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**STUDYING THE IMPACT OF INDIVIDUAL CHARACTERISTICS ON
THE DEVELOPMENT OF CULTURAL INTELLIGENCE AND SELF-
EFFICACY OF EMPLOYEES AND MANAGERS OF MARKAZI
PROVINCE KESHAVARZI BANK BRANCHES**

***Mohammad Sadegh Horri¹ and Masumeh Safaei²**

¹*Department of Management, Islamic Azad University, Arak Branch, Arak, Iran*

²*Department of Executive Management, Islamic Azad University, Arak Branch, Arak, Iran*

**Author for Correspondence*

ABSTRACT

Purpose: This study is mainly aimed to investigate the impact of individual characteristics on the development of cultural intelligence and self-efficacy of employees and managers of Markazi Province Keshavarzi Bank Branches. **Research methodology:** This study is descriptive and field research. Statistical population is all of employees, supervisors and managers of Markazi Province Keshavarzi Bank. Statistical sample size is selected 300 persons and it has been done using convenience sampling method. Out of 300 distributed questionnaires, 285 questionnaires have been collected. Collecting method is field method and measuring tool is questionnaire. Its content, construct and face validity is acceptable and verified. Its durability has been verified through Cronbach's alpha (0.843). To collect data, standardized questionnaire has been employed. To analyze data, first, it has been taken action to examine acceptance of theoretical model using LISREL software and then data analysis has been determined helping path coefficient and t Test. **Findings:** Results show that model is useful for statistical population and model fitness is acceptable. Results obtained from data analysis show that job and management experiences have impact on cultural intelligence. Cultural intelligence has impact on public self-efficacy. Cultural intelligence has impact on cognitive intelligence. Cultural intelligence has impact on motivational intelligence. Cultural intelligence has impact on behavioral intelligence.

Keywords: *Cultural Intelligence, Behavioral Intelligence, Motivational Intelligence, Self-efficacy*

INTRODUCTION

Capital market is popularized as one of the underlying bases of economic growth and development in the countries. Investment is accounted as the most important determining component in economy of each country. In this regard, information plays a fundamental role in performance of capital market. Due to this fact that most of decision such as investment decisions are made in uncertainty, so in this circumstance, information has an impressive role to decrease uncertainty. To reduce uncertainty, required information has to be provided from different references. Firms as the economic units are always intending investment, profitability and eventually wealth creation. Investment in relatively deeply involved in information asymmetry and agency problems. What is often existed in beliefs is that information asymmetry has been added to difference existed in the market and influence in the cost of external finance providence and it will easily lead to adequate investment for the firms which are suffering liquidity constraint. While agency problem is often driven from excessive investment by managers for personal benefits and abusing Free Cash Flow in projects with negative Net Present Value (Jensen and Meckling, 1976). Due to agency problem, it is possible that firms' managers don't use firms' resources to increase stockholders' wealth. For this purpose, to support stockholders' resources, different tools are used to resolve this problem. According to the role of accounting in determining contract condition and monitoring its correct implementation between owners and managers, accounting principles and procedures are applied which aimed to protect the rights of beneficiaries and fair proposing of financial statements. Conservatism concept is applied to give an effective mechanism to contracts between firm, creditors and stockholders. On the other hand, institutional investors are one of the groups working in the market which are able to have considerable effect on direction of markets movement through major deals.

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Under efficient-monitoring hypothesis and because of invested wealth volume, institutions are probably managing their investments actively. Based on attitude of institutional investors, investors are expert who have relative advantage in collecting and processing information. Moreover, organizational coherent structure and ownership complicated network will feature distinction between these groups more and also, institutional investors have more incentive to monitor managers and are able to control excessive investment in business units. Institutional investors will increase information transparency by implementing corporate governance and will decrease information asymmetry and this action causes to strength efficiency in capital market. Accordingly, a question is arisen: have firms working in the Tehran stock exchange developed conservatism and institutional ownership in order to terminate vast inefficient behaviors of firms' investment such as excessive investment and insufficient investment?

