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A study on the effect of human resource management on financial performance: A case study of Bank Melli Esfahan using Harvard method

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#### CHRONICLE

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#### ABSTRACT

This paper presents an empirical investigation to study the relationship between human resource management and financial performance of some Iranian banks. The proposed study of this paper designs a questionnaire and distributes it among all management teams who work in city of Esfahan, Iran. Three questionnaires have been designed, which are associated with human resources, present financial performance and desirable financial performance with 22 questions. Cronbach alpha has been calculated as 0.86, which is well above the minimum desirable limit of 0.70. The study uses Pearson correlation ratio as well as regression technique and structural equation modeling to examine five hypotheses associated with this survey and the results of our all investigations have confirmed that there are some positive and meaningful relationship between human resources development and financial figures.

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### 1. Introduction

Human resource management is one of the most important parts of any organization and there are many evidences to believe that human resources improvement could increase the financial performance of organizations (Kaplan & Norton, 1996; Lengnick-Hall; et al., 2009). According to Kaplan and Norton (1996), intangible assets are essential part of business units and the performance of any firm must be evaluated based on intangible assets such as internal processes, human resources and customers. There are literally various studies on the effects of human resources and performance of business units. Jiang et al. (2012), for instance, provided considerable evidence that certain systems of human resource practices had a significant effect on individual and organizational performance. However, challenges of recognizing the structure of human resource systems is still an open question. Ahmad and Schroeder (2003) investigated the effect of human resource management practices on operational performance by studying country and industry differences. de Menezes et al.

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(2010) investigated the integration of human resource and operation management practices and its link with performance through a longitudinal latent comprehensive class study. Way and Johnson (2005) theorized on the effect of strategic human resource management (SHRM) and outlined a framework to provide scholars with the theoretical tools. These tools are used to develop construct measures of organizational effectiveness and to generate prescriptive SHRM models that can accurately explicate and evaluate the primary linkages of SHRM.

Nemati et al. (2013) developed a comprehensive method to learn the impact of knowledge management (KM) practices on organizational performance. They also used BSC to materialize this comprehensiveness and to avoid research dispersion, the selective indicators in KM were oriented to some critical success factors influencing KM implementation. They also used structural equation modeling and the results indicated that KM practices could maintain some impacts on the overall performance.

The organization of this paper is as follows. We first present details of our survey in section 2 while the results of our investigation are given in section 3 and paper ends with concluding remarks.

# 2. The proposed study

The proposed study of this paper considers the relationship between human resources management strategies and financial performance in one of Iranian banks. There are five hypotheses associated with this study as follows,

- 1. There is a meaningful relationship between human resources management in interest groups and financial performance of Bank Melli Iran.
- 2. There is a meaningful relationship between human resources management in situational factors and financial performance of Bank Melli Iran.
- 3. There is a meaningful relationship between human resources management in getting different opportunities or situational factors and financial performance of Bank Melli Iran.
- 4. There is a meaningful relationship between human resources management in human resource developments and financial performance of Bank Melli Iran.
- 5. There is a meaningful relationship between human resources management in terms of human resource developments and financial performance of Bank Melli Iran.

The proposed study of this paper uses Pearson correlation ratios to investigate the relationship between these two components. Statistical population of this survey includes all 104 managers of bank Melli who work for various branches in city of Esfahan, Iran. There are five variables associated with human resource management including interest groups, situational factors, human resource results, long-term gains and human resource policies. There are also four factor dependent variables including quality management, earnings, asset quality and capital adequacy. Three questionnaires have been designed, which are associated with human resources, present financial performance and desirable financial performance with 22 questions. Cronbach alpha has been calculated as 0.86, which is well above the minimum desirable limit of 0.70.

## 2.1. Personal characteristics

In our survey, 95.5% of the participants were male, 4.5% of them were female and 69.7% of them aged 41-50. Approximately 38.2% of the participants could achieve up to high school degrees while 4.5% of them hold master's degree of science. Finally, 61.8% of the participants had, at least, 20 years of job experience and only 5.6% of the participants had 6 to 10 years of job experience. Table 1 demonstrates a summary of present and desirable circumstances of banks.

