Factors Associated with Preferences Regarding Selected Forms of Variable Pay: A Replication and Extension

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Abstract
This study investigates the relationships among being paid via different variable pay systems, perceptions regarding selected work environment characteristics, and preferences regarding selected variable pay plans. The data highlight the importance of studying pay system preferences among those with significant work experience because measurement of such variables as experience with variable pay systems and perceptions of work environment characteristics is otherwise not possible. The findings suggest a link between perceptions of work autonomy, efficient management of firm resources and job support, pay satisfaction, experience with variable pay systems and preferences regarding selected variable pay systems.

Keywords: variable pay; profit sharing; performance bonus; commission-based pay; risk orientation; job support; work autonomy; pay satisfaction.

1. Introduction
Variable pay plans continue to grow in popularity, increasing from 47% of American companies offering some type of variable pay plan in 1990 to 88% offering such plans in 2009 (Abosch & Malague, 2010). Research indicates that pay-for-performance perceptions are strongly related to measures of pay satisfaction (Heneman, Greenberger & Strasser, 1988). A review of empirical investigations of merit pay by Heneman (1992) revealed that managers were very consistent in ranking merit as the number one preferred criterion for pay adjustment decisions. However, employees may have different preferences for types of merit pay, based on individual and/or organizational characteristics. For example, college students expressed a preference for individual-based pay systems over team-based systems (Cable & Judge, 1994; Kuhn & Yockey, 2003) and preferred employers utilizing individually-oriented pay for performance reward systems (Bretz & Judge, 1994). LeBlanc and Mulvey (1998) reported on a survey of American workers that found workers preferred rewards based on individual performance rather than team, group or company performance. In this paper, we examine several characteristics that may influence individuals’ preferences for different variable pay plans.
2. Literature Review and Hypotheses

2.1 Literature review

Compensation systems utilizing performance bonuses and profit sharing can be based on success sharing or risk sharing (Clark, 1996). In a success sharing contingent pay plan, employees are assured of receiving the agreed upon base pay (assumed to be at market level), with the possibility of additional pay depending on individual and/or organization performance. Risk sharing contingent pay systems place a portion of base pay at risk and, depending on employee and/or organization performance, provide employees with the possibility of replacing the base pay at risk, plus the possibility of earnings beyond the market level base pay. Empirical research suggests that pay-at-risk incentive plans have a negative impact on pay satisfaction, even among those whose earnings were greater under the pay-at-risk plan than any previous pay plan (Brown & Huber, 1992).

Individual characteristics may also impact pay system preferences. Research indicates risk-averse workers have a greater inclination to quit when employed by a firm with a variable pay component in the compensation plan (Gomez-Mejia & Balkin, 1989). Risk-averse job seekers displayed a preference for a fixed pay system of compensation (guaranteed annual salary) over a variable pay system where bonuses were linked to measures of organization success (Cable & Judge, 1994).

Empirical research also suggests that pay increases based on an assessment of individual performance are preferred over a system linking pay increases to group or organization performance (Bretz & Judge, 1994; Cable & Judge, 1994; Kuhn & Yockey, 2003; LeBlanc & Mulvey, 1998). Other research based on samples of hourly employees suggests that a system in which some hourly wages are at risk are least preferred (Brown & Huber, 1992; Schwab & Wallace, 1974). To investigate preferences between the various types of pay plans, we offer the following hypothesis:

Hypothesis 1: Individual performance bonuses are preferred to profit sharing plans (an organization wide group reward system), and profit sharing plans are preferred to commission-based pay plans (a system in which at least some of one’s base salary is at risk).

In their survey of American workers, LeBlanc and Mulvey (1998) found that 80 percent of respondents paid under a contingent pay system reported they would prefer a different pay system. The authors suggested that traditional merit pay is probably the preferred “other system.” Schwab and Wallace (1974) and Brown and Huber (1992) report research results that suggest hourly employees prefer the traditional wage system of compensation. Despite early theory linking motivation, performance and pay (Vroom, 1964), these findings suggest that employees paid under such systems experience pay dissatisfaction and prefer a pay system without a variable pay component.