Literature Review

Cultural Intelligence

Cultural intelligence has been increasingly addressed by researches in the context of cross-cultural studies (Ng and Earley, 2006). But so far, as it was mentioned by Gelfand *et al.*, in their interoperation about handbook of cultural intelligence, conception of cultural intelligence from theories and researches about different factors is extremely primary. This is a very important gap in respective literature, because a model which identifies secondary dimensions can have some of valuable practical functions. The most prominent one is to propose a coherent and theoretical combination which hasn't been in multicultural competency literature so far (Gelfand *et al.*, 2008). Cultural intelligence can complete other forms of intelligence like emotional intelligence, social intelligence and practical intelligence, because intelligence is something more than ability to perceive concepts and solve problems in academic condition. These intelligence forms are compliment, because norms for social interactions are different from a culture to another one and neither cognitive intelligence or emotional intelligence are not specifically concentrated on capabilities which are exclusively related to an individual with effectiveness in cross-cultural condition (Van *et al.*, 2012).

Cultural intelligence can be defined as learning ability and giving correct behavioral responses to these models. Based on categorization of cultural intelligence studies center, 4 dimensions of strategy, incentive, knowledge and behavior can be considered as components of cultural intelligence (Rahimi *et al.*, 2012).

Dimensions of Cultural Intelligence

Earley and Ang (2003) have presented cultural intelligence as a multidimensional concept based on multi focus of intelligence framework which has been introduced by Sternberg and Detterman (1986). Specifically, Sternberg (1986) combined previously scattered and fragmented views about intelligence with proposing 4 continuous methods to perceive intelligence in individual level.

- Meta cognitive intelligence
- Cognitive intelligence
- Motivational intelligence
- Behavioral intelligence

Metacognitive Cultural Intelligence

Metacognitive cultural intelligence includes conceptualization and perceiving diverse cultural experiences (cultural intrinsic awareness level of an individual during cross-cultural interactions). Metacognition is a concept which has been developed in cognitive psychology field. That is, thinking about knowledge or mental processes is related to cognitive affairs. This conception can be divided into two compliment components:

1. Metacognitive knowledge
2. Metacognitive experience (Alidoust and Homaei, 2012)

Metacognitive cultural intelligence also includes self-awareness and awareness of others using individual dimension of metacognitive knowledge framework. It calls people to investigate consciously their own cultural assumptions and engage actively in speculation during cultural encounter in order to enhance their cultural intelligence (Livermore, 2010).

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Cognitive Cultural Intelligence

The second aspect of cultural intelligence is cognitive cultural intelligence. Cognitive cultural intelligence reflects knowledge related to norms, methods of performance and contracts in different cultures which have been gained through training and personal experience (Ang *et al.*, 2007). Cognitive cultural intelligence reflects public knowledge and knowledge structures about cultures and cultural differences. This is along with intelligence conception as a knowledge which has been introduced by Ackerman (1996) and provides a similar rationalization for knowledge importance as a part of thought (Van *et al.*, 2012).

Motivational Cultural Intelligence

The third aspect of cultural intelligence is motivational cultural intelligence which has been defined as people capability to direct attention and energy toward learning and working in a condition including cultural differences (Ang *et al.*, 2007). Motivational cultural intelligence has different individual interests and benefits in terms of effectiveness in cross-cultural interactions. This requires leaning about cultural differences in various conditions and in accordance with its performance (Mosayezadeh and Tajmirriahi, 2012).

Self-efficacy

Self-efficacy has a relatively short history which has been started by Bandura activities (1997). He has mentioned this issue in a script entitled “Toward integrating theories of behaviors’ changes”

Many factors are effective on people successes in life. Self-efficacy as a cognitive factor can help people and pave a path for them to reach success. So, knowing this factor and ways to strengthen it to enhance goals in life is very important (TorkLadani, 2009). Self-efficacy is originated from social learning theory by a famous psychologist Albert (1997) which refers to individual belief or judgments to his abilities in doing tasks and responsibilities. Social learning theory is based on tripartite casual pattern of behavior, environment and individual. This pattern emphasizes on reciprocal relation between behavior, environmental effects, individual factors, cognitive-emotional factors and biologic factors which refers to individual perceptions for describing psychological functions (Abdollahi, 2006).

