

## ***The relationship between cultural intelligence and achievement: a case study in an Iranian company***

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### **Abstract:**

Cultural diversities can be considered as a treat as well as an opportunity which increasingly has effects on success of those organizations that are working in world scale. Previous studies in this relation have been focused on intercultural or cultural values that do not provide for managers recognition of the needed competencies to success. In this research, through studying a new multidimensional construct of cultural intelligence, which contains both cognitive and behavioral dimensions, we have considered its relation with the achievement need of the managers. 78 middle and high managers of an Iranian company working energy are chosen and the results show a high correlation between cultural intelligence and its different dimensions including CQ of knowledge, strategy, motivation and behavior with the achievement need motif of the managers who have been studied".

### **Keywords:**

Cultural intelligence, Achievement need, Multicultural workplace

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## **Introduction**

Over the last decade, globalization has overwhelmed an increasing number of researchers, challenging them to rethink basic paradigms on what characteristics can be needed to succeed managers. As the world is shrinking through globalization, more and more people live and work in foreign countries and thus they continually come into contact with the people coming from much diversified cultural origins, involving language, norms, lifestyle, etc. (Zakaria, 2000; Montagliani and Giacalone, 1998). Improvement and management of the people on a global scale inevitably requires dealing with cultural diversity and the problems regarding this – matters of motivation, leadership, productivity, authority, etc. (Higgs, 1996; Selmer, 2002). On this point, it can be said that the fact of cultural diversity in all organizations, ignoring national boundaries in aspect of the field of activity, possesses greater significance and meaning in comparison with domestic organizations. On the other hand, it is seen that a lot of research has been conducted, particularly in recent years, related to the dimensions of values involving business and the need to know how cultural variety in the organizational concept should be managed. However, the research brings in the different perspectives apart from each other and hence a lack of implicit agreement.

As is seen, various elements have been focused on in the texts and the fact of cultural diversity emerging from the multinational business workforce structure, particularly with globalization, gets organizations to come across with positive and/or negative conclusions brought on by this diversity. Most organizations face externally and internally imposed standards of hiring and promotion, workplace conditions, and, in some cases, training in understanding differences. The answer to the question of how this diversity should be managed cannot be given easily.

In order to respond effectively with dynamics of cultural change, we propose a new approach based on cultural intelligence (CQ) construct and examine its relationship with achievement need. CQ introduces a comprehensive framework that can be solving problems of prior approaches in studying of multicultural situations, because it encompasses both cognitive and behavioral aspects. We believe that managers with high CQ have a higher achievement need and harder attempt to adapt effectively with different value systems and cultures in every local market.

CQ have significant relationship with achievement needs.

Metacognitive CQ have significant relationship with achievement needs.

Cognitive CQ have significant relationship with achievement needs.

Motivational CQ have significant relationship with achievement needs.

Behavioral CQ have significant relationship with achievement needs.

## **2. Theoretical framework**

### **2.1. Cultural intelligence and its dimensions**

Cultural intelligence (CQ), defined as an individual's capability to function and manage effectively in culturally diverse settings, is consistent with Schmidt and Hunter's (2000) definition of general intelligence as 'the ability to grasp and reason correctly with abstractions (concepts) and solve problems.' Although early research tended to view intelligence narrowly as the ability to solve problems in academic settings, there is now increasing consensus that intelligence may be displayed in places other than the classroom (Sternberg and Detterman, 1986). This growing interest in 'real world' intelligence includes intelligence that focuses on specific content domains such as social intelligence (Thorndike and Stein, 1937), emotional intelligence (Mayer et al., 2000) and practical intelligence (Sternberg et al., 2000). CQ acknowledges the practical realities of globalization (Earley and Ang, 2003) and focuses on a specific domain – intercultural settings. Thus, following Schmidt and Hunter's (2000) definition of general intelligence, CQ is a specific form of intelligence focused on capabilities to grasp reason and behave effectively in situations characterized by cultural diversity. CQ proposes insights about required individual capabilities to cope with cross-cultural conditions and make effective communications. CQ is a state-like individual difference that describes an individual's malleable capability to deal effectively with people from other cultures (Ang et al, 2006; Ng & Earley, 2006). A person with high CQ recognizes behavioral features of unfamiliar people and groups and responds to them favorably. Thus, cultural intelligence redounds to develop a good working relationship (Triandis, 2006).

Earley and Ang (2003) conceptualized CQ as comprising metacognitive, cognitive, motivational and behavioural dimensions with specific relevance to functioning in culturally diverse Cultural Intelligence settings. Metacognitive CQ reflects mental processes that individuals use to acquire and understand cultural knowledge, including knowledge of and

control over individual thought processes (Flavell, 1979) relating to culture. Relevant capabilities include planning, monitoring and revising mental models of cultural norms for countries or groups of people. Those with high metacognitive CQ are consciously aware of others' cultural preferences before and during interactions. They also question cultural assumptions and adjust their mental models during and after interactions (Brislin et al., 2006; Triandis, 2006).

