Performance-based reward for teachers: teachers' perceptions of their motivation

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ABSTRACT

This study focuses on which effects of the policy of performance-based reward for teachers could be varied by teacher's characteristics and studies the policy effects on motivation, morale and commitment according to teacher's characteristics. Results indicate that the policy of performance-based reward has a more positive effect on motivation, morale, commitment of male teachers rather than female teachers. Characteristics including secondary school, urban area, over-10-years of teaching experience, hygiene factors are found to have positive effects on the policy.

Keywords : Performance-based reward, teacher's motivation, teacher's morale, teacher's commitment

INTRODUCTION

Since the 1980's, a performance-based reward system has been capable of being an important tool for attracting and retaining quality teachers. Proponents claim that it is possible for a merit pay system to be awarded to more effective teachers (Dee & Keys, 2004). The arguments are persuasive enough to have stimulated various types of programs in Korea and other countries that differentiate teacher pay on the basis of performance. Meanwhile, opponents argue that the impact of pay supplements on supply and productivity will be small, that it reduces morale, and that it is difficult to identify high-performing teachers (Murnane & Cohen, 1986). The issue of performance pay has led to contentious educational debate, particularly concerning whether linking performance and pay is an effective means of improving performance.

A performance pay system is based on motivation theories. Because the employees' efforts and persistence relate to the quantity and quality of work performed, teacher's motivation is a key factor in the learning process that takes place in schools. It is believed that a performance-based reward affects teacher's motivation in a way that would reduce a turnover rate and enhance student achievement. However, an interesting fact is that in teachers' responses to performance-based pay, a number of teachers strongly oppose a performance pay system.

Motivation is closely associated with individual perceptions. Nonetheless, previous debates have spurred discussion about a link between performance related pay and teacher effectiveness. But, little information is provided regarding the teachers' characteristics and backgrounds that would be required for performance related pay to work. In this context, this study focuses on teachers' characteristics and backgrounds instead of entering the debate over the effectiveness of performance pay for teachers.

LITERATURE REVIEW

Performance-based reward assumes two things. First, there is the assumption that teachers affect the academic achievements of students and second, that differences in students' achievements are a result of a teacher's personal characteristics. Several studies indicate that teachers who have professional knowledge and skills in academic subjects and in turn link them to effective teaching methods in the classroom are proven to be more effective in instructing students and improving overall academic achievement (McDiarmid et al., 1989; Guyton & Farokhi, 1987). These studies support the argument that, in order to motivate teachers to gain new knowledge and skills for improving students' achievements, the teacher pay system has to be re-structured based on the unitary ladder system (Sanders et al, 1997).

Research on performance pay systems is mixed. While efforts by school districts to offer teachers performance-related pay have been largely unsuccessful in practice (Murnane & Cohen, 1986; Ballou & Podgursky, 2001; Goldhaber & Anthony, 2005), other research supports the notion that a performance pay system may have some potential in education (Clotfelter & Ladd, 1996; Lavy, 2002; Dee & Keys, 2004; Figlio & Kenny, 2007).

With regard to teachers' motivation, there are arguments in support of and in opposition to a performance-based reward system. It is argued that teachers who are not motivated by financial rewards can be encouraged with non-financial rewards (Odden, 2000; Tomlinson, 2000). These rewards can include satisfaction from high student achievement, recognition, influence, learning new skills, and personal growth. Therefore, a performance-based pay system is a means of providing motivation by introducing clear goals to the whole school.

Some teachers have been opponents of performance-based pay policy, while other

teachers have been proponents of a performance-based pay system. Ballou and Podgursky (1993) indicated that teachers surveyed were in favor of additional pay for additional duties as part of a career ladder where performance dictated the speed of advancement. Moreover, the level of pay in a school district appears to have no influence on teachers' attitudes towards merit pay, yet it was more likely to be supported by teachers with low salaries and by ethnic minorities such as Black and Hispanic educators (Ballou and Podgursky, 1993).