Bandura (1982) defines self-efficacy as judgments which are being done by people for their competencies about certain task. He found 4 sources of self-efficacy development: Practical skill, modeling, verbal convincement and motivating.

Various studies have found positive relationship between self-efficacy with eventual training and internship skills (Holladay and Quinones, 2003). Self-efficacy influences on behavior affecting incentive and self-confidence to overcome problems and performance improvement. Self-efficient Knowledge Management System refers to understanding a personal ability to perform tasks in the area of knowledge management system (Hasan, 2006).

Belief in self-efficacy is an important factor in manufacture system of human competency. Doing tasks by different people with similar skills in different situation in weak, average or strong forms or by a person in different situations is dependent on their self-efficacy beliefs. Self-efficacy feeling enables people to do extraordinary jobs using skills to encounter barriers. So, perceived self-efficacy is an imperative factor for successful performance and required underlying skills (the same reference, 75).

Therefore, research’s hypotheses are described as following:

- Job experience has impact on cultural intelligence.
- Travel experience has impact on cultural intelligence.
- Management experience has impact on cultural intelligence.
- Cultural intelligence has impact on public self-efficacy.
- Cultural intelligence has impact on cognitive intelligence.
- Cultural intelligence has impact on motivational intelligence.
- Cultural intelligence has impact on behavioral intelligence.

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MATERIALS AND METHODS

Research Methodology

Current study in terms of data analysis method is descriptive research and in terms of research kind, it is a casual research. To collect data and to understand the relation between variables, field studies have been used and to clarify literature review and theoretical framework, library studies have been used. In this study, to collect research required data, questionnaire has been employed. To analyze data, there are different methods. In this study, 2 methods of descriptive analysis and inferential analysis have been exploited to analyze data.

Statistical Population and Sampling Method

In current study, statistical population includes all of managers, supervisors and employees working in Markazi Province Keshavarzi Bank Branches. Due to this issue that structural equations technique has been applied to analyze data, so sample size is calculated as following:

$$5q \leq n \leq 15q$$

Here, q is number of measurement variables (questions).

$$27 \times 15 \leq n \leq 27 \times 5 \quad \text{and} \quad 405 \leq n \leq 135$$

Here, statistical sample based on aforementioned contents and according to guidance and assistance professors' opinions was chosen 300 persons and sample is chosen from employees, supervisors and managers of Markazi Province Keshavarzi Bank branches using convenience random sampling. Out of 300 distributed questionnaires, 285 questionnaires were collected.

RESULTS AND DISCUSSION

Data Analysis

Table 1: Demographic features of sample

Percentage	Frequency	Variable Gender
71.2	203	Male
28.8	82	Female
Age		
1.1	3	between 20-25
14.4	41	between 26-30
24.6	70	between 31-35
37.2	106	between 36-40
13.3	38	between 41-45
6	17	between 46-50
3.5	10	more than 5
Education		
37	13	Diploma
46	16.1	Associate s' degree
158	55.4	Bachelor's degree
44	15.4	Master's degree and higher

Figure 1 show t coefficients for measurement model (t coefficients for questions and respective variables) and structural model (t coefficients for determined paths between variables in the model)

Also, Fig. 2 displays standard coefficients for measurement model (standard coefficients for questions and respective variables) and structural model (standard coefficients for determined paths between variables in the model).

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Path between all of independent variables and dependent variables is introduced and named by Gamma coefficient and path between all of dependent variables is introduced and named by Beta coefficient.

