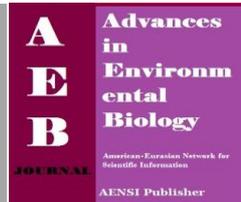




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Determinants of Cultural Intelligence; a Study in a: Research and Educational Organization in Iran

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ABSTRACT

This study is aimed to assess cultural intelligence (CQ). statistical population of this research (participants) were 108 persons (each holding a bachelor's degree) from educational and research centers of Agricultural Jihad of Lorestan province. To collect primary data standard questionnaire distribution method was used, and secondary data was acquired through library study. Measurement scale was of Likert-type five-choice spectrum and Spearman –Brown's and Cronbach's alpha was used to calculate the reliability of the questionnaire. Spearman-Brown's and Cronbach's alpha coefficients for cultural intelligence questionnaire, respectively, were equal to (%80 and %92). The research findings indicate that according to results of single-group t test, CQ level of the participants with an average of 3.20 was greater than mean level. Based on Friedman's rank test, there is a significant different between participant's views of foregoing centers in relation to cultural intelligence aspects so that maximum and minimum rank averages achieved, respectively, were allocated to motivational and meta-cognitive aspects. Also, findings acquired from variance analysis (F test) showed that there is a significant difference between viewpoints of employees of foregoing centers in relation to cultural intelligence aspects according to demographical variables (gender, education, service record). Based on correlation coefficient matrix also, there is direct and significant relation between all aspects of cultural intelligence with its cognitive aspect at p-value <0.01 level. since developing capabilities has had a remarkable importance in cultural intelligence settings, therefore, it has been recommended that in educational workshops and classrooms while informing the staff of their present cultural intelligence situation, large steps should be taken using educational methods, extra-organizational and extraterritorial missions, teaching foreign languages for openness and gaining experience in direction of object of study centers and promoting this capability.

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INTRODUCTION

In propounded views on traditional schools and thoughts of management, evaluation criterion for staff's behavior has been their performance correspondence with ratified job description [1]. Final years of the 20th century and early years of the 3th millennium has been accompanied with heated and controversial discussion of globalization. Not only it is not a one-dimensional phenomenon, but also it is a political, economic, social, cultural...process that the more it moves towards coherence, the greater the importance of correct understanding of cultural differences will be [2]. According to increasing trend of globalization, fast changes of technology and fast development of information and communication technology, therefore, modern, dynamic and complicated workplaces require employees who while having good command of their own culture, know other cultures and be able to establish a suitable relationship with people of other cultures and elevate their efficiency in organization. so, these employees require a high level of cultural intelligence [3]. Cultural intelligence concept was proposed by Early and Ang (2003) from Business College of London for the first time [4]. Cultural intelligence (CQ) provides employees of organizations with a suitable background to understand and feel whatever their colleagues think and do. Also by decreasing intercultural communicative obstacles, gradually increases voluntary co-operations and by establishing a appropriate background for demonstration and manifestation of other behaviors including organizational citizenship behavior among employees, augments organizational efficiency.

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Principles and theoretical frame work:

Nowadays, besides concrete realities of organizational world there are also intangible facts in the organizational world emphasizing on them devices can be thought so that learners and graduates of management science especially governmental management could bridge the long distance between theory and practice and using theories agreeable with characteristics of their situation solve real difficulties of organizations and give a practical function to their knowledge [5]. Cultural intelligence concept is one of those intangible realities of the organizational world. Fully changing and governing situations over organizations and necessity of efficacy of organizations in such situations, more than ever reveals their need for a valuable generation of staff who are considered as organizational soldiers [6], the staff that are distinguishing face of effective organizations from non-effective ones, because they consider organizations their hometown and do not withhold any endeavor from organizations in order to realize their goals [7]. Nowadays, most managers wish for employees that not only do things other than their usual formal tasks yet effective in enhancing organizational goals, but also having a necessary view of their own culture and norms and familiarity with other cultures, acquire required skills to understand and interpret other people's behavior and making necessary adjustments to their behavior make an effective and suitable communication with co-workers from the same or different cultures at workplace [8]. Therefore, to attain this goal, they need a high level of cultural intelligence. Although cultural intelligence even among new kinds of intelligence enjoys a shorter life and record but it should not be forgotten that even in a single country there are ethnic and national sub-cultures, concerning development of business activity levels, the need for cultural intelligence as a competence helping managers and employees encountering environments with cultural diversity, has revealed itself more than ever.

