaction with pay and compensation plans remains prominent in employee surveys (Denton, 1991; Leonard, 2001). When pay expectations are not met, employees may believe that

the organization has violated its obligations and disregarded its commitments (Lester et al., 2002). However, this does not mean that people expect to receive the highest monetary reward; rather, they expect a fair level of reward relative to their performance (Denton, 1991). Thus, if every person received the same reward regardless of performance, it not only would raise issues of inequity and distress but also would likely undermine people's motivation to raise their effort and performance level (Denton, 1991).

Results of a study by Heneman, Greenberger, and Strasser (1988) relate to the measurement of pay-for-performance perceptions and pay satisfaction. Previous researchers reported a positive relationship between pay-for-performance perceptions and overall pay satisfaction (Carroll & Tosi, 1973; Kopelman, 1976; Miceli & Near, 1987; Penner, 1966). Pay-for-performance systems have a great deal of potential to satisfy and motivate employees while increasing productivity (Lawler, 1995 & 2003).

The difficulty of these systems is that they inadequately deal with the complications inherent in the workplace due to personalities and human dynamics. The fact that the employees' expectations are directly tied to their satisfaction should be accounted for in performance-based pay systems (Dreher, 1981). These systems should be employed in ways that maximizes employee

satisfaction and motivation while minimizing the chances for dissatisfaction (Heneman, 1984). There is no one-size-fits-all solution to successful implementation of a pay-for-performance system. Each performance-based pay system will have to be tailored to fit each organization's structure and needs, and customized to the interpersonal dynamics of each organization (Lawler, 1995 & 2000).

When pay-for-performance plans such as merit pay are properly administered, they have been shown to be related to high motivation, performance, and job satisfaction (Heneman, 1984; Heneman, Greenberger, & Strasser, 1988). As a result of these relationships, many organizations have implemented innovative compensation plans where pay is tied to performance (Milkovich & Newman, 2004). At a theoretical level, there should be a positive relationship between pay-for-performance perceptions and pay satisfaction (Lawler, 2000). To the extent that performance is perceived by employees as being instrumental to the attainment of a valued outcome such as pay raise, then pay satisfaction should be increased (Lawler, 1971).

The empirical research has confirmed this positive relationship between pay-for-performance perceptions and pay satisfaction (Carroll & Tosi, 1973; Kopelman, 1976; Miceli & Near, 1987; Penner, 1966). For obvious reasons, pay-for-

performance perceptions would be expected to be directly related to pay-raise satisfaction. These perceptions might also, however, be positively associated with the other dimensions of pay satisfaction (Heneman et al., 1988; Sturman et al., 2005).

Specifically, there could be a relationship with pay-level satisfaction because in many organizations salary increases for performance in one year are built in to the base salary for subsequent years (Dreher, 1981; Sturman et al., 2005). In addition, pay-for-performance perceptions could be related to the structure/administration facet of pay satisfaction because performance is often used as a criterion to move employees within salary grades (Heneman et al., 1988). This criterion may or may not be preferred by employees as the basis for the allocation of pay in comparison with other potentially valued criteria, such as seniority. Finally, pay-for-performance perceptions may be related to satisfaction with benefits in that it may take fewer benefits of lesser value to satisfy an employee when performance is high and pay raises are large (Dreher, 1981; Sturman et al., 2005).

Heneman and colleagues (1988) hypothesized that while pay for performance would be most highly related to pay-raise satisfaction, pay-for-performance perceptions would also be significantly related to pay level, benefits, and structured

administration satisfaction. They showed that not only were pay-for-performance perceptions related to pay-raise satisfaction, they were significantly related to pay-level satisfaction (Heneman et al., 1988).

This finding makes sense in the context of the studied organization because pay raises, which were, in part, to be based upon performance, were built into the base salary. Hence, one would expect that perceptions about pay for performance for pay raises would carry over to pay levels as well. This finding suggests that in developing specific measures believed to be related to a particular facet of pay satisfaction, as suggested by Heneman & Schwab (1985), attention also needs to be given to the interdependent nature of the facets of pay satisfaction relative to these specific measures.

The importance of individual perceptions, in comparison with actual characteristics of the employee and job, in influencing pay satisfaction was emphasized by Dreher (1981), and the results of the study by Heneman and colleagues (1988) reinforce this conclusion. The results from their study indicated that little variance was explained in overall pay satisfaction or facets of pay satisfaction by more objective measures like salary level, salary increase, performance ratings, tenure, and promotions.

However, Heneman and colleagues (1988) found that a significant amount of variance was explained in overall pay satisfaction and two facets of pay satisfaction by pay-for-performance perceptions. While actual characteristics of the employee and job should be included as control variables in any study of pay satisfaction, the data in Heneman and colleagues's 1988 study suggest that employee perceptions concerning various aspects of pay-system administration deserve further study (Sturman et al., 2005).

Perceptions of the pay-for-performance plans were assessed in a study of Australian industry that explored employees' attitudes toward some of the key criteria that usually determine pay (Mamman, 1997). His research proved conclusively for Australian industrial workers that an employee's choice of pay criteria is a function of factors such as education and age. Integral to this study was the assumption that an employee will perform at a maximum level when pay criteria are perceived to be fair. A 1999 study by Mirabella continued Mamman's research with American employees, and confirmed his conclusions beyond the boundaries of Australia. Therefore, the importance of employee perceptions of pay criteria and the relevance of these criteria to successful pay plans should be incorporated into pay-for-performance systems.

## Overview of Employee Motivation Theories

### *History of Motivation Theory*

How does a manager motivate employees? To be effective motivators, managers must know what behaviors they want to motivate people to exhibit. Management must motivate people to join the organization, remain in the organization, come to work regularly, perform their jobs in a way that produces high output and high quality, and exhibit good citizenship (Bateman & Snell, 2004). Good citizens are committed, satisfied employees who add value to the organization by performing above and beyond the call of duty (Bartlett & Ghoshal, 2002). The common recent perception that loyalty is dead must be rejected and the challenge of creating an environment that will attract and motivate people so that they commit to the organization (Bartlett & Ghoshal, 2002; Lawler, 2005).

The topic of employee motivation has fascinated human resources experts for over a century, and has been the focus of numerous research studies and results indicate that a myriad of factors are involved in motivating humans (Adams, 1965; Herzberg, 1966; Maslow, 1943; McClelland, 1966; House et al., 1974; Lawler, 1971 & 2000; Rosen & Weaver, 1960; Terborg & Miller 1978; Vroom, 1964; Weinstein & Holzbach, 1973; Whyte,



1955; Wofford, 1971). At the most basic level, motivation involves what's important to a person, and offering it in exchange for some desired behavior (Milkovich & Newman, 2005). The first component, what's important to a person, is a multifaceted, highly complex, and extremely individualized dimension of motivation. The second part of this definition of motivation focuses on the exchange of what is wanted. And, the third part focuses on desired behavior, which in the workplace is job performance. All of these components have been extensively researched in motivation studies that have generated numerous theories on employee motivation (Robbins, 2004).

The theories of Maslow, McClelland, and Herzberg are content theories because they focus on identifying factors that motivate people or what is important to people (Steers et al., 2004). In contrast, expectancy theory and equity theory are process theories because they focus on the exchange between a company and its employees (Milkovich & Newman, 2005). "Process theorists view work motivation from a dynamic perspective and look for causal relationships across time and events as they relate to human behavior in the workplace," (Steers et al., 2004, p. 381). Finally, goal-setting theory focuses on the third element of motivation, which is desired behavior. The emphasis of a large body of goal-setting research is identifying

desired behaviors and goals expected to flow from these behaviors (Milkovich & Newman, 2005).

The use of rewards as a motivator has been studied by a plethora of researchers (Adams, 1965; Herzberg, 1966; Maslow, 1943; McClelland, 1966; House et al., 1974; Lawler, 1971 & 2000; Rosen & Weaver, 1960; Terborg & Miller 1978; Vroom, 1964; Weinstein & Holzbach, 1973; Whyte, 1955; Wofford, 1971), yet there is still controversy over the efficacy of performance-based pay systems in motivating employees. While only a small sample of the body of knowledge on motivation, a detailed examination of the above mentioned theories highlights the evolution of modern motivation theory, presents an overview of the thousands of research studies on motivation, and should be helpful in understanding how rewards can be used to motivate individuals in the workplace.

### *Content Theories*

In 1943, Abraham Maslow proposed a theory of employee motivation that revolves around a hierarchy of needs, which builds from the most basic needs that are physiological and safety based to higher-order needs, such as social interaction, to self-esteem, and self-actualization. The appearance of one

need usually rests on the prior satisfaction of another, more pre-potent need, yet, needs are never fully met because they are cyclical in nature. The higher-order needs become motivating factors after the lower-order needs are met. Finally, when a need is not met, it becomes frustrating (Hersey et al., 2001).

These essential features of Maslow's Hierarchy lead to three general predictions about performance-based pay. First, base pay must be set high enough to provide individuals with the economic means to meet their basic needs (Robbins, 2004). Second, an at-risk program will not be motivating since it restricts an employee's ability to meet lower-order needs (Bateman & Snell, 2004; Milkovich & Newman, 2005). Third, success-sharing plans may be motivating to the extent they help employees pursue higher-order needs (Bunger & Trumple, 2004). Therefore, pay-for-performance plans may not motivate or even demotivate employees if it impinges upon the employee's ability to meet daily living needs, and incentive pay is motivating to the extent that it is attached to achievement, recognition, or approval (Milkovich & Newman, 2005). In conclusion, Maslow's motivation theory supports the concept that performance-based pay systems may be motivating if they help employees achieve higher goals.

Another needs theory was developed in the early sixties by McClelland, which "ignored the concept of a hierarchy and focused instead on the motivational potency of an array of distinct and clearly defined needs, including achievement, affiliation, power, and autonomy," (Steers et al., 2004, p. 381). McClelland (1966) argued that, at any given time, individuals are driven by several different and often competing needs that serve to motivate when activated. By far the most attention to McClelland's theory has focused on the needs for achievement and power. Achievement is defined as behavior directed toward competition with a standard of excellence and power is defined as a need to have control over one's environment (Hersy et al., 2001). In contrast to Maslow's more abstract conceptualization, McClelland's conceptualization offered researchers a clearly defined set of needs as they relate to workplace behavior, and has found considerable popularity in research on individual factors relating to work motivation.

While Maslow and McClelland focused on the role of individual differences in motivation, Frederick Herzberg sought to understand how work activities and the nature of one's job influence motivation and performance. In the late 1950s and early 1960s, Herzberg developed a two-factor theory called the

motivation-hygiene theory because of the two different categories of human needs that are independent of each other and affect behavior in different ways, hygiene factors and motivators or satisfiers (Bateman & Snell, 2004). Since hygiene factors revolved around the extrinsic or environmental aspects of the job, they serve as maintenance factors (Milkovich & Newman, 2005). Herzberg found that when people are dissatisfied with their jobs, they were concerned with the environment in which they were working (Hersey et al., 2001). Satisfiers revolved around the actual job itself and served to motivate the employee. In his motivation-hygiene theory, Herzberg argued that work motivation is largely influenced by the extent to which a job is intrinsically challenging and provides opportunities for recognition and reinforcement.

Herzberg found that while the presence of a motivating factor serves to satisfy the employee, the absence of a hygiene factor such as pay will not (Whitsett & Winslow, 1967). Herzberg found that pay was only a factor in that workers are negatively motivated when paid insufficiently, but he saw little correlation with positive motivation. This supports Abraham Maslow's "hierarchy of needs," which downgraded pay to the level of merely satisfying basic human needs (Lawler, 1971).