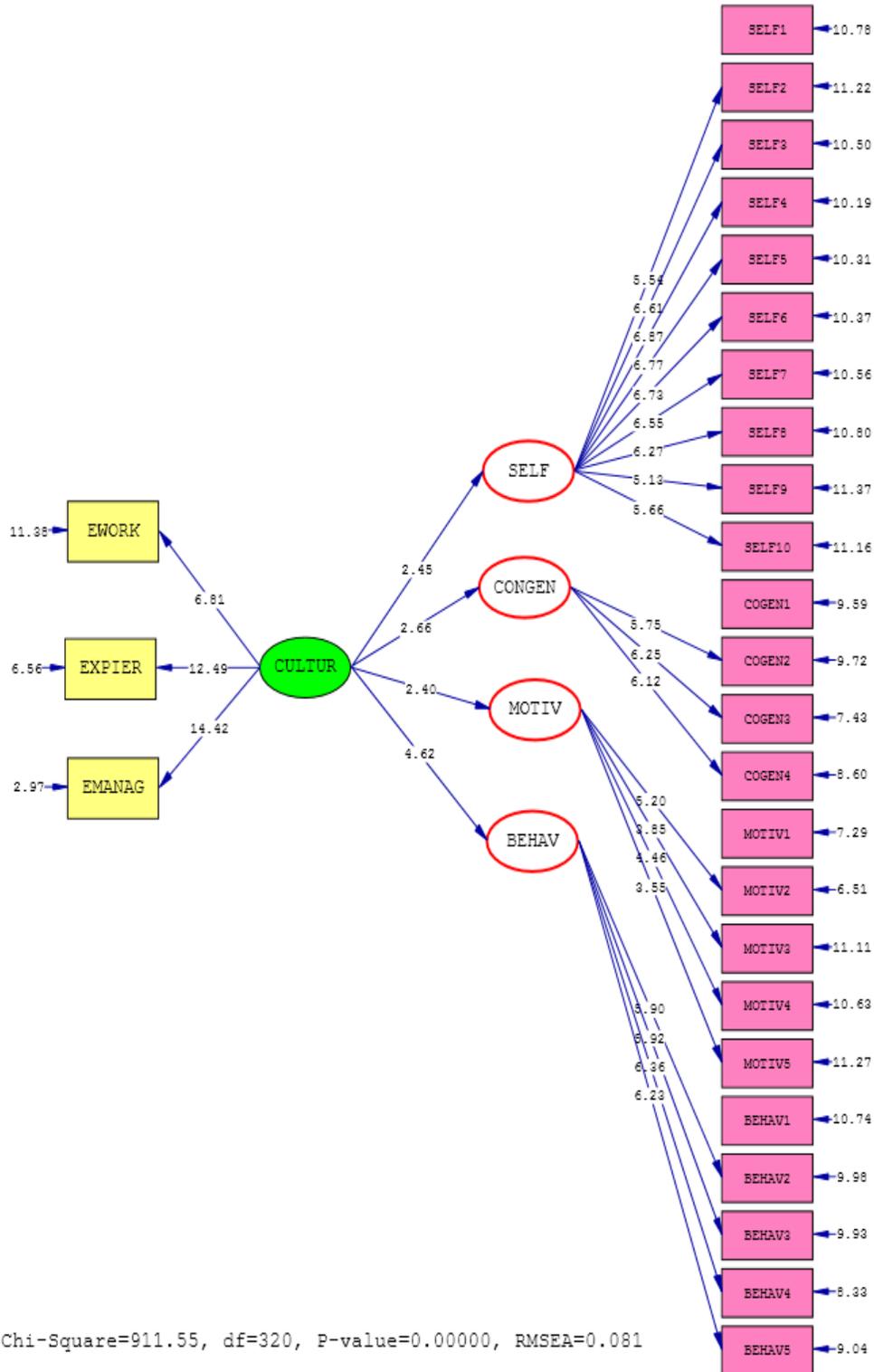


Figure 1: t values of structural model (variables and questions)