Motivation theories would be useful in understanding how teachers responded to a performance-based pay system. Most motivation theories depict the differences in teachers' needs, beliefs, and goals. As far as possible, most teachers try to personalize their roles in a school so that their motivation is closely related to their individual characteristics. Among the theories, motivation-hygiene theory, which has been called two factor theory, has been widely accepted by administrators (Hoy & Miskel, 2005). Motivation-Hygiene theory by Herzberg and his colleagues (1959) explained that the motivation mechanism can differ according to a person's attitude and disposition. Hence, motivation-hygiene theory shows that factors contributing to worker's job satisfaction and dissatisfaction exist independently. However, satisfaction is not determined solely based on these factors, and Herzberg distinguishes people into motivation seekers and hygiene seekers based on their attitudes and disposition at work. Motivation seekers mainly consider accomplishment, recognition, responsibility and development at work, while hygiene seekers regard work in terms of payment, working conditions, supervision and position. It means that motivation seekers focus on upper desire in the desire system, while hygiene seekers emphasize lower desire.

METHODOLOGY

Thirty primary, low-secondary, and high-secondary schools were selected from Daegu and the Gyeongbuk area of Korea. A total of about three hundred and twenty teachers were randomly sampled and data were collected through a questionnaire.

Teachers were asked to complete a questionnaire that was composed of three parts: teacher's background information, characteristics, and their perceptions of a performance pay system. In the first section, teachers were asked to provide information about their gender (i.e., male, female), number of years teaching, school-level (i.e., primary, low-secondary, and high-secondary), and school location (i.e., urban, suburban, rural). In the second section, they were asked to indicate their attitude (i.e., hygiene-oriented, motivation-oriented). In the final section, they were asked to indicate their responses to a performance pay system (i.e., motivation, morale, commitment).

A cover letter, the survey instrument (questionnaire), and a stamped return envelope were mailed to each teacher during the month of April, 2010. The sample population of this study was 320 teachers but only 284 of the teachers completed and returned the survey. This represents a response rate of 88.7%.

The purpose of this study was to clarify if there is a difference in how performance-based reward affects motivation, morale and commitment of teachers according to a teacher's background. In order to examine data packet score trends across the groups, we conducted an analysis of variance (ANOVA) to investigate whether distributions of teachers' backgrounds and characteristics differ from one another.

Motivation, morale and commitment, which are the criteria for analyzing group difference, are defined as follows. Motivation is the process of showing one's concentration, direction and durability for accomplishing goals. Concentration is how hard a person focuses on his goal. If the direction pursued by a person is different from the one laid out by the organization, there is a lack of performance results. Durability is considered important as an indicator of how long one person can maintain his efforts (Mitchell, 1997). Morale is defined

by a passionate attitude and interest in work and it is based on social satisfaction by participating in educational activities and on personal pride and worthiness. Commitment is a degree of psychological connection to a specific object which teachers value as highly relevant to educational activities. Teacher commitment consists of value recognition as cognitive perspective, identification as definitive perspective, and participation as behavioral perspective on how teachers consider their class, students or school organization (Hong, 2007).

RESULTS

An analysis of the effects of reward policy on teacher motivation, categorized by teachers' backgrounds, is as shown in Table 1. The analysis reveals that there was a significant difference in terms of gender, school level, location, number of years teaching, and attitude.

First, the results show that performance-based reward is more appropriate for male teachers rather than female teachers as far as providing motivation, as it was found that female teachers (2.68) receive less motivation than male teachers (3.23). However, recognition of motivation by male teachers is at an average of 3.23, meaning that it is not realistic in the field. These results are statistically significant at $p<.001$. Second, the effects of performance-based reward on a teacher's motivation are larger at lower school levels. Elementary school teachers (3.27) are motivated better than middle school teachers (2.78) and high school teachers (2.19). As a result of the Scheffe test, the differences between elementary – middle school, elementary – high school, and middle – high schools are statistically significant at $p<.001$. Third, performance-based reward is more appropriate for teachers in urban and suburban areas than for those in rural areas. Teachers working in urban (2.98) and suburban (3.10) areas receive better motivation than teachers in rural areas (2.25). As a result of the Scheffe test, these differences occur between rural areas and urban, suburban areas, and they are statistically significant at $p<.001$. Fourth, performance-based reward is more appropriate for motivating teachers with more than 10 years of teaching experiences. Teachers with more than 10 years of experience (3.33) are better motivated than teachers with less than 10 years of experience. Lastly, a person's attitude also has an effect on how they are affected by performance-based reward. Performance-based reward is better for motivating teachers who are hygiene-oriented (4.11) rather than teachers who are motivation-oriented (1.88). Considering the average, hygiene seekers recognize performance-based reward as a positive factor in motivation. On the other hand, motivation seekers consider performance-based reward to be a negative factor in motivation. These results are statistically significant at $p<.001$(refer to Table 1).

