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**PSYCHOLOGICAL MECHANISMS EXPLAINING MERIT PAY
ACCEPTANCE AND EFFECTIVENESS**

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Abstract

In Finland, especially in central governmental and municipal sector, collective pay agreements make it possible to use—and even require—job evaluation and individual performance appraisals to determine employee base pay levels. These practices are generally designed to enhance pay satisfaction and the motivation of the current workforce, as well as to attract and retain skilled work force. This dissertation provides new insights into the psychological mechanisms that explain why employees adopt certain attitudes and behaviors in response to merit pay reforms, often referred to as *incentive effects* in the literature on compensation psychology. The dissertation summarizes five studies that draw upon different theoretical perspectives and concepts, including psychophysics, affective events theory, reflection theory, organizational politics and fairness. Each study contributes to our understanding of how merit pay in particular influences attitudes and behaviors of the existing workforce. The data were gathered from seven public sector organizations in Finland via employee surveys (sample size totals N=1350 for all the studies). We used records-based pay data from five of the seven organizations.

Based on the results, I argue that pay increases of less than eight percent might not be meaningfully noticed. However, employees are comparatively more sensitive to negative pay changes such as indirect pay cuts. The results suggest that organizations should be aware that employees react to pay reforms affectively depending in part on how the reform personally impacts their pay, and these affective reactions may influence attitudes and behaviors at work. I argue that employee acceptance of merit pay practices depends on their understanding of why the system is being implemented and accepting these reasons in such a way that the pay system transmits positive symbolic and instrumental messages. Managers can have a positive impact on pay system success through participatory goal-setting processes and by creating trusting relationships where subordinates perceive performance appraisals as fair. The results imply that for a pay system to be effective, it is essential for employees to believe that politics do not play a part in performance appraisals and pay decisions. If employees believe that pay decisions are based on politics instead of performance, the organization risks having not only an ineffective pay system but one that produces undesirable outcomes. The results also suggest that employee participation in pay system development only matters when employees believe that managers' actions are sincere.

Keywords: compensation psychology, incentive effects, merit pay, pay satisfaction, pay-for-performance

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Tiivistelmä

Suomessa työehtosopimukset etenkin julkisella sektorilla ovat mahdollistaneet ja määritelleet, että työn vaatavuuden ja työsuorituksen arviointiin perustuvat palkkausjärjestelmät korvaavat A-virikapalkkajärjestelmät ja niihin liittyvät ikälisät. Palkkaus uudistusten keskeisiä tavoitteita ovat olleet henkilöstön palkkatyytyväisyyden parantaminen, työmotivaation ja sitoutumisen lisääminen sekä esimiestyön tukeminen. Väitöskirja tarjoaa uusia näkökulmia aiheeseen psykologisten teorioiden avulla, jotka selittävät miten etenkin suorituksen arviointiin perustuvat palkkausjärjestelmät vaikuttavat henkilöstön asenteisiin ja käyttäytymiseen työpaikalla. Väitöskirjan tulokset tarkentavat ja täydentävät nykykäsitystä suorituksen arviointiin perustuvan palkkauksen keskeisistä soveltamishaasteista ja -mahdollisuuksista. Työn sisältö perustuu viiteen osajulkaisuun. Tutkimusaineisto kerättiin seitsemästä suomalaisesta julkisen sektorin organisaatiosta pääosin henkilöstökyselyjen avulla (yhteenlaskettu otoskoko N=1350). Näistä viidessä organisaatiossa kerättiin myös palkkatietoja tuplasokkometelmän avulla.

Tutkimuksessa havaittiin, että palkkaus uudistus herätti sekä kielteisiä että myönteisiä tunteita, jotka osin riippuvat siitä, miten uudistus vaikutti omaan palkkaan. Tunnereaktiot puolestaan osin selittivät, miten palkkaus uudistus vaikutti asenteisiin ja käyttäytymiseen työpaikalla. Palkankorotukset, jotka olivat alle kahdeksan prosenttia, eivät tulosten mukaan olleet merkittäviä henkilöstölle. Henkilöstö reagoi kuitenkin herkemmin prosentuaalisesti pienempään takuupalkkaan. Tutkimuksen mukaan on tärkeää, että henkilöstö ymmärtää, mitkä palkkausjärjestelmän tavoitteet ovat. Palkkausjärjestelmä koettiin merkitykselliseksi ja siihen oltiin tyytyväisempiä, jos henkilöstö koki sen kautta saavansa palautetta työstään. Esimiehet voivat vaikuttaa myönteisesti palkkausjärjestelmän toimivuuteen osallistavalla tavoitteiden asettamisella, joka perustuu luottamukseen. Jotta suorituksen arviointiin perustuva palkkaus vaikuttaisi myönteisesti henkilöstön toimintaan, on tärkeää, ettei suoritusarvioiden ja niiden perusteella tehtävien palkkapäätösten koeta määräytyvän poliittisten agendojen perusteella henkilöstön suoriutumisen sijaan. Epäluottamus palkkapäätösten perusteiden tarkoituksiperistä saattaa vaikuttaa kielteisesti henkilöstön toimintaan.

Avainsanat: palkitseminen, palkkaus, suorituksen arviointi, palkkatyytyväisyys, työasenteet, vaikutukset toimintaan

LIST OF PUBLICATIONS

This thesis consists of an overview of these five original publications:

- I Mitra, A., Salimäki, A., & Shaw, J.D. (2009). Just noticeable differences in positive and negative pay changes¹. Helsinki University of Technology, Department of Industrial Engineering and Management, Working Paper no. 2009/1. Espoo, Finland, 27 pages.
- II Salimäki, A., & Lount, R.B., Jr. (2008). Pay system change as an affective event². Helsinki University of Technology, Department of Industrial Engineering and Management, Working Paper no. 2008/1. Espoo, Finland, 42 pages.
- III Salimäki, A., Hakonen, A., & Heneman, R.L. (2009). Managers generating meaning for pay: A test for reflection theory. *Journal of Managerial Psychology*, 24:2, 161-177.
- IV Salimäki, A., Ylikorkala, A., Hulkko, K., Nyman, G., & Keskivaara, P. (2005). Managerial influence on the implementation of pay systems: A model describing manager contribution to pay system success³. *Journal of the Finnish Psychological Society*, 40, 53-70.
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With deepest gratitude,

Minneapolis, April 26th 2009

Aino Salimäki

Kiitos elämästä, Äiti.

Pari riviä tein kirjaimia tänään.

Siinä kaikki. Olen onnellinen.

(ensimmäinen säe runosta Onni: Lauri Viita, 1965)

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Appendix I: Just noticeable differences in positive and negative pay changes

Appendix II: Pay system change as an affective event

Appendix III: Managers generating meaning for pay: A test for reflection theory

Appendix IV: Managerial influence on the implementation of pay systems: A model describing manager contribution to pay system success

Appendix V: Perceptions of politics and fairness in merit pay

1. Introduction

Compensation has been studied from many different perspectives, including those based in organizational behavior, organizational theory, international management, industrial/organizational psychology, sociology, economics, labor economics, law, and strategy, among others. Recently, Werner and Ward (2004) conducted an eclectic review of compensation-related articles published from 1996 to 2002 in the 20 top management journals. They used Milkovich and Newman's definition of compensation (2002): "*all forms of financial returns and tangible services and benefits employees receive as part of an employment relationship.*" Werner and Ward (2004) categorized compensation research into 12 areas:

- 1) Environmental determinants of compensation
- 2) Firm determinants of compensation
- 3) Job and group determinants of compensation
- 4) Gender and race determinants of compensation
- 5) Individual determinants of compensation
- 6) Individual outcomes of compensation
- 7) Compensation psychology**
- 8) Organizational justice
- 9) Firm outcomes of compensation
- 10) Benefits
- 11) International compensation
- 12) Executive compensation.

This dissertation provides new insights into the literature Werner and Ward (2004) referred as to "compensation psychology," which includes research on pay satisfaction, motivation, the meaning of money, and psychological reactions to compensation. One of the four topics they cite as receiving little attention so far is employee satisfaction with and reactions to changes in compensation plans. More specifically, there are few midrange theories that foster our understanding of the mechanisms through which return-on-investment on pay system reforms could be improved (R. L. Heneman, 2000a). Heneman (2000a) argues that while there is an increasing body of knowledge showing that compensation practices hold great potential for motivating employees, we know relatively little about why the pay systems work the way they do and under what conditions they work best. Following this call for research, this dissertation explores *the psychological mechanisms that explain why employees adopt certain attitudes and*

behavioral responses to merit pay reforms—often referred to as *incentive effects* in the literature on compensation (Gerhart & Rynes, 2003; Rynes, Gerhart, & Parks, 2005).

This dissertation studies employee attitudes and behaviors towards one form of employee compensation—broadly called pay-for-performance and, more specifically, merit pay. Merit pay is defined here as *a form of base pay determined by a performance appraisal of an individual employee* (R. L. Heneman, 1992). In this dissertation, I argue that research on the effects of merit pay on employee attitudes and behaviors is important and necessary for at least two reasons:

- 1) In practical terms, this is an under researched area compared to its popularity. Ongoing changes in the labor market are pushing local and global organizations alike to implement pay-for-performance practices, one of the most prevalent being merit pay.
- 2) We have an incomplete theoretical understanding of the psychological mechanisms through which merit pay practices influence employee attitudes and behaviors.

I also argue that the main challenges with pay-for-performance systems are related to these two factors:

- 1) *Acceptance* of the plan by employees
- 2) *Effectiveness* of the compensation system to promote desired attitudes and behaviors, and achieving broader organizational goals, such as strategy implementation and enhanced productivity.

The notion of *acceptance* captures employees' attitudes towards the pay system. I believe these attitudes may or may not be associated with employee actions and organization-level outcomes. I argue that we can understand more about the *effectiveness* of merit pay practices by studying the indirect effects of merit pay on employee attitudes and behaviors in the workplace. Further, I argue that since organizations implement pay systems with certain goals in mind, asking employees how the goals of the reform are achieved can provide information on the success of a given pay reform. The introduction to this dissertation builds on these arguments.

1.1 The Prevalence of Merit Pay Practices

Three overarching themes characterize the debate over compensation systems in Europe, the US and Japan (Sparrow, 2004). First, there is a shift from job- to person-based human resources practices; a trend that deviates from the historical patterns of wage structure. Second, governments are transferring social costs and risks away from organizations and the state to the individual. Third, there are significant threats to the psychological contract, and the reward-effort bargain is becoming more fragmented and individualized. I argue that all these trends have implications for pay-for-performance practices (refer also to Salimäki & Heneman, 2008).