Edward Lawler reversed the trend with his renewal of research on performance-contingent wages as a means for inducing high productivity (Lawler, 1971). Some researchers argued that Herzberg's research indicated that pay and other extrinsic rewards can never be motivators, only a source of dissatisfaction. Yet, Lawler clearly disagreed, stating, "many still hold this view, despite the fact that it is not consistent with Herzberg's research results or with the research of most who have followed up on his original work," (Lawler, 2000, p. 70). The research clearly shows that pay can be a source of motivation when it is tied to performance and seen as a form of recognition (Lawler, 1995 & 2000; Locke & Latham, 2004; Milkovich & Newman, 2005).

#### *Comparison of the Content Theories of Motivation*

The main content theories on worker motivation can be summarized in a variety of ways. Paul Hersey and colleagues (2001) constructed a table summarizing these theories of motivation, and it shows that while Maslow's Hierarchy has five categories of motivators, they could be grouped into Herzberg's two classification scheme. Additionally, Hersey and colleagues (2001) describe McClelland's theory on the need for achievement

and point out the overlapping similarities between this and Maslow's theory of self-actualization. They further state, "... McClelland's concept of achievement motivation is also related to Herzberg's motivation-hygiene theory" (Hersey et al., 2001, p. 70). An achievement-oriented person is going to be motivated by the job itself, and doing it to the best of their ability. In fact, achievement is one of the factors Herzberg lists as motivator factors, rather than as a hygiene factor. So, achievement is a strong motivator of employees. Additionally, recognition of that achievement enhances motivation, as do career advancement and increased responsibilities.

Figure 1 is an Ishikawa fishbone diagram developed to illustrate the similarities of these theories and outline the factors that are most influential in motivating individuals. Due to the overlap in the motivational factors identified in the theories of Maslow, McClelland, and Herzberg, the top motivational areas that are proposed by their theories can be summarized in terms of Achievement, Recognition, Advancement, and Responsibility. The fishbone diagram depicted in figure 1 is a synthesis of these primary factors that enhance employee motivation. Also called a cause-and-effect diagram, the fishbone diagram can aid in the analysis of causes and how they

alter the effect that is of interest. Employee motivation is the effect that is of interest in this diagram.

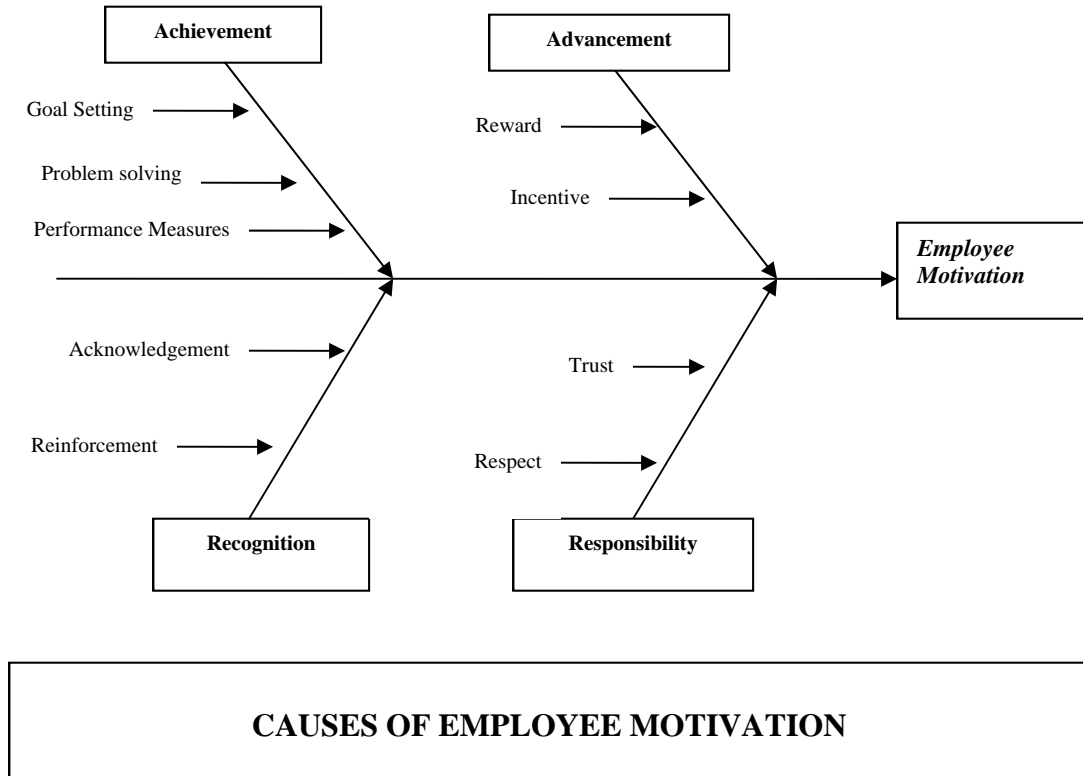
According to all three theories and as pointed out in figure 1, one of the main factors influencing employee motivation is achievement. Goal setting, problem solving, and performance measures are all beneficial aspects of achievement oriented motivation. Goal setting has great potential as a motivator and when properly used can increase performance while contributing to employee fulfillment. Furthermore, achievement oriented motivation results in problem solving, which is another proven employee motivator. Performance on the job and the end product of the work can be powerful motivators for achievement oriented employees, such that measures of performance act as feedback for achievement oriented employees.

Recognition oriented factors also cause employees to be motivated (Hersey et al., 2001). Recognition plays directly into achievement, for it is very unlikely that an individual will continue to strive to achieve without recognition of their efforts. Recognition has two aspects that require further exploration, acknowledgement and reinforcement. Acknowledgement of a job well done or a problem solved can boost an individual's self-esteem and boost their desire to achieve, which results in reinforcing the behavior of achievement oriented motivators.



Performance feedback is one way to convey to the employee the recognition and acknowledgement that is deserved. Bonuses or other extrinsic rewards can also be used to convey the deserved recognition.

Figure 1. Ishikawa fishbone diagram of the main causes of employee motivation.



Responsibility and advancement are motivational areas that are intertwined. Career advancement usually is associated with

new responsibilities, and fulfilling responsibilities satisfactorily can result in receiving a promotion (career advancement). Both of these are strong motivators of employees and each has components to it that further enhances employee motivation. In addition to boosting self-esteem and confidence, career advancement is usually associated with extrinsic rewards to employees and generates further incentive for employees to continue performing.

### *Process Theories*

Central to the process theory genre is a series of cognitive theories of motivation that collectively attempt to understand the thought process people go through in determining how to behave in the workplace (Steers et al., 2004). Perhaps two of the most well known cognitive theories are expectancy theory and equity theory.

Currently the most widely accepted theory of work on motivation is expectancy theory. Victor Vroom's (1964) expectancy theory attempts to predict the choices an individual will make when forced to choose among several tasks. The decision to put forth effort is supposedly the result of three perceptions: valence, instrumentality, and expectancy (Vroom,

1964). The valence is the perceived value of the outcomes or the value employees attach to the organization rewards offered for satisfactory job performance (Bateman & Snell, 2004; Milkovich & Newman, 2005). Instrumentality is employees' beliefs that the behavior or job performance will result in obtaining the desired outcomes or be rewarded by the organization. Here, expectancy is defined as the employees' perception concerning the likelihood that a particular act will be followed by a particular outcome, in other words, will their efforts enable them to attain their performance goals (Bateman & Snell, 2004). According to expectancy theory, we choose the behaviors that yield the most satisfactory exchange.

Expectancy theory further argues that people behave as if they cognitively evaluate what behaviors are possible in relation to the value of the rewards offered in exchange. People tend to form judgments about how effectively they perform their jobs in part according to their sense of self-competence and self-esteem (Milkovich & Newman, 2005). Therefore, people who think more highly of themselves may inaccurately believe that they are high performers and are likely to feel less satisfied with their pay.

Expectancy theory predicts that employees will exert a high level of effort if they discern that there is a strong

relationship between effort and performance, performance and rewards, and rewards and personal satisfaction (Robbins, 2004). Therefore, expectancy theory appears to provide a simple and convincing rationale for why pay-for-performance plans could enhance employee efforts, and it predicts that employee motivation will increase under pay-for-performance plans provided five conditions are met (Milkovich & Newman, 2005). First, employees understand the plan performance goals and view them as reasonable, such that they believe they have the necessary skill or ability to perform at the required level, or no reward will work. Second, there is a clear link between performance and pay increases such that a specified level of performance is a precondition for receiving the reward. Third, there is constant communication and follow through. Fourth, employees value the reward and view it as significant, meaning that the reward is large enough to influence behavior. And finally, the reward must be foremost in the minds of employees.

Adams' (1965) equity theory is a second process theory that also focuses on what goes on inside an employee's head. Not surprisingly, equity theory argues that people are highly concerned with equity or fairness of the exchange process (Milkovich & Newman, 2005). Adams' equity theory explains how employees react cognitively and behaviorally to a perceived

unfairness in the workplace (Pritchard, Dunnette, & Jorgenson, 1972; Steers et al., 2004). Adams (1965) argued that both conditions of underpayment and overpayment influence subsequent behavior. Furthermore, equity theory implies that people are motivated when perceived outputs equal perceived inputs (Goodman, 1974; Locke & Latham, 2004; Pritchard, 1969).

Equity theory focuses on the motivational effects of distributive justice, which is based on comparisons of ones own inputs and outcomes with those of others (Scholl, Cooper, & McKenna, 1987; Sweeney & McFarlin, 2005). Thus, an implication of equity theory is that employees will evaluate the adequacy of their pay by comparing it to the pay of other employees (Locke & Latham, 2004; Pritchard, 1969). Therefore, a well-defined pay-performance link is needed for the successful execution of a performance-based pay system. In addition, if outcomes do not match expectations, employees will react negatively (Milkovich & Campbell, 1972). And, finally, since employees evaluate their pay-effort balance in comparison to other employees, fairness and consistency of performance-based pay across employees in an organization is important, and relative pay matters (Milkovich & Newman, 2005).

*Goal-Setting Theory*

As with Vroom's expectancy theory, Locke's goal-setting theory supports the relationship between pay and performance. The process of setting goals is most likely to improve performance when goals are challenging, specific, and agreed upon by employees (Locke et al., 1981; Locke, 1982; Milkovich & Newman, 2005). Additionally, tying significant rewards, like pay increases, to goal attainment increases the likelihood that employees will meet goals (Bunger & Trumble, 2004). The amount of reward needs to match the level of difficulty in achieving the goal, but it is important that the employees believe that the goal is attainable. By directing employee behaviors toward organizational goals, pay-for-performance plans can improve performance (Lawler, 2000; Pritchard & Curtis, 1973).

Many research studies supported Locke's theory by finding correlation between positive beliefs about goals versus employee achievement (Locke et.al., 1981; Locke, 1982; Locke & Latham, 2004; Terborg & Miller, 1978). Further studies, such as one by Prichard & Curtis (1973) reported that pay incentives increased the likelihood of goal achievement. Once employees realize that a given level of performance will lead to a set amount of additional pay and that marginal improvement will not be

rewarded, they have an incentive to understand the goal-setting and appraisal process and to work toward meeting their goals (Sink & Sahl, 1995). When setting goals, objective performance measures have been shown to be better motivators than subjective measures, as employees assign them higher credibility and typically accept their validity (Lawler, 1995 & 2000). Similarly, payouts based on beating historical averages are believed to have more motivational value than performance targets, which employees tend to view as arbitrary and subjective management gimmicks (Ledford, 1995). Furthermore, the employee must play an integral role in determining the performance goals and the rewards associated with them (Hersey et al., 2001; Nash & Carroll, 1975).

The strength of motivation in achieving goals is at a maximum when the probability of success is approximately fifty percent (Hersey et al., 2001). This relationship is exemplified by the fact that when goals have a low probability of success (they are too difficult), employees are not very highly motivated by the goal (Bartlett & Ghoshal, 2002). Similarly, when there is a high probability of succeeding at a goal (the goal is too easy), employees are not very highly motivated to achieve the goal (Bateman & Snell, 2004).

