

The Relationship between Human Resource Management Practices, Intellectual Capital and Human Resource Development

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ABSTRACT

With Human resource management practices as an independent variable, intellectual capital as a mediator variable and human resources development as the dependent variable, the model has been formed. In terms of purpose, this study is of functionality type, and in terms of method, it is a descriptive survey research based on questionnaires. Required survey data has also been collected. The population of this research consists of bank employees of Yazd and random sampling method has been used to select the total number of 181 valid samples.

SPSS, LISREL has been used for data analysis and results show that the variable of intellectual capital plays the role of mediator in the relationship between communication practices and learning development, career development, development of social interaction and communication and enhancing motivation, also in relationship between alignment practice and learning development, career development, development of social interaction and communication.

The results of this study can be valuable for researchers and bank staff due to the useful information they provide in the field of human resource development. In addition, suggestions for improving the effectiveness of these results are presented.

KEYWORDS: Alignment practice, Communication practices, Learning development, Career development, Development of social interaction and communication, Enhancing motivation

1. INTRODUCTION

When development is being discussed, a set of activities or processes that lead to gradual growth and prosperity come to mind. However, Human Resource Development includes applications, systems and practices that are designed to improve employee performance.

Over the past decades, Intellectual Capital and intangible assets have been significant issues for researchers, politicians, regulators, companies, investors and other stockholders. Evidence suggests that within the modern competitive environment, market value factors lie in the Intellectual Capital rather than physical and financial capital.

One of the common concepts in process of human resource development is recognizable flow of interdependent events in achieving goal.

The intellectual capital theory is a new issue which has been proposed in the last few years. However, since it is a precious resource for countries and organizations, its growth and development rate is rapidly becoming an indicator for countries' development. Due to the competitive business environment and organizational affiliation to human and intellectual capital, access to appropriate sources is considered as the most obvious factor in successfulness of organizations.

Human resource is the only resource that can be distinguished from other sources. Furthermore, it has the capability not to have the negative characteristics of other sources. Therefore, Strong Human resource which uses developed systems and processes can be an enhanced competitive advantage base.

Human resource management, as it is currently understood, is a generalization of the traditional requirements of effective management of employees. Therefore, the research on intellectual capital management actions that can help to develop the human resources is necessary, and the scholar has carried out the research intending to achieve the following objectives:

The main objective is to investigate the relationship between human resource management practices and human resources development.

The second objective is measurement of human resource management practices through intellectual capital on human resources development.

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Theoretical Framework

Today, skilled and independent manpower is known as the most important factor in developing and changing social dynamics. Furthermore, the importance of human resources development is absolutely clear, and organizations cannot survive ignoring the importance of human resources and their constructive role in providing services. Human resources development includes the followings:

Learning Development: development of a new product is often a new concept as a learning process in which acquisition and management of knowledge are essential.^[1]

Career Development: Providing employees with opportunities for career development is important for every person as well as every organization. For career development, one of the several operational techniques such as improvements, making opportunities, participation and consensus may be used.^[2]

Development of social interaction and communication: within the early years of the Internet, users had very limited opportunities for commenting and interacting with any of the organizations. Web appearance in the early twenty-first century led to significant changes in the relationship between organizations and users to help develop cooperation and negotiation between them. Thus the way toward fully interactive communications was opened.^[3]

Enhancing motivation: The objectives are defined independently motivated when they are looked for because of the inherent incentives or identity congruence. In this case, goals, as a result of personal, are sought by external forces rather than a Sense of control.^[4]

Also, organizational knowledge is known as the main competitive advantage and value creation. Therefore, achieving competitive advantage and survival of the organization depends on its ability to create, store, distribute and use knowledge assets. As a result, intellectual capital in organizations is important. Intellectual capital has three components including human capital which is the basis of intellectual capital and the primary element in its tasks; capital structure that contains items that remain after employees logging off companies; and relational capital that acts as a bridge and catalyst of functions in intellectual capital and identifies formal and informal relationships with an organization's external stakeholders and their perceptions of the organization. In addition, to manage human resources which constitute the highest cost, organizations must use committed managers and human resources professionals.

