



# Studding the efficacy Cultural Intelligence on Staffs Performance Improvement

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**Abstract:** *The main aim of this study is studding the relationship between cultural intelligence with staff's performance in universities of Astara city. The purpose of this research is applied research and the methodology is descriptive- correlation. Data collection method is the field study and tool for data collection is standardized questionnaire. Study Statistical population are 147 employees in universities of Astara city. the questionnaire was distributed among a sample of 108 people that whit use of morgen schedule was selected. The method of sampling is random sampling, and the method of testing hypotheses is the spearman correlation coefficient and regression analyzing, whit using SPSS 16 software.*

*The analysis showed significant relationship between cultural intelligence and staffs performance. Also, analyzing of sub-hypotheses of research results which serving the relationship between cultural intelligence dimensions and staffs performance, showed that No significant relationship was between cognitive dimension and staffs performance, but Between meta cognitive, motivational, behavioral dimensions and staffs performance there was significant relationship. Also, analyzing regression showed that meta cognitive dimension with regression coefficient of 0.32, have the most effect on the staffs performance in universities of Astara city in comparison to other dimensions. Finally, the results of the tests showed that increasing cultural intelligence in the universities of Astara city Cause to improving staff's performance.*

**Keywords:** *Cultural Intelligence, Performance, Meta Cognitive Factors, Cognitive Factors, Motivation Factor, Behavioral Factor*

## INTRODUCTION

In today's world of capability, economic strength and prosperity of any country depends on the efficient use of facilities, resources and manpower of the country. In this respect, if workforce is more efficient and capable, the development in different areas of economic and social success will be higher. In this case, experts and researchers believe that effectiveness of individuals depends on the factors like: talent, intelligence, motivation, machinery and tools which can be used, education, job conditions, and etc. (Bell, 2004). Among these factors, intelligence is a case which is highly regarded by psychologists, and throughout the history of psychology, attempt has been done on the nature of intelligence, its variety, its variability, and .... To be examined under survey (Fatemi, 2006). Cultural intelligence can be noted from various intelligences. This ability is a new kind of intelligence that has a big relationship with a culturally diverse workplace. People with similar values and attitudes are more willing to work together, but the members of the working groups have different values, just through a very strong cultural management, integrated team can be created, that this is very time consuming. However, having a cultural appropriateness is not the main factor in achieving

this, but having cultural intelligence is much more important. The best way to invest on cultural diversity in the groups is to be sure that members have a high cultural intelligence and the leaders within the group have the desire and skills to discover problems (Thomas & Inksun, 2008). Cultural intelligence is the key to success in today's world. A person with high cultural intelligence, has the ability to learn in new cultural environment, and enjoys dealing with new cultures (Deng & Gibson, 2008). People with high intelligence, are negotiating deciders, lattice worker, and even better leaders for the new global world, and that is why today's organizations strive to attract staff with high cultural intelligence (Livermore, 2011). Another problem that its attention and measurement is very important in the organizations is the performance. Performance is a way through which employees perform their duties, and performance appraisal, is the judge on employee performance (Scott, 2009). Bernadin and colleagues believe that performance should be defined as the results, because the results have the strong relationship with its strategic objectives, customer satisfaction and economic roles (Armestrong, 2006). The leadership of an organization's top performers, who knows where the organization wants to take, and makes sure that all employees understand the organization's direction, and they are clearly active and involved in order to help organizations to move toward goals (Harpest, 2006). In general, cultural diversity in a work group decreases the group performance, but over time, it can be increased. Over time, members find the ways to tackle the problems of intercultural communication, and they provide more creativity, more qualitative decisions, and higher performance (Hendawi, 2006). Professor Sunang, senior director of the center for leadership and cultural intelligence of Nan yang Singapore University, with Professor Christopher Early, in the year 2003, had supplied the concept of cultural intelligence for social sciences and management, and since then, this concept was considered through the world and in different fields. Look into the path of cultural intelligence construct, suggesting that the development of a theoretical concept to a measurable structure is with strong psychometric properties and science within the framework of global education (Enji, Vendyn, and Ang, 2012). According to the classification of cultural intelligence center, cultural intelligence is divided into four dimensions: met cognitive, cognitive, motivational and behavioral.

Meta cognitive factors mean that how a person understands cultural experiences. Also it indicates the processes which people use to acquire and understanding of cultural intelligence. This occurs when people make judgments about their own and others thinking processes.

Cognitive factors indicate the ones' understanding of cultural similarities and differences, and it shows the general knowledge, mental designs, and the person's cognitive of other cultures.