On the other hand, cultural intelligence has the capability of being extended (generalized) to ethnic and national sub-cultures inside a national culture, therefore local managers can take advantage of it in daily interactions. This research by setting employees of educational and research centers of Agricultural Jihad of Lorestan province as its statistical population is planning to explain the problem whether the participants's cultural intelligence in all four capabilities (meta-cognitive, cognitive, motivational, behavioral) is in a desirable situation, whether the participants's view with respect to each one of cultural intelligence capabilities (meta-cognitive, cognitive, motivational, and behavioral) is different, and also whether the participants's cultural intelligence in the four capabilities (meta-cognitive, cognitive, motivational and behavioral) according to demographical variables (gender, education, job background, age, marital status) is different.

There are two reasons why educational and research centers of Agricultural Jihad of Lorestan province were nominated for this research. First: no research has been carrying on assessing cultural intelligence of employees of these centers yet. Second: these employees's unawareness of the level of their cultural intelligence may cause them to neglect positive benefits of this important capability in more and more realizing organizational goals of these educational and research centers, while awareness of the power of this important capability and effort and encouragement in direction of its promotion could have an effective and useful impact on these centers to achieve their organizational goals.

Cultural Intelligence:

Cultural intelligence concept was put on the table by Early and Ang (2003) two researchers of London business college for the first time. The researchers by publishing the book "Cultural intelligence, individual interactions across cultures" (2003) developed cultural intelligence theory [9]. According to Early and Ang (2003) cultural intelligence is : ability of learning new patterns and offering correct behavioral responses to the patterns [10]. These two researchers believed that encountering new cultural situations one can hardly find familiar signs and signals to enjoy for making communication, so, in such cases, considering present information, one must compile a common cognitive framework, even if the framework does not have a sufficient understanding of local behaviors and norms. Only those with a high level of cultural intelligence are capable of compiling such frameworks. Cultural intelligence is a capability that facilitates the process. The two researchers in another definition have considered cultural intelligence as an individual capability to understand, interpret and act efficiently in situations enjoying cultural diversity and is agreeable with those intelligence concepts that rather know intelligence a cognitive ability [11]. Many researchers have defined cultural intelligence as one's ability to perform his/her duty efficiently I different cultural situations [12 و 13]. Some researchers know this type of intelligence a kind of multilateral merit which contains cultural knowledge, reflective action and a list of behavioral skills [14]. According to Crowne (2008) cultural intelligence is a structure independent from culture which is used in specific cultural situations and improves sense and understanding cross cultural interactions [15]. According to Peterson (2004) cultural intelligence is a novel kind of intelligence which relates greatly to culturally diverse workplaces and is the aptitude to use skills and abilities in different environments [16]. Cultural intelligence is a meta-intelligence including different shapes of intelligence and IQ is just one of them and is people's ability for personal growth through continuation of learning and a better recognition of cultural heritages, costumes and traditions and an efficient behavior with people with different cultural and cognitive background [17].

Dimensions of Cultural Intelligence:

Although for cultural intelligence variable and its aspects there are several definitions and classifications but despite the plurality these definitions there are a lot of overlaps among them. In present survey what the author has in mind relates to Early's definition and classification and Ang's, 2003, of cultural intelligence and its aspects. Because according to many pundits the most comprehensive definition and classification belongs to these two researchers. In Early's opinion and Ang's (2003) cultural intelligence is: the ability to learn new patterns in cultural interactions and giving correct responds to these patterns which are composed of four aspects as follow:

1- Meta-cognitive aspect:

It is a method through which one reasons cross cultural experiences and considers a process people use to understand and acquire cultural knowledge. The cognitive aspect can be divided into two complementary elements of cognitive knowledge and cognitive experience. The cognitive knowledge is the state (quality) of dealing with a knowledge acquired under a diverse situation but meta-cognitive experience means the state of integrating correlated experiences as a lead for future interactions.

