

## **Self-Efficacy and its Impact on Pay Satisfaction, Pay-Level Satisfaction, and Benefits Satisfaction**

**Sunghoon Kim and Seongsu Kim**

*College of Business Admin.*

*Seoul National University*

### **Abstract**

This study examined the impact of self-efficacy on overall pay satisfaction and two of its sub-dimensions, pay-level satisfaction and benefits satisfaction. Self-efficacy, a central component of social cognitive theory, is general or task-specific self-confidence. The relationship between self-efficacy and performance received much attention from researchers. Results from 192 employees at a Korean bank support proposed hypotheses that self-efficacy is negatively related to pay satisfaction and its subscales. Implications, future research directions, and limitations are discussed.

Researchers have long studied factors that affect behaviors and attitudes at workplace in order to understand the phenomenon itself and find ways to improve organizational effectiveness. Self-efficacy has always been one of the most important variables in this line of research because of its impact on individuals' behaviors and attitudes at workplace (Mitchell, Hopper, Daniels, George-Falvy, & James, 1994). Self-efficacy, a central component of social cognitive theory, is general or task-specific self-confidence (Bandura, 1997, 1986). It refers to belief individuals have regarding specific tasks at work. If individuals have high self-efficacy, they tend to enjoy the work, commit themselves to work, and produce good results. In contrast, individuals with low self-efficacy tend to be easily discouraged at

---

\* This study was supported by the Institute of Management Research of Seoul National University.

work, try to avoid facing challenging work, and show performance below average. The level of self-efficacy an individual has such profound effect on the attitudes and behaviors at work, and therefore, the relationship between self-efficacy and performance received much attention from researchers. The majority of research on this issue confirmed that self-efficacy has positive effects on performance (Karl, O'Leary, & Martocchio, 1993).

Since individuals with high self-efficacy yield high performance, they expect to receive commensurate compensation for the performance. When individuals have high expectations, they expect more from employers and tend to be dissatisfied with what is actually given (Dreher, 1981; Motowidlo, 1982; Shank, 1986). If self-efficacy is positively related to performance and performance, in turn, is negatively related to pay satisfaction, what would be the relationship between self-efficacy and pay satisfaction? This is the main research question of the present paper. By answering this question, we can understand an important dimension in the pay satisfaction construct which has been ignored for long. Also we can begin to find ways to improve pay satisfaction with same level of pay as before.

## **Theory and Hypotheses**

### **Self-efficacy, performance, and pay satisfaction**

Researchers have long emphasized the importance of self-efficacy in understanding individual behaviors and attitudes in the work environment (e.g., Bandura, 1977; Gist, 1987). It is the central component in the social cognitive theory that explains both the competency development and regulation of action. Mitchell et al. (1994) explained that self-efficacy "clearly refers to what a person believes he or she can do on a particular task".

Self-efficacy received considerable attention from researchers because it directly affects human thought, motivation, and action (Bandura, 1977). People's judgments on their own capabilities are mostly based on their experiences or other people's evaluations. Therefore, it is quite possible that those

with higher self-efficacy will set higher goals and show higher performance. A large body of literature on self-efficacy consistently found that self-efficacy is positively related to goal setting, learning, effort level, and performance level (e.g., Bandura, 1997; Gist, 1987; Harrison, Rainer, Hochwarter, & Thompson, 1997; Mone & Baker, 1992; Wood & Locke, 1987). This implies that individuals with high self-efficacy set higher goals and commit themselves to achieve these goals. This prompts them to expend more efforts than individuals with low self-efficacy and in most cases, those with higher self-efficacy achieve higher performance level. Self-efficacy has been found to have such powerful, positive effect on individuals' attitudes and behaviors in numerous previous studies.

The essence of previous studies on the relationship between self-efficacy and performance was that the former increases the latter. Research on the relationship between performance and pay satisfaction found that performance is negatively associated with pay satisfaction (Motowidlo, 1982; Shank, 1986). Equity theory (Adams, 1963) suggests that individuals with high performance expect to be compensated for their contributions. In comparing their inputs (effort, performance, etc.) and outputs (pay, recognition, etc.), high performers tend to expect more outputs than the outputs they have received from the organizations. This is because of favorable bias individuals have toward themselves. Individuals tend to attribute success more to themselves than others or organizations. The latter group tend to attribute success towards external factors. Through the self-serving bias, individuals with higher self-efficacy tend to be dissatisfied with pay and perceive pay inequity. This inevitably leads to low pay satisfaction. Because of these reasons, previous research consistently demonstrated negative relationships between performance and pay satisfaction.