Additionally, research pertaining to sorting suggests a different relationship. The sorting literature assumes that job applicants use compensation systems as one mechanism for assessing their overall fit with an organization and its culture (Dineen, Noe & Ash, 2002; Gerhart & Rynes, 2003; Lazear, 2000; Stevens & Ash, 2001). This line of research seeks to identify features of a compensation system that trigger turnover and which attract new employees who fit the compensation system (Dohman & Falk, 2011; Eriksson & Villeval, 2008; Gerhart & Rynes, 2003, Lazear, 2000). For example, an individual-based variable pay system may be very attractive to applicants who believe they are highly skilled, while candidates who perceive themselves as average or below average performers may seek to avoid such a pay system. Given that the literature reviewed above suggests different relationships between having some form of variable pay in one’s current job and variable pay preferences with regard to future employment, we seek to investigate the following research question.

Research Question 1: Is being paid a bonus or commission in one’s current job related to future preferences for variable pay systems (profit sharing, performance bonus and commission)?

In discussing Expectancy Theory and performance-based pay, Milkovich, Newman and Gerhart (2011) emphasize the importance of employees’ assessments of their ability to perform their job and having performance goals linked to contingent pay. This led Milkovich et al. (2011) and others to assert that “line of sight” is critical in the design of contingent pay schemes—employees must believe they can attain performance targets that trigger incentives and bonuses (Gerhart & Rynes, 2003; Pazy & Ganzach, 2009).
Perceived support of supervisors has been shown to be an important predictor of performance when pay is tied to performance (Pazy & Ganzach, 2009). We suggest that perceptions of the support present in one’s job environment (e.g., competent managers, well maintained equipment, coworker support and reasonable performance standards) have a positive impact on estimates of one’s chances of attaining the performance goals which trigger variable pay rewards. Therefore, we expect to find employee perceptions regarding job support to be positively related to preferences regarding variable pay systems. This leads to the hypothesis below.

Hypothesis 2: Perceptions of job support are positively related to preferences regarding variable pay systems.

Along with the availability of resources needed to perform one’s job, individuals also need to have the autonomy to use these resources, as they deem appropriate, to achieve performance goals (Hackman & Oldham, 1976). Workers experiencing greater control over their job (i.e., freedom to decide how to do their work) perceive that they are better able to impact their performance goals. As a result, we expect workers with greater perceived autonomy in the performance of their jobs to express a stronger desire for pay systems that tie compensation to performance.

Hypothesis 3: Perceived job autonomy is positively related to preferences for variable pay plans.

In addition to individual and organizational characteristics, an important predictor of preferences regarding variable pay systems is likely to be satisfaction with one’s current pay. As noted earlier, Heneman et al. (1988) reported that one of the primary determinants of pay satisfaction is the extent to which individuals believe that the pay they receive is related to their own performance. Based on this finding, individuals who report dissatisfaction with their current pay may prefer a pay system that directly rewards their own performance. Alternatively, many organizations offer profit sharing plans as incentives. These plans typically provide rewards based on organization-wide performances that are distributed without regard to individual performance. Profit sharing plans enable organizations to shift some risk associated with profit variability to employees, especially in firms with high employment growth (Kruse, 1996). A recent study of over 150 firms, however, found higher turnover when group incentive plans were utilized (e.g., profit sharing plans) (Guthrie, 2000). This study suggested that free-riding caused high performing individuals to prefer rewards based on individual efforts. From this, we wondered whether pay satisfaction and the link between pay and individual performance extends to organization-wide reward systems. Therefore, we offer the following hypothesis and research question:

Hypothesis 4: Satisfaction with one’s current pay is negatively related to preferences for individual-based variable pay plans (bonuses and commission-based pay).

Research Question 2: Is pay satisfaction negatively related to preferences for profit sharing plans?

2.2 Control variables to consider

Research suggests that gender, age, and salary are related to the importance of pay as well as pay satisfaction (Lawler, 1971). Research also suggests that men place more importance on performance-based pay than women (Heneman, 1992; Koys et al., 1989). Consequently, age, gender and current salary are included as control variables in our analysis. As noted above, risk orientation is related to pay system preferences. Zenger (1994) and Zenger and Marshall (2000) report evidence that organization size may be negatively related to employee preferences regarding variable pay systems. These variables are entered as control variables in our analysis.