Table 1			
The summary	of present and	desirable	conditions

	Present		Desirable	
Component	Mean	Standard deviation	Mean	Standard deviation
Capital adequacy	3.06	0.94	3.53	1.12
Quality of Assets	3.12	1.08	3.46	1.04
Quality of management	3.22	1.02	3.85	1.07
Incomes	3.30	1.07	3.71	1.01
Performance	3.18	0.95	3.64	0.98

According to the results of Table 1, in current circumstances, income maintains the highest mean and capital adequacy holds the lowest value.

#### 3. The results

In this section, we present details of our findings in terms of various factors.

3.1. The first hypothesis of the survey: The relationship between human resource management and financial performance

The first hypothesis of this survey is as follows,

H<sub>0</sub>: There is no correlation between human resource management and financial performance.

H<sub>1</sub>: There is some correlation between human resource management and financial performance.

The Pearson correlation ratio between human resource management and financial performance is equal to 0.511 and P-Value is equal to 0.000. Therefore, the null hypothesis is rejected and we can conclude that there is a meaningful relationship between these two items. We have also measured Pearson correlation ratio between human resource management and four variables of quality of management, income, quality of assets and capital adequacy and the results are 0.541(0.000), 0.466(0.000), 0.429(0.000) and 0.560(0.000), respectively, which means the relationships are meaningful.

3.2. The second hypothesis of the survey: The relationship between human resource management among interest groups and financial performance

The second hypothesis of this survey is as follows,

- H<sub>0</sub>: There is no correlation between human resource management among interest groups in interest group and financial performance.
- H<sub>1</sub>: There is some correlation between human resource management among interest groups and financial performance.

The Pearson correlation ratio between human resource management among interest groups and financial performance is equal to 0.621 and P-Value is equal to 0.000. Therefore, the null hypothesis is rejected and we can conclude that there is a meaningful relationship between these two items. Once more, we have also calculated Pearson correlation ratios between human resource management and four variables of quality of management, income, quality of assets and capital adequacy and the results are 0.712(0.000), 0.654(0.000), 0.423(0.000) and 0.543(0.000), respectively, which means the relationships are meaningful.

3.3. The third hypothesis of the survey: The relationship between human resource management in situational factors and financial performance

The third hypothesis of this survey is as follows,

- H<sub>0</sub>: There is no correlation between human resource management in terms of situational factors and financial performance.
- H<sub>1</sub>: There is some correlation between human resource management in terms of situational factors financial performance.

The Pearson correlation ratio between human resource management in terms of situational factors and financial performance is equal to 0.385 and P-Value is equal to 0.004. Therefore, the null hypothesis is rejected and we can conclude that there is a meaningful relationship between these two items. Again, we have also calculated Pearson correlation ratios between human resource management in terms of situational factors and four variables of quality of management, income, quality of assets and capital adequacy. The results of our survey for these items are 0.415(0.000), 0.398(0.000), 0.164(0.120) and 0.365(0.008), respectively, which means the relationships are meaningful only for three cases of quality of management, income and capital adequacy but it is not meaningful for quality of assets.

3.4. The fourth hypothesis of the survey: The relationship between human resource management in terms of human resources achievement and financial performance

The fourth hypothesis of this survey is as follows,

- H<sub>0</sub>: There is no correlation between human resource management in terms of human resources achievement and financial performance.
- H<sub>1</sub>: There is some correlation between human resource management in terms of human resources achievement and financial performance.