The first trend reflects a shift from looking at the job as a basis for compensation to focusing on desired skills, knowledge and competencies of individual employees (Klaas, 2002). Employee compensation costs resulting from the transition to knowledge-based occupations are high and will continue to escalate. Organizations have to know whether their compensation practices support achieving strategic objectives. This trend derives from a strategic approach to managing pay that is becoming increasingly common in organizations throughout the world (R. L. Heneman, Ledford, & Gresham, 2000). Researchers have used various terms to describe the trend: *strategic pay* (Lawler, 1990), *new pay* (Schuster & Zingheim, 1992) and *performance-based pay* (R. L. Heneman & Gresham, 1998). In addition to merit pay practices, variable pay systems and group-based and/or company-wide performance- or results-based pay plans now supplement base pay systems to tie employee efforts more tightly to organization strategy. These new forms of pay often require individualized pay negotiations and result in greater differentiation in pay levels within the organization.

The second trend reflects a shift from institutional isomorphism to competitive isomorphism in the global economy (DiMaggio & Powell, 1983). The trend generates more coherent pay structures in multinational corporations but at the same time leads to insecurity over income and thus the value attached to immediate financial rewards for employees. Currently, multinationals are evenly split between centralized (i.e., globally integrated) and decentralized (i.e., locally responsive) approaches to their global compensation structure (49 percent centralized vs. 51 percent decentralized) (WorldatWork & WatsonWyattWorldwide, 2004). However, there is a growing trend toward greater centralization in the near term in order to have a consistent link between rewards and results and a consistent position in relation to the market and internal equity.

The third trend highlights a decentralized collective bargaining process (with an increase in company-level bargaining) that has lent a strong impetus to the spread of pay-for-performance. When a firm uses pay-for-performance, employees desire local bargaining to have a larger role in wage contracts (Heikkilä & Piekkola, 2005). As a result of these trends, pay-for-performance practices are not only becoming more prevalent, but also preferred by employees. Indeed, research shows that employees are generally accepting systems of rewards based on their performance. For example, according to a study on pay criteria preferences, Hong Kong and Australian employees rated performance as the most preferred criterion, and Indonesian and Malaysian employee samples rated it the second most preferred criterion after responsibility (Mamman, Sulaiman, & Fadel, 1996). Another study showed extensive agreement among bank employees from Canada, Hong Kong, the United Kingdom and Finland on what criteria should determine rewards (Chiang & Birtch, 2005). They ranked performance as the most important criterion, closely followed by human capital (e.g. skills, experience and education) and job inputs (e.g. responsibility, workload, effort). These results, and others, indicate that employees typically accept the principle of compensation for performance.

Pay-for-performance plans reward certain sets of behaviors or the results of those behaviors on an individual or collective level via a diverse set of technical solutions (see Table 1 for a categorization of the types of pay-for-performance plans). This dissertation studies employee attitudes and behaviors in organizations that have recently implemented a particular type of pay-for-performance, called *merit pay*. Merit pay is defined here as a form of base pay that reflects the performance appraisal of an individual employee (R. L. Heneman, 1992), just as individual incentives do. However, incentives differ from merit pay because they are variable, not a fixed part of base pay. Note that incentives and other variable forms of pay often mean that employees incur more risk with their pay, which could precipitate different kinds of psychological reactions (e.g. Deckop, Merriman, & Blau, 2004). Individual-level pay-for-performance is often contrasted with collective forms of pay-for-performance, which may produce a different set of psychological and behavioral reactions (such as social loafing, or free-riding) resulting from work interdependence (see for example Shaw, Gupta, & Delery, 2002). All forms of pay-for-performance can be contrasted with flat-rate percentage increases for all employees based on market conditions (e.g. cost-of-living adjustments) or pay increases based on seniority (e.g. years of service, rank, status) of the employee.

Table 1. Pay-for-performance practices come in many forms (Salimäki & Heneman, 2008, p. 159)

	Individual	Collective
Fixed	Merit pay Skill- or competency-based pay Promotion	
Variable	Payment by results Piece-rate pay Commissions Bonuses Individual incentives	Performance-related pay Financial participation Gain-, goal-, and profit sharing Ownership Group incentives

In Finland, there is a strong trend towards adopting different forms of pay-for-performance, especially in the public sector where collective pay agreements now make it possible to use—and even require—job evaluation and individual performance appraisals to determine base pay levels. Although collective bargaining agreements continue to be nearly universal in Finland, the shift toward these practices is based on several strategic grounds, including enhancing the reputation of employer, providing more attractive career paths and opportunities for employees, and improving organizational performance (The State Audit Office, 2002). The political agenda of the Ministry of Labor specifically emphasizes that the new pay systems aim “*to promote fair salaries, to improve salary competitiveness, to support staff in developing their skills and in seeking more demanding tasks, to encourage staff to perform better and to develop, and to improve leadership and leadership skills*” (collective agreement for state civil servants and employees under contract 2005, §1). According to the Ministry of Labor, these aims are best advanced by implementing pay systems based on job evaluation and performance appraisals instead of distributing across-the-board increases to all employees.

Since 1994, organizations within the central government in Finland have been implementing new pay systems. Especially after 2004, implementation has been centrally enforced, and many governmental organizations agreed with employee representatives on the implementation of new systems. The governmental organizations had traditionally granted pay increases to employees based on their seniority levels and promotions (i.e., job title). In recent years, because of these reforms, the criteria used to determine pay increases have shifted from seniority to job content, performance and competence of the employee. Almost all (97.6 %; 115 150) employees in the central government sector were covered by new pay systems based

on job evaluation and performance appraisals as of January 2007 (Ministry of Finance, 2007). The same trend applies to the municipal sector and has been evident for an even longer time in the private sector (Hakonen, Salimäki, & Hulkko, 2005).

Structurally, the public sector pay systems typically consist of three parts: job-based pay, merit pay and, in some instances, guaranteed pay. Job-based pay corresponds to the job evaluation score an employee and supervisor agree to. The value of the job scores are negotiated between employer and employee representatives. Job-based pay is a relatively stable portion of overall pay. Regular (usually yearly) performance appraisals serve as a basis for the *merit pay* portion of salary (that may consist of up to 50% on top of job-based pay). Under the reform policy, the proposed new pay levels based on job evaluation and performance appraisal have been smaller for some employees in comparison to their old pay levels. To enhance the acceptability of the pay reform, the pay levels based on the old system have been guaranteed (collective agreement for state civil servants and employees under contract, 2005, §8) so that pay cuts would not occur as long as the person stays with the same employer, typically in the same position. However, the pay guarantee has implications for the future pay prospects of the employee, since in order to get a merit increase, the person would have to first catch up with the performance expectations required for the level of pay guarantee (i.e., previously earned pay level), and then exceed those.

In sum, there clearly is a “push” towards the use of pay-for-performance practices, especially merit pay as part of total compensation, for several reasons. However, the question remains whether these systems actually promote acceptability (satisfaction) and effectiveness (such as increased effort and organizational goal attainment) and under what conditions. Knowing the conditions necessary for acceptability and effectiveness might help us improve the return-on-investment of employee merit pay practices (R. L. Heneman, 2000a). As employees are commonly more dissatisfied with *how* their pay is determined rather than with their pay level, much needs to be done to make compensation practices more acceptable and effective (LeBlanc & Mulvey, 1998).

The next section contains a brief overview of some of the major psychological theories that explain *how* and *why* merit pay can be acceptable and effective.

1.2 Theory Supporting the Use of Merit Pay

There is a large body of research with a psychological foundation that encourages the use of merit pay and other forms of pay for individual performance. This reasoning contends that pay systems contingent on performance have great potential to be powerful motivators. Several meta-analyses have documented that performance-contingent pay systems have a substantial impact on employee performance (Jenkins, Mitra, Gupta, & Shaw, 1998; for a review, see Rynes, Gerhart, & Parks, 2005). In contrast, theories claiming that pay is a hygiene factor (motivation-hygiene theory by Herzberg, 1987) or at the low end of the needs hierarchy (hierarchy of needs by Maslow, 1943), are not adequately supported by empirical research (Gerhart & Rynes, 2003, pp. 48-54; Rynes, Gerhart, & Parks, 2005). Instead, the research seems to support the notion that pay has a larger impact on employees' work than they acknowledge (Heath, 1999; Rynes, Gerhart, & Minette, 2004).

Several complementary psychological theories (Bartol & Locke, 2000), such as expectancy theory, goal setting theory and equity theory, relate pay-for-performance to employee motivation and performance. Perhaps the best-known theory in psychology that promotes the use of merit pay is expectancy theory, which has been extensively researched (for reviews, see Ambrose & Kulik, 1999; Van Eerde & Thierry, 1996). The theory, first presented by Vroom (1964), consists of three components: expectancy, instrumentality and valence. Expectancy refers to estimating how much effort is needed to achieve a certain level of performance. Instrumentality is a belief in the existing link between performance and outcomes such as pay and promotion. Valence is the attractiveness of these outcomes to the individual. Employee motivation is highest when the individual believes that his/her behavior will lead to certain outcomes, when he/she feels that these outcomes are attractive, and that performance at the desired level is possible. According to expectancy theory, merit pay may motivate individuals when performance is *accurately measured*, *pay is valued* as an outcome, *the relationship between pay and performance is clearly defined* and there are *opportunities to improve performance* (R. L. Heneman & Werner, 2006, pp. 25-27). Merit pay is not likely to motivate if one does not value the reward, if one does not believe that one can perform well, or that one will get what one deserves.

Another highly influential theory in motivation research is goal-setting theory, which describes the importance of goals to work motivation (Latham & Pinder, 2005). According to the theory, *challenging, specific and acceptable goals* are related to higher levels of effort and persistence

on the job (Locke & Latham, 1990). Specific goals also narrow attention and direct efforts to goal-relevant activities and away from undesirable and goal-irrelevant actions. Goal-setting theory suggests that pay affects behavior through its influence on acceptance of challenging, specific work goals and maintaining commitment to them. Thus, merit pay motivates an individual to set more difficult goals and promotes commitment to those goals (R. L. Heneman & Werner, 2006, pp. 32-33). Merit pay also promotes better overall performance because specific goals direct employee effort to relevant tasks. Merit increases, according to this theory, must be contingent on specific rather than "do your best" goals and should be based on goal difficulty. If goal difficulty is not factored into rewards, employees may be motivated to set lower goals because they are easier to accomplish and employees can still get rewarded. Goals, weights for each goal, and merit increases should all be discussed at the same time to have the desired motivational effect.