3. Research Methods

3.1 Sample

The National Opinion Research Center (NORC) collected the data utilized in this study for the Graduate Management Admissions Council. The data collection involved a random sampling process of first year graduate students from institutions offering programs leading to an MBA or MBA-equivalent degree. Participating schools agreed to write a letter to students encouraging them to complete the survey. Completed surveys were mailed directly to NORC in a pre-addressed, stamped envelope.

A total of 2,054 responses were received from a random sample of 2,794 full-time and part-time students, resulting in a 73.5% response rate.
Given the focus of our study, our analysis was limited to those respondents who were employed full-time and had more than 12 months of work experience since graduating from college. This, along with missing data, reduced the number of respondents for our analysis to 462. The modal respondent was a 28 year old male (62%) who worked in an organization employing between 2,000 and 5,000 workers, had worked for five years since college, changed jobs once since graduation and had worked with the current employer for 3.5 years.

3.2 Measures

Respondents provided information concerning the following: age, gender, total annual salary, company size and whether part of their annual compensation was based on a performance bonus or commission. The variable pay measures (bonus and commission) were coded as dummy variables (no = 0; yes = 1).

Measures of job support, autonomy and pay satisfaction were taken from the 1972-1973 Quality of Employment Survey (Quinn & Shepard, 1974). The alpha coefficient for the 11 item job support scale was .88. Example items are: The people I work with are helpful to me in getting my job done; I receive enough help and equipment to get my job done. The autonomy measure was comprised of four items with an alpha coefficient of .75. A sample item is: I am given a lot of freedom to decide how I do my own work. The procedure used in this study to measure work-related characteristics relied directly on the perceptions of the respondents, and is methodologically appropriate (Hackman & Lawler, 1971).

Pay satisfaction was assessed using the following statement: The pay is good. Risk orientation was assessed with the following item: Suppose you owned a lottery ticket that had a 50% chance of paying nothing and a 50% chance of paying $100. What is the lowest price you would sell the ticket for? WRITE IN NUMBER OF DOLLARS. $______ Dollars.

The approach to measuring risk-attitude represented by the above item is the selling price lottery method (Pennings & Smidts, 2000; Slovic, 1972). Slovic (1972) reported high reliabilities for this method. Pennings and Smidts (2000) studied the predictive validity of the lottery approach and judged this method to be appropriate when predicting market behavior and choices.

Three dependent variables were measured in the current study. Respondents were asked to indicate how important each of the following would be in choosing a place of employment: profit-sharing plan, performance bonuses and commissions. These items were scored on a four-point scale ranging from “not too important” to “extremely important.” Preferences regarding each of the pay plans were assessed with a single item measure. In addition, risk orientation and pay satisfaction were assessed with single-item measures. Regarding the validity of a single-item scale, Sweeney, McFarlin and Inderrieden (1990) found the same results when using a single item measure of pay satisfaction and a three-item measure developed by Andrews and Withey (1976). In addition, Nagy (2002) reported that single-item facet measures of job satisfaction were strongly correlated with the corresponding multi-item facets of the Job Descriptive Index (JDI).

4. Results

Paired t-tests show clear support for hypothesis 1. The mean preference ratings for performance bonuses, profit sharing and commission-based pay are: 3.16, 2.99 and 1.76, respectively. The paired t-test results revealed performance bonuses were preferred over profit sharing (t = 3.45, df = 474, sig. < .001), and profit sharing was preferred over commission-based pay (t = 21.50, df = 474, sig. < .0001).

Multiple regression results pertaining to research question 1 suggest that being paid a bonus in one’s current job is associated with more positive preferences regarding performance bonuses in the future. Similarly, being paid a commission is associated with more positive preferences regarding commission-based pay.

Perceived job support is associated with positive preferences regarding commission-based pay, but unrelated to preferences for performance bonuses. Perceived job support is negatively associated with preferences regarding profit sharing. Thus, hypothesis 2 is, at best, partially supported.

Partial support for hypothesis 3 is also observed. Those who report greater perceived autonomy in the performance of their work have more positive preferences with regard to performance bonus and profit sharing systems. However, perceived autonomy is not related to commission-based pay preferences.
Hypothesis 4, which predicted a negative relationship between pay satisfaction and preferences for performance bonuses and commission-based pay, is supported. Individuals who are dissatisfied with their current pay expressed a stronger preference for individual-oriented variable pay systems in future employment. Regarding Research Question 2, the relationship between pay satisfaction and profit sharing plans, although negative, is not significant.