2- cognitive aspect:

This aspect of cultural intelligence relates to an individual's recognition (understanding) of cases concerning similarities and differences of cultures that reflects general knowledge about cultures like: information about believes, religious and spiritual believes, values and opinions about career and profession, family relations, costumes and traditions, values, norms and language.

3- Motivational aspect:

This aspect is an expression of one's confidence in the fact that whether he/she is capable of adapting oneself to a new culture and if he/she has a great motive in knowing a new culture. This aspect indicates individual's energy volume and orientation for an effective interaction in the new culture and includes a level in which people both are confident in their own abilities in cross-cultural interactions and enjoy a high level of openness for a good experience with people from other cultures. Also they enjoy a large amount of inner satisfaction resulting from those interactions. Those individuals who have a high motivational aspect in cultural intelligence, act more effectively in cross-cultural interactions and have this strong feeling that they can cope with different attitudes of others and variable and unknown situations and manage uncertainty and complexity but those who, motivationally speaking, have a low cultural intelligence while involving in primary frustration achieving goals, their efficiency expectations drops progressively and find a negative self-image and avoid interaction with others and live in isolation.

4- Behavioral aspect:

This aspect shows an individual's capability to display appropriate verbal and non-verbal actions in an interaction with individuals from different cultures and concentrates on the subject that how people act in new cultural situations. And in fact points to an individual's ability to act appropriately in different cultural situations.

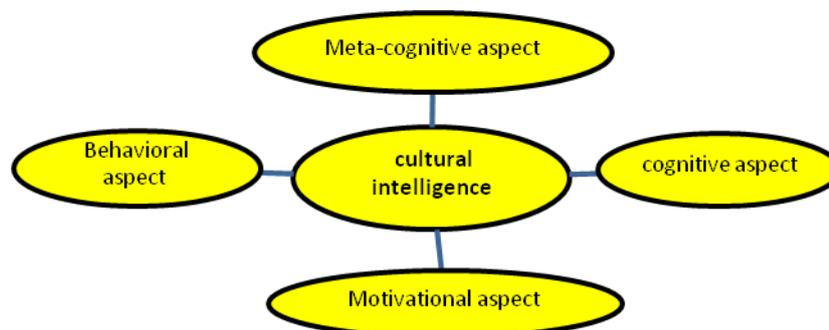


Fig. 1: Dimensions of cultural intelligence

perhaps, one can fit the most important reasons and necessity of understanding cultural intelligence concept in format of fundamental concepts as follow :1- necessity to know and understand globalization phenomenon multilaterally, globalization of culture and global culture 2-necessity of paying attention to cultural pluralism, cultural convergence and importance of correct understanding of cultural differences at the area of organizations and manager's main strategies facing them 3- necessity of reciprocal correlation understanding between culture

and geography (cultural geography), but what is unquestionable is that not only globalization is not a one-dimensional phenomenon but also it is process which is political, economic, social, cultural, ...that as much as it move toward cohesiveness the importance of correct understanding of cultural differences increases [18]. Besides, although cultural intelligence is more directed to the way of interaction with foreign national cultures but it is capable of being generalized to ethnic and national sub-cultures inside a national culture, therefore local managers also can use it in their daily interactions. Considering that modern organizations are open, dynamic, diverse and multi-cultural systems and employees who work at these organizations might belong to various cultures (for example in a country like Iran employees of an organization might belong to an ethic culture like Lori, Kurdish, Turkish, Baluch...) it can be admitted that: cultural intelligence variable is among variables which can be counted as a correlated variable and preparatory to other desirable organizational behaviors such as organizational citizenship behaviors, because cultural intelligence paves the way for employees of organizations to sense and understand what their colleges think and do. And by reducing cross-cultural communicational obstacles, gradually increases voluntary and entrepreneurial co-operations among colleagues and by establishing an appropriate background for demonstration and manifestation of other desirable organizational behaviors, augments organizational efficiency. In this research, cultural intelligence aspects of the participants from education center of Agricultural Jihad of Lorestan province has been tested. Main questions of this research are :

1- Is cultural intelligence of the participants from foregoing organization in the four aspects (meta-cognitive, cognitive, motivational, behavioral) at a desirable condition ?