*Motivation Theories' Support for Pay-for-Performance*

In many respects the difficulty in knowing what individuals want argues for using financial rewards as motivators. Albeit money may not be the most important reward for some people, unquestionably it is important to most people. "Money has a certain universality about it because purchasing power and status are attached to it in every society," (Lawler, 2000, p. 76). Lastly, money can be easily quantified and allocated into varying amounts.

The first key to a motivating reward system is to use only rewards that are valued, and empirical evidence has demonstrated that people value money. Support for pay-for-performance is mainly theoretical and based on Vroom's expectancy theory and Locke's goal-setting theory. Schay (1993) indicates that together these theories predict that pay-for-performance plans can motivate and improve employee performance, if the following seven conditions are met: (1) significant rewards can be given and tied to performance, (2) employees are informed as to how rewards are given, (3) supervisors are willing to explain and support the reward system, (4) rewards can vary depending on performance, (5) performance can be objectively and inclusively measured, (6) meaningful performance evaluation sessions can



take place, and (7) high levels of trust exist between managers and employees.

## Pay and Satisfaction

### *Pay versus Job Satisfaction*

Both opponents and proponents of Taylor's scientific management approach have studied the connection between pay and job satisfaction. The need to understand the factors that influence employee job satisfaction derives from the desire to improve productivity by motivating employees. According to Edward Lawler (1971), "it is significant that the same condition which motivates employees also leads to higher pay satisfaction," (p. 257). By stating this Lawler acknowledged the integral link between pay satisfaction and motivation.

The literature on pay satisfaction consistently shows negative relationships with tenure and performance. This means that people that have worked at a job for many years are dissatisfied with their pay. In addition it implies that pay dissatisfaction and poor performance are associated. Job dissatisfaction, aggregated across numerous employees, creates a workforce that is more likely to exhibit higher turnover, higher absenteeism, poor customer service, lower corporate citizenship,

more grievances and lawsuits, strikes, poor mental and physical health, stealing, sabotage, and vandalism (Bateman & Snell, 2004). All of these consequences of dissatisfaction are costly to the organization, either directly or indirectly.

Yet, pay satisfaction has positive relationships with salary level, salary increases, and job satisfaction (Heneman & Schwab, 1985; Schwab & Wallace, 1974). Since there is a positive relationship between salary increases and pay satisfaction, a pay raise leads to a higher salary, which in turn produces greater pay satisfaction (Heneman & Judge, 2000; Heneman et al., 1988; Heneman, Tansky, & Camp, 2000).

Formulated in 1911 by Edward Thorndike, the law of effect states that a behavior leading to positive consequences, such as a reward, will tend to be repeated (Bateman & Snell, 2004). The law of effect forms the theoretical basis for tying pay to job performance in the hope of improving productivity (Lawler, 1971, 2000, 2003). By developing a more thorough understanding of pay satisfaction, pay can be potentially used as a tool for managers to use to satisfy employees and as a mechanism for improving productivity (Milkovich & Newman, 2005).

*Satisfaction with Rewards*

A great deal of research has been conducted to determine what factors contribute to satisfaction with rewards received by an individual (Tables 1 & 2). Research results indicate that satisfaction is a complex reaction to many factors (Heneman & Judge, 2000; Heneman et al., 1985; Heneman et al., 2000; Miceli & Near, 1987; Penner, 1966; Schwab & Wallace, 1974), which can be summarized by four general conclusions. The first conclusion is that satisfaction with a reward is a function of how much is received and how much the individual feels should be received (Locke, 1976; Lawler, 1971, 1981, & 2000; Milkovich & Newman, 2005). An individual's perception of what should be received greatly influences their level of satisfaction with what they do receive (Lawler, 2000 & 2003; Milkovich & Newman, 2005).

"Managers across different industries have tried hundreds of pay plans over the years so as to find the optimal plan for inducing the greatest productivity; yet an often overlooked key element was that the success of the pay plan depends on the employee's perception of how his pay is determined," (Mirabella, 1999, p. 21). The employee's perception of the determinants of the pay plan is essential to that person's job satisfaction. Edward Lawler (1966, 2000, 2003) often noted that the best performers

were often the employees who saw the greatest connection between pay and performance. It was recognized that the remaining employees were not effectively motivated by pay.

Furthermore, people's feelings of satisfaction are determined by a comparison between what they receive and what they feel they should receive (Lawler, 2000; Milkovich & Newman, 2005). Equity theory advocates three possible outcomes from this comparison: satisfaction, over-reward and under-reward (Adams, 1965). Under-rewarded individuals become dissatisfied and tend to decrease performance. On the other hand, over-reward triggers feelings of guilt, and causes the individual to compensate for this inequity by increasing performance (Adams, 1965; Kahn & Sherer, 1990; Lawler, 2000). Therefore, an employee's perception of what factors are important in determining pay should be considered by management in order to develop a pay plan that enhances the chances for providing satisfaction (Deckop, Merriman, & Blau, 2004; Milkovich & Newman, 2005). Yet, increasing pay is not a simple solution to enhancing satisfaction because profitability can be dramatically affected by such a potentially costly undertaking (Lawler, 2003).

As noted above, there are studies supporting a link between pay satisfaction and various behavioral individual-level

outcomes. Further supporting the link between pay satisfaction and outcomes at the individual level of analysis are equity models of pay satisfaction (and their close derivatives, discrepancy models--see Heneman, 1985, for a review). Such models stipulate that individuals form judgments of pay satisfaction by comparing their outcome (pay) to input ratio relative to the ratios for comparison others (Lawler, 1971, 1973, 2000, 2003; Miceli & Mulvey, 2000).

It is a natural human tendency for people to compare their own situation to the performance of others and what they receive. People draw conclusions about what they should receive by benchmarking both internal and external to the organization (Deckop et al., 2004; Milkovich & Newman, 2005), and their satisfaction is determined by how favorable the comparisons are (Deckop et al., 2004; Lawler, 1971, 1973, 2000, 2003). When an individual's outcome/input ratio is below that of comparison others, the individual may respond by lowering his/her level of effort, thereby bringing his/her ratio closer in line with the referent. The effects of under reward, and their refinements as expressed in justice theory (Heneman & Judge, 2000), have received considerable support in the literature in demonstrating the behavioral implications of perceived injustice in reward allocation (Gerhart, Rynes, & Minette, 2004). Therefore, both

theory and empirical evidence suggest that there are behavioral implications resulting from pay satisfaction or dissatisfaction.

When people assess what their pay should be, they also consider factors such as education, experience, skill, training, effort, age, seniority, loyalty, and both past and present performance (Lawler, 1971; Mamman, 1990; Milkovich & Newman, 2005). Ordinarily, people tend to make their comparisons based on inputs beneficial to themselves because they feel that their strongest factors should be weighed most heavily in determining their pay (Lawler, 1966, 2003). Regardless of the pay plan instituted, people will compare their situation with the situation of others when determining their level of satisfaction (Adams, 1965; Lawler, 2000; Milkovich & Newman, 2005).

The third research-based conclusion about satisfaction with rewards is that people often misperceive the rewards of others (Lawler, 1971, 1973, & 2000; Mamman, 1990 & 1997). Individuals tend to underestimate the performance of others while overestimating the rewards others receive, which results in a distorted perception that leads to dissatisfaction and reduced self-esteem (Lawler, 1971 & 2000). Therefore, just tying pay to performance will not necessarily lead to high pay satisfaction. The amount of pay must approximate what the employees'

perception of what it should be (Lawler, 2000; Milkovich & Newman, 2005).

The final conclusion from research into reward satisfaction is that overall job satisfaction is influenced by how satisfied employees are with both the intrinsic and extrinsic rewards they receive from their jobs (Deckop et al., 2004; Lawler, 1973 & 2000; Miceli & Mulvey, 2000). One implication of this conclusion is that pay will not compensate for a boring job, just as an interesting job will not make up for low pay (Lawler, 1981 & 2000; Miceli & Mulvey, 2000). In fact, it has been determined that low pay is more likely to result in job dissatisfaction than high pay is likely to result in job satisfaction (Lawler, 1971 & 2000). Even so, there is a positive correlation between pay and job satisfaction, and rewards have been shown to motivate workers (Lawler, 1995 & 2000; Milkovich & Newman, 2005).

#### *Lawler's Model of Pay Satisfaction*

The specific interest in pay satisfaction can be traced to Lawler (1971), who set forth a discrepancy model of pay satisfaction. According to this model, pay satisfaction is a function of the perceived amount of pay that should be received

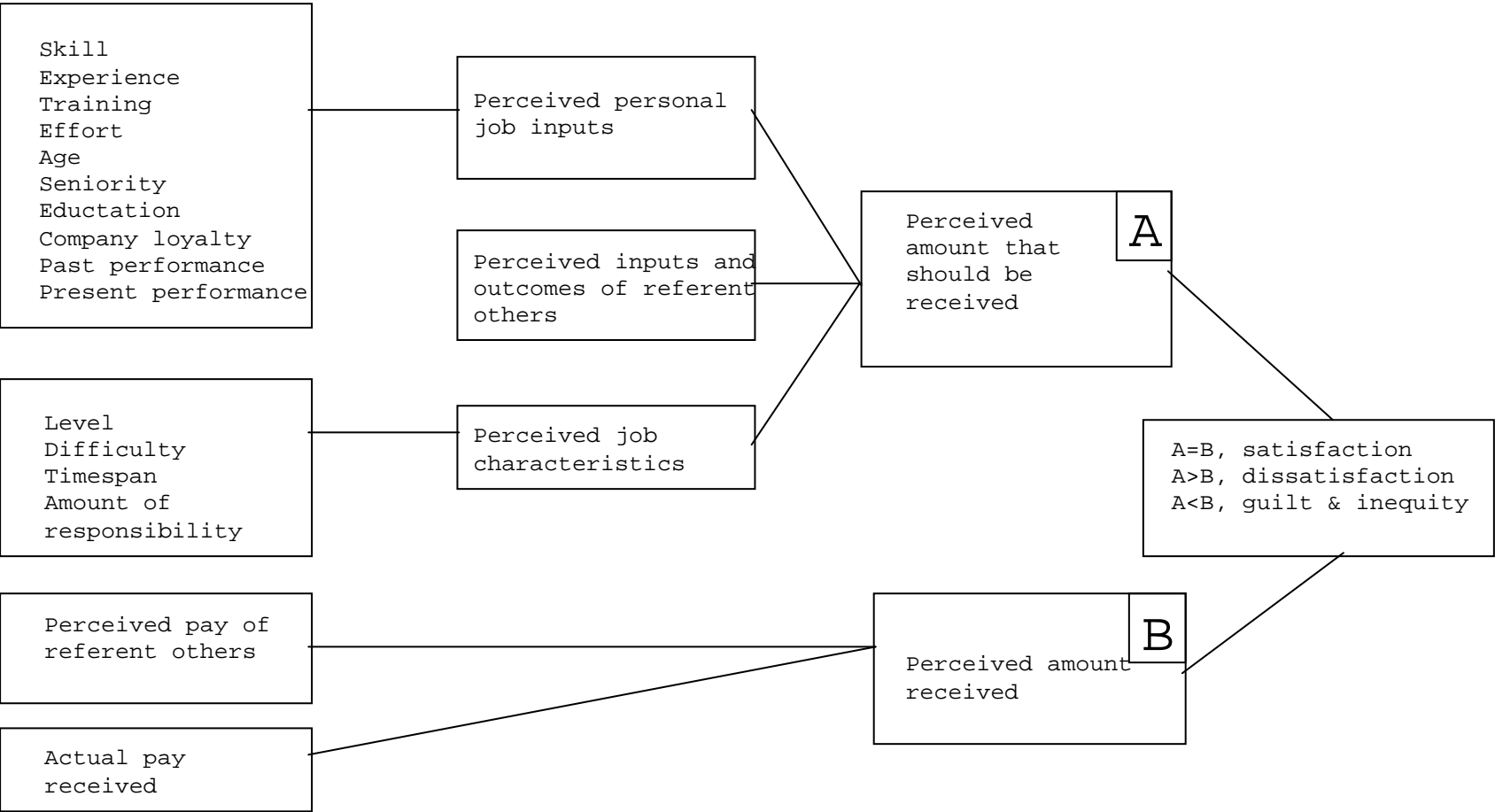
less the perceived amount that is received. These perceptions are thought to be determined by a variety of actual and perceived characteristics of the employee and job. Characteristics of the employee include job performance and tenure, whereas characteristics of the job include the level of difficulty and amount of responsibility.

