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## The Relationship between Reward Management System and Employee Performance with the Mediating Role of Motivation: A Quantitative Study on Global Banks

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### Abstract

The primary goal of this study is to research the relationship between the reward management system applications and employee performance of bank employees on global banks in Istanbul. It also focuses on the role of motivation as an intervening factor. According to the literature review on the previous studies it is proven that organizations use reward systems and strategies to motivate their employees and to increase their performance. This study will have lots of contributions to the business world. Organizations may improve or change their reward systems to survive in today's environment with the help of this study. They may renew their reward systems and put more efficient and effective ones. In this study, employee performance effectiveness is determined on reward systems. At the beginning of the study, there is a literature review and there are hypotheses concerning the effects of reward management system and motivation on employee performance. Secondly, theoretical framework is discussed through the effects of reward management system applications and motivation on employee performance. Finally hypotheses are tested using data from 116 bank employees in 12 global banks and research results or findings are analyzed.

Keywords: Reward Management System, Employee Performance, Motivation, Global Bank

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### 1. Introduction

Globalization is a concept that encompasses change and competition. Organizations who want to survive in an intense competition and to develop themselves are required to produce different kinds of solutions. There are lots of external factors that triggered organizations to work harder. Especially in

global crises, businesses in terms of profitability and permanency should pay attention to change and development within their systems.

Undoubtedly, the most important factor is human in organizations. One of the main management strategies of the organizations is to invest in employees. Organizations are seeking to develop, motivate and increase the performance of their employees in a variety of human resources applications. Therefore, the reward management system has been the most considerable practices of the human resource management system.

Reward management system is a core function of human resource discipline and is a strategic partner with company managements. Besides, it has an important role on employee performance. [15]

Barber and Bretz (2000) mentioned that reward management systems have major impact on organizations capability to catch, retain and motivate high potential employees and as a result getting the high levels of performance. [7]

On the other hand, it is crucial to invest in employee development for enhancing the skills and abilities of employees and organization. Furthermore, social exchange theory shows that employees behave in positive ways when the organizations invest to them. [4] Organizational inducements are the factors for the motivation of the employees and pro socially motivated employees make a great effort to benefit the organization. [11]

According to Steers and Porter (1987), work motivation is a factor that sustain and manage employee behavior. In another study, Porter and Miles (1974), put some theories about motivation and they gathered into three categories which are job (e.g., degree of autonomy), individual (e.g., need for achievement) and work environment characteristics (e.g., rewards). [1]

Yang (2008) has investigated the individual performance and results of his study showed that we cannot verify individual performance. Even so, he also claimed that if employees' performance is observable than organizations can use direct bonuses or relational contracts to motivate them based on their performance.

Bishop (1987), on the other hand has studied about employee performance and found that recognition and reward of employee performance leads to differentiation between the productivity of the employees.

## **2. Literature Review And Hypotheses**

### *2.1. Reward Management System*

Reward management system contains the organization's policies, processes and practices for rewarding its employees in accordance with their contribution, abilities and artifice. It is progressed within the organization's reward philosophy, strategies and policies, and includes agreements in the form of processes, practices, structures and procedures which will provide appropriate types and levels of pay, benefits and other forms of reward. [2]

Employee performance is originally what an employee does or does not do. Performance of employees could include: quantity of output, quality of output, timeliness of output, presence at work, cooperativeness

#### *2.1.1. Reward Management System Applications*

Reward Management System Tool includes both Financial and Non-Financial Rewards which are also called as Extrinsic and Intrinsic Rewards. Financial rewards are salary increase, bonus system, perquisite etc. On the other hand there are non-financial rewards which are; promotion and title, authority and responsibility, education, appreciation and praise, certificate and plaque, participation to decisions, vacation time, comfort of working place, social activities, feedback, flexible working hours, design of work, recognition, social rights etc. [15]

## 2.2. Employee Task Performance

According to Yazıcı, (2008), the effectiveness of an organization's performance and reward management have an impact on moral and productivity. Many organizations have found that far from complementing the stated aims of the business, their performance and reward systems were actually driving counter-productive behavior.