5. Discussion and conclusion

5.1 Discussion of results

The results of our study indicate that among the common variable pay systems investigated here, performance bonuses are clearly the preferred option for full-time workers with some job experience. This is consistent with previous research which reported that when presented with a choice between variable pay linked to individual performance or group performance, the former is the preferred option (Bretz & Judge, 1994; Cable & Judge, 1994; Kuhn & Yockey, 2003; LeBlanc & Mulvey, 1998). In the context of making future employment decisions, about 43 percent of our respondents report performance bonuses to be “extremely important,” compared to 28 percent who describe profit sharing as “extremely important,” and just 7 percent who rated commission-based pay as “extremely important.” The results of this study are also consistent with findings reported by Brown and Huber (1992), as well as Schwab and Wallace (1974). Individual-oriented success sharing plans are more popular than group-oriented success sharing plans, and both are much more popular than individual-oriented risk sharing plans. In addition to supporting earlier findings, we extend earlier research by using a sample that consists primarily of exempt workers with an average of five years of work experience (following their bachelor studies).

The regression analyses (Table 1) find employee age and company size are both negatively related to the importance of performance bonuses, and risk seeking is positively related to the importance of performance bonuses. These findings are consistent with research reported by Zinger (1994) and Zinger and Marshall (2000). In addition, the relationship between risk orientation and performance bonus preferences reported by Gomez-Mejia and Balkin (1989), Cable and Judge (1994) as well as Dohmen and Falk (2011) is confirmed. These findings regarding risk orientation and performance bonus preferences contribute to existing theory by extending existing findings to college-educated members of the labor force with extensive work experience; earlier studies were based on samples of college students.

With respect to Research Question 1, having part of one’s current annual compensation in the form of performance bonuses is positively related to performance bonus preferences, and having part of one’s current annual compensation in the form of commissions is positively related to preferences regarding commission-based pay. Sorting provides a possible explanation for these findings. The sorting hypothesis suggests that variable pay schemes which link pay and performance attract more productive workers, and that less productive workers find such pay arrangements unattractive. Eriksson and Villeval (2008) as well as Dohmen and Falk (2011) find that among student subjects, high performers are attracted to variable pay systems and low performers are attracted to fixed pay systems. Lazear (2000) reported sorting effects when a fixed wage system was replaced by a piece rate with guarantee system among non-exempt workers at Safelite Glass Company. Relating the sorting hypothesis to the positive association we found between being paid with a given variable pay system and preferences regarding that variable pay system in future employment, high performers receiving high bonuses or commissions may be likely to stay in that job, while low performers receiving low or no bonuses/commissions are likely to leave.

The significant positive association between job support perceptions and commission preferences provides some support for Hypothesis 2. This is consistent with discussions by Milkovich et al. (2011) as well as Gerhart and Rynes (2003) regarding “line of sight” and individual contingent pay schemes. Employees who perceive they have the necessary information, resources and other support to reach performance goals have more positive perceptions of commission-based pay. However, the finding that job support is negatively related to profit sharing preferences is contrary to our hypothesis. Instead, the observed relationship suggests that positive views regarding profit sharing are associated with the perception that resources are limited and one has challenging performance goals. It appears that when employees believe management maintains tight control of resources and sets demanding performance goals, employees have more positive views regarding profit sharing plans. This is similar to Locke and Latham’s (1990) theory that challenging goals help focus individual efforts towards achieving a target, creating a sort of “tunnel vision” that yields greater persistence over time.
Taken together, it may be that profit sharing, coupled with tight control of resources, causes employees to view exerting effort and persisting towards goals that yield profit sharing payouts (i.e., goals requiring more long-term effort and persistence) as more attainable. A related explanation is suggested by case studies of Microsoft (Bartlett, 2001) and Lincoln Electric (Fast & Berg, 1983). Both case studies describe a work environment in which resources are limited and closely monitored so there are no unnecessary expenses, and employees are “stretched” to attain performance goals. When employees believe that management maintains tight control of resources, including headcount, and sets demanding performance goals, employees may have more positive preferences regarding organization-wide incentive systems such as profit sharing plans.