Motivational factors, indicates the ones' interest to examine other cultures, and interact with people from different cultures. This incentive includes the intrinsic value of individuals for multi-cultural interaction, and self-confidence, which allows a person to effectively operate in different cultural situations.

Behavioral factor includes the individual's ability to cope with those verbal and nonverbal behaviors that are appropriate for dealing with different cultures (cultural intelligence center, 2005).

Rahim Niya and associates (2009), in their study concluded that the relationship between cultural intelligence and task performance was significant.

Abzari & associates (2010), in their study concluded that between cultural intelligence and its dimensions (strategy, knowledge, motivation and behavior) there is a direct and significant relationship with team effectiveness.

Vendayn and others (2007), in their study which was done in America, came to the conclusion that there is a significant relationship between cognitive and behavioral dimensions of cultural intelligence with functional performance. Given the above, the present study was aimed at answering the question whether there is a significant relation between cultural intelligence and performance of staff at the universities in Astara?!!

Independent variable

Dependent variable



**Figure 1.** Conceptual model

The main hypothesis:

There is a significant relationship between cultural intelligence, and performance of staff.

Subsidiary hypotheses:

1. There is a significant relation between met cognitive cultural intelligence and employee performance.
2. There is a significant relation between cognitive factor of cultural intelligence and employee performance.
3. There is a significant relation between motivational factor of cultural intelligence and employee performance.
4. There is a significant relation between behavioral factor of cultural intelligence and employee performance.

### The research method

This study is the survey of the relationship between cultural intelligence and employee performance at the universities of Astara. This research is descriptive (non-experimental), and is a kind of correlation, in terms of its purpose of application, and research methodology. Statistical population in this study includes the employees of the universities in Astara city. All of the employees are individuals who are employed by the university staff, and the intention of universities, is all the universities in Astara city (University of Astara), of course, the nonprofit Shahriyar university is also a part of Astara universities, that was eliminated due to lack of cooperation from the statistical community.

Total number of male and female office workers in the study population is equal to 147, that according to Morgan chart, estimated sample of this population includes 108 individuals. Then individually from each of the universities, sample was collected by using this formula,  $n = n \cdot N_n / N$ , that is equal to 108. The details of each of the estimates are given in Table 1.

**Table 1.** Statistical population index

Row	Statistical population	Number of employees	Number of sample
1	Islamic Azad University	107	79
2	Payamnoor university	15	11
3	Comprehensive university of science-applied	7	5
4	Sama technical college	18	13
	Total	147	108

Also in the present study, the simple random sampling method was used for sampling. For hypothesis testing, inferential statistics methods such as Spirman’s correlation method, and regression analyzes were used. The method of collecting data of the type of library, and the tool for gathering data of questionnaire, is standard. Validity of research tool was evaluated in terms of validity of the method of content and apparent, and the reliability by using Cronbach’s Alpha, respectively for cultural intelligence questionnaire 80/0, and for performance 91/0, obtained, that is in a high level. Questionnaire used in this study are as follows:

-Questionnaire for collecting demographic information: This questionnaire includes the information like: age, gender, marital status, education, work experience, and employment of responders.

-Questionnaire for cultural intelligence: To measure cultural intelligence of the staff of the universities of Astara, standardized questionnaire of 20 questions and cultural intelligence that was designed by Age and assistant in the year 2004, has been used. This questionnaire measures four dimensions: Meta cognitive, cognitive, motivational, and behavioral cultural intelligence. The answer to this question as the fifth choice phrases from strongly agree (5 points) to strongly disagree (1 point) has been proposed.

-Questionnaire for employee performance: To measure the performance of Astara city university staff, a questionnaire of 25 questions, and job performance standard is used, which is designed by Halajiyani, and has three sub-scales that includes: job knowledge, job skills, attitude, and manpower behavior. The answer to this question as the fifth choice phrases from strongly agree (5 points) to strongly disagree (1 point) has been proposed.

**The research findings**

Description findings:

In the chart 2, some information and statistics have been brought, which are related to independent variables and its dimensions, Dependent variable and its components separately to the number of observations, minimum, maximum, middle, and range of the changes. Looking back we can say that the status of the subjects in terms of cognitive factors, cognitive, motivational, behavioral and cultural intelligence is in good condition, and the responders have a favorable opinion with respect to this factor, also these factors have been in good condition in the terms of job knowledge and job skills, also the variables of attitude and manpower behavior are in excellent condition, which indicates that people have a favorable opinion with respect to this factor.