Consistent with results of previous studies, Mone (1994), in a study on the relationship between self-efficacy and job satisfaction, found a negative relation because "high self-efficacy and performance were not met with the commensurate rewards that create job satisfaction" (p. 297). A negative relationship found between self-efficacy and job satisfaction due to inadequate rewards further suggests a similar relationship between self-efficacy and pay satisfaction. Integrating theoretical

arguments and empirical results above, the following hypothesis is developed:

Hypothesis 1: Self-efficacy will be negatively related to pay satisfaction.

Pay satisfaction is a multidimensional construct, composed of pay-level satisfaction and benefits satisfaction (Miceli & Lane, 1991). Therefore, the relationship between self-efficacy and pay satisfaction can be extended to these dimensions in pay satisfaction.

First, researchers have found that pay-level satisfaction is the central sub-dimension in pay satisfaction. Compared with benefits satisfaction, pay-level satisfaction has been found to have three to five-fold explanatory power in accounting for the general pay satisfaction (e.g., Heneman, Greenberger, & Strasser, 1981). Those high in self-efficacy tend to set higher goals, expend more effort, and yield high performance. As a result, these high performers tend to form higher expectations regarding pay and, most likely, expect higher levels of pay than those they have received from the organizations. This can make them to perceive inequity in pay level and, therefore, low pay-level satisfaction. These arguments suggest the following hypothesis:

Hypothesis 2: Self-efficacy will be negatively related to pay-level satisfaction.

Benefits satisfaction is also a very important dimension in the overall pay satisfaction. While many organizations sought various ways to tie pay with performance, they haven't spent the same amount of effort to link benefits to performance. Instead, benefits have traditionally been seen as a fringe and thus a complementary factor in the compensation package. Also it was suggested that linking benefits and performance could be over-management and may offend workers. Because of these reasons, benefits are usually not tied tightly to performance level (Gerhart, Milkovich, & Murray, 1992) so individuals with high self-efficacy and high performance receive similar number and level of benefits as those with low self-efficacy and low performance. Since individuals with higher self-efficacy tend to achieve higher level of performance than individuals with lower

self-efficacy, they may expect a higher level of benefits. Then those high in self-efficacy are likely to experience dissatisfaction with benefits level because of loose link between benefits and performance in most organizations. Hence,

Hypothesis 3: Self-efficacy will be negatively related to benefits satisfaction.

## **Method**

### **Sample**

The data were collected from 192 out of 270 employees at a Korean bank. The response rate was 71.1%. The sample consists of 103 males (54%) and 89 females (46%). The modal education category was "finished college" and the mean tenure was 6.8 years. The mean age was 34.2 and 68% of the respondents were currently married.

### **Measures**

Three scales using Likert-scaled items that were previously developed were used in this study. Item responses could range from 1 to 7 and were anchored as follows: 1 = strongly disagree, 2 = disagree, 3 = disagree somewhat, 4 = neutral, 5 = agree somewhat, 6 = agree, and 7 = strongly agree. Mean scores were used to measure the scales in this study. The actual scales are included in the Appendix.

The dependent variable, pay satisfaction, was measured using the 18-item Pay Satisfaction Questionnaire (PSQ) developed by Heneman and Schwab (1985). Reliability coefficient (Cronbach's alpha) was .92. This 18-item scale also taps two aspects of pay satisfaction: pay-level satisfaction and benefits satisfaction. Table 1 reports results of factor analysis that reveal two subscales of pay satisfaction. Reliability coefficients (Cronbach's alphas) were .91 (pay-level satisfaction) and .90 (benefits satisfaction).

Self-efficacy was measured using the 10-item scale developed by Riggs and Knight (1994). This scale captures the general and

**Table 1. Factor Analysis Results for the Pay Satisfaction Questionnaire (PSQ)**

Items	Factor	
	Level	Benefits
1. My take-home pay	.88	.16
2. My benefit package	.35	.75
3. My most recent raise	.76	.32
4. Influence my supervisor has on my pay	.57	.05
5. My current pay	.90	.24
6. Amount the company pays toward my benefits	.22	.82
7. The raises I have typically received in the past	.60	.41
8. The company's pay structure	.20	.14
9. Information the company gives about pay issues of concern to me	.21	.34
10. My overall level of pay	.77	.40
11. The value of my benefits	.28	.88
12. Pay of other jobs in the company	.65	.30
13. Consistency of the company's pay policies	.44	.26
14. Size of my current salary	.17	.87
15. The number of benefits I receive	.83	.32
16. How my raises are determined	.56	.38
17. Differences in pay among jobs in the company	.28	.23
18. How the company administers pay	.48	.38
Eigenvalues	10.37	1.54
% Total variance	57.21	8.58

Note: Highest loading for each row is underlined, N=192.

task-specific aspects of self-efficacy and has been found to be reliable (Riggs & Knight, 1994). Reliability coefficient (Cronbach's alpha) was .88.