After analyzing the effects on motivation in terms of teachers' backgrounds, differences appear in gender, school level, working area, experience, and attitude. However, the fact that variables other than attitude show an average of less than 3 means that teachers with these variables are not actually affected positively. However, effects of performance-based reward on hygiene seekers are actually positive.

Table 2 indicates the results of an analysis of the effects of reward policy on teacher morale, categorized by teachers' backgrounds. The ANOVA results reveal that there were statistically significant outcomes.

First, it can be determined that performance-based reward increases the morale of male teachers (3.22) more than female teachers (2.69). This difference is statistically significant at $p<.001$. Second, reward policy is more appropriate to raise the morale of teachers at elementary and middle schools (3.13 and 3.01, respectively), rather than high schools (2.20). Under the Scheffe test, this difference results from a group difference between elementary and high schools and middle and high schools. The difference between elementary

and middle schools is not statistically significant. Third, reward policy works more positively to raise the morale of teachers in suburban areas. The morale of teachers working in suburban areas (3.19) is raised higher than that of teachers in rural areas (2.50). The Scheffe test shows that this difference results from a difference in average between suburban and rural areas, and it is statistically significant at $p<.001$. Fourth, the effect of reward policy on teachers' morale appears to be different according to teaching experiences. The more experienced teachers are, the higher their morale is raised. The Scheffe test shows that this difference is statistically significant at $p<.001$ for groups of teachers between more than 10 years of experience and no experience, more than 10 years of experience and 1-10 years of experience, and no experience and 1-10 years of experience. Lastly, reward policy has different effects on teachers' morale according to attitude. Reward policy gives out higher morale to teachers who are hygiene-oriented (4.06) rather than teachers who are motivation-oriented (1.92). Considering the averages of each group, hygiene seekers recognize the effects of reward policy on morale as positive, while motivation seekers think of its effects as negative. Similar to its effects on teachers' motivation, the effects of reward policy on morale are actually determined heavily by the individual's attitude.

The effects of reward policy on the level of a teacher's commitment are analyzed in Table 3, categorized by teachers' backgrounds. Significant differences were observed in teachers' perceptions of performance-based reward.

First, as a result of gender comparison, male teachers (3.50) recognized the effects of performance-based reward on their commitment to be more positive than female teachers (2.93), and this result is statistically significant at $p<.001$. Second, the comparison between school levels shows that reward policy plays a more positive role in raising the commitment of elementary school teachers (3.35) than in the case of high school teachers (2.80). To analyze the difference between group averages, a Scheffe test is conducted. Differences in average values between elementary-middle schools, elementary-high schools, and middle-high schools are statistically significant at $p<.001$. Third, teachers working in suburban areas recognize the effects of reward policy on commitment most positively in comparison to working areas. Reward policy affects the commitment level of teachers working in urban and suburban areas (3.12 and 3.36, respectively) more than those working in rural areas (2.75). As a result of the Scheffe test, this difference results from difference between rural-urban areas and rural-suburban areas. Differences between suburban and urban areas are not statistically significant. Fourth, a teacher with more teaching experience recognizes the effects of reward policy on commitment to be positive. A group with more than 10 years of experience has an average of 3.72, which is the highest among the categories. The average of a group with 1-10 years of experience is 2.65, and one with no experience is 1.64. This means they believe reward policy affects teachers' commitment negatively. Looking at the average values of each group, only a group with more than 10 years of experience considers reward policy to have a positive effect, while the rest of the groups think it has a negative effect. Lastly, teachers who are hygiene-oriented (4.30) recognize the positive effects of reward policy on commitment, whereas those who are motivation-oriented perceive the negative effects of reward policy. This difference is statistically significant at $p<.001$.

CONCLUSIONS & IMPLICATIONS

This study analyzes the effects of reward policy, categorized by teachers' backgrounds and attitudes. It turns out that the reward policy has some effect on the motivation, morale and commitment of teachers, but these effects can be increased given certain teachers' backgrounds and attitudes.