Human Resources Management means stable directing and managing of the most valuable assets of the organization; it also means that employees working in the organization try to achieve organizational goals. It is composed of the two following parts:

Alignment practice: there should be consistency between supply chain strategy and supply chain partners; either internal or external. As a result, proper adjustment of the supply chain is the result of relationships in terms of goals, structures, processes and functions within and between the various members of the supply chain.^[5]

Communication practice: For more information about relative procedures, at first it is needed to identify and understand the key strategies or action and traditional relationship communicative plans provided by the "rules" and the "principles".^[6]

According to the added descriptions and the importance of human resource management practices, intellectual capital and human resources developments, researchers have conducted studies on recognizing the efforts of human resource management, intellectual capital and human resource development, a brief review of which is presented below.

In a study by Kit Brooks and Fredrick Muya Nafukho done on researchers, the relationship between human resource developments, social capital, organizational and emotional efficiency has been shown to be highly integrated.^[7]

In a study by Samer Khasawneh done in Higher education institutions, it is shown that there are no significant differences in evaluation planning of human capital based on participants' sex and their university affiliation.^[8]

According to a study by Lúcio Camara e Silva and Ana Paula Cabral Seixas Costa done on companies, it is concluded that appropriateness of human resources can be considered as the main process in Project Management Informational Systems.^[9]

Another study by Daniel Brännström and Marco Giuliani conducted in companies revealed that the companies do not show intangible assets to be in one form; also that Contracts are a useful tool to make accounting possible for intellectual capital.^[10]

According to a study by Alexander Brügger, Philip Vergauwen and Mai Dao done in companies, no relationship was found between intellectual capital and disclosure level of information asymmetry.^[11]

Results of a study by Abdel-Aziz Ahmad Sharabati, Shawqi Naji Jawad and Nick Bontis conducted in pharmaceutical center showed that that measuring intellectual capital is the primary focus of managers of pharmaceutical companies.^[12]

In a study by Gregorio Martín-de Castro, Miriam Delgado-Verde, José E. Navas-López and Jorge Cruz-González done in companies, proper existence role of innovation in a knowledge-based model of innovation product is shown.^[13]

In a study by Fitsum Ghebregiorgis and Luchien Karsten conducted in developing countries, the concept and knowledge of human resource management are shown to be true and appropriate with some local effective parameters^[14]

According to a study by Juni Chan and John Burgess done in companies, inadequate human resources management experience with the inconsistency in the reported cases were reported in public documents, and there exists lack of reports in respect with human resources management standards.^[15]

Also a research was carried out by Judie M. Gannon, Liz Doherty and Angela Roper on international hotel industry; however, further research on strategic groups will strengthen theoretical understanding of strategic human resource management.^[16]

Study Hypotheses:

The First Main Theory

Ha: there is direct relationship between human resource management practices and human resources development.

Secondary Hypotheses

- 1- There is a direct relationship between communication practices and learning development
- 2- There is a direct relationship between alignment practices and learning development
- 3- There is a direct relationship between communication practices and career development
- 4- There is a direct relationship between Alignment practices and career development
- 5- There is a direct relationship between communication practices and development of communication and social interactions
- 6- There is a direct relationship between alignment practices and development of communication and social interactions
- 7- There is a direct relationship between communication practices and incentives promotion
- 8- There is a direct relationship between alignment practices and incentive promotion

The second Main Theory:

Hb: Human resource management practices affect human resources development by intellectual capital.