2- Is there a significant difference among viewpoint of employees of foregoing centers in relation to cultural intelligence aspect ?

3- Is there a significant difference among employees of research and educational centers of Agricultural Jihad of Lorestan province according to age, gender, marital status, education level and job background.

RESEARCH AND DISCUSSIONS

This research is applied (functional) from research goal viewpoint and is descriptive-geodetic from viewpoint of collecting data. The four aspects of cultural intelligence are variables of the research . They are : meta-cognitive, cognitive, motivational and behavioral. Statistical population of the research consists of 108 employees of Agricultural Jihad of Lorestan province. because of limited number of statistical population, all members were investigated. The main tool for collecting information in this research was cultural intelligence standard questionnaire which was developed by Ang et al [19]. Validity and reliability of questionnaire because of its standardization had already been achieved, however some professors and knowledgeable in the field were interviewed to confirm its validity. Also to revise reliability of the questionnaire reliability intersection method and Cronbach's alpha were used. Calculated Spearman's and Cronbach's alpha coefficients, respectively, were 0.80 and 0.92 which is expressive of high desirable reliability of foregoing questionnaire.

Analyzing Data and Research findings:

Demographic characteristics of responses indicate that %87 of the community were men, %13 were women, %96 were married, %4 were single, %38 were Bachelors, %58 were Masters, %4 were PhD graduates, %3 were between 20-30 years old, %22 were 30 -40 years old, %62 were 40-50 years old, %13 were 50-60 years old, %9 had 1-10 years of experience, %52 had 10-20 years of experience, %39 had 20-30 years of experience.

➤ the Answer the first question:

is cultural intelligence of employees of educational and research centers of Agricultural Jihad of Lorestan province in the four aspects of meta-cognitive, cognitive, motivational and behavioral at a desirable condition ?

Results related to T- test are presented in table (1).

Table 1: one sample T- test related to the status of cultural intelligence variables

cultural intelligence & aspects of cultural intelligence	Theoretical average	practical average	mean	sd	T	Sig
Meta-cognitive	3	2/55	-0/444	0/051	-8/68	0/000
cognitive	3	2/86	-0/131	0/057	-2/28	0/024
Motivational	3	3/80	0/805	0/069	11/63	0/000
Behavioral	3	3/52	0/522	0/062	8/38	0/000
cultural intelligence	3	3/20	0/203	0/046	4/36	0/000

p-value < 0.05

In table 1, considering observed t in regard to cultural intelligence variable and behavioral and motivational aspects is greater than the critical value of the table (1.645), and also at the level of p-value<0.05, there is a significant difference between theoretical and empirical means, and empirical mean in all three cases is greater than theoretical mean, therefore, it can be said that cultural intelligence level of participants has been above average and foregoing centers in both motivational and behavioral aspects have had a desirable above-average operation. But, with regards to two cognitive and meta-cognitive aspects, since observed t smaller than critical value of the table (1.645) and at the level of p-value<0.05 there is significant difference between theoretical and empirical average and empirical average in both cases is smaller than theoretical average, therefore, it can be said that foregoing centers in two cognitive and meta-cognitive aspects have had an undesirable below-average operation. Also, the maximum and minimum achieved empirical averages concerning cultural intelligence aspects, respectively, pertain to motivational and meta-cognitive aspects which indicate that foregoing centers have had a more desirable operation concerning motivational aspect.

➤ *the Answer the second question:*

is there a significant difference among views of participants from foregoing enters in relation to cultural intelligence aspects ? Results pertaining to Friedman's test are presented in table (2).