On the other hand "path-goal model" is absolutely explain the relationship between reward system and employee performance. The concept states that "if a worker sees high productivity as a path leading to the attainment of one or more of his personal goals, he will tend to be a high producer. Conversely, if he sees low productivity as a path to the achievement of his goals, he will tend to be low producer. In other words, the employee would be motivated to expend a greater amount of effort in his work if he felt his previous effort had resulted in his receiving rewards". [8]

*Hypothesis 1: Reward management system applications are significantly and positively related to employee performance.*

## 2.3. Motivation

A basic explanation of motivation is the capability to change behavior. Motivation is a drive that holds one to act because human behavior is directed toward some goal. [5]

Grant (2008) established a study where motivation enforced the employee outcomes such as persistence, productivity and performance. Besides, motivated employees are found to be more self-driven and more autonomy-oriented than those who are less motivated (e.g. Ryan and Deci, 2000; Thomas, 2002, as cited in Grant, 2008), which suggests that they will take more responsibility when offered developmental opportunities. Motivated employees are also more engaged and involved with their jobs (e.g. Guay et al., 2000; Vansteenkiste et al., 2007), they may be more involved in the work of their colleagues, when compared with employees with low motivation. [11]

*Hypothesis 2: Motivation is significantly and positively related to employee performance.*

Social cognitive theory, claims that rewards given for success of challenging performance standards may result in high motivation. [5]

*Hypothesis3: Reward management system applications are positively related to motivation.*

## 3. Methodology

### 3.1. Sample and Procedure

The sample of this study includes bank employees in 12 global banks in Istanbul who are titled as administrative staff, assistant supervisor, supervisor, director, deputy manager and manager. Data were collected through survey method. The sampling frame consists of employees in the center of global banks. The concepts in the study are developed by using measurement scales adopted from further studies. Data for this research are collected by online system. The questionnaire was sent to the e-mails of the bank employees.

The questionnaire consists of two sections. First part includes seven socio demographic questions including; gender, age, marital status, education level, work period, position in the organization (title) and name of the bank. At the second part, there are 49 statements which determine the choices of employees about reward system tools, motivation and employee performance. These statements will be graded using a 5-point Likert scale. These points in the scale are “Strongly Disagree” (5), “Disagree” (4), “Uncertain” (3), “Agree” (2), “Strongly Agree” (1).

The first questionnaire includes 16 statements used in this study was adapted from the researchers of Nas, 2006 The second questionnaire used for this study which includes 33 statements was adapted from the researches of Kaplan, Elbir and Taşpınar, 2006. Approximately 500 bank employees are randomly selected and a total of 116 employees were returned. Therefore, the respond rate is % 23,2 for this study which is below the expected respond rate of %50.

Table 1. Demographic Characteristics of Respondents

Variable	N	%	Variable	N	%
AGE			EDUCATION LEVEL		
20-30	59	50,9	High School	2	1,7
31-40	47	40,5	Academy	12	10,3
41-50	8	6,9	Undergraduate	77	66,4
51-60	2	1,7	Graduate	21	18,1
			Doctorate	4	3,4
JOB TITLE			WORK PERIOD		
Administrative Staff	1	0,9	1-5	63	54,3
Assistant Supervisor	29	25	5-10	33	28,4
Supervisor	37	31,9	10-15	17	14,7
Director	35	30,2	20 and more	2	1,7
Deputy Manager	6	5,2			
Manager	8	6,9			

The reason for asking socio demographic questions is to analyze the average response rate of employees according to their age, education level etc. Besides, the title, education level and work period of the respondents are necessary for the validity of the answers.

Table 1 shows the demographic characteristics of 116 respondents. In terms of age, 50,9 percent were between the age of 20-30 and 40,5% percent were between 31-40.

By education level, undergraduate respondents were the most with 77% respond rate, graduate were 21% and respondents with academy degree were 12%. In terms of work period, % 54,3 of respondents were 1-5 years employees, %28,4 were 5-10 years and %14,7 were 10-15 years. According to job title, %31,9 of respondents were supervisors, %30,2 were directors, %25 were assistant supervisors.