**Table 2.** Information and statistics related to the independent variable and the research of dependent variable

Research variables	Number of observations	Minimum	Maximum	Middle	Range of variation
Meta cognitive factor	108	2	5	4	3
Cognitive factor	108	1	5	4	4
Motivational factor	108	2	5	4	3
Behavioral factor	108	2	5	4	3
Cultural intelligence	108	2	5	4	3
Job knowledge	108	2	5	4	3
Job skill	108	3	5	4	2
Manpower attitude & behavior	108	3	5	5	2
Employee performance	108	4	5	5	1

**Analytical findings**

Each of the hypotheses with the results of the analysis, are presented in this section.

**Table 3.** Spearman's correlation coefficient test.

Variable	Spearman's correlation coefficients	Significant level	Test results
Relationship between cultural intelligence and employees' performance	0/53	0/001	Accept the hypothesis
Relationship between Mega cognitive factor and employees' performance	0/43	0/001	Accept the hypothesis
Relationship between cognitive factor and employees' performance	0/19	0/06	Reject the hypothesis

Relationship between motivational factor and employees' performance	0/40	0/001	Accept the hypothesis
Relationship between behavioral factor and employees' performance	0/34	0/001	Accept the hypothesis

The results of Spearman's correlation coefficients are shown in the above chart.

There is a significant correlation between cultural intelligence and employees' performance at level  $\alpha=0/001$ , and with confidence level, 99 percent. Therefore, the null hypothesis is rejected.

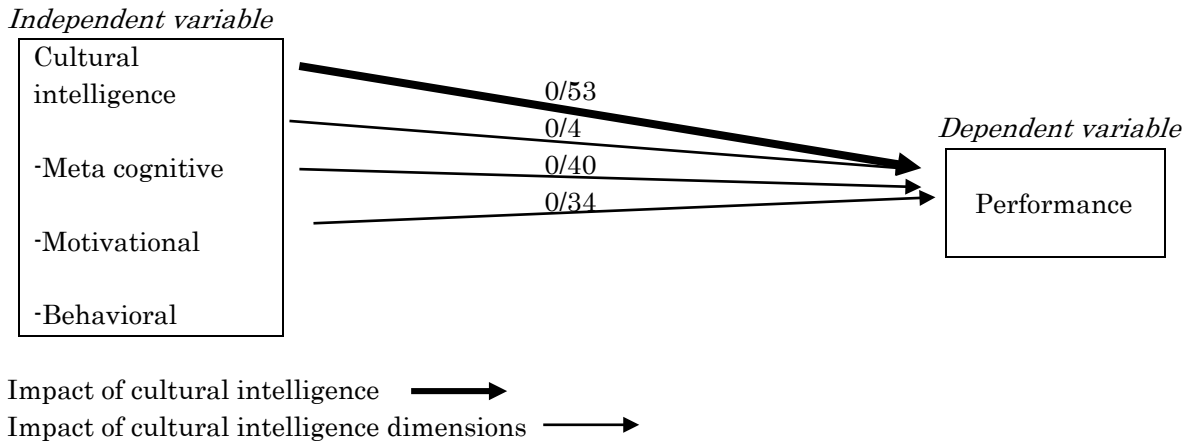
There is a significant correlation between the Meta cognitive cultural intelligence factor and employees' performance at level  $\alpha=0/001$ , and with confidence level, 99 percent. Therefore, the null hypothesis is rejected.

There is not any significant correlation between cognitive cultural intelligence factor, and employees' performance at level  $\alpha=0/05$ , and with confidence level, 95 percent. Therefore, the null hypothesis is not rejected.

There is a significant correlation between motivational factor and employees' performance at level  $\alpha=001/0$ , and with confidence level, 99 percent. Therefore, the null hypothesis is rejected.

There is a significant correlation between behavioral cultural intelligence factors, with employees' performance at level  $\alpha=001/0$ , and with confidence level, 99 percent. Therefore, the null hypothesis is rejected.

Figure 2 shows the correlation between cultural intelligence and employees' performance, with regard to the results obtained from the analysis.



**Figure 2.** Operational model according to the results of research

Regression analysis of the relationship between cultural intelligence and employees' performance:

In this part of the analysis, cultural intelligence factors go inside the regression equation by using step by step method that finally on three steps of the components of the motivational, Meta cognitive and cultural intelligence behavioral, went into the regression equation. And they could have amounted to 33/0 (R2 adjusted) variance in the dependent variable, it means that they could explain the employees' performance. In fact we can say that employees' performance is withdrawn from these three components, and between these three variables, the highest proportion is in variable explaining of employees' performance with 32/0 percent, which is related to Meta cognitive variable. The results of analysis of variance with  $P=0/001$ , and  $F=15/06$ , confirmed that the variables which were entered into the regression equation, were significant.