Table 2: Friedman test results regarding the difference between employees' perspective in terms of cultural intelligence variables

cultural intelligence & aspects of CQ			Ranking			
Motivational			3/57			
Behavioral			2/95			
cognitive			2/13			
Meta-cognitive			1/35			

Friedman test =192/126

df = 3

Sig = 0/000

As observed in table to: since statistic value of Friedman's rank test concerning cultural intelligence aspects (meta-cognitive, cognitive, motivational, behavioral) is greater than critical value of the table (9.467), therefore null hypothesis, based on no difference among viewpoints of employees in relation to cultural intelligence aspects, is rejected. So, it can be said that at level of p-value<0.05 there is a significant difference among viewpoints of employees in relation to cultural intelligence aspects. Also, maximum and minimum rank average achieved for cultural intelligence aspects are, respectively, related to motivational and meta-cognitive aspects.

➤ *the Answer the third question:*

Is there a significant difference among cultural intelligence aspects of employees of educational and research centers of Agricultural Jihad of Lorestan province according to variables such as : age, gender, marital status, education level and employment background ?

Table 3: The results of the analysis of the cultural intelligence variables for the experts of the education and research Centers of agricultural jihad on the basis of age

		-30 20	30-40			40-50			50-60					
X		Sd	Se	X	Sd	Se	X	Sd	Se	X	Sd	Se	F	Sig
Meta Cognitive	2/66	1/12	0/650	2/46	0/618	0/128	2/55	0/485	0/059	2/68	0/486	0/125	0/536	0/658
Cognitive	2/72	1/34	0/777	2/89	0/665	0/138	2/81	0/553	0/067	3/10	0/499	0/128	0/995	0/398
Motivational	4/00	1/05	0/611	4/00	0/583	0/121	3/78	0/723	0/088	3/56	0/807	0/208	1/30	0/278
Behavioral	4/46	0/80	0/466	3/56	0/558	0/116	3/57	0/677	0/082	3/24	0/596	0/153	1/13	0/339

p-value < 0.05

According to findings available in table 3, observed (fs) are not significant in regard to all aspects of cultural intelligence (meta-cognitive, cognitive, motivational, behavioral). Therefore it can be said that at level of p-value<0.05 there no significant difference among viewpoints of employees of above-mentioned centers in relation to cultural intelligence aspects according to age class, in other words, the employees age class have not had any influence on their viewpoint in relation to cultural intelligence aspects.

Table 4: he results of the analysis of the cultural intelligence variables for the experts of the education and research Centers of agricultural jihad on the basis of education levels

		Phd	Master			Bachelor							
X		Sd	Se	X	Sd	Se	X	Sd	Se	F	Sig		
Meta -Cognitive	2/50	0/353	0/176	2/52	0/476	0/060	2/60	0/625	0/097	0/342	0/711		
Cognitive	2/83	0/192	0/096	2/79	0/560	0/070	2/97	0/666	0/104	1/14	0/321		
Motivational	4/30	0/757	0/378	3/62	0/761	0/095	4/02	0/564	0/088	5/21	0/007		
Behavioral	4/30	0/871	0/435	3/38	0/654	0/082	3/65	0/542	0/084	5/52	0/005		

p-value < 0.05

According to the findings available in table (4) observed (f)s are significant only in regard to two aspects of motivational and behavioral at level of p-value<0.05. so, it can be said that there is a significant difference among viewpoint of employees of foregoing centers in relation to cultural intelligence aspects according to level of education .Tukey's test results in order for pairwise comparison of mean difference of scores related to motivational and behavioral aspects according to level of education are presented in tables (5) and (6).

Table 5: Paired comparison of mean scores of components in terms of Motivational on the basis of education level (*Tukey's test*)

education level		Mean			Error			Sig
Master- Bachelor		0/400			0/139			0/013
Phd- Bachelor		0/270			0/362			0/737
Phd- Master		0/671			0/357			0/150

p-value < 0.05

Based on tukey's test results available in table (5) mean difference of scores related to motivational aspects of employees having a BA or MA, at level of p-value<0.05 is significant in the manner that maximum mean relates to employees holding a BA and minimum value refers to employees with an MA.

Table 6: Paired comparison of mean scores of components in terms of Behavioral on the basis of education level (*Tukey's test*)

education level		Mean			Error			Sig
Master- Bachelor		0/226			0/124			0/088
Phd- Bachelor		-0/646			0/325			0/121
Phd- Master		-0/912			0/320			0/015

p-value < 0.05

According to tukey's test results available in table (6), mean difference of scores related to behavioral aspect of employees having a MA or PhD is significant at level of p-value<0.05, in the manner that maximum mean relates to employees having a PhD and minimum value relates to employees having an MA.