In his 1981 book, *Pay and Organizational Development*, Edward Lawler expanded on his model of determinants of pay satisfaction (Figure 2). The model stresses the importance of social comparisons, and it gives inputs and outcomes a prominent role, as does equity theory. It argues that satisfaction is basically determined by the difference between perceived pay and the person's belief about what his pay should be. Lawler's model shows that a person's perception of what his pay should be is influenced by a number of factors, including perceived job inputs, such as skills, abilities, and training brought to the job in addition to the behavior exhibited on the job.



Figure 2. Model of the determinants of pay satisfaction.

(Lawler, 1981)



Lawler's model has inspired numerous researchers to conduct pay satisfaction studies, and as a result, his model has been refined in at least two ways. The first refinement was suggested by Dyer & Theriault (1976). They tested three hypotheses based on Lawler's model. First, they demonstrated that persons with lower salaries are less satisfied with their pay than persons with higher salaries, which is logical. Secondly, they concluded that pay satisfaction is negatively correlated with self-perceived training and experience. This means that persons with higher perceived personal job inputs are less satisfied with their pay than those individuals with lower perceived personal job inputs. The third hypothesis tested by Dyer & Theriault (1976) was that the amount of pay an employee receives is positively associated with pay satisfaction. Because of this positive relationship, Risher (1997) believes compensation can still be a potentially valuable tool that managers can use to influence employee performance.

Dyer & Theriault's 1976 proposed modification to Lawler's model was based on the work of Goodman (1974), and was that pay satisfaction is influenced by perceptions of the perceived adequacy of pay-system administration. Adequacy of pay-system administration was defined as employee perceptions concerning the appropriateness of pay criteria, understanding of pay

criteria, accuracy of performance assessment, and adherence to pay policies or contracts. The modified discrepancy model of pay satisfaction received empirical support in studies conducted by Dyer & Theriault (1976) and Weiner (1980). In both of these studies a significant amount of pay-satisfaction variance was explained by the variables assessing the perceived adequacy of pay-system administration. In support of the revised discrepancy model, the perceived adequacy of pay-system administration explained a significant amount of variance in pay satisfaction in addition to the variance accounted for by the original discrepancy model of Lawler (1971).

The second refinement to Lawler's model was by Heneman & Schwab (1985), who suggested that pay satisfaction was a multidimensional construct. In previous (and some subsequent) research, pay satisfaction had been treated as a unidimensional construct. Empirical research conducted by Heneman and Schwab (1985) indicates that pay satisfaction has four subdimensions. These subdimensions are labeled as satisfaction with pay level, pay structure/administration, pay raises, and benefits. Satisfaction with pay level is the perceived satisfaction with direct wages or salaries, whereas satisfaction with pay raises refers to perceived satisfaction with changes in pay level (Heneman & Schwab, 1985). Satisfaction with

structure/administration is defined as perceived satisfaction with the internal pay hierarchy and with the methods used to distribute pay. Satisfaction with benefits concerns perceived satisfaction with indirect payments to the employees.

One important element of employee perceptions concerning the perceived adequacy of pay-system administration was the extent to which pay is perceived by employees to be linked to performance (Lawler, 2000). For example, when pay-for-performance plans such as merit pay are properly administered, they have been shown to be related to high motivation, performance, and job satisfaction (Heneman, 1984). As a result of these relationships, many organizations have implemented innovative compensation plans in which pay is tied to performance (Milkovich & Newman, 2004).

At a theoretical level, there is be a positive relationship between pay-for-performance perceptions and pay satisfaction (Lawler, 1981). To the extent that performance is perceived by employees as being instrumental to the attainment of a valued outcome such as pay raise, then pay satisfaction should be increased (Lawler, 1971). The empirical research has confirmed this positive relationship between pay-for-performance perceptions and pay satisfaction (Carroll & Tosi, 1973; Kopelman, 1976; Miceli & Near, 1987; Penner, 1966). Caution

should be exercised, however, in interpreting this positive relationship. Lawler (1971) points out that low pay results in dissatisfaction and adequate or good pay do not necessarily result in satisfaction by employees.

For obvious reasons, pay-for-performance perceptions are expected to be directly related to pay-raise satisfaction (Mamman, 1990, 1997). These perceptions can also, however, be positively associated with other dimensions of pay satisfaction (Henneman & Schwab, 1985). Specifically, there may be a relationship with pay-level satisfaction because in many organizations salary increases for performance in one year are built in to the base salary for subsequent years (Henneman & Schwab, 1985; Henneman et al., 1998). In addition, pay-for-performance perceptions can be related to the structure/administration facet of pay satisfaction because performance is often used as a criterion to move employees within salary grades (Henneman & Schwab, 1985; Henneman et al., 1998). Yet, the preference of employees for these criteria as the basis for the allocation of pay needs to be compared with other potentially valued criteria such as seniority and education. Finally, pay-for-performance perceptions can be related to satisfaction with benefits in that it may take fewer benefits of lesser value to satisfy an employee when performance

is high and pay raises are large (Heneman & Schwab, 1985; Heneman et al., 1988). Heneman and colleagues (1988) demonstrated that while employee perceptions of pay-for-performance is be most highly related to pay-raise satisfaction, pay-for-performance perceptions are also significantly related to satisfaction with pay level, benefits, and the structure & administration.

#### *Research Based on Lawler's Model*

One important outcome employees derive from work is their pay (Lawler, 1971). Pay satisfaction has been thoroughly researched, as evidenced by the large number of studies conducted and the numerous theoretical models created (Tables 1 & 2). In addition to the factors included in Lawler's model, researchers have also identified numerous potential determinants that are correlated to pay satisfaction (Table 1). There have also been numerous hypotheses tested relative to pay satisfaction and preferences for pay systems (Table 2). Employee pay satisfaction can be a more important facet of job satisfaction to many employees than satisfaction with other facets such as work, co-workers, and supervision (Heneman, 1985). One reason for the need to study employee pay level

satisfaction or dissatisfaction is because of its link to subsequent employee behaviors, including absenteeism and turnover (Sturman, Trevor, Boudreau, & Gerhart, 2003; Weiner, 1980), pro-union voting behavior (Deckop, 1992), and extra-role behavior, such as taking on extra responsibility (Scholl, et al., 1987).

Deckop (1992) argued that employees' behavioral responses to pay satisfaction or dissatisfaction are affected by the individual's emphasis on organizational pay satisfaction versus career pay satisfaction. According to Deckop (1992), organizational pay satisfaction is "the overall attitude that individuals have about their employers that results from the pay they receive," while career pay satisfaction is "the overall attitude that individuals have about their careers that results from the pay they receive," (p.116). Understanding an employee's focus on organizational versus career pay satisfaction can allow for greater understanding of the employee's behavior. For example, behaviors linked to employees experiencing organizational pay dissatisfaction include reduced effort, complaints, union activity and intra-occupational turnover, while employees with career pay dissatisfaction are more likely to increase effort, retrain, or leave the occupation (Deckop, 1992).

Given such behavioral consequences associated with pay satisfaction or dissatisfaction, theoretical models by Lawler (1971), Dyer & Theriault (1976), Miceli et al. (1991), and Deckop (1992) have been developed to understand the determinants of employee pay level satisfaction. A common variable across these models is pay referents, i.e., the perceived pay of comparison others. Sociological research on the theory of distributive justice suggests that feeling underpaid is affected by social comparisons similar to pay referents (Mirowsky, 1987). Social comparisons which sociologists have studied include: relative deprivation (Merton & Rossi, 1957), referential structures (Berger et al., 1972), and living levels (Rainwater, 1974). Employee pay level satisfaction is predicted to be affected by perceived discrepancies between the employee's actual salary and the salaries of these pay referents (e.g., Deckop, 1992; Dyer & Theriault, 1976; Heneman, 1985; Lawler, 1971; Miceli et al., 1991).

Quarstein, McAfee, & Glassman (1993) found that working college students' overall job satisfaction was affected by more stable pre-hire situational characteristics such as pay and company policies, as well as by more transitory situational occurrences such as interpersonal work relationships and feedback. While one's pre-hire salary is known and certainly



affects initial job acceptance, pay also represents a transitory post-hire situational occurrence variable as the employee eventually compares his/her salary to referents inside and outside the organization.

### *Pay Referent Research*

Goodman (1974) developed a taxonomy of pay referent categories which included: other-inside, other-outside, system structure, system administration, self-pay history, self-family, and self-internal. Subsequent studies (Berkowitz, Fraser, Treasure, & Cochran, 1987; Heneman et al., 1988; Hills, 1980) have built on Goodman's (1974) work by developing multi-item pay referent scales and testing their dimensionality through factor analyses. Although conflicting results across these studies exist, a cumulative integration of results seems to provide the strongest support for five distinguishable pay referent categories- -social, financial, historical, organization, and market.

Social refers to pay comparisons with family, relatives, and friends; financial looks at the adequacy of pay to meet one's current financial needs; historical refers to one's job-related pay received in the past; organization deals with pay

comparisons within the company; and market refers to pay comparisons outside the organization. An integrative summary of other pay referent research using one-item referents (Berkowitz et al., 1987; Dreher, 1981; Scholl, et al., 1987; Shapiro & Wahba, 1978; Sweeney, McFarlin, & Inderrieden, 1990) supports this five-category pay referent taxonomy.

These five pay referents have been operationalized using two different response scales--level and importance. Level asks subjects to compare their pay to referents on some type of quantitative scale, e.g., 5-point, where the scale anchors go from "a lot less" to "a lot more" (Berkowitz et al., 1987; Dreher, 1981; Lee & Martin, 1991; Rice et al., 1990; Ronen, 1986; Scholl, et al., 1987; Sweeney et al., 1990). Therefore, it is expected that as an employee perceived a higher salary level compared to these pay referents, the employee's pay satisfaction should increase. There has been inconsistent support for significantly positive pay referent level-pay satisfaction relationships. For example, results by Dreher (1981), Rice et al. (1990), Ronen (1986), and Sweeney et al., (1990) are supportive, while Berkowitz et al. (1987), Lee & Martin (1991) and Scholl et al., (1987) found mixed results.

Table 1. Factors correlated to pay satisfaction

(Adapted from Mirabella, 1999)

PAY FACTORS CORRELATED TO PAY SATISFACTION	STUDIES WHERE FOUND CONCLUSIVE
Tenure	Mamman (1990, 1997); Lawler (1966, 1971); Morse (1953); Lawler & Porter (1966); Hulin & Smith (1967); Dyer & Theriault (1976) ; Dyer, Schwab & Theriault (1976); Schwab & Wallace (1974); Finn & Lee (1972)
Education	Mamman (1990, 1997); Lawler (1966, 1971); Andrews & Henry (1963); Cantril (1943); Klein & Maher (1966); Penzer (1969); Finn & Lee (1972)
Skill & training	Mamman (1990, 1997); Lawler (1966, 1971); Goodman (1974); Pritchard (1969); Milkovich & Campbell (1972); Dyer, Schwab & Theriault (1976); Dyer & Theriault (1976); Parent & Weber (1994); Murray & Gerhart (1998); Gupta et.al. (1986); Jenkins et.al. (1992)
Performance	Mamman (1990, 1997); Lawler (1966, 1971); Porter & Lawler (1968); Dyer & Theriault (1976); Dyer, Schwab & Theriault (1976); Arvey & Mussio (1973); Graen (1969); Hackman & Lawler (1971); Mitchell & Albright (1972); Cherrington, Reitz & Scott (1971); Reitz (1971); Weinstein & Holzbach (1973); Farr (1976); Terborg & Miller (1978); Dreher (1981); Gupta (1980)
Responsibility	Mamman (1990, 1997); Lawler (1966)
Mental effort	Mamman (1990); Lawler (1966); Dyer & Theriault (1976)
Physical effort	Mamman (1990); Lawler (1966); Dyer & Theriault (1976)
Labour market	Mamman (1990)
Cost of living	Mamman (1990, 1997); Dyer & Theriault (1976) ; Dyer, Schwab & Theriault (1976)

Table 1. (con't.)