One of the key challenges with compensation is to match it with employee perceptions of what is fair. Employees usually like the idea of being compensated for their performance (i.e., pay equity) rather than equally distributed rewards, or distribution according to employee need (e.g., Chen, 1995). For this reason, perceptions of whether there is alignment between pay and performance (R. L. Heneman, Greenberger, & Strasser, 1988) and perceived pay equity (distributive justice, c.f. Colquitt, 2001) are both highly associated with pay satisfaction (Williams, McDaniel, & Nguyen, 2006). In addition, feelings of stress and poor health (for review, see Van Vegchel, de Jonge, Bosma, & Schaufeli, 2005) may result from an imbalance between work effort and rewards. Equity theory (Adams, 1965) explains these responses, contending that employees want to be rewarded in accordance with their performance.

According to equity theory, employees decide what their equitable return should be after comparing their inputs and outcomes with those of their co-workers. *Inequity* (i.e., when a person does not get what he thinks he deserves) *creates a sense of psychological tension or distress that motivates individuals to restore balance*. Employees who see their compensation as inequitable may seek to reduce the inequity by distorting inputs and/or outcomes in their own minds, by directly altering inputs and/or outputs on the job, or by leaving the organization. Research supports the aspect of the theory that finds a sense of underpayment creating tension in employees (Gerhart & Rynes, 2003, pp. 135-138). For example, if pay is not perceived as equitable, employees may leave the organization (Roth, 2006). More specifically, those individuals who perform *at a high level* are most likely to leave an organization if their performance does not lead to sufficient compensation (Trevor, Gerhart, & Boudreau, 1997), but

those with average and low performance are more likely to stay if the relationship between pay and performance is weak (Harrison, Virick, & William, 1996; Shaw & Gupta, 2007). Equity theory has implications for merit pay (R. L. Heneman & Werner, 2006, pp. 29-31) since it suggests that merit pay decisions cannot be viewed in isolation because employees compare their inputs and outputs. To avoid incorrect assessments on the ratio of outcomes to inputs, inputs must be clearly defined and managers must communicate the merit pay practice to employees to avoid incorrect assumptions about the relationship between pay and performance.

This dissertation builds on the theories that assume employees consider pay for performance important. It is based on psychological theories that explain why and how pay systems, especially merit pay practices, impact employee attitudes and behaviors. This work is in many ways based on the literature on expectancy, goal-setting and equity theory that has dominated research in this area for decades. Sounds good in theory, what about practice?

The next section presents a brief overview of the literature that draws attention to the possible challenges with merit pay.

1.3 The Merit Pay Dilemma

Despite the popularity of merit pay practices, and the extensive research support for the principle of paying for individual performance, researchers are troubled by the fact that merit pay seems to work inconsistently (e.g., R. L. Heneman, 1992). Over two thirds of the 63 international human resource managers who responded to a reward-and-recognition survey in 2005 aimed at applying a pay-for-performance *philosophy* internationally (Perskins, 2006) but fewer than half said they were able to apply the concept *in practice*. Only about one-fourth of those surveyed believed that rewards are always linked to performance appraisals *in employee perception*. This result suggests that even if organizations have a pay-for-performance policy, it does not always succeed in practice. Employees perceive the policy as successful even less often.

Practitioners have encountered various implementation problems that hamper the acceptance and effectiveness of merit pay, including difficulty in creating measures for individual performance in interdependent work contexts, problems getting supervisors to provide credible assessments of performance for administrative purposes, and limited pay budgets available for merit increases because of an annuity effect (for a discussion, see Beer & Cannon, 2004;

Campbell, Campbell, & Chia, 1998; Perry, Engbers, & Jun, 2008). These and other implementation problems create a typically weak link between performance and pay increases (for a review, see R. L. Heneman, 1990), suggesting that merit pay does not always motivate employees just because organizations fail to differentiate between high and low performers (Gerhart & Milkovich, 1992). Thus, even though most employees want to be compensated based on their performance and managers support the principle of rewarding employee contributions, the same employees and managers can be very suspicious about whether the merit pay system has any motivational value in practice (e.g., L. Harris, 2001; Marsden & Richardson, 1994).

Multiple studies on US federal government merit pay practices in the 1980's and early 1990's, have demonstrated that merit pay seemed to have little impact on employee motivation and organizational performance because of difficulties with the performance appraisal process and insufficient resources to establish a viable system (for a review, see Kellough & Lu, 1993). Kellough and Lu (1993) conclude that in the public sector:

- Goals and performance criteria are often diverse, conflicting and difficult to measure.
- Credibility issues exist with supervisory ratings, such as rater leniency (tendency to inflate ratings in order to avoid conflict) and halo effect (tendency to give the same rating on all performance aspects) when standard criteria are missing.
- Merit pay invites political intrusion because performance appraisal cannot be done objectively. Public sector managers are often chosen for their neutral competence, and may not have the discretion and skills necessary to apply merit pay practices.
- Because of a budget neutrality policy, pay increases even for outstanding performers have been low. This has caused managers to complain that the amount of paperwork and effort required were not worth the small merit increases allowed for employees.
- Finally, Kellough and Lu state that merit pay practices may not be effective for public sector employees since they are not primarily concerned with their pay, but with other aspects of the job⁵.

⁵ Researchers have debated whether external rewards are detrimental to intrinsic motivation (i.e., motivation to carry out the activity because of pure interest; see cognitive evaluation theory by Deci & Ryan, 1985). Two meta-analyses on the issue (Cameron & Pierce, 1994; see also Cameron & Pierce,

Many practitioners and academics alike believe that organizations waste a significant amount of money on compensation systems because they end up “hoping for A while rewarding for B” (Kerr, 1995). Thus, organizations might end up wasting money because the compensation system motivates not-hoped-for behaviors (Kohn, 1993). A classic example of this would be when an organization verbally supports collaboration but only rewards for individual performance. Consequently, employees may focus on their job goals so intently that they do not have as much time or desire to help others (Wright, George, Farnsworth, & McMahan, 1993) or support the organization’s long-term goals.

Pfeffer (1998), one of the critical voices contributing to the discourse, has argued that individual pay-for-performance undermines teamwork, encourages a short-term focus, and leads people to believe that pay is not related to performance at all but to having the “right” relationships and an ingratiating personality. He states that pay-for-performance undermines employees’ loyalty and performance by fostering their sense of being controlled. Finally, he notes that “*the time and attention spent managing the reward system are not available to devote to other aspects of the work environment that in the end may be much more critical to success*” (p.117).

The literature reflects a dilemma on merit pay: When merit pay works the way it should, it can be highly acceptable and effective. But when it does not work as planned it can be unsatisfying and produce unintended consequences. Overall, pay is an important cost and often a problem because people are commonly unsatisfied with it (Lawler, 1981). Because pay is an important cost, organizations cannot afford to have systems that reward for B while they are hoping for A. Furthermore, if those in power breach of the psychological contract are not paying a fair rate, it can rapidly cause disillusionment, dissatisfaction, and exit (Rousseau, 2004). Literature suggests that if performance differences are obvious and measurable but unrewarded, high-performing individuals may leave or lose motivation (Gerhart & Rynes, 2003, p. 260).

1996; Deci, Koestner, & Ryan, 1999) came to different conclusions. The contemporary formulations of self-determination theory (Ryan & Deci, 2000), partly as a result, suggest that extrinsic motivation can vary in the degree to which it is autonomous versus controlled. According to this view, when rewards are administered in an autonomy-supportive climate, they are less likely to undermine intrinsic motivation and, in some cases, can enhance intrinsic motivation. So far, little research has examined whether rewards can support autonomous motivation (Gagne & Deci, 2005). The controversy remains whether and under what circumstances rewards enhance or undermine intrinsic motivation.

2. Aims and Research Questions

Despite advances in psychological theories such as expectancy, goal-setting and equity theory in providing helpful guidelines to identify challenges with merit pay, the theories are too general (Bartol & Locke, 2000) to address the dilemma organizations face in paying people in a way that is acceptable and effective. Since we do not fully understand why merit pay systems work the way they do and under what conditions they work best, researchers need to develop theories further on how employees perceive and react to merit pay (Rynes, Gerhart, & Parks, 2005).

I adopt a psychological perspective in approaching this challenge for two reasons: First, I assume that there is more value to money than just its absolute value. Secondly, I assume that understanding individuals' reactions to pay is crucial in explaining why pay systems work on some occasions but not on others. The psychological view emphasizes that managers may find it impossible to truly optimize performance if they fail to account for both individual and contextual differences in pursuing high effectiveness in pay systems (Gerhart & Rynes, 2003, pp. 120-123).

Werner and Ward (2004) include research on employee reactions to compensation such as pay satisfaction, motivation and the meaning of money in their definition of compensation psychology. This dissertation contributes to each of these areas and advances the field by introducing theoretical perspectives that broaden our understanding of *why employees adopt certain attitudes and behavioral responses to merit pay reforms*. The dissertation consists of five studies that draw on different theoretical perspectives for answers to the following research questions:

- 1) How do reactions to positive pay changes compare with negative changes resulting from merit pay implementation?
- 2) How does a pay reform influence employee behaviors and attitudes?
- 3) What are the psychological mechanisms that explain employee pay satisfaction?
- 4) How can managers contribute to employees' perceptions of merit pay system success?
- 5) What makes people believe (or not believe) that a merit pay system is effective?

By seeking answers to these questions, the aim is to complement our current understanding of the psychological mechanisms that explain how merit pay influences the attitudes and behaviors of the existing workforce, often called *incentive effects* in the literature (Gerhart & Rynes, 2003; Rynes, Gerhart, & Parks, 2005) (see Chart 1).