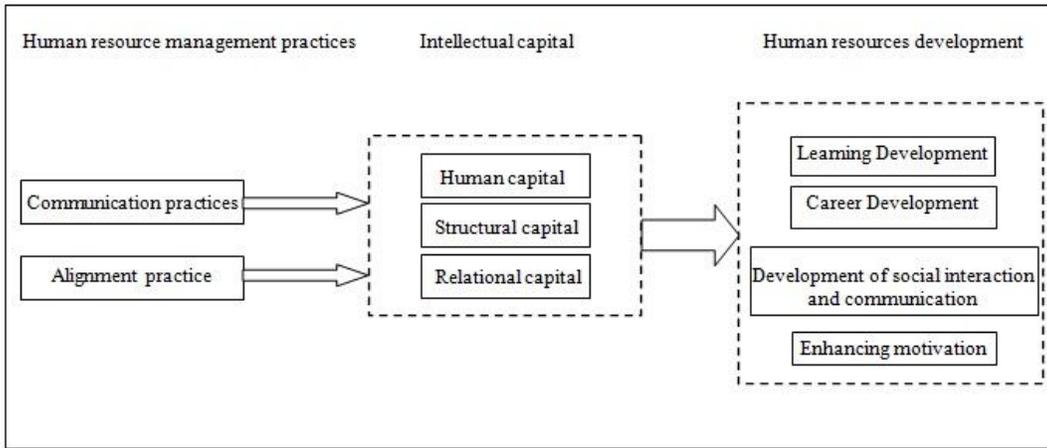
Secondary hypotheses

- 9- Communication practices affect learning development through intellectual capital
- 10- Communication practices affect career development through intellectual capital
- 11- Communication practices affect social interaction and communication development through intellectual capital
- 12- Communication practices affect incentives promotion through intellectual capital
- 13- Alignment practices affect learning development through intellectual capital
- 14- Alignment practices affect career development through intellectual capital
- 15- Alignment practices affect social interaction and communication development through intellectual capital
- 16- Alignment practices affect incentives promotion through intellectual capital

Conceptual Model Of The Study

Studies investigating the conceptual model are designed as seen in the figure below. In this model, human resource management practices have two components of communication measures and adaptive measures. According Mariolina Longo and Matteo Mura^[17], intellectual capital contains human capital, capital structure and relational investors. Also according to this study, human resource development has four components of learning development, career development, social interaction and communication development, and incentives promotion taken from the studies by Kit Brooks, Fredrick Muyia Nafukho and Ying Zhu^[18].

Fig 1. Conceptual model of the study



M. Longo, M. Mura,2011; K. Brooks and F. Muyia Nafukho,2006; Y. Zhu,2004

RESEARCH METHODOLOGY

Application is the aim of the present study and correlation is the method. The study population contains 340 people who are all employees of the Mellat bank. Sampling in this study is random. Sample size was calculated 181 using the Morgan and Krejcie table formula. After a lot of efforts, 183 follow-up questionnaires were achieved. The research tool in this survey was designed as questionnaire. Since the researcher has used a questionnaire submitted to the International Research and academic ideas of teachers and universities have been used to investigate the concept and the questions, its validity has been confirmed. In the present study, Cronbach's alpha method has been used for measuring the reliability of the method and because the alpha coefficient is greater than 0.7, reliability of the questionnaire is acceptable.

Table 1:Cronbach's alpha coefficient

Cronbach's Alpha	N of Items
.976	85

Alpha coefficient>0.7

Descriptive Statistics Research

Table2:Demographic characteristics of raspondents

Gender	Male	91.7%
	Female	8.3%
Marital status	Single	%27.0
	Married	%73.0
Age	Under 25	%15.2
	Between 26 and 35	%47.9
	Between 36 and 45	%29.7
	Between 46 and 55	%7.3
EducationLevel	Associate of Art	%63.6
	Bachelor of Science/Art	%31.8
	Master of Science/Art	%3.9
	PhD	%0.8
Job Experience	Less than 5 years	%10.7
	Between 6 and 10 years	%28.0
	Between 11 and 15 years	%24.0
	Between 16 and 20 years	%16.7
	More than 20 years	%20.7