PAY FACTORS CORRELATED TO PAY SATISFACTION	STUDIES WHERE FOUND CONCLUSIVE
Job status	Mamman (1990)
Government policy	Mamman (1990)
Market rate	Mamman (1997)
Special demands on the job	Mamman (1997)
Collective bargaining	Mamman (1997)
Wage payment method (hourly vs. incentive)	Lawler (1971); Wofford (1971); Mitchell & Albright (1972); Graen (1969); Yukl, Wexley & Seymore (1972); Taylor (1911); Roethlisberger & Dickson (1939); Dalton (1948); Whyte (1955); Cherrington, Reitz & Scott (1971); Finn & Lee (1972); Pritchard, Dunnette & Jorgensen (1972)
Anticipated future earnings	Lawler (1971); Andrews & Henry (1963); Klein & Maher (1966)
Amount of pay / pay level	Lawler (1971); Lawler & Porter (1963, 1966); Porter & Lawler (1968); Locke (1969); Morse (1953); Centers & Cantril (1946); Dyer & Theriault (1976); Oliver (1977); Schwab & Wallace (1974); Heneman, Greenberger & Strasser (1988)
Nonmonetary outcomes	Lawler (1971)
Time span	Lawler (1971); Jacques (1961); Richardson (1971)
Organization level	Lawler (1971); Lawler & Porter (1963, 1966); Andrews & Henry (1963); Rosen & Weaver (1960); Porter (1961)
Gender	Lawler (1971); Hulin & Smith (1964); Morse (1953); Stockford & Kunze (1950)
Age	Lawler (1971); Morse (1953); Lawler & Porter (1966); Hulin & Smith (1967)
Quality of performance	Lawler (1966)

Table 2. Conclusive findings in pay satisfaction (Adapted from Mirabella, 1999)

HYPOTHESIS TESTED	STUDIES WHERE FOUND CONCLUSIVE
Employees prefer multiple criteria to determine their pay.	Mamman (1990, 1997); Lawler (1966); Finn & Lee (1972); Scholl, Cooper & McKenna (1987); Dorstein (1985); Heneman & Schwab (1985)
There is a significant difference between older and younger employees regarding tenure as a criterion for pay systems.	Mamman (1997), Mirabella (1999)
There is a significant difference between respondents with high and low education regarding education as a criterion for pay systems.	Mamman (1997), Mirabella (1999)
Preference for cost-of-living criteria varies across organizational levels.	Mamman (1997); Belcher & Atchison (1976)
Employees have a common set of preferences for criteria in pay determination.	Jacques (1963); Lawler (1971, 1981); Campbell (1984); Greene & Podsakoff (1978)
Employees paid according to the amount they produce will be more satisfied than those paid by the amount of time worked.	Lawler (1971)
Pay satisfaction increases when pay is perceived to be based upon the criteria that employees feel it should be based upon.	Lawler (1966, 1971); Nash & Carroll (1975)
Persons with low salaries will be less satisfied with their pay than those with high salaries.	Dyer & Theriault (1976)

Table 2. (con't.)

HYPOTHESIS TESTED	STUDIES WHERE FOUND CONCLUSIVE
Positive relationship between pay-for-performance perceptions and pay satisfaction.	Carroll & Tosi (1973); Kopelman (1976); Miceli & Near (1987); Heneman, Greenberger & Strasser (1988); Miceli, Jung, Near & Greenberger (1991); Nash & Carroll (1975)
Amount of pay is positively associated with pay satisfaction.	Dyer & Theriault (1976); Lawler & Porter (1966); Oliver (1977); Schwab & Wallace (1974)
Pay satisfaction is negatively correlated with self-perceived training and experience.	Dyer & Theriault (1976)
Pay satisfaction is negatively correlated with tenure.	Schwab & Wallace (1974)

## Pay Systems and Employee Choices

### *Comparison of Pay Systems*

When formulating compensation plans, there are a variety of factors to consider including the criteria on which to base pay. Thomas Mahoney (1989) advocates three bases for pay: job, person/skill, and output/performance. Each of these pay systems has been used with varying degrees of success in numerous organizations (Lawler, 2000 & 2003). Each pay system has its own unique characteristics that are incorporated into the assessment of an employee's pay.

Job-based pay is salaried or hourly, and is typical of stable mass production environments where tasks are clearly defined (Lawler, 1995; Mahoney, 1989). The job-based approach to pay is founded on the assumption that the worth of a job can be determined and that the person doing the job is worth only as much to the organization as the job itself is worth (Lawler, 1995). Frequently associated with Tayloristic forms of work organization, job-based is perhaps the oldest form of pay system, although its use has decreased over the past two decades due to its incompatibility with modern team-based forms of work organization such as cellular manufacturing (Cannell & Long 1991). It is typically used to motivate workers to produce

goods made through simple, repetitive tasks with short cycle times in traditional assembly line systems of work organization with little intrinsic interest provided by the work itself.

The essential principle of job-based is that employees cannot be trusted to do their jobs without some form of immediate incentive to act in the interests of the business, given that management and employee interests diverge widely, and employees are supposed to be self-serving. This view of work behavior originates from the perspective of agency theory (Rowlinson, 1997) whereby management and employee interests have to be aligned with those of shareholders through incentive pay. The job-based approach is often preferred by organizations, but rarely preferred by employees (Lawler 1995, 2000, & 2003). Yet, job-based pay is typical of low paying jobs or blue-collar positions (Cox, 2000; Mahoney, 1989).

Person-based or skill-based pay is an alternative to job-based pay, and determines an employee's pay by the number of skills that person has or the number of jobs that person can do (Robbins, 2004). This form of pay purports to offer benefits to the organization by tying pay to the range and sometimes depth of skill acquired. A variety of potential objectives and benefits are thought to exist to both organizations and employees. Employees are encouraged to become more flexible in



their job tasks, thereby gaining greater awareness of the whole manufacturing process (Cox, 2000). This should lead to improved quality of work once they perceive the impact that their own actions have on the rest of the production process. Labor costs should decrease through worker flexibility in being able to cover for other employees' absence through holidays or sickness, and if employees become responsible for some maintenance tasks, reduced downtime for machinery can also result (Cox, 2000).

Paying people based on their skills and competencies does not necessarily produce pay rates that are dramatically different from pay rates that result from job-based pay because peoples' skills usually match reasonably well with the jobs they are doing (Lawler, 1995 & 2000; Milkovich & Newman, 2005). Skill-based pay is best suited to organizations that typically experience rapid technological change, where tasks and outcomes vary (Lawler, 1990, 1995, & 2000). "An alternative to job-based pay that has recently been adopted by a number of organizations is to pay people based on their skills and competencies," (Lawler, 2000, p. 41). Pay based on skills and competencies equates to person-based pay. Since person-based pay has recently become more widely used as a basis for pay, it has received renewed interest from researchers (Lawler, 1996 & 2000).

Generally, person-based pay appears to fit organizations that want to have a flexible, relatively permanent group of employees that is oriented toward learning, growth, and development (Lawler, 1995 & 2000). Skill-based pay systems are more likely to be appropriate for what Lawler (1990) terms "high involvement cultures", where employee involvement and participation initiatives already exist. Lawler (2000) further elaborates that skill-based pay has been used often in plant start-ups and in plants that are moving toward highly involved, team-based management systems. It also fits situations where organizations need to attract and retain talented people with unique and valuable skills that make them a commodity in themselves (Robbins, 2004). In organizations where the workforce is knowledgeable and flexible, skill-based pay can be used if the employees are capable of performing multiple tasks and willing to do so (Lawler, 2000; Milkovich & Newman, 2005).

The main organizational benefits of person-based pay are flexibility and improved communication. "Filling staffing needs is easier when employee skills are interchangeable," (Robbins, 2004, p. 226). Flexibility often means that fewer employees are needed, and it frequently reduces absentee and turnover rates because people prefer being able to develop, use, and be paid for a wide range of skills. Additionally, numerous studies have

investigated the use and effectiveness of person-based or skill-based pay, and results indicate that the use of person-based pay is expanding and that it generally leads to higher employee performance, satisfaction, and perceptions of fairness of the pay system (Lawler, 1995 & 2000).

Person-based pay results in important changes in an organization's culture and employees' motivation (Milkovich & Newman, 2005). "Instead of being rewarded for moving up the hierarchy, people are rewarded for increasing their skills and developing themselves," (Lawler, 2000, p. 41). The use of a person-based pay system can result in a highly talented workforce that is supported by an organizational culture that enhances personal growth and development (Lawler, 1995 & 2000).

Yet, there are several shortcomings associated with person-based pay systems. For example, there may be an optimal number of skills for any individual to possess, or employees may not want to give up the job they were hired for (Bateman & Snell, 2004). According to Milkovich & Newman (2005), "the bottom line is that skill-based approaches may be only short-term initiatives for specific settings... they do not appear suitable for all situations," (p. 157). Furthermore, person-based pay systems can be challenging to administer because it is difficult to assess how much a skill is worth. Skill assessment can be

difficult and has led to modified person-based systems, such as competency pay (Lawler, 1995). Even with these challenges, there are numerous potential advantages to person-based pay and its use is likely to grow in the near future (Lawler, 2000). A key advantage of person-based pay is that it yields a fairly objective basis for determining pay (Lawler, 1995 & 2000).

Another objective basis for determining pay is performance. Performance-based pay has been extensively studied over the last century (Lawler, 1995, 2000 & 2005; Mahoney, 1989). A majority of personnel managers from various public and private organizations agreed that pay-for-performance is an effective tool for motivating employees and increasing productivity (Kellough & Selden, 1997). In order to better understand the personnel managers' attitudes toward pay-for-performance, Kellough & Selden (1997) performed a multiple regression analysis and discovered several linkages. First, they found that the amount of experience a personnel manager has is negatively correlated with their attitudes toward the pay plan. This indicates that the more experienced the personnel manager, the worse their attitude is toward the pay plan, which is attributed to the fact that experienced managers are more attuned to the many problems associated with administering merit pay systems. The second interesting connection that was

identified was that respondents who have worked exclusively in the public sector were significantly more positive in their attitudes than were those with private sector experience.

Previously, Lawler (1966) had examined pay systems in both the public and private sectors by studying seven organizations, consisting of three state governments and four private companies. Each of the three government organizations had similar compensation systems including having comparable pay ranges for similar jobs, and likewise, the four private companies had compensation systems similar to each other, but different from the government organizations (Lawler, 1966).

Lawler's (1966) study revealed that one significant factor in both private companies and government agencies was that the managers' pay was significantly correlated with seniority, education level and management level. In addition, the quality of job performance and the effort expended were significant factors in the private companies pay systems. When employees were asked how they would like their pay to be determined, the results from both sectors were similar, except for one, which was that managers in the private sector also wanted their pay to be based on performance. In fact, performance was the first choice for pay-bases among managers in private companies, while ranking fourth among seven factors for managers in government

agencies. Therefore, Lawler's (1966) results suggest that when organizations tie pay to performance, the managers will see the connection and will operate to increase performance. Most importantly, Lawler's (1966) results indicate that the concept of performance-based pay is acceptable to managers, and that jobs that typically utilize performance-based pay are ones that involve minimal supervision but have identifiable, controllable outcomes.