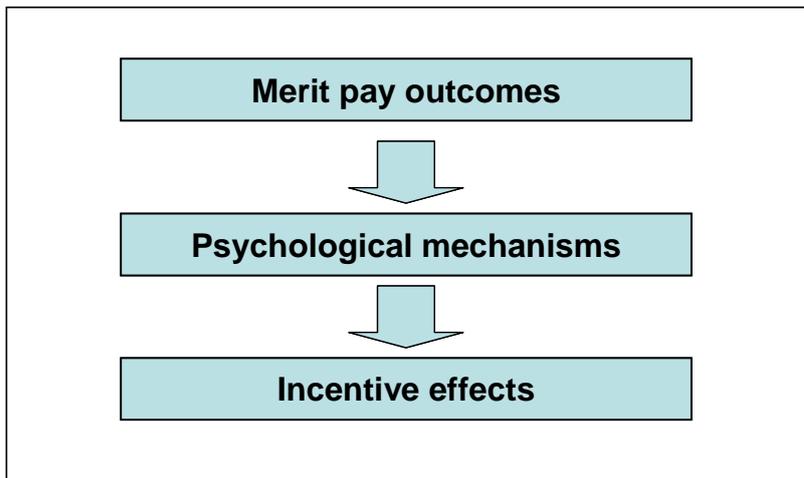


Chart 1. The research focuses on the psychological mechanisms that explain incentive effects on the individual level.

This dissertation will not compare different choices organizations can make in terms of merit pay structure and implementation. Research on the types of individuals attracted and retained (i.e., *sorting effects*) would require organization-level study designs (for example, see Shaw & Gupta, 2007), and this is not in the scope of this dissertation. Instead, the dissertation focuses on individual-level variation in how employees perceive merit pay practices and their attitudes and behaviors concerning pay level and pay changes in connection with the policy. In the conclusion of the dissertation, I discuss how the existing research informs merit pay implementation in practice.

3. Research Approach and Methods

A good research problem should generate new information and be based on strong theory that can be tested (Sutton & Staw, 1995). According to the positivistic ideal the research problem has to be based on testable theory and the chain of assumptions behind the theory should be logically clarified.

The three central assumptions in my research are:

- 1) Pay is important to people and its impact on attitudes, behaviors and organizational goal attainment can be explained by different psychological mechanisms that inform management practice (theoretical assumptions).
- 2) Cross-sectional variation in plan acceptance and effectiveness among individuals is interesting (assumption related to research design).
- 3) Psychological mechanisms as well as plan acceptance and effectiveness can be measured using a survey (assumption related to methodology).

The first assumption, as it is theoretical in nature, is founded in the theoretical discourse presented in the introduction section and throughout the dissertation. Each of the studies focuses on employee attitudes and behaviors, either directly stemming from merit pay practice, or as distal outcomes of the compensation practice. We conducted the studies in seven Finnish public sector organizations that had recently implemented new pay systems partly based on performance appraisals (i.e., merit pay). The data were gathered during 2003-2007. The response rates varied between 34 and 60 percent (see Table 1). Each study gathered data to answer the respective research question.

Appendices I-V contain detailed descriptions of the data collection procedures used in each study. We used structured established survey methods to study cross-sectional individual-level variation in merit pay acceptance and effectiveness. Data on merit pay were in most cases gathered separately from psychological mechanisms and incentive effects. Specifically, records-based pay data were gathered from five organizations out of seven. The pay data were linked to survey data using a double-blind procedure. Inferences from psychological mechanisms to incentive effects were primarily drawn from employee survey data based on established survey methods where possible. The survey scales were pilot-tested to ensure that translation would not have an impact on the interpretation of the items. Information on the

validity and reliability of the survey scales can be found in the articles (Appendixes I-V). Cross-sectional variance in employee acceptance and merit pay effectiveness were analyzed primarily using regression analysis (in SPSS 16.0), and structural equation modeling (in Amos 16 and Lisrel 8.53).

Table 1. Description of the data

Study	Organization/s	Data
1 and 2	Two governmental organizations	Employee survey data (n1=247; RR=49%, n2=248; RR=50%), and pay data from before and after the reform for all of the employees
3	One municipal organization	Employee survey data (n3=371; RR=46%)
4	One governmental organization	Employee survey data (n4=109; RR=60%)
5	Three governmental organizations	Employee survey data (n5=157; RR=48%, n6=109; RR=39%, n7=109; RR=34%), and pay data from before and after the reform for all of the employees
In total	Seven public sector organizations	Employee survey data N=1350 and pay data N=870

Notes. RR = response rate

3.1 Explication of the Contribution

In accordance with university guidelines, I now explicate my personal contribution to the research publication process. All data were gathered in research projects funded by external parties. The descriptive information on the results was first reported to organizations where the data were gathered and/or the financiers of the project. Then we analyzed the data for academic publication purposes.

The first and second articles are based on the same data set from two governmental organizations. The idea for the article in Appendix I first emerged in discussions with Jason D. Shaw and Atul Mitra. As the first author, Atul Mitra wrote an initial draft and conducted the data analysis. I participated in the writing and revision of the article, including a number of

drafts, with Jason D. Shaw. The supportive feedback from the Department of Industrial Engineering and Management Working Paper Series editor Satu Teerikangas influenced the final version of the article.

As the first author of the second article, in Appendix II, I conceived the research question, planned the data gathering, and conducted the statistical analyses. The writing was a joint effort with Robert B. Lount, Jr. During the multiple drafts of the paper, we benefited from discussions with and feedback from Neal Ashkanasy, Joe Cooper, Robert L. Heneman, Raymond Noe, Satu Teerikangas and Steffanie Wilk.

For the article in Appendix III, the data were gathered in a project with Anu Hakonen. As the first author, I planned the article framework, conducted the statistical analysis, wrote an initial version of the article and revised the paper. Anu Hakonen and Robert L. Heneman provided feedback on the writing. Feedback from two anonymous reviewers of *Journal of Managerial Psychology* and the editor, Dianna L. Stone, as well as Jason D. Shaw and Erin Coyne influenced the final version.

The fourth article, in Appendix IV, is based on my Master's thesis in psychology (completed in 2004). As the first author, I conceived the idea for the research, planned the research process, carried out data gathering, conducted statistical testing and wrote an initial version of the article. Pertti Keskivaara provided guidance on how to properly conduct structural equation modeling. Kiisa Hulkko, Göte Nyman and Anna Ylikorkala provided feedback on the writing. Feedback from two anonymous reviewers of *Journal of Finnish Psychological Society*, and the editor, influenced the final version.

For the final article, in Appendix V, Sini Jämsén and I utilized data that was already gathered by my co-author along with her colleagues Mari Huuhtanen, Katriina Karkulehto, Virpi Karppinen, and Carita Lahti. As the first author, I planned the article framework and conducted the statistical analysis. Sini Jämsén participated in the writing as a second author. One version of the article was presented at the annual meeting of the Academy of Management in August 2007. I had valuable discussions with Professor Jason D. Shaw about later drafts of the article. Feedback from Chad Brinsfield, two anonymous reviewers as well as the editors Shay Tzafrir and Dianna L. Stone of the *Journal of Managerial Psychology* influenced revisions of the article.

4. Results

In this section, I briefly introduce the main results of each dissertation study.

4.1 Just Noticeable Differences in Pay Changes: Psychophysics in Pay

Psychophysical theories seek to understand the relationship among stimulus intensities, sensations, and associated processes (Gescheider, 1976; Gescheider & Bolanowski, 1991; Upshaw, 1974). Weber's law of psychophysics provides the basis for establishing thresholds when individuals notice a difference in stimulus. This growing literature provides support for the applicability of Weber's law in understanding employees' perceptions of pay changes. Just as individuals have a threshold for noticing changes in other stimuli (e.g., the brightness of light or the loudness of sound); the point where individuals begin to react to their pay raises has been termed the "just noticeable difference" in pay (Mitra, Gupta, & Jenkins, 1997). It is based on the idea that small pay increases are not met with negative reactions but instead they go essentially unnoticed (e.g., see Katkowski, Medsker, & Pritchard, 2002, for a review).

RQ 1: How do reactions to positive pay changes compare with negative changes in pay resulting from merit pay implementation?

The first article (Appendix I) found that the pay thresholds for positive changes in pay were 8.4 percent for behavioral intent and from 7.2 to 9.7 percent for positive affective reactions. These estimates are very close to estimates using the successive categories approach in Mitra et al.'s (1997) laboratory study (around 7 percent) and Mitra et al.'s (2002) field study (around 6 percent). Indeed, Mitra and his colleagues suggest pay raises in the range of 7 to 10 percent as a practical guideline. Our results in a very divergent context fall squarely within this range.

The notion of a pay change threshold has so far been applied only to pay increases or positive pay changes. According to prospect theory, employees usually pay more attention to losses than gains (Kahneman & Tversky, 1979, 1984). This phenomenon is often referred as to *loss aversion*, which results in a utility function that is steeper for losses than for gains (Tversky & Kahneman, 1992). Loss aversion implies that someone who loses \$100 will be *more* dissatisfied than someone with a \$100 windfall will be notably satisfied. The study assessed just noticeable differences for implied pay cuts (i.e., how employees reacted to guaranteed pay), one of its key contributions. We found that the pay thresholds for negative pay changes

were -5.7 percent for effort and varied from -6.8 to -3.9 for different negative affective reactions. The thresholds were constantly smaller for negative pay changes than for positive pay changes. We thus concluded that people experience loss aversion, a greater sensitivity to losses than to gains, in response even to implied pay cuts.

Our *post hoc* analysis revealed that positive affective responses were primarily associated with factors employees had some control over. Conversely, the negative affective reactions to implied pay cuts were associated with external attributions – but also demonstrated a more complex pattern. A negative affective reaction, “afraid,” was significantly correlated with attribution to the trade union influence. Affect “hostility” was significantly correlated with attribution to the group that oversaw the process of consistent application (a group of employee and employer representatives whose task was to ensure that the system was applied consistently). Finally, affect “nervous” was significantly correlated with attribution to the organizational-level decision-making. Thus, our *post hoc* analysis suggests that with negative pay changes, the respondents’ emotional experience varied among the different attributions.

The study thus demonstrates three factors that play into employees’ reactions to pay changes in reforms:

- 1) Below a certain threshold, employees did not react meaningfully (such as demonstrating higher effort on the job or positive affective reactions) to pay increases.
- 2) Because of loss aversion, employees are more sensitive to even implied negative changes in their pay (i.e., guaranteed pay) than positive changes (i.e., pay increases).
- 3) Attributions will probably be a factor in how employees react to pay changes. According to this study, positive affective reactions were related to attributions of the pay change being caused by factors employees had some control over. Conversely, negative affective reactions were related to a range of external attributions (i.e., others causing the pay change).