Table 7: cultural intelligence components variance analysis outcome based on work experience

		1-10		10-20		20-30							
X		Sd	Se	X	Sd	Se	X	Sd	Se	F	Sig		
Meta -Cognitive	2/55	0/814	0/257	2/44	0/499	0/066	2/70	0/464	0/071	3/128	0/048		
Cognitive	2/83	0/993	0/314	2/78	0/480	0/064	2/98	0/617	0/095	1/312	0/274		
Motivational	4/28	0/640	0/202	3/79	0/716	0/095	3/70	0/712	0/109	2/635	0/076		
Behavioral	3/74	0/533	0/168	3/54	0/667	0/089	3/44	0/643	0/099	0/908	0/407		

p-value < 0.05

According to findings available in table (7), observed (f)s are significant only in regard to meta-cognitive aspect at the level of p-value<0.05. Therefore, it can be said that there is a significant difference among views of participants from foregoing centers in relation to cultural intelligence aspects according to job background. Tukey's test results in order for pairwise comparison of mean difference of scores concerning meta-cognitive aspect according to job record are available in table (8).

Table 8: Paired comparison of mean scores of components in terms of Meta -Cognitive on the basis of work experience (*Tukey's test*)

work experience		Mean			Error			Sig
1-10 - 10-20		0/108			0/179			0/819
1-10 - 20-30		-0/158			0/183			0/665
10-20 - 20-30		-0/226			0/106			0/037

p-value < 0.05

Based on tukey's test results available in table (8) mean difference of scores related to meta-cognitive aspect of employees with 10-20 and 20-30 years of job background at level of $p\text{-value} < 0.05$ is significant in the manner that maximum mean relates to employees with 20-30 years of job record and minimum mean relates to employees with 10-20 years of job record.

Table 9: cultural intelligence components variance analysis outcome based on gender

X		Man	Woman			Se	F	Sig
		Sd	Se	X	Sd			
Meta -Cognitive	2/57	0/511	0/052	2/40	0/665	0/184	1/20	0/275
Cognitive	2/87	0/582	0/059	2/84	0/724	0/201	0/021	0/885
Motivational	3/72	0/721	0/073	4/38	0/360	0/099	10/41	0/002

$p\text{-value} < 0.05$

According to findings available in table (9) observed (f)s are significant only concerning two aspects of motivational and behavioral at level of $p\text{-value} < 0.05$. therefore it can be said that there is a significant difference among viewpoints of employees of foregoing centers in relation to cultural intelligence aspects according to gender in a way that in both aspects maximum mean relates to female employees and minimum value relates to male employees.

Table 10: cultural intelligence components variance analysis outcome based on marital status

X		Married	Single			Se	F	Sig
		Sd	Se	X	Sd			
Meta -Cognitive	2/55	0/518	0/050	2/62	0/924	0/462	0/070	0/792
Cognitive	2/87	0/578	0/056	2/79	1/10	0/554	0/069	0/794
Motivational	3/80	0/717	0/070	3/95	0/869	0/434	0/166	0/648
Behavioral	3/52	0/649	0/063	3/55	0/680	0/340	0/008	0/931

$p\text{-value} < 0.05$

According to findings available in table (10), observed (f)s concerning all cultural intelligence aspects (cognitive, meta-cognitive, motivational, behavioral) are not significant. Therefore, it can be said that at the level of $p\text{-value} < 0.05$ there is no significant difference among viewpoints of employees of foregoing centers in relation to cultural intelligence aspects according to marital status, in other words, marital status of participants had no influence on their viewpoints regarding cultural intelligence aspects.