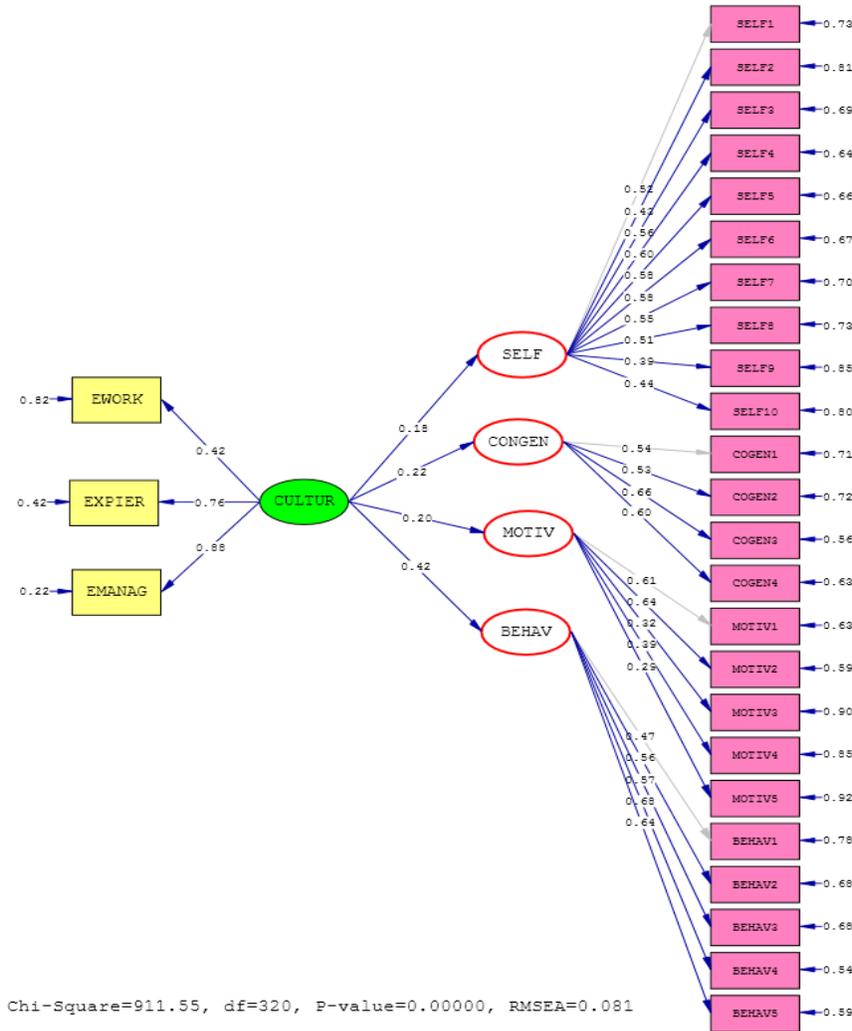


Figure 2: Path coefficients of structural model (variables and questions)

Hypotheses Test

Table 3: Results of standard coefficients and t test of hypotheses

Results	T test	Relation Estimated coefficient	Path
Hypothesis acceptance	6.81	0.42	Job experiences
Hypothesis acceptance	12.98	0.76	Travel experiences
Hypothesis acceptance	14.42	0.88	Management experiences
Hypothesis acceptance	0.45	0.18	Cultural intelligence and public self-efficacy
Hypothesis acceptance	2.66	0.22	Cultural intelligence on cognitive intelligence
Hypothesis acceptance	2.40	0.20	Cultural intelligence on motivational intelligence

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Hypothesis acceptance	4.62	0.42	Cultural intelligence on behavioral intelligence
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Evaluation of Research Structural Models

LISREL method estimates the unknown coefficients of the linear structural equations set while it is designed to fit models including latent variables, measurement errors in each of dependent and independent variables, bidirectional causality, concurrency and reciprocal interdependence. In current study, after drawing model based on data, model’s parameters have been obtained using LISREL software. So, hypotheses were tested using Gamma coefficient (γ) and t test. In below table, relations between variables via standard coefficients have been determined. Standard coefficient means binary correlation (between 2 variables) and it is applied to compare effects of model’s components. The more is this coefficient, the more effectiveness of independent variable on dependent variable. Significance of a coefficient means that its significant number has to be more than 1.96 or less than -1.96 and in total, it is applied to verify or reject hypotheses. If significant number is more than 1.96, it indicates that independent variable has stronger effect on dependent variable.