Confirming The Model Without Mediator Variable

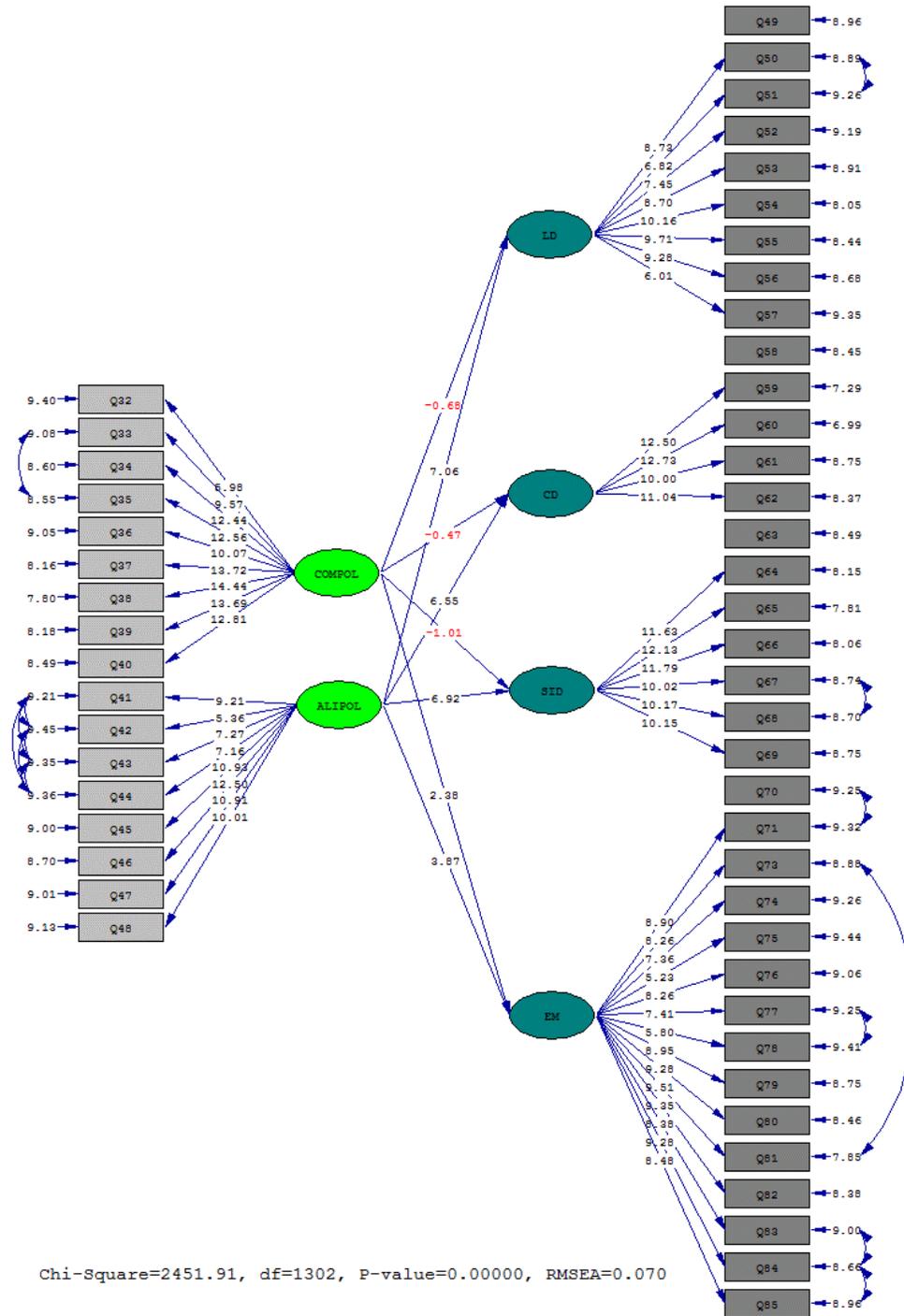


Fig 2. Structural t-value model without mediator variable

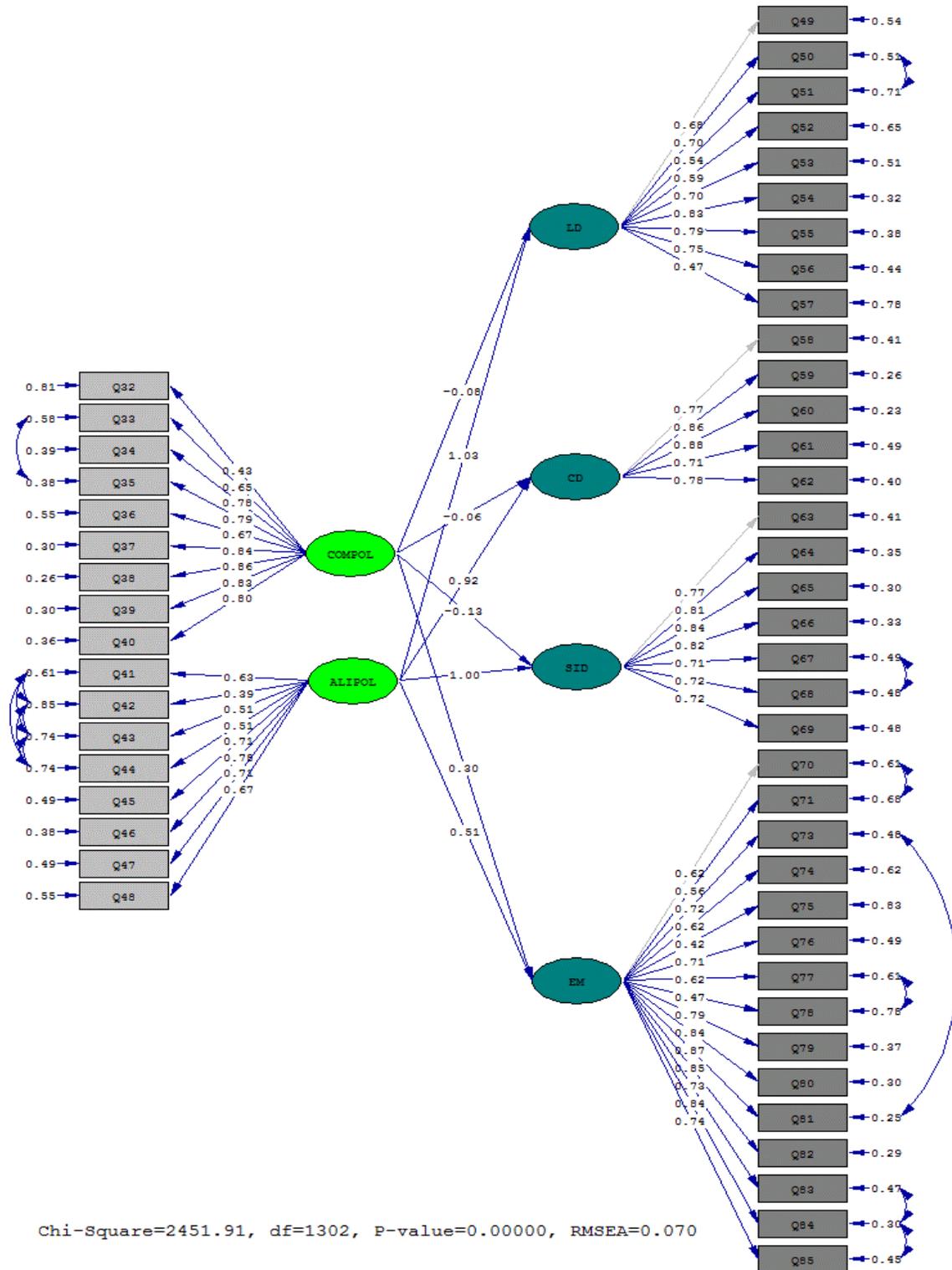


Fig3.Structural model without mediator variable

Table3:CFA result

indicators	Reported values
X^2	2451.91
Degree of freedom	1302
X^2 in degree of freedom	1.88
RMSEA	0.070
GFI	0.76
AGFI	0.73
NFI	0.95
NNFI	0.97
IFI	0.97
CFI	0.97

$X^2 < 3$, RMSEA < 0.08, GFI, AGFI, NFI, NNFI, IFI, CFI > 0.09

As it is observed, the value of X^2 in degrees of freedom is smaller than 3. Also the degree of RMSEA is equal to 0.07 that is smaller than 0.08, and the indicators GFI, AGFI, NFI, NNFI, IFI, CFI are all close to 0.90. Therefore, the model shows a good appropriateness and is confirmed.