4.2 Pay System Change as an Affective Event: Affective Events Theory

Affective Events Theory (AET) proposes that employees react to events like changes in their pay affectively (i.e., emotionally), which can partly explain why they adopt certain attitudes and behaviors (Weiss & Cropanzano, 1996). AET argues that the impact of work events on

attitudes and behaviors is underestimated because the influence, and even the existence, of affective reactions are often ignored. AET proposes that events that occur in our jobs can impact our affective states, which can then impact important work attitudes and behaviors. One of the core arguments of AET that has received some empirical support (e.g., Fisher, 2002; Mignonac & Herrbach, 2004; Zhao, Wayne, Glibkowski, & Bravo, 2007) is that affective reactions following a work event should mediate the relationship between work events and work-related attitudes and behaviors.

Ledford and Heneman (2000) suggest that, although most organizational changes can produce affective reactions in employees, changes in one's compensation seem to be especially subject to affective reactions. Pay is an emotional issue and has direct consequences for employees' self-esteem (Lawler, 1981). A complete pay-system change will likely alter one's psychological contract at work (Rousseau, 2004), and is likely viewed as an important event which will elicit affective reactions among employees. Indeed, some recent research has demonstrated that employees' tendency to experience negative and positive affect have an effect on how they react to pay changes (e.g. Begley & Lee, 2005; Shaw, Duffy, Jenkins, & Gupta, 1999; Shaw, Duffy, Mitra, Lockhart, & Bowler, 2003). Researchers, though, have yet to explore whether affective reactions to a pay reform explain employee behaviors and attitudes.

RQ 2: How does a pay reform influence employee behaviors and attitudes?

In the second article (Appendix II), we examined a situation where a new pay system partly based on performance appraisal replaced a pay system based on seniority and job titles. The "laws of emotion" (Frijda, 1988) state that the amount of positive and negative affect activated would depend on the individual employee outcome from the pay system change. Even though individual and contextual differences with respect to how meaningful money is to people exist (Mitchell & Mickel, 1999), the results of the study demonstrate that employees perceived a pay guarantee as a negative event while they considered a pay increase a positive event. Thus, the pay system elicited equal amounts of positive and negative affect, depending on the direction and amount of change in an individual's pay. In a mood-congruent manner, positive affective reactions were related to high levels of effort, positive work behaviors and organizational commitment. However, the results on negative affective reactions were not as straightforward. Negative affective reactions were associated with lower levels of effort on the job, but also notably higher levels of positive work behaviors directed at improving the work environment.

Overall, the results of the second article suggest that:

- 1) Employees react emotionally to pay changes, partly depending on the direction and amount of their pay change.
- 2) Affective reactions are an important underlying mechanism to help explain why a pay system change may influence employee behaviors and attitudes.

4.3 Managers Generating Meaning for Pay: Reflection Theory

Pay satisfaction is the most common concept when compensation attitudes are discussed (H. G. I. Heneman & Judge, 2000). Research shows that if an employee is unsatisfied with his/her pay, undesirable outcomes follow (H. G. I. Heneman & Judge, 2000). In addition to the absolute amount of pay, relative comparisons contribute to pay satisfaction (see the meta-analysis by Williams, McDaniel, & Nguyen, 2006). Research on pay satisfaction has been dominated by equity theory (Adams, 1965) and discrepancy theory (Lawler, 1971, 1981) according to which employees' pay satisfaction results from the judgments they make on whether their pay is proportionate to their inputs and those of fellow workers, and what they think they should receive. In addition, research on organizational justice has shown that employees care about the perceived fairness of the procedures used to distribute pay, especially when outcomes are low, such as with a low pay increase (Greenberg, 1987). Clearly, the pay distribution *process* matters, as does communication on how decisions are made, over and above payment amount *per se* (see also (Folger & Konovsky, 1989; Greenberg, 1990, 1993).

Reflection theory was developed to address shortcomings in understanding why pay is meaningful to an individual organization member (Thierry, 1998, 2001). Thierry (2001, p. 150) argues that "almost all theories fail to clarify *which kind of meanings* pay may have for that member." For most people, pay not only buys necessities but has important symbolic value (Mitchell & Mickel, 1999). Reflection theory suggests that pay gives the employee a mirror that reflects images of status, power, value and succession. The theory proposes that the meaning pay holds for an individual can be largely deduced from his/her personal characteristics (such as values), pay level (relative to others), the person's familiarity with the pay system (i.e., pay system knowledge) and pay system implementation practices and procedures. The way employees experience the meaning of the pay system is related to important employee outcomes, such as satisfaction, motivation and performance. Thus,

according to Thierry's model, pay level and its delivery processes are assumed to affect employee attitudes such as pay satisfaction through (and because of) the meanings attached to it. Researchers have conducted few empirical studies on the core arguments of reflection theory (Thierry, 2001). Most of the literature on the theory is conceptual, and focuses on establishing the dimensionality of meanings of pay: *motivational properties, relative position, control and spending*.

RQ 3: What are the psychological mechanisms that explain employee pay satisfaction?

Study 3 (Appendix III) and study 4 (Appendix IV) complement others on the importance of transparency in pay system communications (R. L. Heneman, Mulvey, & LeBlanc, 2002; Mulvey, Le Blanc, Heneman, & McInerney, 2002; Sweins & Kalmi, 2008), which have shown that the better the information employees have on what to expect, the more realistic their expectations about pay. However, it is possible that an employee may know the system in general but not understand how it functions for him or herself specifically—and thus the pay system is not perceived as meaningful. The meanings of pay in these studies (Thierry, 1998; 2001) add to our understanding of employee satisfaction with pay. Study 3 demonstrates that the meanings can be both instrumental and symbolic, as reflection theory suggests.

In summary, the results suggest that:

- 1) The better the employees know how their pay system functions (i.e., the higher the knowledge of pay), the more satisfied they are with it, and the more effective the pay system is deemed.
- 2) The way employees interpret the pay system process (i.e., the meanings of pay) determines whether they are satisfied with the system and whether they consider the system effective.

RQ 4: How can managers contribute to employees' perceptions of merit pay system success?

Study 4 (Appendix IV) relied primarily on reflection theory (Thierry, 1998; 2001) to argue that by paying attention to the messages they send when implementing a pay system, organizations can improve employees' satisfaction with pay and even make the system more effective in serving organization goals. Managers can influence pay system success (i.e., acceptance and

effectiveness) by linking pay to performance and giving feedback on personal work achievement. Employee familiarity with the pay system, meanings of pay, and fairness of performance appraisal procedures mediated managerial actions on pay system success. More specifically, the results suggest that:

- 1) The supervisory goal-setting process is related to pay system success only to the extent it helps employees understand the functions of the pay system and when the process was perceived as meaningful by employees in understanding what is valued at work.
- 2) If employees trusted their managers, they were very likely to perceive that the performance appraisal procedure was fair, which was related to pay satisfaction but not to pay system effectiveness.

Overall, studies 3 and 4 both provide a partial test to reflection theory, which suggests that pay level and the delivery processes have an effect on pay system acceptance and effectiveness through the meanings employees attach to them.

4.4 Politics and Fairness: Social Exchange Perspective on Merit Pay Effectiveness

Politics can have widespread effects on the effectiveness and efficiency of organizations through such procedures as performance appraisal, resource allocation, and managerial decision-making. Performance appraisal can be considered a political behavior (Tziner, Latham, Price, & Haccoun, 1996). In addition, employees can believe that politics play a role in how pay raises are determined (Ferris & Kacmar, 1992; Kacmar & Carlson, 1997). The vast majority of research on organizational politics views it as a negative phenomenon causing negative, anxiety-provoking reactions (for a review, see Kacmar & Baron, 1999). However, some scholars have noted that politics is probably necessary for the survival of organizations and its employees (e.g., Ammetera, Douglas, Gardner, Hochwarterb, & Ferris, 2002; Pfeffer, 1981). Accordingly, the aims of organizational politics are: (a) to protect and/or enhance an individual's self-interests, and/or (b) to further the interests or goals of another person or group (Altman, Valenzi, & Hodgetts, 1985).

While research has demonstrated empirically that politics and fairness are not necessarily mutually exclusive, but are separate constructs (Andrews & Kacmar, 2001), little research has examined which one is more relevant (Aryee, Chen, & Budhwarc, 2004) or whether they

interact in predicting outcomes such as job performance, citizenship behavior, job satisfaction, and turnover intentions (e.g., Byrne, 2005; K. J. Harris, Andrews, & Kacmar, 2007). This literature draws from social exchange theory that considers feelings of reciprocity to be at the core of employment relationships (Cropanzano & Mitchell, 2005). Social exchange relationships develop between two parties through a series of mutual, although not necessarily concurrent, exchanges that yield a pattern of reciprocal obligations (Blau, 1964). Workers provide their talents and motivation to earn, in return, pay and power (Randall, Cropanzano, Bormann, & Birjulin, 1999). Merit pay systems can be considered an organizational intervention that simulates a social marketplace, where individuals engage in transactions to generate a favorable return on their investment. Researchers, though, have yet to explore whether perceptions of politics and fairness are antithetical, or whether the impact of one depends on the other in determining merit pay effectiveness.

RQ 5: What makes people believe (or not believe) that a merit pay system is effective?

The final study (Appendix V) proposes that even though generally high levels of politics in merit pay systems are associated with perceptions of an ineffective pay system, some forms of politics may not be as detrimental as others. A high level of favoritism in performance appraisals was related to low levels of pay system effectiveness, as expected. We expected that compression of performance appraisal scores (in anticipation of preserving group climate or encouraging future performance) would be perceived as effective since it might be considered as furthering individual or group interests (Altman, Valenzi, & Hodgetts, 1985). While we did not find support for this contention, we found that compression in performance appraisal was not perceived as having a negative impact on pay system effectiveness either.

The most important goal of our study was to answer the call by Ferris et al. (1995) to explore the conditions under which politics and fairness can be considered antithetical (i.e., politics as a form of bias, a violation of the justice rules), and when they are interactively associated with outcomes. Our study agrees with previous research that organizational politics and fairness are distinct constructs (Andrews & Kacmar, 2001; Aryee, Chen, & Budhwar, 2004) that interact in predicting social exchange outcomes (Byrne, 2005; K. J. Harris, Andrews, & Kacmar, 2007). Our results suggest that organizational politics and distributive justice are distinctively associated with whether a pay system motivates employees to achieve organizational goals. In a high politics environment, the pay system effectiveness also varied as a function of the level of distributive justice. However, voice in pay system development (a form of, or prerequisite for,

procedural justice) did not buffer the negative effect of politics on pay system effectiveness as we predicted. Instead, it only mattered when there was a low level of politics.