Table 2: Fit indices of research model

Fit index	Macro	Standard values	Estimated values
Root Mean Square Error of Approximation	RMSEA	0.05	0.081
Normed Fit Index	NFI	0.90	0.78
Non-normed Fit Index	NNFI	0.90	0.83
Comparative fit index	CFI	0.90	0.84
Root mean square residual	RMR	0.05	0.11
Goodness-of-fit index	GFI	0.90	0.81
Amended goodness-of-fit index	AGFI	0.90	0.77

As it is seen in table 2, Goodness-of-fit index (GFI) is equal to 0.81 and Amended goodness-of-fit index (AGFI) is equal to 0.77 and Root Mean Square Error of Approximation (RMSEA) is 0.081 and Comparative fit index (CFI) is equal to 0.84 which all are in a relative acceptable level.

Conclusion

According to the first hypothesis, job experiences, travel experiences and management experiences have impact on cultural intelligence. Based on structural equations charts, rate of path coefficient between job experiences and cultural intelligence is 0.42. Based on t test $1.96 < 6.81$ and in significance level of 0.05, the relation between these 2 variables is significant. As a result, researcher with 95% has been arrived at this conclusion that job experiences has impact on cultural intelligence and due to positive path coefficient, relation is direct kind. Significant job experiences compared with lack of job experiences puts people in different situations and this indicates that to increase people perception and implementation in social interactions, job experiences is beneficial and research results also prove it. Results show that employees having job experiences can easily perceive cultural intelligence value like cultural intelligence. On the other hand, employees can develop and improve cultural intelligence through sharing job experiences.

Based on structural equations charts, path coefficient between travel experiences and cultural intelligence is 0.76. Based on t test $1.96 < 12.98$ and in significance level of 0.05, the relation between these 2 variables is significant. As a result, researcher with 95% has been arrived at this conclusion that travel experiences has impact on cultural intelligence and due to positive path coefficient, relation is direct kind.

According to structural equations charts, path coefficient between management experiences and cultural intelligence is 0.88. Based on t test $1.96 < 14.42$ and in significance level of 0.05, the relation between these 2 variables is significant. As a result, researcher with 95% has been arrived at this conclusion that management experiences has impact on cultural intelligence and due to positive path coefficient, relation is direct kind.

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The second hypothesis measures impact of cultural intelligence on public self-efficacy. Based on research results, path coefficient between public self-efficacy and cultural intelligence is 0.18. Based on t test $1.96 < 2.45$ and in significance level of 0.05, the relation between these 2 variables is significant. As a result, researcher with 95% has been arrived at this conclusion that cultural intelligence has impact on public self-efficacy and due to positive path coefficient, relation is direct kind. In the current study, impact of cultural intelligence on public self-efficacy has been verified and it can be said that self-efficacy causes increasing incentive and self-confidence of employees to use social interactions and has effect on employees' attitude to enhance cultural relations. Since, cultural intelligence is influential on increasing individual and group abilities, it is recommended, with different kinds of job stimulus such as financial and non-financial (like training and learning, ways to do teamwork and tasks disintegration of each of members in system and also ways to distribute financial rewards and supporting employees' job promotion) to the managers of studied organizations to direct people to progress social relations and perceive different cultures and subcultures.

According to the third hypothesis, cultural intelligence has impact on cognitive intelligence. Based on research results, path coefficient between cognitive intelligence and cultural intelligence is 0.22. Based on t test $1.96 < 2.66$ and in significance level of 0.05, the relation between these 2 variables is significant. As a result, researcher with 95% has been arrived at this conclusion that cultural intelligence has impact on cognitive intelligence and due to positive path coefficient, relation is direct one.