Confirming the Model with Mediator Variable

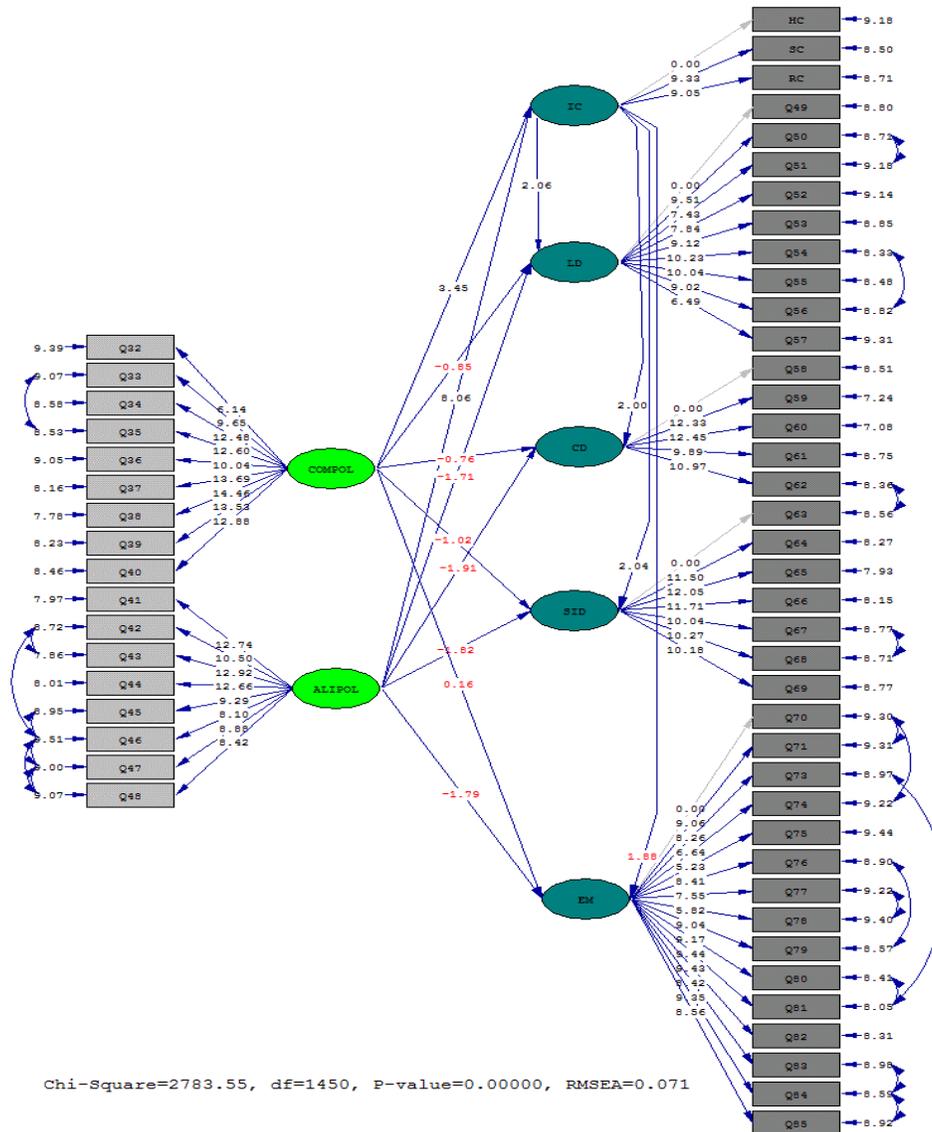


Fig4.Structural t-value model with mediator variable

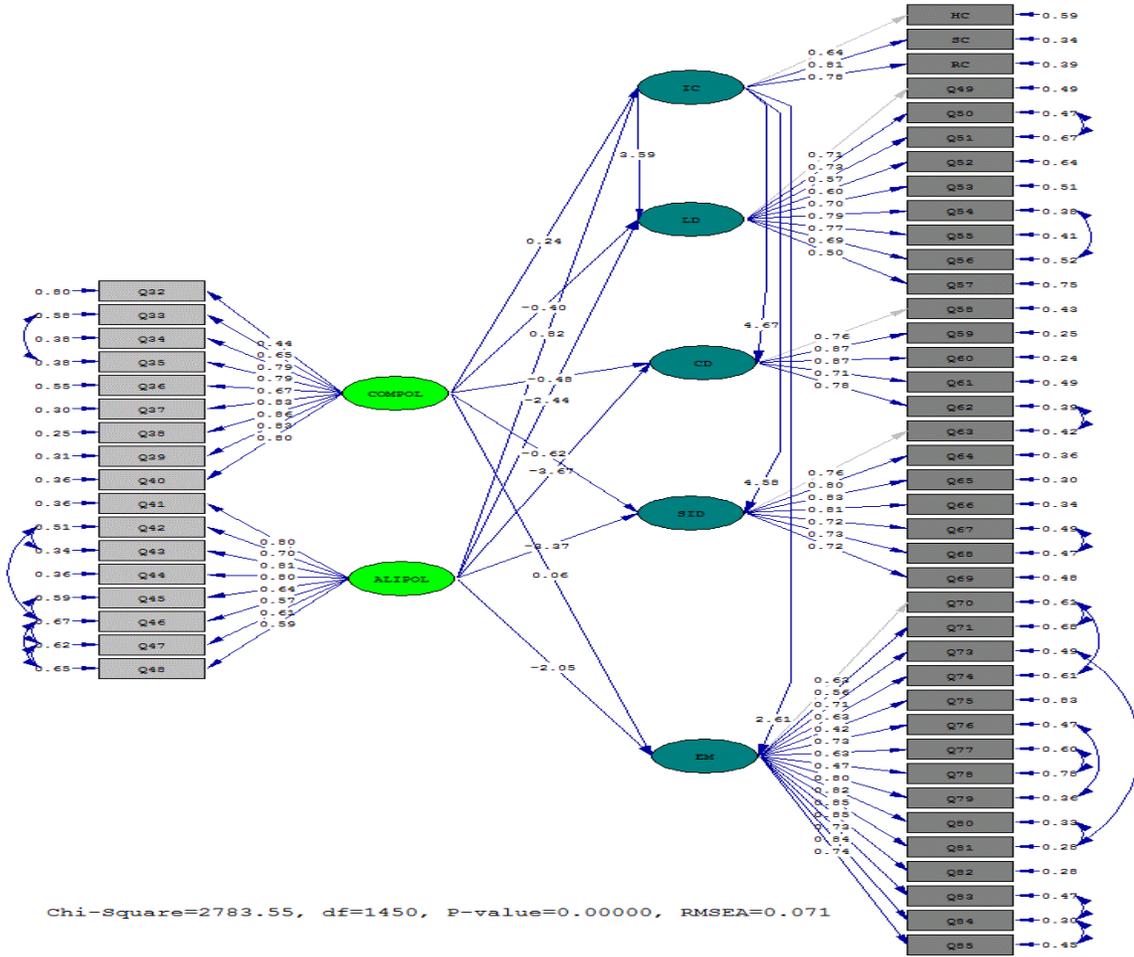


Fig5.Structural model with mediator variable

Table4: CFA result

indicators	Reported values
X ²	2783.55
Degree of freedom	1450
X ² in degree of freedom	1.92
RMSEA	0.071
GFI	0.75
AGFI	0.71
NFI	0.95
NNFI	0.97
IFI	0.97
CFI	0.97

X²<3 .RMSEA<0.08, GFI, AGFI, NFI, NNFI, IFI, CFI>0.09

As it can be observed, the value of X² in degrees of freedom is smaller than 3. Also the degree of RMSEA is equal to 0.071 that is smaller than 0.08, and the indicators GFI, AGFI, NFI, NNFI, IFI, CFI are all close to 0.90. Therefore, the model shows a relatively good appropriateness and is confirmed. Now using T-statistic and standard coefficient, we investigate the effect of the independent variable on dependent variables according to the model.

Results of Hypothesis Testing

Table5:Results of hypothesis testing

Hypotheses	T-statistics	Amount of table	Conclusions	Standardized coefficients
1 st hypothesis	-0.68	1.96	No effect	-0.08
2 nd hypothesis	7.06	1.96	effect	1.03
3 rd hypothesis	-0.47	1.96	No effect	-0.06
4 th hypothesis	6.55	1.96	effect	0.92
5 th hypothesis	-1.01	1.96	No effect	-0.13
6 th hypothesis	6.92	1.96	effect	1.00
7 th hypothesis	2.38	1.96	effect	0.30
8 th hypothesis	3.87	1.96	effect	0.51

Absolute value of T-statistics>1.96

According to the table, in the assumptions that T-statistics in absolute value is greater than 1.96, there is the relationship between variables and when the absolute values of t-statistics are smaller than the 1.96, there is not a relationship. So we can conclude that alignment practices have a very significant effect on learning development, career development, development of social interaction and communication and incentives promotion; also that communicative actions have a significant effect on incentives promotion. However, Communication measures have no significant effect on learning development, career development and development of social and communication interaction.