Taken as a whole, our results suggest that politics and fairness distinctively and interactively related to employee perceptions of pay system effectiveness. More specifically:

- 1) If employees perceive their pay as fair compared to their effort and other factors, they consider the system effective. But if they perceive performance appraisals as based on favoritism, and pay decisions based on politics rather than performance, they are likely to perceive the system as ineffective. Further, it is likely to produce negative, unintended outcomes.
- 2) When employees perceive ratings being compressed in anticipation of evenly distributed pay raises, they consider this neutral, neither negative nor positive.
- 3) In a highly political environment, the negative effect of politics on pay system effectiveness is neutralized for those employees who “win” (still think their pay is fair).
- 4) Employee participation in pay system development may produce positive outcomes only in an environment with minimal politics.

The results of our final article (Appendix V) suggest that the merit pay systems adopted were not ineffective or detrimental *per se*. Their effectiveness varied as a function of the established ‘political’ and ‘fairness’ climates (Treadway, Adams, & Goodman, 2005) at different levels of the organization.

5. Discussion

In this section, I discuss the main theoretical and practical contributions of this research, followed by the limitations and underlying assumptions.

5.1 Psychological Mechanisms: Theoretical Contributions and Propositions

This dissertation focuses on the psychological mechanisms that attempt to explain merit pay acceptance and effectiveness. We can understand more about the attitudes and behaviors of the existing workforce (i.e., incentive effects) by examining psychological mechanisms as reflected in just noticeable differences in pay changes, affective reactions to pay changes, and meanings of pay as well as employee perceptions of politics and fairness. Chart 2 shows the conceptual framework that underpins the dissertation, grounded in different theoretical perspectives.

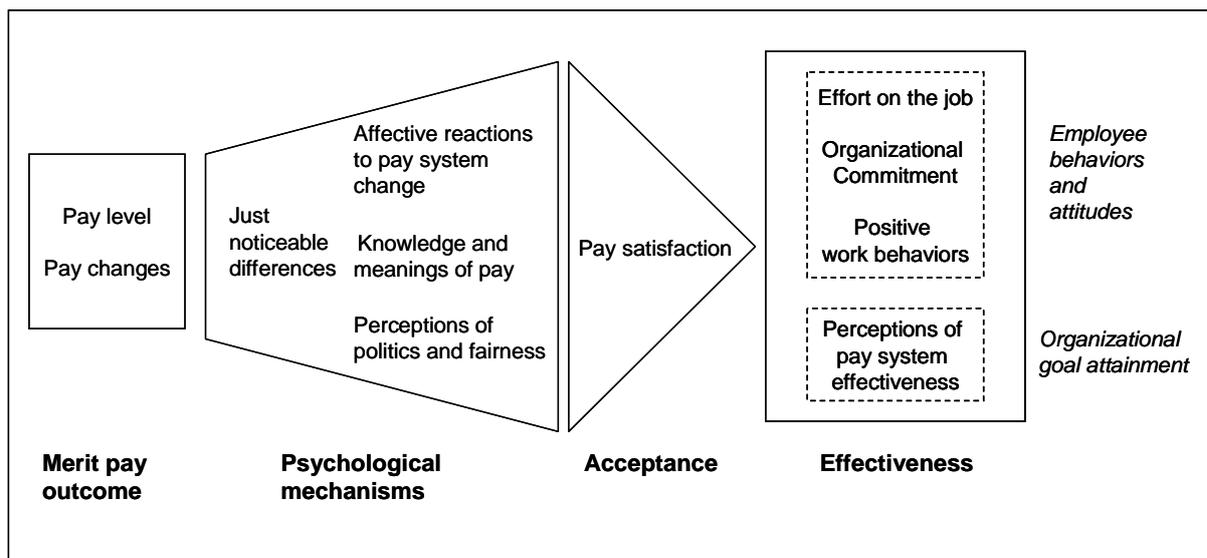


Chart 2. The conceptual framework studied in the dissertation research

The main challenges with merit pay, as I suggested in the introduction, relate to the acceptance and effectiveness of the pay system. The dissertation looked at different factors that explain *why employees adopt certain attitudes and behavioral responses to merit pay reforms.*

The five studies in this dissertation approach the subject from different theoretical perspectives, summarized below:

- Aligned with the literature on just noticeable differences (Mitra et al., 1997) that draws from psychophysics, there is a relatively stable threshold below which pay changes go essentially unnoticed. For negative pay changes this threshold is smaller than for positive changes as prospect theory (Tversky & Kahneman, 1992) predicts.
- Affective events theory (Weiss & Cropanzano, 1996) proposes that affective reactions partly explain the effects of an important event, such as a pay reform, on employee attitudes and behaviors. Thus, positive pay changes such as pay increases elicit positive affective reactions and negative pay changes such as guaranteed pay elicit negative affective reactions. These affective reactions partly explain the unanticipated and desired consequences from a pay system change (such as job effort, positive work behaviors, and organizational commitment).
- As reflection theory (Thierry, 2001) predicts, the effect of pay level and pay changes on merit pay acceptance and effectiveness is mediated through meanings of pay. Thus, the degree to which the pay system communicates symbolic and instrumental values important to the employee can explain how pay outcomes translate to pay satisfaction and pay system effectiveness.
- Based on social exchange theory, a merit pay system can be considered an organizational intervention that simulates a social marketplace, where individuals make transactions to obtain a favorable return on their investment (Cropanzano & Mitchell, 2005). Employees make sense of the different forms of (or motives for) organizational politics that cause inaccuracy in the merit pay process arising from performance appraisals (Tziner, Latham, Price, & Haccoun, 1996) and pay decisions (Ferris & Kacmar, 1992; Kacmar & Carlson, 1997). Some of these inaccuracies are more acceptable than others. Perceptions of organizational politics and fairness are interactively associated with how effective the pay system is deemed.

Future research should explore and integrate the different theoretical perspectives more broadly, including aspects of just noticeable differences, affective events theory, reflection theory, and theorizing on politics and fairness. In the meanwhile, I propose the following:

Proposition 1: The level of just noticeable differences will depend on employees' attributions of the cause for pay changes. In environments where pay cuts are necessary, there will be a lower level of negative affective reactions to pay cuts and employees may be less sensitive to pay cuts. My study 1 (Appendix I) cannot verify this contention since it was conducted in a setting where about a third of the employees received implied pay cuts while most others received increases.

Proposition 2: Literature on affect (Frijda, 1988) suggests that the degree of affective reactions will erode over time as people get used to changes in their environment. It also suggests that negative affect will persist longer than positive. I add that whether the effect of initial reactions will be evident in work-related attitudes and behaviors over the long term depends on the level of perceived politics and fairness in pay distributions. In a situation where an employee first reacted positively to a pay change (probably a positive one), a higher level of organizational commitment might be ongoing only if the employee subsequently believes that pay is distributed fairly and not based on politics.

Proposition 3: A pay system can transmit both positive and negative messages relevant for an employee's self-image. I suggest that an employee can receive constructive feedback on performance via merit pay (i.e., reflecting positive meanings) yet feel controlled by the merit pay system (i.e., reflecting negative meanings). The positive meanings increase pay satisfaction, but the negative connotations may increase the level of stress at the same time. Future researchers should study these positive and negative reactions together, taking into account that employees receiving low pay-for-performance may consider the system controlling while higher-paid employees find it supportive (McCausland, Pouliakas, & Theodossiou, 2005).

Proposition 4: I propose two factors that might explain why some employees found a newly implemented merit pay system effective even when there is a high level of organizational politics (according to the results of study 5). First, these employees may have 'played' the political game and won raises due to astute political behavior (i.e., political skill and political behaviors might be unmeasured factors that explain the relationship). Second, these employees

may believe they earned their ‘maximum’ under the previous pay system (due to seniority, for example), and are relatively happy with their current compensation when they see others struggle under the new merit pay system.

Proposition 5: I propose that merit pay system acceptance and effectiveness are related. Those employees who are happy with their pay and the pay system are likely to behave in ways that are beneficial for the organization (i.e., demonstration of an *incentive effect*). However, the association between acceptance and effectiveness is far from straightforward due to at least two reasons: First, as discussed earlier in the introduction section, the organization may reward for A while hoping for B (Kerr, 1995). Second, a pay system can result in higher level of organizational performance even though not all employees are happy with it. This occurs, for instance, when discontented, low-performing employees quit (i.e., demonstration of a *sorting effect*).

Next, I discuss the differences and similarities between factors that constitute merit pay acceptance and effectiveness in broader terms.

5.2 Merit Pay Acceptance and Effectiveness: One and Same or Different?

In this section, I discuss how existing research informs three central questions related to merit pay acceptance and effectiveness.

Can employers promote the acceptability of their pay systems via distributing more pay to their employees? Previous research on pay satisfaction has shown a consistent but quite weak correlation between pay *increases* and pay satisfaction ($r = .08$: Williams, McDaniel, & Nguyen, 2006). The correlation, though, is substantially higher between pay *level* and pay satisfaction ($r = .29$: Williams, McDaniel, & Nguyen, 2006), in line with the idea that subjective well-being depends more on the frequency of positive events than on their intensity (Diener, Sandvik, & Pavot, 1991). If the research took into account the possibly nonlinear relationship between pay and pay satisfaction, the association might be even higher (R. L. Heneman, Porter, Greenberger, & Strasser, 1997). The previous research suggests that base pay can be more effective in influencing attitudes and behaviors than recent pay changes (Gardner, van Dyne, & Pierce, 2004) or variable pay (Igalens & Roussel, 1999). A study that compared the effect of base pay level and bonuses (Worley, Bowen, & Lawler, 1992) supports this notion. Base pay levels, but not bonuses, were positively related to work performance and

affective commitment. However, merit increases that become a fixed part of base pay are often criticized as promoting an entitlement culture (R. L. Heneman & Gresham, 1998).

Is it realistic to think that a merit pay practice will satisfy all employees? As Heneman (1992) notes, merit practice outcomes are unlikely to be completely positive or negative. A more likely scenario is that a merit pay plan succeeds along some lines but not others. There is also a practical question of whether merit pay can be acceptable and effective for *all* employee groups of the organization. For example, a little less than one third of the employees in the first study sample (Appendix I) received a pay increase at the threshold or higher for just noticeable difference. They would then probably have a positive affective reaction and report higher job effort. For the remaining employees, merit pay was not likely to elicit positive outcomes.