**Table 4.** The test of variance analysis of study variables

Model	Collected squares	DF	Square averages	F	Level of significance
Regression	4249/84	3	1416/61	15/06	0/001
Remaining	8445/38	90	94/06		
Total	12715/23	93			

The variables which are entered into the equation, is presented in the chart below:

**Table 5.** Variables which are entered into the regression equation:

Row	Entered variables	Beta	Level of significance
1	Motivational factor	0/25	0/001
2	Meta cognitive factor	0/32	0/001
3	Behavioral factor	0/26	0/001

According to charts 3 and 4, we can say that equation of employees' performance is as follows:

$$(\text{Motivational factor}) 0/25 + (\text{Behavioral factor}) 0/26 + (\text{Meta cognitive factor}) 0/32 + (\text{employees' performance}) \gamma$$

### Conclusions

Considering that the aim of the recent study was to investigate the relationship between cultural intelligence and the employees' performance at the universities of Astara city, based on the findings of the analysis of inferential statistics, we will explain the hypothesis.

It was shown in the surveying of the main hypothesis that there is a significant correlation between cultural intelligence and employees' performance. The results of the Spearman correlation coefficient between cultural intelligence and employees' performance show that there is a significant correlation between two variables studied, at level  $\alpha=0/001$ , and with confidence level 99 percent. Therefore, the null hypothesis was rejected, so that the amount of correlation coefficient calculated  $r=0/53$ , suggests a moderate relationship between the two variables which are studied. So we can conclude that there is a significant relationship between the two components which are under study. Findings of the main hypothesis of the research show the attunement with the researchers' findings, like: Amiri and assistants (2010), Kazemi (2008), Ghafari (2008), Rahim Niya and assistants (2009), Vandril (2008), Abzari and assistants (1389), Fakhim (1387), Vandayn and assistants (2007), and Rahimi and assistants (1391). According to the results which are obtained by testing the main hypothesis, and correlation intense  $r=0/53$ , that show the average correlation between two variables which are under study, is suggested to enhance the correlation between these two variables, for the organizations to have a respect toward the employees' cultural values and principles, and they should pay attention to the matter that people bring their culture, body, intellect, and their unique spirits to the organization. Organizations should pay attention to the employees' creative ideas, which have the high cultural intelligence, and try to keep them by this way. Organizations should pay attention to the individuals' cultural intelligence skills in the process of recruiting personnel as one of the selection criteria, because the existence of people with high cultural intelligence can be a competitive advantage for the organization than to rival organizations, and finally, the performance and effectiveness of the organization will be better than rival agencies.

### Subsidiary assumptions

It was shown at surveying the first sub-hypothesis that there is a significant correlation between Meta cognitive factor and employees' performance. The results of the Spearman correlation coefficient between the met cognitive cultural intelligence and performance of employees show that there is a significant correlation between two variables which are under study at level  $\alpha=0/001$ , and with confidence level 99 percent.

Therefore, the null hypothesis was rejected, so that the correlation coefficient was calculated as  $r=0/43$ , suggests the average correlation between the two variables which are under study. So we can conclude that there is a significant relationship between the two components which are under study. Results of regression analyzes indicated that cognitive factors with Beta =  $0/32$ , has the highest contribution at explaining the variable of the employees' performance. The findings of this hypotheses research, shows the alignment with the researchers' findings, like: Amiri and assistants (2010), Kazemi (2008), Vendayn and others (2007), Abzari and assistants (2010), and Parhizkari (2010). However, it does not show the alignment with the findings of Rahim Niya and assistants (2009). According to the results obtained from the first sub-hypothesis testing and correlation intensity,  $r=0/43$ , which shows the average correlation of two variables that are under study, is suggested to enhance the relationship between these two variables. Organizations should create and hold classes, workshops, and special sessions to identify, nurture, and develop cultural intelligence and its dimensions, especially its dimension of Meta cognitive cultural intelligence, by taking the acquired aspect of this structural, and through education and outlining the dimensions, and emphasizing on its importance and its impact in the success of employees at communicating effectively with others, and for their better performance, they should do the necessary things. This training cause the individuals to achieve a realistic perception toward him and others, and be empowered to control behavior and improvement of performance.