Table6:Results of hypothesis testing

9 th Hypothesis	Hypothesis	Path	Estimate	T-Statistics	S.E	Coefficient
	1	Communication Actions → Intellectual Capital	0.25	3.45	0.072	0.24
	2	Intellectual Capital → Learning Development	3.47	2.06	1.69	3.59
10 th Hypothesis	1	Communication Actions → Intellectual Capital	0.25	3.45	0.072	0.24
	2	Intellectual Capital → Career Development	4.43	2.00	2.17	4.67
11 th Hypothesis	1	Communication Actions → Intellectual Capital	0.25	3.45	0.072	0.24
	2	Intellectual Capital → Development Of Social Interaction	4.32	2.04	2.12	4.58
12 th Hypothesis	1	Communication Actions → Intellectual Capital	0.25	3.45	0.072	0.24
	2	Intellectual Capital → Enhancing motivation	2.51	1.88	1.33	2.61
13 th Hypothesis	1	Adaptive Measures → Intellectual Capital	0.85	8.06	0.11	0.82
	2	Intellectual Capital → Learning Development	3.47	2.06	1.69	3.59
14 th Hypothesis	1	Adaptive Measures → Intellectual Capital	0.85	8.06	0.11	0.82
	2	Intellectual Capital → Career Development	4.43	2.00	2.17	4.67
15 th Hypothesis	1	Adaptive Measures → Intellectual Capital	0.85	8.06	0.11	0.82
	2	Intellectual Capital → Development Of Social Interaction	4.32	2.04	2.12	4.58
16 th Hypothesis	1	Adaptive Measures → Intellectual Capital	0.85	8.06	0.11	0.82
	2	Intellectual Capital → Enhancing motivation	2.51	1.88	1.33	2.61

Absolute value of T-statistics>1.96

Also according to the tables and the absolute values of t-statistics, it is concluded that there is a significant relationship between the communication measures, alignment practices and intellectual capital. There is also a significant relationship between intellectual capital, learning development, career development and development of social interaction and communication. But there is no significant relationship between intellectual capital and enhancing motivation.