Cognitive intelligence means awareness, self-awareness and knowledge. Regardless of applied method and models, in all of researches have done to compare dimensions of cultural intelligence with employees performance and training, researchers believe that one of the primary factors which causes a person has an upper hand is capability to understand, knowledge and awareness which employees have toward their environment and organization. When people have more ability, subsequently, their effectiveness also is increasing and this issue can be achievable through their cognitive intelligence. Cognitive intelligence is a skill which its owner can control his and others' emotions via self-awareness. Through relations' management, he can behave in a way which is suitable. People, who have strong communicational skills, are more acceptable by their coworkers. People via establishing intimate relationships are able to coordinate their attitudes and thoughts according to others. In this way, occurred issues and problems are being resolved in the best way and new solutions are discovered. Cognitive cultural intelligence requires perceiving known similarities between different cultures and understanding that how cultures are different. So, it is suggested to people to get familiar with subcultures in order to be able to share common features which are known as culture universal factors. Culture universal factors are the same for all of people, because all of cultures have similar fundamental needs. Results obtained from current study are along with Macnab and Wellesley (2012).

The fourth hypothesis has examined impact of cultural intelligence on motivational intelligence. Based on research results, path coefficient between motivational intelligence and cultural intelligence is 0.20. Based on t test $1.96 < 2.40$ and in significance level of 0.05, the relation between these 2 variables is significant. As a result, researcher with 95% has been arrived at this conclusion that cultural intelligence has impact on motivational intelligence and due to positive path coefficient, relation is direct one.

Results obtained from this study show that cultural intelligence is considered as an imperative factor for employees and managers. Organizations and managers, who apprehend strategic value of cultural intelligence, can use cultural diversity and differences in regard with creating competitive advantage and superiority in global market. Cultural intelligence is considered as an adhesive that can be used in diverse environments to create coherence and coordination. People having high cultural intelligence are able to have considerable effect on coworkers and subordinates and enhance organizational performances via sympathy with them. Motivational cultural intelligence has different individual interest and benefits in terms of effectiveness in cross-cultural interactions. This requires leaning about cultural differences in various conditions and performance accordance with it.

To analyze aforementioned findings, it can be articulated that people with similar attitudes and values, are more willing to work with each other, but as members of an organization have various values and culture,

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they can be integrated via cultural intelligence knowledge, because cultural intelligence knowledge means self-understanding as a cultural component along with an understanding of people with different cultural background and in fact, it is a kind of flexibility and ability to transfer experiences from a kind of culture to another form of culture. Development of motivational intelligence provides a possibility to create a relationship with behavioral adaptations. Through this, people can achieve higher steps of cultural intelligence development, life experiences and also other character features such as self-efficacy and they also can facilitate cultural intelligence training and its developmental process. Results obtained from current study are along with Macnab and Wellesley (2012).

According to the fifth hypothesis, cultural intelligence has impact on behavioral intelligence. Based on research results, path coefficient between behavioral intelligence and cultural intelligence is 0.42. Based on t test $1.96 < 2.46$ and in significance level of 0.05, the relation between these 2 variables is significant. As a result, researcher with 95% has been arrived at this conclusion that cultural intelligence has impact on behavioral intelligence and due to positive path coefficient, relation is direct one.

Behavioral intelligence means ability to consciously adapt and adjust behavior in cultural environments. This item includes ability to determine position and update time of a new behavior and also distinguish correct and effective way of this behavior.

Adaptation of specific method of communication in order to interact with different cultures more effectively is a sample of this component. Based on obtained results, it can be expressed that to develop cultural intelligence, people cope themselves with different subcultures in order to be able to have more effective interaction with them the in the future. Also, with verbal and nonverbal behaviors in subcultures, they can have ability to be sensitive to changing conditions in a multicultural environment and coordinate their behaviors with those conditions. Results obtained from current study are along with Macnab and Wellesley (2012).

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