Table 11: orrelation coefficient matrix between cultural intelligence aspects

	Meta cognitive	Cognitive	Motivational	Behavioral
Meta -Cognitive	-	*0/779	0/153	143
Cognitive	*0/779	-	*0/324	*0/375
Motivational	0/153	*0/324	-	*0/866
Behavioral	0/143	*0/375	*0/866	-

$p\text{-value} < 0.01$

In table (11) correlation coefficient matrix among cultural intelligence aspects are shown. According to findings of the table, it can be said that at level of $p\text{-value} < 0.05$ there is a direct and significant correlation between meta-cognitive and cognitive aspects, cognitive and motivational and behavioral, and also motivational and behavioral aspects, also all aspects of cultural intelligence have a direct and significant correlation with cognitive aspect.

conclusion and Discussion and offering suggestions:

Findings of the research indicate that cultural intelligence of employees from educational and research centers of Agricultural Jihad with an average of 3.20 is greater than mean level in the manner that in two aspects of motivational and behavioral they acquired averages above mean level ; but, as for meta-cognitive and cognitive aspects this value is below mean level which in turn is an indication of present undesirable condition of the two aspects in above-mentioned centers. Achieving this value, less than mean level, could be resulted from employees 's lack of awareness of their present cultural intelligence condition and its positive benefits in efficacy and life of their organization. Based on results of Friedman's rank test there is a significant difference among viewpoints of employees of educational and research centers in relation to cultural intelligence aspects, in the manner that maximum and minimum achieved rank averages are, respectively, allocated to motivational and meta-cognitive aspects. Findings derived from analysis of variances (f test) also showed that there is a significant difference among viewpoint of employees of foregoing centers in relation to cultural intelligence

aspects according to demographical variables such as gender, education level, job background except for age and marital status and this indicates that cultural intelligence of employees from centers which are under discussion cannot be judged based on these two aspects. Results achieved from this research only in two aspects of motivational and behavioral agree with research results of), Imai's [20], von drill's (2008) [21], Rhim nia's, Mortazavi's and Delaram's (2009) [22]. Difference of results in the present research most probably refers to differences in statistical population, type of organizational culture, and also differences in spatiotemporal realm of performing the research and cultural differences ruling statistical population under discussion. Considering the results achieved from Friedman's rank test and maximum and minimum rank average concerning cultural intelligence aspects which, respectively, are set aside for motivational and meta-cognitive aspects, the results resulted from this analysis in Rahiminia's, Mortazavi's and Delaram's (2009) also do not agree with meta-cognitive aspect. These differences might have been shaped under the influence of different cultural viewpoints dominating the atmosphere of the organization under discussion. Also, results derived from analysis of variances, do not agree with other similar researches, these differences in results could be resulted from their different understanding of cultural similarities and differences. Based on results of correlation coefficient matrix it was determined that there is a direct and significant relation among cultural intelligence aspects at the level of $p\text{-value} < 0.01$. Also all these aspects had a direct and significant relationship with cognitive aspect. In author's opinion not only the existence of such relationship is not strange and farfetched but the importance of this part of findings is that based on them it could be claimed that promoting each aspect of cultural intelligence aspects especially cognitive aspect will affect other aspects and will create a desirable atmosphere to promote cultural intelligence and in turn other desirable organizational behaviors such as organizational citizenship. It should be kept in mind that no comparison between this research with those done overseas could be realistic because there are spatiotemporal differences between contexts of the researches that cannot easily be ignored.