Control variables used in this study include age, gender, marital status, education, tenure, and pay level. The mean age was 34.2, and 54% of the respondents were male. Sixty-eight percent of respondents were married and the mean job tenure was 6.8 years. Education level was measured using the following four response categories: (1) finished high school or less, (2) some college or finished junior college, (3) finished college, and (4) some graduate work or above. The mean was 2.93 and the modal education category was "finished college." Finally, pay level (annual salary) was measured using eight response categories ranging from (1) less than \$10,000, (2) between

\$10,000 and \$20,000 to (8) \$70,000 or above. The mean was 3.31 and the modal salary category was "between \$30,000 and \$40,000."

**Results**

The means, standard deviations, and correlations for all scales and control variables are reported in Table 2. Self-efficacy was negatively and significantly correlated with pay satisfaction and its subscales.

Hierarchical regression analyses were used to analyze the data and the results are reported in Table 3 (DV = overall pay satisfaction, pay-level satisfaction and benefits satisfaction). In each regression equation, control variables were entered in the first step and self-efficacy was entered in the second step.

**Self-efficacy**

Across all the equations, self-efficacy was negatively and significantly related to the overall pay satisfaction and its sub-dimensions. Therefore, hypotheses 1 to 3 were strongly supported: self-efficacy led to dissatisfaction with pay in general, pay level, and benefits.

**Table 2. Descriptive Statistics and Correlations**

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10
1. Overall pay satisfaction	3.42	1.16										
2. Pay-level satisfaction	3.39	1.24	.97**									
3. Benefits satisfaction	3.52	1.20	.85**	.69**								
4. Age	34.2	5.85	-.11	-.09	-.04							
5. Male	.54	.52	.10	.21**	.08	.50**						
6. Married	.68	.42	-.05	-.03	-.02	.59**	.30**					
7. Education	2.93	.71	.01	-.05	-.08	.44**	.54**	.36**				
8. Tenure	6.80	5.52	-.12	-.21**	-.02	.68**	.05	.42**	-.19**			
9. Pay level	3.31	1.17	.18*	.19**	.03	.56**	.42**	.39**	.44**	.26**		
10. Self-efficacy (SE)	4.75	.68	-.27**	-.28**	-.21**	.36**	.19**	.21**	.23**	.15*	.17*	

N=192, \*p < .05, \*\*p < .01.

**Table 3. Hierarchical Regression Results**

Predictor variable	Overall pay satisfaction		Pay-level satisfaction		Benefits satisfaction	
	b	DR <sup>2</sup>	b	DR <sup>2</sup>	b	DR <sup>2</sup>
Step 1		.22***		.26***		.11*
Age	-.34*		.06		-.12	
Male	.29**		.23***		.10	
Married	.10		.14		.07	
Education	-.06		.12		-.02	
Tenure	.04		.04		.04	
Pay level	.19C		.11*		.03	
Step 2		.19***		.17***		.17***
Self-efficacy (SE)	-.22**		-.23***		-.16*	
Overall F for equation		8.24***		8.13***		5.46***

Note: b is the standardized regression coefficient from the full regression equation with all predictor variables.

Increments for variables entered at the DR<sup>2</sup> significance levels are based on F tests for that step.

Each model above includes dummies for four positions

N=192. Cp < .10. \*p < .05. \*\*p < .01. \*\*\*p < .001.

## Discussion

Although numerous studies were conducted regarding self-efficacy, a central concept in the social cognitive theory, not much studies were done on the relationship between self-efficacy and pay satisfaction. Only limited past research has examined the relationship between self-efficacy and workplace attitudes. Also there is research gap in the literature on the relationship between self-efficacy and pay satisfaction. To fill this gap, we examined the impact of self-efficacy on pay satisfaction and its sub-dimensions. Results from a Korean bank suggest that self-efficacy is negatively associated with the overall pay satisfaction and its sub-dimensions, i.e. satisfaction with pay level and benefits.