Many individual pay-for-performance systems are zero-sum systems where larger raises or bonuses to some employees decrease the likelihood that a given individual will receive a large reward. For this reason, expectation-enhancing human resource practices such as pay-for-performance practices are related to higher quit rates. But further analysis shows that this occurs mainly among poor performers (Shaw, Dineen, Fang, & Vellella, in press). Not all turnover is harmful to organizational effectiveness (Lawler, 1981, p. 16). Organizations can afford to lose some individuals and may actually benefit from losing poor performers. In other cases, it may be easy to replace workers. Thus, turnover is a matter of rate, who leaves, and replacement cost.

It might be unrealistic to expect all employees to accept a merit pay system or expect it to be effective in all circumstances. Perhaps *all employees will never* be happy with their pay? The reason may lie in part with social comparisons: employees can compare many different factors, and they generally select those that are unfavorable, resulting in dissatisfaction (e.g., Brown, 2001; Scholl, Cooper, & McKenna, 1987; Shore, Tashchian, & Jourdan, 2006; Sweeney & McFarlin, 2005; Sweeney, McFarlin, & Inderrieden, 1990; Trevor & Wazeter, 2006). As Bartol and Locke (2000, pp.123-124) state: “Ideally, a compensation system will promote both productivity and satisfaction. Given that it is unlikely that any plan will ever satisfy all employees, the emphasis is the satisfaction of higher performers.”

If employees are satisfied with the pay system, is it guaranteed to be effective? According to a recent meta-analysis, pay satisfaction is usually only weakly related to work performance ($r = .03$, see Williams, McDaniel, & Nguyen, 2006). However, the authors of the meta-analysis

state that the reason for the weak correlation may be that contextually relevant performance criteria are omitted (p. 406). As goal-setting theory suggests, merit pay practices may be particularly effective in focusing employee efforts. Heneman (2000b) states that perhaps the biggest problems with existing merit pay programs is failure to tie them to the organization's business strategy: "Employees often fail to see a link between merit pay and the accomplishment of business goals because no link is being made" (p. 450). Possibly for this reason merit pay seems to be consistently related to positive attitudes, but has not been consistently shown to be related to improved subsequent performance (Heneman, 1992, p. 258). Also, a satisfied employee is not always the most productive one and *vice versa* (Fisher, 2003). Consequently, multiple contextually-relevant outcomes (such as the goals of the reform and the acceptance of these reasons) should be used in evaluating merit pay to determine whether they are likely to succeed or fail.

5.3 Practical Contributions

The findings of the first study (Appendix I) have implications for organizations seeking to manage a pay budget. The results suggest that pay budgets should allow increases of at least eight percent. Below this threshold, employees did not react meaningfully to pay increases. The results also suggest that a pay guarantee is a negative event—even if it does not directly reduce the current pay of the employee. Organizations that adopt a pay guarantee following a pay system change may encounter adverse effects (such as a lower level of job effort).

So how can managers contribute to the success of a merit pay system? The results of the third (Appendix III) and fourth papers (Appendix IV) offer similar insights on how managers can succeed in implementing an acceptable and effective system. The first study suggests that how managers are perceived to set goals, give feedback, and create a relationship of trust has an indirect impact on pay system success, as perceived by employees. Managers can influence both pay satisfaction and pay system effectiveness through communicating the functions of the pay system. As a practical matter, managers should hold discussions on personal goals with each employee and clarify how achieving certain goals relates to pay. Employees will then understand better what is expected of them and the implications for their pay. By giving feedback and acknowledging employee work achievements, managers can influence the messages the pay system conveys. When employees trust their supervisors, they believe they will give fair performance appraisals.

However, managers may fail to link the pay system to organizational goals because politics may figure in pay decisions. The results of the final study (Appendix V) demonstrate that the higher the levels of politics employees perceived in pay decision-making, the less effective they perceived the pay system in achieving its objectives. A high level of supervisory favoritism in performance appraisals was also related to low levels of perceived pay system effectiveness. Both these forms of organizational politics were perceived as distorting the effectiveness of the pay system by the employees. In fact, the pay system was perceived to have increasingly negative, *unanticipated* effects in these cases. One form of organizational politics—compressing performance ratings in anticipation of evenly distributed pay raises—was not, however, perceived as ineffective. According to the results, compression, often a guideline in Finnish public sector organizations, is not perceived as effective either. Employee participation in pay system development was positively associated with pay system effectiveness only in a low-politics environment.

Overall, the results suggest that when organizations implement merit pay, they might want to consider the following factors:

- Pay system change may have emotional impact on employees depending in part on their personal outcome. Pay increases below eight percent may be relatively insignificant to employees. However, employees will probably be comparatively more sensitive to a negative pay change (such as a pay guarantee) than a pay increase. This means that employees are proportionally more disappointed by negative changes in their pay than they are happy with pay increases.
- Companies should invest in pay system communications to make sure employees and managers understand and approve the system's goals and how to achieve them. Employee participation in pay system development is likely to have a positive impact on pay system effectiveness (if it is considered sincere).
- Managers can promote the meaning of the pay system to employees via individualized and participatory goal-setting processes that provides feedback on performance. It is important to clarify how pay can and should be linked to performance on the individual level.

- Managers should avoid politics, especially in pay decisions that might distort the aims of the pay system. However, achieving objective performance appraisals may not be realistic. Employees are likely to judge and react to performance appraisal inaccuracy based on how they perceive the motives for the inaccuracy.

Taking into account all the evidence from existing research, including the dissertation papers, tying pay to performance is desirable but difficult to achieve because of implementation challenges at the organizational and supervisory levels (see Chart 3). An assessment of the conditions that facilitate or hinder the use of merit pay needs to be made. The main challenges with merit pay relate performance appraisals, pay budgets and pay decisions (Campbell, Campbell, & Chia, 1998; Kellough & Lu, 1993; Perry, Engbers, & Jun, 2008). I would expect that *organizational context*, including economic conditions, institutional environment, and the kinds of jobs employees hold, are important predictors of how prevalent each of these challenges is in practice (for a discussion on situational constraints, see R. L. Heneman & Werner, 2006, pp. 57-92).

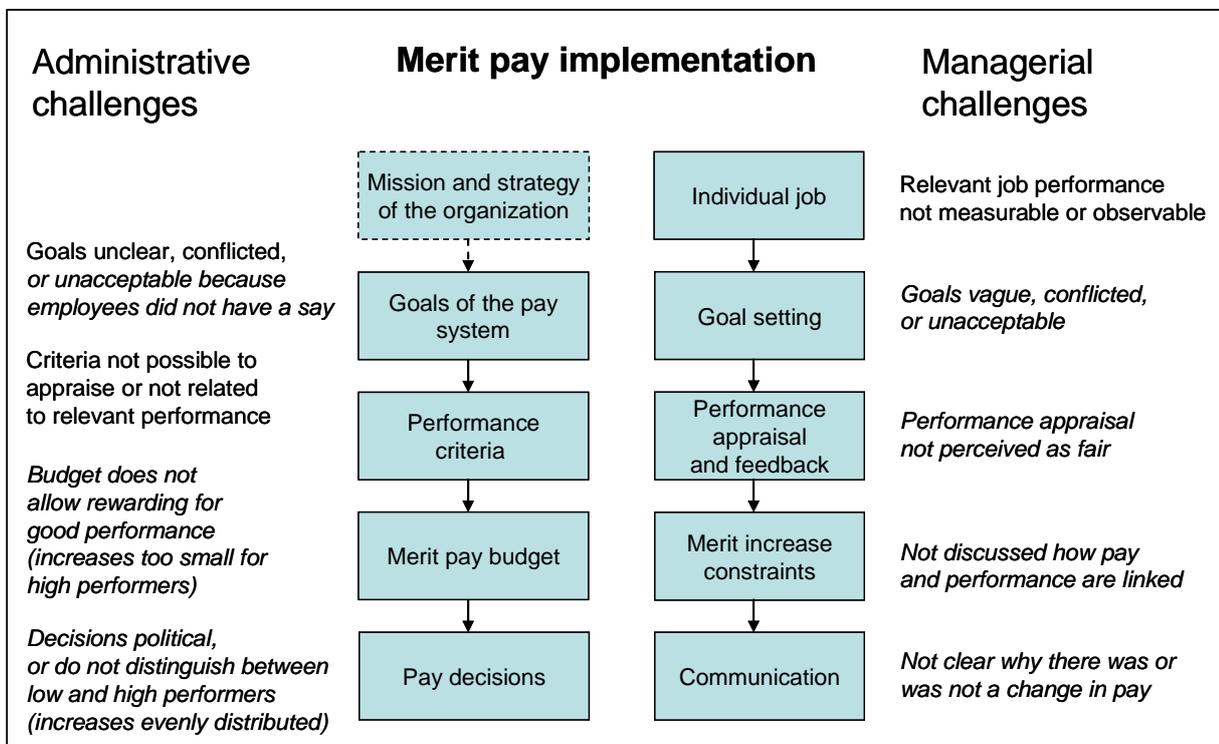


Chart 3. Possible challenges with merit pay implementation (Note: dissertation conclusions depicted in *italics*)

Strategic pay framework suggests that best results emerge when compensation practices are aligned tightly with organizational strategies. As R.L. Heneman (2000b) argues, compensation goals must be linked to business strategy and specific enough to *focus employee efforts on the organization's long-term objectives* (i.e., shifting the focus from rewarding past achievements to future requirements). This may be more easily said than done with merit pay since the criteria for a merit pay practice can be tedious to accommodate as the conditions change. Merit pay practices generally work best in relatively stable organizations where favorable economic and institutional conditions allow an adequate pay budget (R. L. Heneman & Werner, 2006, pp. 57-92). Further, job characteristics need to be well-defined, and employees should ideally have a high level of discretion in performing their (independent) work. The organizations where merit pay systems work well are likely to have streamlined structures with clear supervisory relationships. If supervisors can know well ahead of time about pay budget frameworks, this can help them set goals and clarify expectations concerning payouts.