#### 4. Data Analysis and Hypotheses Testing

Table 2. KMO and Bartlett's Test

<i>REWARD MANAGEMENT SYSTEM APPLICATIONS</i>			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0,718
	Approx.		
	Chi-Square		457,520
Bartlett's Test of Sphericity	df		55
	Sig.		0
<i>MOTIVATION</i>			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0,797
	Approx.		
	Chi-Square		457,384
Bartlett's Test of Sphericity	df		78
	Sig.		0
<i>EMPLOYEE PERFORMANCE</i>			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0,823
	Approx.		
	Chi-Square		184,709
Bartlett's Test of Sphericity	df		10
	Sig.		0

According to the results of factor analysis, Kaiser-Meyer-Olkin score of Reward Management System Application questions which represents the adequacy of the sample size was found to be 0,718 and Bartlett's Test of Sphericity score is significant at the level of 0,000. On the other hand, Kaiser-Meyer-Olkin score of Motivation was found to be 0,79 which is adequate for the sample size of the study. Last factor analysis of Performance questions shows that Keiser-Meyer-Olkin score was 0,823 and Bartlett's Test of Sphericity score was found significant at the level of 0,00. (Table 2)

Table 3. Reliability Analysis and Factor Analysis results of variables

Reward Management System Applications	Cronbach's Alpha	N of Items	Factor Loadings
Factor 1 (Financial Rewards) Q7	0,765	4	0,868

Q8			0,892
Q9			0,527
Q10			0,752
Factor 2 (Intrinsic Rewards)	0,645	3	
Q14			0,687
Q17			0,757
Q18			0,718
Factor 3(Non-Financial Rewards)	0,68	4	
Q11			0,701
Q12			0,815
Q13			0,594
Q15			0,586
<hr/>			
Motivation			
<hr/>			
Factor 1(Job Satisfaction)	0,867	6	
Q25			0,749
Q27			0,737
Q30			0,836
Q31			0,772
Q32			0,797
Q54			0,813
Factor 2 (Extrinsic Motivation)	0,702	4	
Q45			0,475
Q47			0,875
Q49			0,842
Q53			0,477
Factor 3 (Intrinsic Motivation)	0,702	3	
Q39			0,578
Q41			0,781
Q43			0,848
<hr/>			
Employee Performance			
<hr/>			
Factor 1 Q24, Q26, Q28, Q29, Q33	0,816	5	
<hr/>			

The factor loadings of the items in Table 3 range from 0,475 to 0,892 are acceptable for this research. In terms of Reliability Analysis results, Cronbach's Alpha value was appropriate for all the variables (RMSA, Motivation and EP). For Factor 1, 2 and 3 of RMSA questions, Cronbach's Alpha values are range from 0,64 to 0,765 which are acceptable and show the reliability of the factors. Cronbach's Alpha of Factor 1, 2 and 3 of the Motivation questions are range from 0,702 to 0,867. Employee Performance questions contributed in one factor. The consistency of the factor was assured with a 0,816 Cronbach's Alpha value. (Table 3)

*Hypothesis 1*

In order to attain the relation between the RMSA and EP, a regression analyses was conducted and the results in the Model Summary table showed that the explanatory power of the constructed model ( R Square) was ,203. That means %20,3 variation of the employee performance variable was explained by Financial Rewards variable. According to F value 28,549 and p value 0,000 (sig.) in ANOVA table it is decided to reject Ho hypothesis that means it is significantly possible to predict Employee Performance variable with the independent variable Financial Rewards. After finding the model statistically significant, regression equation was conducted. Before the regression equation t statistics are tested to find the significance of the coefficients. After testing the t statistics it is founded that some of the variables such as Non-Financial and Intrinsic Rewards are found insignificant. Because of this situation the new regression test must be conducted without these variables. (Table 4)

Table 4. Model Summary, Anova and Coefficients tables of the Regression Model

Model Summary(b)	Model	R	R Square	Adjusted R Square	Std. Error	Durbin Watson
	1	.451a	0.203	0.196	0.591	1.958

Anova (b)	Model	Sum of Square	df	Mean Square	F	Sig.
	1					
	Regression	9.957	1	9.957	28.549	.000a
	Residual	39.061	112	0.349		
	Total	49.018	113			

a. Predictors: (Constant), Financial Rewards  
 b. Dependent Variable: Employee Performance