This means that those with higher self-efficacy were less satisfied with pay in general and, specifically, with pay level and benefits. The negative relationship found in this study between



self-efficacy and pay satisfaction may be important in understanding inconsistent relationships reported in past research between self-efficacy and job satisfaction. O'Neill & Mone (1998) and other studies report positive relationships between self-efficacy and job satisfaction. However, Riggs & Knight (1994) and other studies found no significant relationships between the two constructs and still others report negative relationships between self-efficacy and job satisfaction (e.g., Carter, 1991; Mone, 1994). Since pay satisfaction, an important component of job satisfaction, was found to be negatively related with self-efficacy in this study, research on the relationships between self-efficacy and job satisfaction could be aided by studies on the relationships between self-efficacy and other sub-dimensions of job satisfaction. Then a comprehensive model explaining the relationships among self-efficacy, job satisfaction, and its sub-dimensions could be developed.

Also future research is needed regarding the interaction effect of self-efficacy and pay-for-performance perception on pay satisfaction and its subscales. It is highly likely that individuals with higher self-efficacy would have different attitudes towards pay when the organization has a performance pay policies that tightly link pay and performance than otherwise. If employees believe that pay depends on performance, they are more likely to accept the compensation package from their organizations and, therefore, more likely to be satisfied with it. The empirical research confirmed this positive relationship between pay-for-performance perception and pay satisfaction (e.g., Carroll & Tosi, 1973; Kopleman, 1976).

Those low in self-efficacy and low in pay-for-performance perceptions are likely to be frustrated with the compensation they receive for their efforts, relative to those low in self-efficacy and high in pay-for-performance perceptions. That is because the latter is more willing to believe that their pay correctly reflects their performance than the former is.

On the other hand, those high in self-efficacy and high in pay-for-performance perceptions will have lower level of pay satisfaction than those low in self-efficacy and high in pay-for-performance perceptions because, other things being equal, self-efficacy will be negatively related to pay satisfaction. Similarly, those high in self-efficacy and low in pay-for-performance

perceptions will have lower level of pay satisfaction than those low in both self-efficacy and pay-for-performance perceptions.

Findings of this study have several meaningful managerial implications. First, to increase pay satisfaction or, at least, not to decrease it, organizations need to tightly link pay and performance. Self-efficacious employees would like to see their commitment and performance to be accordingly rewarded in organizations and the best way to do this is to have a tight link between pay and performance. It is highly likely that performance-based-pay will be more effective to individuals with higher self-efficacy than lower self-efficacy. Second, organizations need to carefully manage self-efficacious employees because they tend to expect more from organizations than those with low self-efficacy because the former group put in effort and commitment. Thus, unless fairly rewarded, their job satisfaction is not necessarily high and their pay satisfaction can be low.

There are some limitations in this study. The first one is the possibility of respondents not being honest or accurate in their responses. While there is no reason to suspect that there would be distortions in self-reports of demographic status or family status, there may be more distortions in individuals' responses on items related to self-efficacy and pay satisfaction. However, given the nature and types of data needed for this study, we know of no other way to gather this information. Hence, although the threat to internal validity remains, until some other method is available we suspect our methods represent the most acceptable manner in which to collect this type of data. Ultimately, further research examining antecedents related to pay satisfaction will be worthwhile to validate our preliminary findings.

The second limitation of our findings is the nature of the sample. We collected data from Korea where U.S.-type pay-for-performance schemes are relatively new. The bank in our sample had a compensation system based on pay-for-performance principles, but the tightness of the link between pay and performance may be different from that of typical U.S. firms. This could limit generalizability of findings in this study. Further studies using U.S. data will be worthwhile.

In summary, this study offers some initial understanding of

how self-efficacy influence pay satisfaction. In addition, this study increases our knowledge of social cognitive theory by examining the impact of self-efficacy on pay satisfaction. Specifically, we found that self-efficacy has negative impact on pay satisfaction, probably because self-efficacious individuals have higher expectations about pay. We also found that self-efficacy is negatively related with pay-level satisfaction and benefits satisfaction. The mechanism through which this happened needs to be studied.