Managerial challenges are fundamentally related to the kinds of jobs their employees perform. Task performance *outcomes* need to be visible, and/or there need to be other ways of gathering performance information (such as from customers). Merit pay may be hard to sustain if supervisors cannot draw firm conclusions about individual performance in interdependent work contexts, such as when work is organized into teams (for example, see Shaw, Gupta, & Delery, 2002). Supervisory training is often suggested as a way to promote performance appraisal objectivity (Campbell, Campbell, & Chia, 1998). However, as Bartol and Martin (1988; 1990) show, managers may distort the “objectivity” of the pay system for legitimate reasons such as retaining key employees. Also, even though supervisors may know how to differentiate among employees, they tend to consider the broader effects of rewards on group harmony, as an example (Giacobbe-Miller, Miller, & Victorov, 1998). Thus, organizations need to consider how feasible it is to trust supervisory judgment and decentralize pay decision-making, and where unified higher-level consideration is needed.

Research that compares merit pay *administrative* and *managerial challenges* to those of alternative reward systems such as incentive plans, promotions, and nonmonetary rewards in different organizational contexts can advance our knowledge in this area.

5.4 Limitations

This dissertation adds to our understanding of how employees react to pay systems, especially merit pay plans. I discuss the limitations in each of the individual research papers in detail. Here I will describe them from a broader perspective.

The theoretical concepts need to be carefully operationalized to achieve good validity and reliability. Because the concepts have been operationalized by using multiple-choice questions, the options are narrowed and the scale for answers predetermined. For example, in examining the meanings of pay, only positive meanings have been considered in the current operationalization of the reflection theory. It is thus possible that the meaning of pay in the organization we studied was not neutral but primarily negative. Our research approach would not have captured this factor. Similarly, only certain aspects of political behavior related to pay-for-performance were measured. The decisions about compensable factors and sub-factors, timing of assessments and reassessments, and internal or external equity (Gupta & Jenkins, 1996) are factors to consider in future studies. The measure of affective reactions captured only the active spectrum of affective reactions (i.e., positive activation and negative activation). These choices are a major restriction with this hypothetic-deductive approach, which relies on theories and concepts that are predefined (and traditionally operationalized in a certain fashion).

According to the positivistic orientation, the data should be systematically gathered from the theoretical framework to achieve objectivity. One could ask whether the individual-level approach is useful to appraise the effects. Employees may be good informants of their own attitudes, such as organizational commitment (Goffin & Gellatly, 2001) but they may not be the best informants with regard to their behavior, especially their performance (M. M. Harris & Schaubroeck, 1988) or attaining organization-wide goals. The broader issue is whether employee attitudes and behaviors matter in organizational settings. One could ask whether there is any hard data linking employee perceptions of merit pay with, for example, firm performance or productivity. We know from the literature that, at least on the individual level, employee attitudes predict job performance. This was demonstrated in a recent meta-analysis where overall job attitudes reflecting organizational commitment and job satisfaction strongly predicted ($r = .59$) how engaged a person was with his/her job (Harrison, Newman, & Roth, 2006). The researchers used a composite of multiple job performance measures. Also on the unit level, aggregate job satisfaction and employee engagement are significantly related to

business unit performance ($r = .37-.38$) (Harter, Schmidt, & Hayes, 2002). These meta-analyses suggest that employee attitudes have relevance. However, there is still only sparse longitudinal research that explores whether attitudes affect performance or *vice versa*. Some recent research has shown that the relationship between pay satisfaction and financial performance might be reciprocal (Schneider, Hanges, Smith, & Salvaggio, 2003). Thus, when economic conditions are good, employees often receive higher pay, which satisfies them. This satisfaction promotes higher effort and performance. Longitudinal research combining data from different levels of the organizations would be valuable. At the organizational level, both success and survival of the plans should be assessed (Gerhart and Rynes, 2003, p. 195).

Our reliance on a single survey is of concern. Since our independent and dependent attitudinal variables were measured within the same survey, our findings may be influenced by common method bias by creating artificial correlation between the variables (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). To help reduce this possibility, the following steps were taken in the survey design and administration. First, information about the double blind data gathering procedure was communicated to everyone to reduce social desirability. Second, pilot tests were conducted to reduce survey item ambiguity. Further, in some of the papers, we explicitly tested the effect of common method bias (by incorporating a method factor in the model) and did not find evidence that it would significantly impact our results. Nevertheless, it remains a potential issue. Common method bias, we should mention, is not a concern when it comes to testing interactions. Research has shown that artificial interaction cannot be created by common method variance (Evans, 1985). Instead, true interactions can be deflated.

Many studies focus on employee attitudes either following a change in pay (i.e., measuring reactions shortly after a reform), or asking explicitly about their attitudes about the pay system (such as whether it is effective and they are satisfied with it). However, none of the studies can claim that these attitudes are a *direct result* of the pay reform, partly because of the possibility of common method variance explaining the results and partly because the research design was not longitudinal. The best way to study whether pay reforms *change* attitudes would be to conduct random experimental longitudinal studies with clear interventions and control groups (Stone-Romero & Rosopa, 2008). Then changes in attitudes can be measured as a function of the reform. For example, I argue in this dissertation that how managers implement pay systems affects employee satisfaction and the effectiveness of the system. However, this is only shown through measuring employee perceptions of their managers' actions. Consequently, we cannot know whether training managers in performance management, or changing organizational

structure and managerial roles in pay system implementation, would make any difference in employee attitudes and behaviors. This would be an interesting avenue for future research.

All five dissertation studies focused on individual-level phenomena and treated the employee samples as a relatively homogenous group (controlling for certain demographical factors). Since the studies did not differentiate between high- and low-performing employees, another concern of practical relevance arises: are the systems targeted to “key employee groups”? For example, if there is variation in the commitment of the employees, which ones are planning on leaving, the high- or low-performing employees? To what extent does employee turnover result from dissatisfaction with compensation system? While most research on the topic, including this dissertation, usually considers employees as a single entity, they are of course a heterogeneous group. Practitioners need to take this into account when they evaluate the success of their reforms. Organizations may want to attract, retain and motivate certain groups of employees. They would then determine the success of their pay systems based on their acceptability and effectiveness for these groups in particular. Also for this reason, we cannot infer from these studies whether the reforms succeeded in attracting and retaining a skilled workforce, or whether they definitively achieved other specific goals, *per se*.

Finally, it is possible that some of the results are contextual and do not apply to other contexts. For instance, the notion of guaranteed pay is specific to the context we investigated. Two of the studies (Appendixes I and II) utilized this as an opportunity (which occurs infrequently), and one (Appendix V) only controlled for its existence (parceling out the possible effect of the phenomenon). Even if the results of dissertation research support the hypothesis about guaranteed pay as a negative affective event in the eyes of employees, the results for its effect on employee attitudes and behaviors were mixed. Is there a need for further theory development, or are these results just context-specific? According to an excellent review by Johns (2006), context can restrict range, affect base rates, change causal direction, reverse signs, prompt curvilinear effects, tip precarious relationships and threaten validity. Any new results should therefore be interpreted cautiously and further validated in another context to distinguish between universal and context-specific phenomena.

To summarize, the major limitations of the dissertation research are:

- I adopted a hypothetic-deductive theory-testing approach and used previously validated survey measures to study theoretical concepts. This should enhance the *reliability* of the research (i.e., the degree to which the procedures can be repeated). However, few of these survey measures have been validated in the Finnish language. The studies have also relied on employees as sources of information on their own behaviors and the effectiveness of the pay practice. These methods present possible threats to the *construct validity* of the study (i.e., the appropriateness of the operational measures).
- All results are subject to the possibility of common method bias and none of the studies capture changes in employee attitudes before and after a pay reform. Thus, we cannot infer from the data how the systems compare to other practices (such as the older ones) in motivating employees. None of the studies looks at whether interventions in implementation (such as training) would affect unit- or organizational-level performance. Given the reliance on cross-sectional data gathered mostly from one source, these aspects of the research pose potential threats to the *internal validity* of the research (i.e., the degree to which causal relationships can be established between constructs).
- Since some aspects of the research context are unique (especially the contention of guaranteed pay, implied pay cuts), it may be difficult to fully distinguish between universal and context-specific phenomena. This poses a potential threat to the *external validity* of the research (i.e., the degree to which the results can be generalized to other contexts).

Having noted the primary limitations of the dissertation research, I want to recall the basic premise of the research: did the studies produce interesting, theoretically and methodologically sound and novel information? I believe they did. The results should help us understand more about why employees react in certain ways to pay-for-performance practices. They also provide new information on the conditions under which pay-for-performance may be considered acceptable and effective by employees. Both of these contributions have theoretical and practical relevance. However, we must bear in mind the limitations noted above in interpreting these results.

6. Future Directions

The psychological mechanisms studied in this dissertation describe the conditions under which merit pay plans will be acceptable and effective, and *why*. These studies underscore the importance of not assuming that adopting a pay-for-performance philosophy will always lead to a successful pay-for-performance practice and positive employee perceptions.

How can academic research help organizations overcome the dilemma that lies at the core of the merit pay practice? Research suggests that merit pay is hard to implement but if employees do not believe their compensation systems are equitable, the organization risks wasting money and losing high performers. In my view, compensation research has not focused sufficiently on what organizations and managers face in putting a new pay system into practice. For example, Bartol and Locke (2000) acknowledge that implementing equity is much harder than enumerating general principles. But they offer no specific guidelines, except to say that “the plan is [should be] implemented in a fair and objective manner” (p.124). Research on procedural justice has demonstrated that communication and employee participation are critical (Konovsky, 2000), and managers can buffer the negative effect of underpayment by treating employees fairly (Greenberg, 2006). Overall, however, there is relatively little (multilevel) research on the intervening processes between merit pay policy and organizational effectiveness (Gerhart & Rynes, 2003, pp. 260-261). This is one of the major challenges to compensation research and theory development, in my view.

Finally, it is evident that even though most people work for money (and would not work if they did not receive compensation for their efforts) monetary reward is only one part of why people join and remain with an organization and perform well. There are individual differences in how important money is for different people (e.g. Tang, Tang, & Luna-Arocas, 2005) and they may trade off money in return for such rewards as interesting work, opportunities for growth, outstanding leadership, benefits, job security, stimulating colleagues and convenient location or working conditions (Bartol & Locke, 2000). Lawler (1981) argues, however, that intrinsic and extrinsic rewards are not directly substitutable because they satisfy somewhat different needs: “Money will not make up for a boring, repetitive job just an interesting job will not make up for low pay” (p. 15). As Gerhart and Rynes (2003, p. 262) note, we need a more refined understanding of the most efficient investment of total resources in attracting the right people to an organization and then motivating and retaining them.

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