It was shown in the second surveying of sub-hypothesis that there is not any significant correlation between cognitive factor and performance of employees. The results of the Spearman's correlation coefficient between cognitive factor of cultural intelligence and the employees' performance showed that there is not any significant correlation between the two variables which are under study at level 0.05, and with confidence level 95 percent. Therefore, the null hypothesis was accepted so that the calculated correlation coefficient  $r=19/0$ , confirms that there is not any relationship between the two variables which are under study. The function of performance which is obtained by regression analysis also showed that cognitive factor does not have any contribution at explaining the variables of the employees' performance. So we can conclude that there is no significant relationship between the two components which are under study. The findings of this thesis research, does not have any alignment with the findings of the researchers like: Amiri and assistants (2010), Hadizadeh Mogadam and Hosseyni (2008), Abzari and assistants (2010), Kazemi (2008), Rahim Niya and assistants (2009). However it shows the alignment with the research findings of Vandayn and others that it was done in the year 2007, and Parhizkari (2010). According to the test results for the second sub-hypothesis and correlation intense  $r=0/19$ , which shows that there is not any significant relation between the two variables which are under study, is suggested for building and strengthening the relationship between these two variables. Managers should try to provide conditions for employees, at all organizational levels; for, they can understand their and others' cultural intelligence, and to further strengthen it. So they can be more successful to have an effective, deep, and honest relationship with their colleagues in the workplace, and finally they are well equipped to the sense of self-efficacy, at their jobs. This, in turn, enables employees to communicate with others as a decision maker and active person, and not a passive one and with an interpersonal management in a safe way, and logically pays attention to change and modify of the individual and social environment at work, and cause their performance to be increased.

It was shown in the third sub-hypothesis that there was a significant correlation between motivational factor and employees' performance. The results of the Spearman's correlation coefficient between the two variables of motivational factor and employees; performance showed that there is a significant correlation between the two variables which are under study at level  $\alpha=0.001$ . Therefore, the null hypothesis was rejected. So that the correlation coefficient calculated  $r=0/40$ , suggests that there is an average relationship between the two variables which are under study. So we can conclude that there is a significant relationship between the two components which are under study. Results of regression analysis of motivational factor with Beta= $0/25$  shows the proportion of this variable at explaining the variable of employees' performance. The findings of this thesis research, shows the alignment of the findings of the researchers like: Amiri and assistants (2010),

Kazemi (2008), Parhizkari (2010), Hadizadeh Mogadam and Hosseyni (2008), Abzari and assistants (2010), ANG and assistants (2007), but it does not have the alignment with the results of Rahim Niya and assistants (2009), and Vandayn and others (2007). According to the results obtained from testing the third hypothesis, and correlation intense  $r=0/40$ , which shows the average relation between the two variables which are under study, is suggested to enhance the relationship between these two variables. Managers has strengthened the employees' positive attitude and motivation that this leads to a sense of interest in people for testing other cultures, and interacting with people from different cultures and getting diverse experiences, and the use of these experiences to improve their performance.

In the surveying of the fourth sub-hypothesis, it was observed that there was a significant relationship between the behavioral factor and employees' performance. The results of the Spearman's correlation coefficient between the behavioral factor of cultural intelligence and employees' performance, showed that there is a significant correlation between the two variables which are under study at level  $\alpha=0.001$ . Therefore, the null hypothesis was rejected. So that the correlation coefficient calculated  $r=0/34$ , suggests that there is an average relation between the two variables which are under study. So we can conclude that there is a significant relationship between the two components which are under study. Results of regression analyzes of behavioral factors of cultural intelligence with Beta= $0/26$ , shows the alignment of this variable at the explanation of employees' performance. The findings of this thesis research, shows the alignment with the findings of the researchers like: Amiri and assistants (2010), Kazemi (2008), Rahim Niya and assistants (2009), ANG and assistants (2007), Vandayn and assistants (2007), Abzari and assistants (2010), Hadizadeh Mogadam and Hosseyni (2008). But it does not have alignment with the findings of Parhizgari (1389). According to the test results which was obtained from the fourth sub-hypothesis, and correlation intense  $r=0/34$ , that shows the average relation between the two variables which are under study, is suggested to enhance the relationship between these two variables. Managers should inform employees of the standards of conduct with regard to how to deal with different people at work, and eliminate behaviors that have a negative impact on performance, and encourage those behaviors that will lead to improved performance.

The overall result: The results of the analysis of the assumptions showed that there is a significant relation between cultural intelligence and the employees' performance, and by encouraging the cultural intelligence, the function of employees improves at the universities in Astara. Also the impact of cultural intelligence on the performance of employees has arisen from the dimensions of Meta cognitive, motivational, and behavioral of cultural intelligence. Given that staffs employed in universities are daily in interaction with people from different cultures, compared to other institutions, need to have this intelligence in order to be successful in doing tasks, and to facilitate communication with different people from different cultures and environments and to operate effectively. So we can say that doing this kind of researches, particularly in relation to the employees at the environments such as universities, can be helpful and worthwhile.

## Resources

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