According to Mahoney (1989), these three bases for pay do not need to be mutually exclusive, and are often combined in companies. In fact, linking pay to performance is not only possible but also desirable in skill-based systems, especially when high base salaries are an area of concern to a company (Franklin, 1988; Milkovich & Newman, 2005). The choice of pay system criteria is of interest to both organizations and employees, and because of this, pay has been the focus of numerous research studies (Lawler, 1995, 2000 & 2003; Milkovich & Newman, 2005; Robbins, 2004).

#### *Performance-based Pay*

For organizations, the importance of performance in pay systems is a result of the relationship between performance and

productivity (Lawler, 1995, 2000, & 2003; Milkovich & Newman, 2005; Robbins, 2004). Employers and employees tend to choose different factors to determine pay rates. When determining pay, an employee's title and their length of service are the two factors that are usually favored by employers (Lawler, 2000). When employees are rewarded according to seniority, or when everyone receives the same annual increase, compensation becomes an entitlement rather than an incentive. As Kerr (1996) points out, this approach is contradictory to managing scientifically, and was exactly the kind of pay system that Frederick Taylor was trying to eliminate.

The importance of pay plan factors to employees has been studied extensively because managers need to design pay plans that are successful in attracting and retaining employees while still meeting budget constraints (Milkovich & Newman, 2005). The chief threats to employee loyalty are pay dissatisfaction and the methods used to determine the factors involved in pay systems (Lawler, 1971, 1995, & 2000). While cradle-to-grave employment is a thing of the past, Americans remain surprisingly loyal to their employers. Only 60% of American workers are satisfied with their job security, whereas 80% are committed to their employers (Robbins, 2004). However, the workers expect to be rewarded fairly in exchange for this loyalty (LeBlanc and

Mulvey, 1998; Robbins, 2004). The pay system is the most important factor in determining employee commitment or intention to leave (Lawler, 1995, 2000 & 2005). If organizations devise pay systems that take into account employee preferences, concerns, commitment and performance, then retention is likely to increase (LeBlanc & Mulvey, 1998).

#### *Employee Perceptions of Pay Plans*

Recently some research has discovered the fact that employee participation is a critical success factor for pay system effectiveness (Lawler, 2003). The potential benefits to be gained from involving employees in pay system design and implementation are clear (Milkovich & Newman, 2005), but it is illuminating to draw on some work on organizational justice to illustrate from the employees' perspective the significance of perceptions of (in)justice or (un)fairness and to relate this to opportunities for participation in pay system management.

The concept of justice was initially used to investigate employees' reactions towards the level of reward offered (e.g. Adams' equity theory 1965). More recently it was applied to analyze the way that the allocation processes are managed. This has been found to have a significant positive impact on employee



views of their organization, organizational commitment, engagement in Organizational Citizenship Behaviours and evaluations of supervisors (Folger & Konovsky, 1989; Moorman, 1991). Thus, the involvement of employees in pay system design can be a crucial factor in the success of the pay system.

A research study conducted Heneman and colleagues (1988) focused on the worker's perception of his being paid for performance. By focusing on the employee's perception of performance-based pay, Henneman and colleagues (1988) work confirms the pay-for-performance model derived from Vroom's expectancy theory. Theoretically, there should be a positive relationship between pay-for-performance perceptions and pay satisfaction, and this was validated by many studies (Lawler, 2000). Studies on blue-collar workers have shown that an employee's satisfaction with his pay is the result of an interaction between how he feels his pay is determined and how he feels it should be determined (Lawler, 1966; Currall et al., 2005).

Manipulating the contingencies of a reward system can create conditions under which performance is tied to satisfaction (Cherrington, Reitz, & Scott, 1971; Milkovich & Newman, 2004; Orpen, 1982). By testing random rewards, positively contingent rewards, and negatively contingent

rewards, researchers were able to demonstrate that positively tying performance to pay led to a positive correlation between satisfaction and performance (Cherrington, Reitz, & Scott, 1971; Orpen, 1982). Likewise, the research demonstrated that rewarding low performers while ignoring high performers (i.e., negatively contingent rewards) resulted in a negative correlation between satisfaction and performance (Cherrington, Reitz, & Scott, 1971; Orpen, 1982).

Heneman and colleagues' (1988) study of hospital employees discovered three significant relationships with pay-for-performance perceptions, one with pay raise satisfaction, one with pay level satisfaction, and one with overall pay satisfaction. Yet, when comparing actual pay level instead of pay-for-performance perceptions, the researchers found no significant relationships. "To the extent that performance is perceived by employees as being instrumental to the attainment of a valued outcome such as a pay raise, then pay satisfaction should be increased," (Mirabella, 1999, p. 34). The employees' perceptions of pay and preferences for pay have become the focus of numerous pay-related research studies in an attempt to better understand pay satisfaction and employee motivation (Lawler, 1995 & 2000; Mamman 1997).

*Preferences for Pay Systems*

Lawler's work truly served as a catalyst to promote research on the effects of pay systems and employee pay satisfaction (Heneman et al., 1988; Robbins, 2004). Some studies focused on the choice of pay comparisons (Goodman, 1974), while others focused on the threshold of a meaningful pay increase (Krefting & Mahoney, 1977) or pay system administration (Dyer & Theriault, 1976; Lawler, 1971), and a few even focused on the criteria upon which recipients prefer to be paid (Dyer et al., 1976; Mamman, 1997; Mirablla, 1999). Several studies have shown that even though performance has been shown to have the largest impact on pay satisfaction, it was recognized that a number of non-performance related factors also influence pay satisfaction (Fossum & Fitch, 1985).

After decades of research, experts continue to underscore the importance of linking pay systems to meeting organizational objectives (Lawler, 2000 & 2004; Milkovich & Newman, 2005). Researchers have found that employees prefer their pay to be determined first and foremost by performance, but this preference is contingent on many factors (Lawler, 1995 & 2000). Highly skilled employees tend to prefer performance-based pay more than low-skilled employees (Lawler 1995). Additionally,

unionists tend to be less supportive of pay-for-performance (Lawler, 2000). And because accurate and objective measurement of employee performance can depend on the nature of the job, it can be argued that the nature of the job will also impact one's preference for the pay-for-performance system (Mamman, 1997).

While conducting research on employees in Australia, Mamman (1997) found that performance was overwhelmingly the most preferred criterion by which employees prefer to have their pay determined. The various criteria explored included performance, cost of living, tenure, educational qualification, collective bargaining, skill, market rate, responsibility and special demands. As expected, there were significant differences among subgroups of employees. Not surprisingly, older people ranked tenure to be significantly more important than did younger people. Similarly, highly educated people ranked education as much more important than less educated people. In general, respondents preferred having multiple criteria used in determining their pay. Pay preference was related to age, occupation/position, and education level of the employee (Mamman, 1997), which indicates that individualized pay plans may lead to pay satisfaction (Cox, 2000).

While research suggests that a 10-20% increase in productivity occurs when individual incentive plans are used,

there are many negative side effects of individualized pay-for-performance plans (Cox, 2000). These negative effects include restricting output due to perceptions of possible social rejection by peers and of possible layoffs due to running out of work (Bateman & Snell, 2004; Farr, 1976). Lawler (1973) demonstrated that group incentive plans generally avoid these side effects and may do a better job of tying rewards to performance.

Finally, employees' preferences for pay system determinants will be influenced by equity theory, such that satisfaction with the pay system will be determined by a comparison with the compensation received by others (Milkovich & Newman, 2005; Sweeney & McFarlin, 2005). Equity theory implies that satisfaction with pay is contingent on employees' perceptions regarding the fairness of their compensation in comparison to their role/position in the organization and that of others in the organization (Lawler, 2000). Therefore, choice of pay systems by employees is dependent on their preferences for the criteria used to determine pay and their perceptions of the pay system. The pay determinants preferred by various employees will vary with their backgrounds (Mamman, 1997; Milkovich & Newman, 2005), and this fact needs to be incorporated into pay systems.

*Conclusions on Pay System Choices*

Utilizing a voluntary choice of pay plans binds employees to their choices and results in a commitment to the organization (Currall et al., 2005; Lawler, 2003). Student subjects selected reward schemes based on their prior performance, even though none of the subjects were paid on performance (Chow, 1983). As many studies have shown, allowing individuals to choose their pay plans probably will increase the likelihood that they attain the goals that are needed to get the pay (Lawler, 2000 & 2003).

Taken in its entirety, research indicates that individuals will follow Vroom's expectancy theory and maximize expected rewards by rationally choosing among alternatives (Vroom, 1964). Furthermore, when faced with a decision to choose among different reward plans, it is anticipated that individuals will choose the alternative that yields maximum expected rewards or minimum expected costs (House et al., 1974). Thus, employees with high self-perceived ability levels would be expected to prefer plans that distribute rewards based on performance, while employees with low self-perceived ability would be expected to choose time-based reward plans (Cox, 2000; Farh et.al., 1991; Robbins, 2004).

In conclusion, the choice of pay systems is dependent on numerous factors, some of which are preferred by employers and some of which are preferred by employees. Employers and employees need to agree on the criteria used in the pay system, if the system is going to be successful (Bateman & Snell, 2004; Cox, 2000). In addition, the pay system criteria preferred by employees will vary with the type of employee. And finally, employee perceptions of the criteria used in pay systems influences pay satisfaction (Lawler, 2003; Currall et al., 2005).

## CHAPTER 3: METHODOLOGY

### Methodological Approach

Mamman (1997) and Mirabella (1999) used surveys when assessing employee preferences regarding pay system criteria, and analyzed the data using quantitative statistical tools. Both of these studies yielded significant results and demonstrated that employee preference for pay system criteria can be assessed using quantitative techniques. Since quantitative analyses work best for theory validation, the use of quantitative methods for analyzing employee preference for pay system determinants is a logical choice, especially considering that the pay system theory has been around a long time and has been studied by numerous researchers.

### Study Design

The purpose of this study is to determine the relationship between employee preference for a pay system and job characteristics, personal factors, and recent economic uncertainty. The conceptual framework for this study was based on Aminu Mamman's (1997) study and James Mirabella's (1999) study. The data utilized in the study was collected by the investigator via written survey. The research hypotheses,



survey instrument, survey design, construct validity and reliability, and research variables are described in the following sections.

### Research Hypotheses

The six hypotheses in the null and alternative forms are:

*Hypothesis  $H_{01}$  (null)*: There is no significant difference between employees' preferences for pay system criteria as a result of being directly or indirectly adversely affected by events that have occurred over the last five years. This hypothesis can be broken down for each of the eight dependent variables.

*Hypothesis  $H_{01a}$* : There is no significant difference between employees' preferences for length of service as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{01b}$* : There is no significant difference between employees' preferences for level of skills possessed as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis H<sub>01c</sub>*: There is no significant difference between employees' preferences for market forces as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis H<sub>01d</sub>*: There is no significant difference between employees' preferences for job performance as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis H<sub>01e</sub>*: There is no significant difference between employees' preferences for cost of living as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis H<sub>01f</sub>*: There is no significant difference between employees' preferences for job responsibilities as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis H<sub>01g</sub>*: There is no significant difference between employees' preferences for the inconveniences of the job as a pay system criterion as a result of being

directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{01h}$* : There is no significant difference between employees' preferences for education level as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1}$  (alternate)*: There is a significant difference between employees' preferences for pay system criteria as a result of being directly or indirectly adversely affected by events that have occurred over the last five years. This hypothesis can be broken down for each of the eight dependent variables.