This research has been done inside IRAN's territory and among domestic cultures and sub-cultures but Ang's et al (2007) [23] and Von dyn's (2005) [24] have been done in USA and among different nationalities. so, one should not expect to deduct applied recommendations by making comparisons. However, in author's opinion the higher cultural intelligence of employees is and the more information they have about culture of each other and the more they are familiar with one another's values, believes, material and spiritual believes, language, reasoning style, practice style, economic systems, juridical system, arts and handcrafts, verbal and non-verbal behaviors (cognitive aspect), the better they understand one another and therefore the more they are inclined to become agreeable and socialized in workplace (motivational aspect), and in turn the more will be helping one another (humanism) and co-operation in social life of organization (good temper), sensitivity toward functional destiny of the colleague and the influence of personal measures on their functional life (courtesy) toleration of difficult situations when not deliberate (endurance), because fear of unknown is a human quality, some face it and try by intuition, education and experience mechanisms discover the unknown and gaining more knowledge conquer the world and some other run away from it and live in isolation. In a multi-cultural workplace also with different cultures and sub-cultures and a low cultural intelligence, it is obvious that employees act overcautiously and make less contacts with one another and therefore their inclination to show voluntary ultra-role activity such as organizational citizenship behavior will diminish, while if using formal and informal trainings, establishing more interactions in formal and informal groups at workplace and...this fear is shattered and most prejudgements and personal judgements concerning others' culture and character is dismissed and awareness about culture, language, religion of one another increases, while employees be more enthusiastic to acquire cultural knowledge and use it at workplace to confirm its verification (meta-cognitive aspect), also spontaneously they be more friendly, kinder, politer, more tolerant and duteous to one another. Maybe the best way to break this fear and promote cultural intelligence aspects is to construct sub-structures and a suitable atmosphere to inform employees of research and educational centers of Agricultural Jihad of Lorestan province of their present status of cultural intelligence and positive benefits of such behaviors in efficacy and life of the organization through holding classes and educational workshops using photos, images and posters throughout the organization. The technique presented in research of Taslimi et al, as techniques of promoting cultural intelligence, stresses on of educational need assessment, I.e awareness of present status of cultural intelligence and organizational citizenship behavior and informing about that situation and performing programs to promote and improve present status of those two variables. In other researches also, in direction of promoting cultural intelligence following methods have been stressed: educational methods conforming logic, analogical deduction, thinking per se. But in the centers under study, using extra-organizational-extraterritorial missions, teaching foreign languages for openness in gaining experience is helpful. Using this parameter in above-mentioned centers is important because it is important to be familiar with top technologies throughout the world concerning agricultural tools and techniques and be familiar with improvement of plants naturalization of those sciences and spreading it across the country, province and organization to improve principles and methods of agriculture and improving productivity of products and also enjoying a comprehensive geographic information system. since a remarkable part of cultural intelligence capabilities are acquired, educational centers of

Agricultural Jihad of Lorestan province can have a special position in promoting those abilities in their organization.

Also, they can enjoy this scale to evaluate operation of their employees which finally results in double efficacy and efficiency. In regard to promoting cultural intelligence of employees especially in two aspects of meta-cognitive and cognitive which were below mean level foregoing centers can use following methods :

a) providing employees with suitable backgrounds to achieve better and more knowledge of national culture and urban sub-cultures through holding educational classes and workshops in this field and dispatch of employees to extra-organizational missions in different parts of the country.

b) providing employees with suitable backgrounds to a better recognition of language and culture of other countries in all fields of political, economic, social, cultural, religious, legal ...especially research and educational in agricultural field which is in a direct relationship with their functional field in educational and research centers of Agricultural Jihad that raise their awareness level of the universal the state of the art technologies and encourage them to naturalize this kind of technology in their centers.

c) Teaching foreign languages along with suitable investments to teach them.

d) Using multimedia including radio, T V, internet in order to promote cognitive aspect of cultural intelligence.

e) To fit long term (at least one year) extraterritorial extra-organizational missions into employees schedule.

f) Holding face-to-face and virtual classes and workshops in regard to foreign languages

(at least one international language) through virtual systems, email and education from long distance.

g) Hiring knowledgeable expert human resources having a good command of foreign languages (at least one international language) beside other skills necessary for the organization.

h) Using simulation practices in regard to a special workplace with different cultures and sub-cultures in order to assessing tensions resulted from cultural shock and evaluation of tolerance threshold of employees and the way of encountering a new situation and also help to socialize in such different cultural textures.

i) Since meta-cognitive aspect of cultural intelligence concentrate on a process people use of understanding and cultural knowledge (like paying attention to what is obvious from behavior of people or awareness about feelings and sentiments ideas and opinions) therefore centers under the study in order to promote the level of meta-cognitive aspect of cultural intelligence, should use those educational methods which stress on learning styles and analogical reasoning.

Recommendations for future study:

1- construction and normalization of a valid and reliable tool to measure cultural intelligence of employees conforming local characteristics and the culture ruling governmental and non-governmental organizations.

2- investigating the relation between cultural intelligence with other variables like : organizational citizenship behavior.

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