Table7:Results of hypothesis testing

Hypotheses	Z test statistic	S.E	Significance level of p	Indirect effect	Standardized indirect effect
9 th hypothesis	1.767	0.491	0.077	0.868	0.862
10 th hypothesis	1.760	0.629	0.078	1.108	1.121
11 th hypothesis	1.757	0.615	0.079	1.08	0.099
12 th hypothesis	1.658	0.378	0.097	0.628	0.0626
13 th hypothesis	1.984	1.486	0.047	2.950	2.944
14 th hypothesis	1.974	1.908	0.048	3.766	3.829
15 th hypothesis	1.970	1.864	0.049	3.672	3.756
16 th hypothesis	1.833	1.164	0.067	2.134	2.140

p<0.05

On the other hand, according to the Sobel test statistic, if the significance level of p is greater than 0.05, the intellectual capital variable does not play the role of mediator, and if it is less than 0.05, the intellectual capital plays the role of mediator. It is concluded that communication efforts do not affect learning development, career development, development of social interaction and communication, and enhancing motivation through intellectual capital. It was also concluded that adaptive action does not affect the enhancing motivation through intellectual capital. However, alignment practices affect learning development, career development, and development of social interaction and communication through intellectual capital.

DISCUSSION AND CONCLUSION

Human capital is complementary to physical capital resulting in better utilization of physical capital. If the infrastructures for the growth of human force, such as appropriate instruction space, instructional equipment, and internet, are optimized, the status of human force will also be optimized. Providing various and high-quality services and products, reduction of the costs, creativity and innovation, and increasing competitiveness are advantages of qualitative and knowledgeable human force. Therefore, today the trading strategy of the organizations is necessarily focused on human resources.

During the time and with development of the primary forms of international communication and trading, contemplation and knowledge about the surrounding environment were regarded as a source for creating new opportunities for improvement of life and trading. Also the trading space experienced industry in addition to agriculture. Intellectual capital originates from knowledge that is used for working to create value. In fact, intellectual capital of the whole staff includes organizational knowledge and its capabilities to create additional value, and leads to constant competitive advantages.

HR management is responsive to human needs of the organization by analyzing these needs regarding the variable conditions and required efforts. The significance of HR management is well known since human is a live creature capable of thinking and making decisions and judgments. Therefore, human being is not easy to manipulate. Sometimes his goals are not parallel with those of the organization; rather, they may be opposite. Here the role of HR management is critical to make personal goals of the staff parallel with organizational goals.

As indicated above, sixteen research hypotheses are confirmed. It is noteworthy that when the relationship between human resource management practices and human resource development is studied with no mediator variable, there is a significant relation between development of adaptive learning, career development, development of social interaction and communication and enhancing motivation; also between communication measures and enhancing motivation. On the other hand, there is no significant relationship between measures of social interaction and communication, career development and learning development. When a variable mediator of intellectual capital is considered, it is concluded that intellectual capital variables do not play the role of mediator in the relationship between measures of learning and development, career development, development of social interaction and communication, and enhancing motivation. Also, the relationship between alignment practices and enhancing motivation does not play the role of mediator. Within the relationship between alignment practices and development of learning, career development and development of social interaction and communication, intellectual capital plays the role of mediator to the full range.

Suggestions

Since for each of the factors examined in this study some variables have been set; the followings are recommended to improve each of these factors in the bank branches according to the relevant criteria:

- 1- The effect of alignment practices, as a component of human resource practices, on learning development, career development and development of social interaction and communication has been confirmed in the present study through the mediator variables of intellectual capital. It is recommended to organization managers, particularly in banking industry, to move through the development of intellectual capital in order to develop human resources and promote more values to their organization's alignment practices.
- 2- It is also recommended that banks try to achieve more trust of their customers by improving the quality level of their services. Therefore, their reliability will increase for the costumers.

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