*Hypothesis  $H_{A1a}$* : There is a significant difference between employees' preferences for length of service as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1b}$* : There is a significant difference between employees' preferences for level of skills possessed as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1c}$ :* There is a significant difference between employees' preferences for market forces as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1d}$ :* There is a significant difference between employees' preferences for job performance as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1e}$ :* There is a significant difference between employees' preferences for cost of living as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1f}$ :* There is a significant difference between employees' preferences for job responsibilities as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1g}$ :* There is a significant difference between employees' preferences for the inconveniences of the job as a pay system criterion as a result of being

directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1h}$* : There is a significant difference between employees' preferences for education level as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{02}$  (null)*: There is no significant difference between older and younger employees in their rating of "length of service" as a criterion for pay systems.

*Hypothesis  $H_{A2}$  (alternate)*: There is a significant difference between older and younger employees in their rating of "length of service" as a criterion for pay systems.

*Hypothesis  $H_{03}$  (null)*: There is no significant difference between older and younger employees in their rating of "performance" as a criterion for pay systems.

*Hypothesis  $H_{A3}$  (alternate)*: There is a significant difference between older and younger employees in their rating of "performance" as a criterion for pay systems.

*Hypothesis H<sub>04</sub> (null)*: There is no significant difference between respondents with low and high educational qualifications in their rating of "education" as a criterion for pay systems.

*Hypothesis H<sub>A4</sub> (alternate)*: There is a significant difference between respondents with low and high educational qualifications in their rating of "education" as a criterion for pay systems.

*Hypothesis H<sub>05</sub> (null)*: There is no significant difference between respondents with low and high educational qualifications in their rating of "performance" as a criterion for pay systems.

*Hypothesis H<sub>A5</sub> (alternate)*: There is a significant difference between respondents with low and high educational qualifications in their rating of "performance" as a criterion for pay systems.

*Hypothesis H<sub>06</sub> (null)*: There is no significant difference between how respondents rank their current pay system in its use of "performance" as a criterion vs. their rating of "performance" as a preferred pay criterion.

*Hypothesis H<sub>A6</sub> (alternate)*: There is a significant difference between how respondents rank their current pay system in

its use of "performance" as a criterion vs. their rating of "performance" as a preferred pay criterion.

#### Instrument

The data from this study was gathered using a two-part questionnaire. A copy of this questionnaire is included in Appendix A. This questionnaire is the identical one used by Mamman (1997) and Mirabella (1999) without any need for translation, except additional demographic questions have been asked to determine whether the respondent was directly or indirectly adversely affected by events that have occurred over the last five years.

#### Survey Design

The first section consisted of opinion questions about how employees prefer their pay to be determined as well as information questions about how their pay is currently determined. The second section consisted of background questions on demographic variables such as age, gender, education, and whether the respondent was adversely affected by events that have occurred in the last five years. The survey took approximately five to ten minutes for the respondents to

complete. All pay-related statements were based on a five-point scale for responses.

### Construct Validity and Reliability

As this questionnaire was successfully tested and utilized by Mamman (1997) and Mirabella (1999), it was assumed to meet the requirements for construct validity.

### Research Variables

#### *Dependent Variables*

Each of the eight dependent variables are an employee's preference for having pay determined by the respective factor.

LENGTH OF SERVICE IN THE ORGANIZATION is the number of years of tenure an employee has with his current organization.

THE SKILLS YOU POSSES is defined as the specialized abilities an employee has that differentiate him from other employees.

MARKET FORCES is defined as the external factors that may affect one's pay, to include a shortage in the job field.

YOUR JOB PERFORMANCE can be either an appraisal rating or a measured output in a manufacturing job.



COST OF LIVING is defined as the expenses associated with living where the job is located.

JOB RESPONSIBILITIES are defined as the level of importance of one's position. This is often correlated to the degree of risk involved with decisions at that level.

INCONVENIENCES OF YOUR JOB are the difficulties and hassles associated with your position.

EDUCATION LEVEL comprises both the number of full years of college as well as the degrees completed. For the purpose of this study, the degrees are stated as Associates, Bachelors, Masters and Doctorate, and the number of years is computed based on the credits completed as opposed to time spent in school.

### *Independent Variables*

The independent variables are factual background data. They consist of age, education level, and whether the respondent has been indirectly or directly adversely affected by unemployment in the last five years.

### Summary

This chapter described the methodology for this study aimed at determining the relationship of employee job characteristics and personal factors against the preference for a pay system. The chapter included a review of the research hypotheses, survey instrument, survey design, construct validity and reliability, and research variables.

## CHAPTER 4. DATA COLLECTION AND ANALYSIS

This chapter describes the collection and analysis of the data. The purpose of this study was to determine the relationship of employee job characteristics and personal factors against the preference for a pay system. The conceptual framework for this study was based on James Mirabella's (1999) study and Aminu Mamman's (1997) study.

## Data Collection

The research population for this study consisted of graduate and undergraduate students as well as workers of all types in Dubuque, IA. The sampling frame consisted of over 300 students from the University of Dubuque's graduate programs, over 600 students from Northeast Iowa Community College's bachelors and associates degree programs, and over 6,000 students from the University of Wisconsin - Platteville undergraduate and graduate programs. The subjects were randomly selected using cluster sampling. Five classes were randomly selected from the University of Wisconsin - Platteville's Spring 2006 course schedule. Five classes were also randomly selected from Northeast Iowa Community College's Spring 2006 course schedule. And three classes were also randomly selected from

the University of Dubuque's Spring 2006 course schedule. In every case, the entire class was asked to complete the survey instrument immediately, thereby maximizing response rate.

The data utilized in the study was collected by the investigator via written survey (Appendix A). Each subject was given verbal instructions and asked to anonymously complete the survey for immediate collection. Respondents were also informed as to the purpose of the study to minimize any bias associated with employee satisfaction surveys. Subjects who did not wish to participate in the study were asked to return the blank survey to the investigator.

A total of 169 surveys were administered by the investigator, receiving a 100% response rate. The sample size was smaller than the sample collected by James Mirabella (240 respondents), but was larger than the size of Aminu Mamman's sample of 126 respondents. The data was manually entered into SPSS 11.0 for Windows for statistical analysis.

## Data Analyses

### *Test of Hypothesis One*

Hypothesis H<sub>01</sub> states that there is no significant difference between employees' preferences for the various pay system criteria as a result of being directly or indirectly

adversely affected by events that have occurred over the last five years. This hypothesis can be broken down for each of the eight dependent variables. Hypothesis  $H_{01a}$  states that there is no significant difference between employees' preferences for length of service as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years. Hypothesis  $H_{01b}$  states that there is no significant difference between employees' preferences for level of skills possessed as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years. Hypothesis  $H_{01c}$  states that there is no significant difference between employees' preferences for market forces as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years. Hypothesis  $H_{01d}$  states that there is no significant difference between employees' preferences for job performance as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years. Hypothesis  $H_{01e}$  states that there is no significant difference between employees' preferences for cost of living as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over

the last five years. Hypothesis  $H_{01f}$  states that there is no significant difference between employees' preferences for job responsibilities as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years. Hypothesis  $H_{01g}$  states that there is no significant difference between employees' preferences for the inconveniences of the job as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years. Hypothesis  $H_{01h}$  states that there is no significant difference between employees' preferences for education level as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years. Tables 3 - 10 summarize the results of the one-factor analysis of variance tests that were conducted.

Table 3. ANOVA for length of service (Hypothesis One- Part a)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.046	1	0.046	0.033	0.856
Within Groups	234.593	167	1.405		
Total	234.639	168			

The One-Factor Analysis of Variance that was conducted for "length of service" had a p-value (Table 3) greater than the established significance level of 0.05. As a result, the null hypothesis was not rejected and there was insufficient evidence to conclude a difference in one's preference for being paid based on length of service as a function of whether the respondent, a close friend, or a relative has been unemployed due to events such as 9/11, layoffs, or bankruptcies.

Table 4. ANOVA for level of skills possessed (Hypothesis One - Part b)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.001	1	0.001	0.002	0.963
Within Groups	74.070	167	0.444		
Total	74.071	168			

The One-Factor Analysis of Variance that was conducted for "level of skills possessed" had a p-value (Table 4) greater than the established significance level of 0.05. As a result, the null hypothesis was not rejected and there was insufficient evidence to conclude a difference in one's preference for being paid based on level of skills possessed as a function of whether the respondent, a close friend, or a relative has been unemployed due to events such as 9/11, layoffs, or bankruptcies.

Table 5. ANOVA for market forces (Hypothesis One - Part c)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.389	1	0.389	0.358	0.550
Within Groups	181.398	167	1.086		
Total	181.787	168			

The One-Factor Analysis of Variance that was conducted for "market forces" had a p-value (Table 5) greater than the established significance level of 0.05. As a result, the null hypothesis was not rejected and there was insufficient evidence to conclude a difference in one's preference for being paid based on market forces as a function of whether the respondent, a close friend, or a relative has been unemployed due to events such as 9/11, layoffs, or bankruptcies.

Table 6. ANOVA for job performance (Hypothesis One - Part d)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.475	1	0.475	1.316	0.253
Within Groups	60.271	167	0.361		
Total	60.746	168			

The One-Factor Analysis of Variance that was conducted for "job performance" had a p-value (Table 6) greater than the established significance level of 0.05. As a result, the null hypothesis was not rejected and there was insufficient evidence



to conclude a difference in one's preference for being paid based on job -performance as a function of whether the respondent, a close friend, or a relative has been unemployed due to events such as 9/11, layoffs, or bankruptcies.

Table 7. ANOVA for cost of living (Hypothesis One - Part e)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.826	1	0.826	0.853	0.357
Within Groups	161.612	167	0.968		
Total	162.438	168			

The One-Factor Analysis of Variance that was conducted for "cost of living" had a p-value (Table 7) greater than the established significance level of 0.05. As a result, the null hypothesis was not rejected and there was insufficient evidence to conclude a difference in one's preference for being paid based on cost of living as a function of whether the respondent, a close friend, or a relative has been unemployed due to events such as 9/11, layoffs, or bankruptcies.

Table 8. ANOVA for job responsibility (Hypothesis One - Part f)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.342	1	0.342	0.650	0.421
Within Groups	87.729	167	0.525		
Total	88.071	168			

The One-Factor Analysis of Variance that was conducted for "job responsibility" had a p-value (Table 8) greater than the established significance level of 0.05. As a result, the null hypothesis was not rejected and there was insufficient evidence to conclude a difference in one's preference for being paid based on job responsibility as a function of whether the respondent, a close friend, or a relative has been unemployed due to events such as 9/11, layoffs, or bankruptcies.

Table 9. ANOVA for inconveniences of your job (Hypothesis One - Part g)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.069	1	0.069	0.062	0.804
Within Groups	185.801	167	1.113		
Total	185.870	168			

The One-Factor Analysis of Variance that was conducted for "inconveniences of your job" had a p-value (Table 9) greater than the established significance level of 0.05. As a result, the null hypothesis was not rejected and there was insufficient evidence to conclude a difference in one's preference for being paid based on inconveniences of your job as a function of whether the respondent, a close friend, or a relative has been unemployed due to events such as 9/11, layoffs, or bankruptcies.

Table 10. ANOVA for education level (Hypothesis One - Part h)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.386	1	1.386	1.524	0.219
Within Groups	151.904	167	0.910		
Total	153.290	168			

The One-Factor Analysis of Variance that was conducted for "education level" had a p-value (Table 10) greater than the established significance level of 0.05. As a result, the null hypothesis was not rejected and there was insufficient evidence to conclude a difference in one's preference for being paid based on education level as a function of whether the respondent, a close friend, or a relative has been unemployed due to events such as 9/11, layoffs, or bankruptcies.

#### *Test of Hypothesis Two*

Hypothesis H<sub>02</sub> states that there is no significant difference between older and younger employees in their rating of "length of service" as a criterion for pay systems. Table 11 summarizes the results of the one-factor analysis of variance.