### References

- Adams, J.S. 1963. Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*, 67: 422-436.
- Bandura, A. 1977. *Social learning theory*. New Jersey: Prentice-Hall.
- Bandura, A. 1986. *Social Foundations of thought and action: A social cognitive theory*. New Jersey: Prentice-Hall.
- Bandura, A. 1997. *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Carroll, S.J., & Tosi, H.L. 1973. *Management by objectives: Applications and research*. New York: Macmillan.
- Carter, G.W. 1991. *Relationships between ability and job satisfaction among U.S. Army enlisted personnel*. Paper presented at the sixth annual conference of the Society for Industrial and Organizational Psychology, St. Louis, MO.
- Dreher, G.F. 1981. Predicting the Salary Satisfaction of Exempt Employees. *Personnel Psychology*, 34: 579-590.
- Gerhart, B., Milkovich, G.T., & Murray, B. 1992. Pay, Performance, and Participation. In D. Lewin, O.S. Mitchell, & P.D. Sherer (Eds.), *Research Frontiers in Industrial Relations*: 193-238. Madison, WI: IRRA.
- Gist, M.E. 1987. Self-Efficacy: Implications for Organizational Behavior and Human Resource Management. *Academy of Management Review*, 12: 472-485.
- Harrison, A.W., Rainer R.K., Hochwarter, W.A., & Thompson, K.R. 1997. Testing the self-efficacy - performance linkage of social-cognitive theory. *Journal of Social Psychology*, 137: 79-87.
- Heneman R.L., Greenberger, D.B., & Strasser, S. 1988. The relationship between pay-for-performance perceptions and pay satisfaction. *Personnel Psychology*, 41: 745-761.
- Karl, K.A., O'Leary, A. M., & Martocchio, J.J. 1991. The impact of feedback and self-efficacy on performance in training. *Journal of*

- Organizational Behavior*, 14: 379-394.
- Kopelman, R.E. 1976. Organizational control system responsiveness, expectancy theory constructs, and work motivation: Some interrelations and causal connections. *Personnel Psychology*, 29: 205-220.
- Miceli, M.P. & Lane, M. C. 1991. Antecedents of pay satisfaction: A review and extension. In G. R. Ferris & K.M. Rowland (Eds.), *Research in personnel and Human Resources Management*, vol. 9: 235-309. Greenwich, CT: JAI press.
- Mitchell, T.R., Hopper, H., Daniels, D., George-Falvy, J., & James, L.R. 1994. Predicting self-efficacy and performance during skill acquisition. *Journal of Applied Psychology*, 79: 506-517.
- Mone, M.A. 1994. Relationships between self-concepts, aspirations, emotional responses, and intent to leave a downsizing organization. *Human Resource Management*, 33: 281-298.
- Mone, M.A., & Baker, D.A. 1992. A social-cognitive, attributional model of personal goals: An empirical evaluation. *Motivation and Emotion*, 16: 297-321.
- Motowidlo, S.J. 1982. Relationship Between Self-Rated Performance and Pay Satisfaction Among Sales Representatives. *Journal of Applied Psychology*, 67: 209-303.
- O'Neill, B.S., & Mone, M.A. 1998. Investigating Equity Sensitivity as a Moderator of Relations Between Self-Efficacy and Workplace Attitudes. *Journal of Applied Psychology*, 83: 805-816.
- Riggs, M. L., & Knight, P.A. 1994. The Impact of Perceived Group Success-Failure on Motivational Beliefs and Attitudes: A Causal Model. *Journal of Applied Psychology*, 79: 755-766.
- Shank, S.E. 1986. Preferred hours of work and corresponding earnings. *Monthly Labor Review*, November: 40-44.
- Wood, R.E., & Locke, E.A. 1987. The relation of self-efficacy and grade goals to academic performance. *Educational and Psychological Measurement*, 26: 207-231.

## APPENDIX

### Items for the Scales Used

Items marked with an asterisk were reversed scored.

#### **Self-Efficacy** (Riggs and Knight, 1994)

1. I have confidence in my ability to do my job.
- 2.\* There are some tasks required by my job that I cannot do well.
- 3.\* When my performance is poor, it is due to my lack of ability.
- 4.\* I doubt my ability to do my job.
5. I have all the skills needed to perform my job very well.
- 6.\* Most people in my line of work can do this job better than I can.
7. I am an expert at my job.
- 8.\* My future in this job is limited because of my lack of skills.
9. I am very proud of my job skills and abilities.
- 10.\* I feel threatened when others watch me work.

#### Pay Satisfaction (Heneman and Schwab, 1985)

1. My take-home pay.
2. My benefit package.
3. My most recent raise.
4. Influence my supervisor has on my pay.
5. My current pay.
6. Amount the company pays toward my benefits.
7. The raises I have typically received in the past.
8. The company's pay structure.
9. Information the company gives about pay issues of concern to me.
10. My overall level of pay.
11. The value of my benefits.
12. Pay of other jobs in the company.
13. Consistency of the company's pay policies.
14. Size of my current salary.
15. The number of benefits I receive.
16. How my raises are determined.
17. Differences in pay among jobs in the company.
18. How the company administers pay.