The major findings of this study are as follows: First, this policy has different effects

between genders in that male teachers show more positive effects than female teachers. Second, the effects of reward policy appear to differ between school levels. Teachers in elementary schools have a more positive result than those in middle and high schools. Third, the effects of reward policy are different by location. Teachers working in urban and suburban areas have more positive results than those in rural areas. Fourth, more teaching experience is also a factor in the varying effects of the reward policy. Teachers with more than 10 years of experience responded more positively than those with less than 10 years. Fifth, the effects of reward policy appear variable in terms of personal attitudes. Teachers who are hygiene-oriented are affected more than those who are motivation-oriented.

Policymakers have held to the assumption that giving more extrinsic rewards to teachers will improve results. However, the findings of this study indicate that it is necessary to consider the teachers' backgrounds and attitudes. Therefore, educational leaders should verify individual characteristics, beliefs and needs in order to increase teachers' motivation.

To this end, the following items need to be taken into consideration. First, a more in-depth analysis is necessary to verify the cause for the difference in the effects of performance-based reward in terms of gender, school level, and location. Further studies are needed to clarify which characteristics of school organization create a difference in realizing the positive effects of reward policy among different school levels, what cultural value and norms make regional differences, and which factors in gender lead to different effects of reward policy. If new information is accumulated, compatible policies can be pursued.

Second, future analysis should further consider differences in school levels and location. Elementary, middle and high schools in Korea have their own distinct organizational structures and management systems. In addition, the goals of school education are different according to school levels. Different cultural values and norms are found in urban, suburban and rural areas, and in turn they are reflected in school education. Therefore, based on further studies with an emphasis on clarifying differences in school levels and location, a more adequate analysis can be conducted.

Third, the autonomy of each school has to be guaranteed in order to establish standards for receiving performance-based reward and for practicing the actual evaluation. Because uniform criteria set up by the government do not properly account for the distinct features of school organizations and regional differences, they are not suitable for reward policy. Thus, a policy to grant autonomy to each school that reflects the needs and characteristics of the school and its teachers is an important factor in practicing the reward policy.

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APPENDIX

Table 1. To Extent to Which PBR increases Motivation

	N	Mean	SD	F value
Gender				
Male	100	3.23	1.014	11.821***
Female	184	2.68	1.398	
School Level				
Primary	142	3.27	1.310	
low-secondary	72	2.78	1.078	18.549***
high-secondary	70	2.19	1.195	
Location				
Urban	129	2.98	1.228	
Suburban	99	3.10	1.366	8.817***
Rural	56	2.25	1.164	
Number of Years teaching				
Less than 1 year	44	2.07	0.846	
1~10	71	2.30	1.047	31.497***
More than 10 years	169	3.33	1.299	
Attitudes				
Motivation-oriented	157	1.88	0.683	763.157***
Hygiene-oriented	127	4.11	0.669	

*p<.05, **p<.01, ***p<.001

Table 2. To extent to which PBR increase Morale

	N	Mean	SD	F value
Gender				
Male	100	3.22	1.106	11.712***
Female	184	2.68	1.334	
School Level				
Primary	142	3.13	1.300	
low-secondary	72	3.01	0.682	14.226***
high-secondary	70	2.20	1.480	
Location				
Urban	129	2.79	1.267	
Suburban	99	3.19	1.322	5.892***
Rural	56	2.50	1.128	
Number of Years teaching				
Less than 1 year	44	1.64	0.487	
1~10	71	2.39	1.062	54.37***
More than 10 years	169	3.40	1.211	

Attitudes				
Motivation-oriented	157	1.92	0.716	626.089***
Hygiene-oriented	127	4.06	0.716	

*p<.05, **p<.01, ***p<.001

Table 3. To extent to which PBR increase Commitment

	N	Mean	SD	F value
Gender				
Male	100	3.50	1.259	14.834***
Female	184	2.93	1.155	
School Level				
Primary	142	3.35	1.092	5.156***
low-secondary	72	3.03	1.278	
high-secondary	70	2.80	1.336	
Location				
Urban	129	3.12	1.143	4.646**
Suburban	99	3.36	1.417	
Rural	56	2.75	0.899	
Number of Years teaching				
Less than 1 year	44	1.64	0.487	98.382***
1~10	71	2.65	0.847	
More than 10 years	169	3.72	1.058	
Attitudes				
Motivation-oriented	157	2.18	0.639	817.576***
Hygiene-oriented	127	4.30	0.595	

*p<.05, **p<.01, ***p<.001