Table 11. ANOVA (Hypothesis Two)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.78	2	0.891	0.63	0.531
Within Groups	232.85	166	1.403		
Total	234.63	168			

Respondents were divided into three age groups: (1) under 30, (2) 30 to 39, and (3) 40 and older. There were 77 respondents in group 1, 36 in group 2, and 56 in group 3. The One-Factor Analysis of Variance had a p-value of 0.531, which is greater than the established significance level of 0.05. As a result, the null hypothesis was not rejected and there was insufficient evidence to conclude a difference in one's preference for being paid based on length of service as a function of individual ages.

#### *Test of Hypothesis Three*

Hypothesis H<sub>03</sub> states that there is no significant difference between older and younger employees in their rating of "performance" as a criterion for pay systems. Table 12 summarizes the results of the one-factor analysis of variance.

Table 12. ANOVA (Hypothesis Three)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.685	2	.343	.947	.390
Within Groups	60.060	166	.362		
Total	60.746	168			

Respondents were divided into the same age groups from Hypothesis Two. The One-Factor Analysis of Variance had a p-value of 0.390, which is greater than the established significance level of 0.05. As a result, the null hypothesis was not rejected and there was insufficient evidence to conclude a difference in one's preference for being paid based on performance as a function of individual ages.

#### *Test of Hypothesis Four*

Hypothesis H<sub>04</sub> states that there is no significant difference between respondents with low and high educational qualifications in their rating of "education" as a criterion for pay systems. Table 13 summarizes the results of the t-test for Equality of Means for independent samples.

Table 13. t-Test for equality of means for independent samples (Hypothesis Four)

	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Equal variances assumed	-4.015	167	.000	-.57	.142	-.851	-.290
Equal variances not assumed	-3.881	167	.000	-.57	.147	-.861	-.280

Respondents were divided into two education groups: (1) without a bachelor's degree and (2) with a bachelor's degree or higher. There were 73 respondents in group 1 and 96 in group 2. The t-test for Independent Samples had a p-value of 0.000, which is less than the established significance level of 0.05. As a result, the null hypothesis was rejected and it was concluded that there is a significant difference in one's preference for being paid based on education level as a function of actual educational background.

#### *Test of Hypothesis Five*

Hypothesis H<sub>05</sub> states that there is no significant difference between respondents with low and high educational qualifications in their rating of "performance" as a criterion

for pay systems. Table 14 summarizes the results of the t-test for Equality of Means for independent samples.

Table 14. t-Test for equality of means for independent samples (Hypothesis Five)

	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Equal variances assumed	-2.000	167	.047	-.19	.093	-.368	-.002
Equal variances not assumed	-1.878	111.6	.063	-.19	.099	-.380	.010

Respondents were divided into the same education groups from Hypothesis Four. A test for homogeneity of variances indicated that the two samples had equal variances ( $p = 0.02$ ). The t-test for Independent Samples with equal variances had a p-value of .047, which is less than the established significance level of .05. As a result, the null hypothesis was rejected and it was concluded that there is a significant difference in one's preference for being paid based on performance as a function of actual educational background.

*Test of Hypothesis Six*

Hypothesis H<sub>06</sub> states that there is no significant difference between how respondents rank their current pay system in its use of "performance" as a criterion vs. their rating of "performance" as a preferred pay criterion. Table 15 summarizes the results of the t-test for paired samples.

Table 15. t-test for paired samples (Hypothesis Six)

		Paired Differences			95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	Actual -Pref	-.80	1.125	.087	-.98	-.63	-9.301	168	.000

All respondents were asked to rate not only their preference for being paid on performance but also the degree to which their current employer pays on performance. Each of the 169 respondents answered both questions, and so the t-test for Paired Samples was appropriately used. The resulting p-value of .000 was less than the established significance level of .05. As a result, the null hypothesis was rejected and it was concluded that there is a significant difference in one's preference for being paid based on performance versus how one conceives the degree to which he/she is paid on performance.



CHAPTER 5. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Overview

This chapter describes the overall findings and conclusions of the study, and provides some recommendations for future research. The questions investigated in this study included the following: (1) Is there a significant difference between people directly or indirectly affected by unemployment in their rating of any of the criteria traditionally used to determine pay systems? (2) Is there a significant difference between older and younger employees in their rating of "length of service" as a criterion for pay systems? (3) Is there a significant difference between older and younger employees in their rating of "performance" as a criterion for pay systems? (4) Is there a significant difference between respondents with low and high educational qualifications in their rating of "education" as a criterion for pay systems? (5) Is there a significant difference between respondents with low and high educational qualifications in their rating of "performance" as a criterion for pay systems? (6) Is there a significant difference between how respondents rank their current pay system in its use of "performance" as a criterion versus their rating of "performance" as a preferred pay criterion?

Approximately 100 years ago, Frederick Taylor was the first to propose that rewards for productive work are a motivator for success, and demonstrated that a system of performance-based pay encourages employees either to work harder or quit (Lawler, 2003). Since then, numerous pay systems have been adopted by organizations, including skill-based systems, tenure-based systems, and even education-based systems (Milkovich & Newman, 2004). Each pay system encourages employees to maximize their potential with respect to the system or quit. For example, in an education-based pay system employees without a college degree will either attempt to obtain a degree or seek employment where their skills are appreciated regardless of their education level.

During the last century, there has been a plethora of research into pay systems and their relationship with factors such as motivation and productivity (Lawler, 2005). Despite the overwhelming research on pay systems, few researchers have investigated employees' preferences for criteria used in these pay systems. In this study, as with that of James Mirabella (1999) and Aminu Mamman (1997), respondents were asked how they preferred to be paid. A better understanding of pay system criteria preferences is beneficial to managers when identifying, selecting, and implementing employee pay plans. The need to

continue to study which pay system criteria are important to employees is a management imperative because of the dynamic and constantly changing nature of employee attitudes and preferences. Since the beginning of the 21<sup>st</sup> Century, there have been a variety of notable events that have significantly influenced the way in which people view the world (Kondrasuk, 2004; Leonard, 2002), and this altered view has changed the attitudes and preferences of employees with regard to several

Furthermore, a better understanding of employee preferences for pay system criteria can give managers insight into what motivates employees to high performance levels. Pay systems that properly reflect the factors that motivate employees may provide an organization the opportunity to maximize performance and minimize turnover by either adapting the pay system to the factors that motivate employees or seeking employees whose motivations correlate to the current pay system (Lawler, 2003).

#### Research Hypotheses

The following were the research hypotheses for this study:

*Hypothesis H<sub>A1</sub>*: There is a significant difference between employees' preferences for pay system criteria as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1a}$*  states that there is a significant difference between employees' preferences for "length of service" as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1b}$*  states that there is a significant difference between employees' preferences for "level of skills possessed" as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1c}$*  states that there is a significant difference between employees' preferences for "market forces" as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1d}$*  states that there is a significant difference between employees' preferences for "job performance" as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1e}$*  states that there is a significant difference between employees' preferences for "cost of

living" as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1f}$*  states that there is a significant difference between employees' preferences for "job responsibilities" as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1g}$*  states that there is a significant difference between employees' preferences for "the inconveniences of the job" as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis  $H_{A1h}$*  states that there is a significant difference between employees' preferences for "education level" as a pay system criterion as a result of being directly or indirectly adversely affected by events that have occurred over the last five years.

*Hypothesis H<sub>A2</sub>*: There is a significant difference between older and younger employees in their rating of "length of service" as a criterion for pay systems.

*Hypothesis H<sub>A3</sub>*: There is a significant difference between older and younger employees in their rating of "performance" as a criterion for pay systems.

*Hypothesis H<sub>A4</sub>*: There is a significant difference between respondents with low and high educational qualifications in their rating of "education" as a criterion for pay systems.

*Hypothesis H<sub>A5</sub>*: There is a significant difference between respondents with low and high educational qualifications in their rating of "performance" as a criterion for pay systems.

*Hypothesis H<sub>A6</sub>*: There is a significant difference between how respondents rank their current pay system in its use of "performance" as a criterion vs. their rating of "performance" as a preferred pay criterion.

### Conclusions

The results of the t-tests and ANOVAs performed supported three of the six hypotheses. In support of Mirabella's and Mamman's research, the results of this study indicated that educational background is a significant determining factor in people's preference for being paid based on their education level. This makes intuitive sense since people with college degrees typically obtain positions with higher pay. A college education is a costly investment of both time and money, and highly educated people generally expect to be compensated for their investment through higher salaries.

A second finding was that there is a significant difference in people's perception of their being paid on performance versus their desire for such a pay system. This exemplifies the disparity between what people feel they deserve for their efforts versus what they actually receive in terms of pay.

Interestingly, the hypothesis that people of different education levels differ in their preferences for a performance-based pay system was found conclusive at the 0.05 significance level, indicating that educational background is a significant determining factor in people's preference for being paid based on performance. This is interesting because most highly

educated people had to work very hard to accomplish their educational goals.

Contrary to Mirabella's (1999) and Mamman's (1997) previous research, the study failed to conclude that age is a significant determining factor in people's preference for being paid based on their length of service with an employer. This makes sense in light of the recent trend for people to change careers several times in their lifetime. The implication of this phenomenon is that the length of service with an organization for older individuals is much shorter than it was 10 years ago. Since the older individuals do not have as much tenure as they used to, they do not prefer to be paid based on length of service.

Lastly, the study results failed to indicate that workers, who were directly or indirectly affected by unemployment in the last five years, preferred different criteria than workers that were not affected. This indicates that there may be other criteria that are considered to be the most important determining factors used in pay systems by recently unemployed individuals.



### Suggestions for Further Research

The results of this study suggest that American employees in 2006 are similar to those in previous studies in terms of some of their preferences for pay criteria, but some of their other preferences have changed over the last five to seven years. Additionally, the results of this study indicate that the individuals who experienced unemployment or had somebody close to them experience unemployment, as a result of events such as 9/11, bankruptcies, or layoffs in the last five years, exhibited no difference in their preferences for pay criteria from the individuals who were unaffected. Therefore, further research to investigate the factors that contribute to the change in employees' attitudes toward pay system criteria since the year 2000 is recommended.

Furthermore, with the increase in corporate buyouts, mergers, bankruptcies and lay-offs, another area for recommended research is to investigate the preferences of recently separated employees, in order to draw comparisons between the pay system they left and the one they prefer. Research into this area could provide managers with a better idea of what pay system criteria to use to attract and retain employees.

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## APPENDIX A

## Pay Criterion Survey

Circle your best response to each of the following:

	<b>How important is each factor in determining your current salary?</b>					<b>How important do you think each factor should be in determining your salary?</b>				
	<i>low</i>				<i>high</i>	<i>low</i>				<i>high</i>
Length of service in the organization	1	2	3	4	5	1	2	3	4	5
The skills you possess	1	2	3	4	5	1	2	3	4	5
Market forces	1	2	3	4	5	1	2	3	4	5
Your job performance	1	2	3	4	5	1	2	3	4	5
The cost of living	1	2	3	4	5	1	2	3	4	5
Your job responsibilities	1	2	3	4	5	1	2	3	4	5
The inconveniences in your job	1	2	3	4	5	1	2	3	4	5
Education level	1	2	3	4	5	1	2	3	4	5

Answer the following background questions:

1. What is your age? \_\_\_\_\_
2. What is your gender? (male / female)
3. Are you currently attending college? (yes / no)
4. What degrees have you completed? *circle all that apply* (Associates / Bachelors / Masters / Doctorate)
5. How many years have you been employed by your current organization? \_\_\_\_\_
6. What is your management level in your organization? (Non-mgt / lower mgt / middle mgt / upper mgt / self-employed / unemployed)
7. Have you been unemployed in the last five years as a result of events such as 9/11, layoffs, or bankruptcies? (yes / no)
8. Has anybody close to you (co-worker, family member, or close friend) been unemployed in the last five years as a result of events such as 9/11, layoffs, or bankruptcies? (yes / no)
9. Are you the primary money earner in your household? (yes / no)
10. How many dependents do you have? (0 / 1 / 2 / 3 / 4 or more)