The hypothesis addressing the association between work autonomy and variable pay preferences also receives some support. We find that individuals who perceive they have autonomy in the performance of their jobs prefer performance bonus systems (beta = .17) and profit sharing systems (beta = .19). The relationship between work autonomy and performance bonuses is consistent with research reported by Turban and Keon (1993), Montemayor (1995), and Ramamoorthy and Carroll (1998). They all reported that in situations characterized by high autonomy, reward systems keyed to individual performance and merit are preferred. Our findings confirm earlier findings from studies using student samples and extend existing theory to better understand preferences of experienced individuals who are employed on a full-time basis.

Our final hypothesis focused on the relationship between pay satisfaction and both individual and group contingent pay system preferences. The results suggest that satisfaction with one’s current pay influences future preferences for particular variable pay systems. Individuals who report dissatisfaction with their current pay indicate a greater preference for pay systems that directly link pay and individual performance. Although not statistically significant, the relationship between pay satisfaction and preferences for profit sharing plans in future employment is also negative. The directionality of these results is consistent with Guthrie’s (2000) study in which group incentive plans (i.e., profit-sharing) led to greater turnover, although it is unknown whether this is due to free-riding.

5.2. General discussion and implications

Our findings regarding performance bonus preferences are largely consistent with earlier research. The principal contribution of our study is that our sample consists of respondents with several years of full-time work experience following completion of their bachelor studies, while many of the earlier studies involved college students without full-time work experience. Insofar as our findings are consistent with such earlier studies, one can have greater confidence that the relationships reported by these earlier studies apply to employed members of the labor force. In addition, our findings highlight the importance of studying pay system preferences among those with significant work experience, because measurement of variables such as being paid in part through a particular variable pay system, job support, work autonomy and pay satisfaction is not possible with traditional college student samples. We believe that our investigation provides evidence that contributes to our understanding of employee preferences regarding the forms of variable pay systems studied here. First, we observe a positive relationship between having been paid with a given variable pay system (performance bonus or commission) and preferences with respect to that variable pay system. These findings may stem from sorting effects attributable to the presence of performance bonuses and commission-based pay in the compensation system of some organizations.

Second, a positive relationship between job support and perceptions regarding commission-based pay and a negative relationship between job support and perceptions regarding profit sharing plans are observed. The relationship between job support and commission-based pay suggests that ample resources are important when base pay is at risk. On the other hand, the negative relationship between job support and profit sharing preferences can be interpreted as evidence that lower level management and professional employees perceive a positive link between efficient use of company resources, challenging performance goals and profit sharing payouts. We also found a positive relationship between work autonomy and both profit sharing as well as performance bonus preferences. This suggests that among lower level management and professional employees, control over the performance of one’s job is positively related to preferences regarding both organization-wide variable pay plans (profit sharing) and individual performance bonus systems.
5.3 Study limitations

This investigation has limitations and shortcomings. The use of single-item measures of preferences regarding forms of variable pay is a limitation. In addition, all data are self-report responses collected concurrently, which raise issues of common method variance. However, we believe that the nature of the sample and the variables studied offer advantages that offset data collection issues. Because our sample consists of individuals with several years of work experience, they can more realistically report whether their current compensation includes a performance bonus or commission component. They can also report perceptions regarding job support, work autonomy and job satisfaction. In addition, our study surveyed a nation-wide sample of managers or those who aspire to be managers. As a consequence, there was a high degree of realism when they were asked to report the importance of selected variable pay systems in making labor market choices.

5.4 Conclusion

In closing, our findings indicate the importance of considering satisfaction with current pay when investigating preferences regarding variable pay systems in future employment decisions, especially since pay satisfaction is negatively associated with both performances bonus and commission preferences—two common incentive plans. Taken together, we believe these findings provide new evidence regarding experience with particular pay systems, perceptions of one’s employment conditions and the influence of such perceptions of rewards systems in current and future employment situations.

References


### Table 1: Regression Analysis Results: Preferences Regarding Variable Pay Systems

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<td>-.04</td>
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*Standardized beta coefficients. Significance: a ≤ .05; b ≤ .01; c ≤ .001