Coefficients (a)		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	t	Sig.
	(Constant)	0.806	0.18		4.488	0
	Financial Rewards	0.692	0.129	0.451	5.343	0

a. Dependent Variable: Employee Performance

In terms of the p values of 0,000, EP variable was explained by the variable of Financial Rewards.. As a result the equation of the model is:  $Employee\ Performance = 0,806 + 0,692 * Financial\ Rewards$

*Reward management system applications are significantly and positively related to employee performance.*

*Hypothesis 2*

In order to attain the relation between the RMSA and Motivation, two regression analyses was conducted after the elimination of insignificant values such as Job Satisfaction variable. The results in the Model Summary table showed that the explanatory power of the constructed model ( R Square) were ,132 and ,111 respectively. That means %13,2 variation of the Extrinsic Motivation variable was explained by Financial Rewards variable and % 11,1 variation of the Intrinsic Motivation variable was explained by Non-Financial Rewards. According to F values of 16,017 and 13,416 respectively and p values of both 0,000 (sig.) in ANOVA table it is decided to reject Ho hypothesis that means it is significantly possible to predict Extrinsic Motivation variable with the independent variable of Financial Rewards and possible to predict Intrinsic Motivation variable with the independent variable of Non-Financial Rewards. After finding the model statistically significant, regression equation was conducted. (Table 5)

Table 5: Model Summary, Anova and Coefficients Tables of the Regression Model

Model Summary(b)	Model	R	R Square	Adjusted R Square	Std. Error	Durbin Watson
	1	.364a	0.132	0.124	0.465	2.016
Anova (b)	Model	Sum of Square	df	Mean Square	F	Sig.
	1					
	Regression	3.465	1	3.465	16.017	.000a
	Residual	22.715	105	0.216		
	Total	26.18	106			
c. Predictors: (Constant), Financial Rewards						
d. Dependent Variable: Extrinsic Motivation						

Coefficients (a) Unstandardized Coefficients Standardized Coefficients

Model	B	Std. Error	Beta	t	Sig.
(Constant)	1.14	0.147		7.748	0
Financial Rewards	0.417	0.104	0.364	4.002	0
b. Dependent Variable: Extrinsic Motivation					

Model Summary(b)	Model	R	R Square	Adjusted R Square	Std. Error	Durbin Watson
	1	.334a	0.111	0.103	0.532	2.207
Anova (b)	Model	Sum of Square	df	Mean Square	F	Sig.
	1					
	Regression	3.8	1	3.8	13.416	.000a
	Residual	30.308	107	0.283		
	Total	34.108	108			
e. Predictors: (Constant), Non-Financial Rewards						
f. Dependent Variable: Intrinsic Motivation						

Coefficients (a) Unstandardized Coefficients Standardized Coefficients

Model	B	Std. Error	Beta	t	Sig.
(Constant)	1.193	0.178		6.715	0
Financial Rewards	0.452	0.123	0.334	3.663	0
c. Dependent Variable: Intrinsic Motivation					

In terms of the p value of 0,00, Extrinsic Motivation variable was explained by Financial Rewards variable. As a result the equation of the model is:

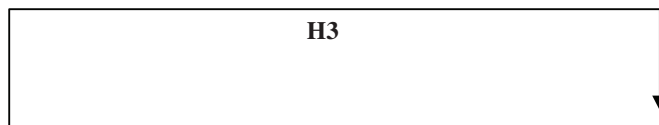
$$\text{Extrinsic Motivation} = 1,14 + 0,417 * \text{Financial Rewards}$$

On the other hand, according to the p value of 0,00, Intrinsic Motivation variable was explained by Non-Financial Rewards variable. Therefore the result of the model is:

$$\text{Intrinsic Motivation} = 1,193 + 0,452 * \text{Non-Financial Rewards}$$

*Reward management system applications are positively related to motivation.*

Research model is formed in terms of the regression analyses results which has shown at Figure 1 following:





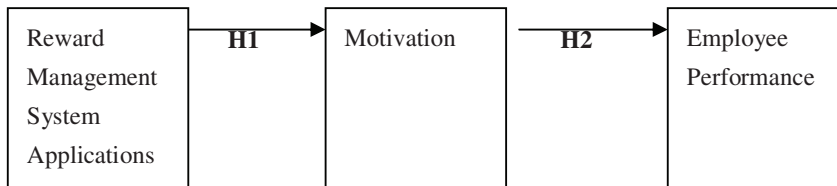


Fig. 1. Theoretical Framework shows the model of the study which includes the relationship between those variables

## 5. Conclusion

In this study, the relation between Reward Management System Applications, Motivation and Employee Performance were investigated. Bank employees of Global Banks in Istanbul formed the sample of this study. The respond rate was below the expected rate as only 116 employees of 12 banks answered the online survey. Besides, the factor analysis and reliability analysis showed the adequacy of the sample size. So the results of the factor and reliability analysis were appropriate with the number of the items and sample size.

In terms of the results of the statistical tests, the first hypothesis supported through the regression analysis. According to the findings, it is founded that Financial Rewards have positive effects on Employee Performance. The second hypothesis aimed to measure the effect of Motivation on Employee Performance. Therefore as a mediating variables it is founded that both Extrinsic and Intrinsic Motivation have an impact on Employee Performance.

The last hypothesis is related with the variable of Reward Management System Applications and Motivation. By the results of the statistical test, it is founded that Extrinsic Motivation is explained by the variable of Financial Rewards and Intrinsic Motivation is explained by the variable of Non-Financial Rewards.

The findings of the study is consistent with the previous studies which, Herpen, Praag, Cools, (2005), have investigated empirically the effects of pay on performance. They mentioned that some theories predict that the practice of a compensation system affects the motivation of employees. The results of their study bring out a positive relationship between the perceived features of the reward system and extrinsic motivation. According to their findings similar with the results of this study, Intrinsic motivation is not affected by the design of monetary compensation, but by promotion opportunities.

The limitation of the study is the response rate of the bank employees who are expected to be 250 appropriate with the number of the items. For further studies, the ineffectiveness of the non-financial rewards on employee performance should be investigated to find the weakness of the non-financial part of the reward system.

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## Appendix. Scale

- Q7-Financial rewards (salary, bonus and perquisite) increase the motivation.
- Q8-Price increase of salaries raises the performance of the employees up.
- Q9-The benefits such as rent, clothing and fuel for heating increase the loyalty to the organization and success at work.
- Q10-Bonuses which are given at the special days such as new years and feasts, to successful employees, increase their performance.
- Q11-Performance of the successful employee may be increased by promoting them.
- Q12-Giving more responsibility and increasing the authorization for successful employees is effective to increase their productivity.
- Q13-Increase of success may be seen if managers observe the talents of the employees and direct them to improve their talents.
- Q14-Appreciation and being praised by their managers for successful employees, increase their success at work.
- Q15-In order to have high performance, it is effective to make employees involve with decisions at workplaces.
- Q17-Social activities such as company picnics, travel, cinema and theatre organizations make close the relationships between employees and this provides more success for the employees.
- Q18-When employees are rewarded, they seek for the tools and processes which may be beneficial for the organization and so the performance and interest on the work increases.
- Q24-Level of wage affects performance.
- Q25-Level of wage is fair and satisfactory.
- Q26-Wage fairness affects performance.
- Q27-Appraisal is satisfactory.
- Q28-Appraisal affects performance.
- Q29-Rewarding mechanism affects performance.
- Q30-Rewarding is fair.
- Q31-Punishment is fair.
- Q32-Promotion opportunities fair and satisfactory.
- Q33-Promotion opportunities affect performance.

- Q39-The relations with the colleagues affect motivation.
- Q41- Authority/responsibility and dependence requests in the workplace affects motivation.
- Q43-Participation in decision-making process affects motivation.
- Q45- Using equipment within the company affects motivation.
- Q47-The match between overtime hours and lifestyle affect motivation.
- Q49- The holiday, off-day and resting periods and their match with the lifestyle affect motivation.
- Q53- Working period affects motivation.
- Q54-The degree of managers' sensibility to workplace problems is satisfactory.