The Pearson correlation ratio between human resource management in terms of human resources achievement and financial performance is equal to 0.289 and P-Value is equal to 0.029. Therefore, the null hypothesis is rejected and we can conclude that there is a meaningful relationship between these two items when the level of significance is only five percent. One more time, we have also calculated Pearson correlation ratios between human resource management in terms of human resources achievement and four variables of quality of management, income, quality of assets and capital adequacy. The results for quality of earning and incomes are 0.388(0.003) and 0.309(0.018), respectively and these are meaningful when the level of significance is five percent. However, the results of Pearson correlation ratios for quality of assets and capital adequacy are 0.164(0.120) and 0.150(0.126), respectively. These results do not confirm any meaningful relationships between human resources management in terms of achievement and quality of assets and capital adequacy when the level of significance is five or even ten percent.

3.5. The fifth hypothesis of the survey: The relationship between human resource management in terms of human resources development and financial performance

The fifth hypothesis of this survey is as follows,

H<sub>0</sub>: There is no correlation between human resource management in terms of human resources achievement in terms of human resources developments and financial performance.

H<sub>1</sub>: There is some correlation between human resource management in terms of human resources achievement in terms of human resources developments and financial performance.

The Pearson correlation ratio between human resource management in terms of human resources achievement and financial performance is equal to 0.546 and P-Value is equal to 0.000. Therefore, the null hypothesis is rejected and we can conclude that there is a meaningful relationship between these two items when the level of significance is only five percent. Finally, we have also computed Pearson correlation ratios between human resource management in terms of human developments and four variables of quality of management, income, quality of assets and capital adequacy. The results of our survey for these items are 0.612(0.000), 0.460(0.000), 0.533(0.000) and 0.465(0.000), respectively, which means the relationships are meaningful for all cases.

Finally, we have considered the following regression model

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Y_i = \beta_0 + \beta_1 Interests + \beta_2 Longterm + \beta_3 Opport + \beta_4 Human + \beta_5 Policy + \varepsilon,
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where  $Y_i$  is represent financial performance, Interests, Longterm, Opport, Human and Policy represent human resource management interest groups, long term plans, opportunities, human resources achievements and human resources policies. In addition,  $\beta_i$ , i=0,...,5, represent coefficients to be estimated and finally  $\varepsilon$  is the residual of the regression. Implementation of ordinary least square technique on this model has yielded the following results

$$Y_i = 12.24 + 1.66 Interests + 1.98 Long term + 2.24 Opport + 2.14 Human + 1.09 Policy$$
 t-student 6.09 1.56 1.44 1.09 1.20 1.78 P-value 0.000 0.014 0.025 0.018 0.000 0.000  $R^2 = 0.389$ 

As we can observe from the results of regression model, there is a meaningful relationship between financial performance and other independent variables of the survey. Therefore, we can conclude that all five independent variables influence positively on human resource management.

Another investigation on studying the relationship between human resource management and financial performance is to use structural equation modeling (SEM). Fig. 1 shows details of our investigation for the relationship based on the implementation of SEM.

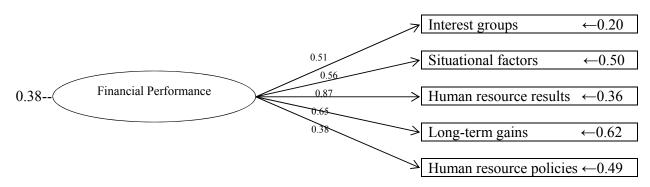


Fig. 1. The proposed framework of the SEM results

In terms of statistical observations, RMSEA is equal to 0.064, which is less than 0.08 and this means the results are statistically significance. In addition, Chi-square is equal to 29.66 with 10 degree of freedom and P-value of 0.01654, which are in accordance with our results. The result of GFI is also equal to 0.87, which is relatively close to one and the proposed study maintains a good fitness.

Finally, the results of AGFI and PGFI are equal to 0.90 and 0.63, respectively, which validate the results of our survey.

## 4. Conclusion

In this paper, we have presented an empirical investigation to study the effects of human resources management on financial performance of an Iranian bank. The proposed study of this paper uses three methods namely; Pearson correlation ratio, regression analysis and structural equation modeling and found some positive and meaningful relationship between human resources development and financial performance of this bank. The results indicate that any investment on human resource management could contribute to financial performance, significantly.

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