While metacognitive CQ focuses on higher-order cognitive processes, cognitive CQ reflects knowledge of the norms, practices and conventions in different cultures acquired from education and personal experiences. This includes knowledge of the economic, legal and social systems of different cultures and subcultures (Triandis, 1994) and knowledge of basic frameworks of cultural values (e.g., Hofstede, 2001). Those with high cognitive CQ understand similarities and differences across cultures (Brislin et al., 2006).

Motivational CQ reflects the capability to direct attention and energy toward learning about and functioning in situations characterized by cultural differences. Kanfer and Heggestad (1997, p. 39) argued that such motivational capacities 'provide agentic control of affect, cognition and behavior that facilitate goal accomplishment.' According to the expectancy-value theory of motivation (DeNisi and Pritchard, 2006), the direction and magnitude of energy channeled toward a particular task involves two elements – expectations of success and value of success. Those with high motivational CQ direct attention and energy toward cross-cultural situations based on intrinsic interest (Deci and Ryan, 1985) and confidence in their cross-cultural effectiveness (Bandura, 2002).

Behavioral CQ reflects the capability to exhibit appropriate verbal and nonverbal actions when interacting with people from different cultures. As Hall (1959) emphasized, mental capabilities for cultural understanding and motivation must be complemented with the ability to exhibit appropriate verbal and nonverbal actions, based on cultural values of specific settings. This includes having a wide and flexible repertoire of behaviors. Those with high behavioral CQ exhibit situationally appropriate behaviors based on their broad range of verbal and nonverbal capabilities, such as exhibiting culturally appropriate words, tone, gestures and facial expressions (Gudykunst et al., 1988).

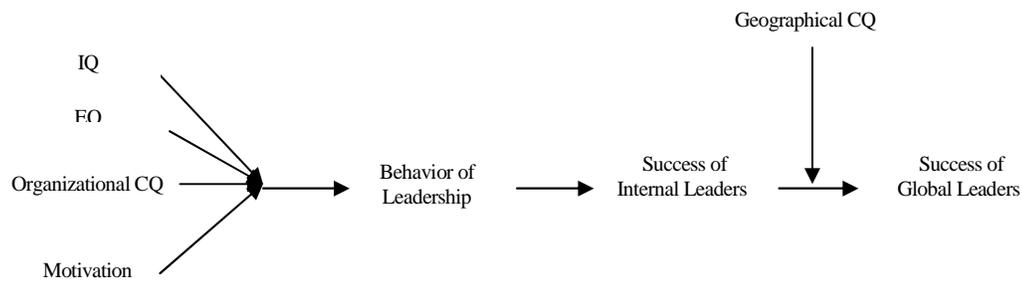


Figure1: Higgins&amp;Alon 2005

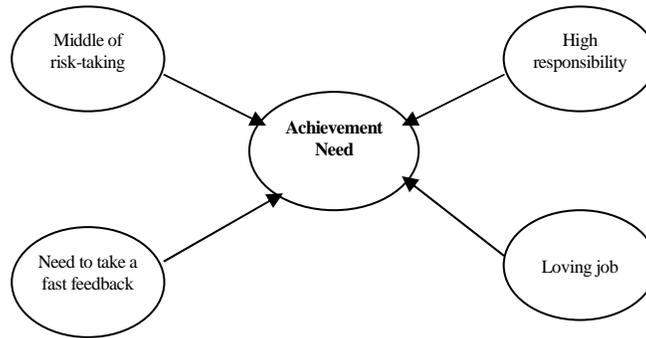
Whereas CQ is a new and growing construct, limited studies accomplished about it. Nonetheless, all of these researches confirm importance and proficiency of CQ in work environments. Earley and Peterson (2003) recognized cultural intelligence as a new approach to intercultural training for the global manager. They believe most important weakness in prior approaches is this assumption that all individuals need a similar exposure and training regime and CQ approach provides a guide for assessing a manager's specific competencies to provide training in every specific area. Earley and Mosakowski (2004) offered a six-profiles framework included provincial, analyst, natural, ambassador, mimic, chameleon to identify managers bases on CQ capacities. In another study, found out evidence that level of team member CQ predicts intragroup trust, cohesion, and performance for the multinational team (Moynihan et al, 2006). Linkages between CQ and other sociological construct such as decision-making, cultural adaptation and cultural judgment is confirmed too (Ang et al, 2007).

Cultural intelligence have an important distinct with other intelligences. Intelligence quotient (IQ), emotional intelligence (EQ), and social intelligence (SQ), are more a cognitive ability (Salovey and Mayer 1990; Dulewicz & Higgs, 1999; Jones & Schneider, 2006), while CQ is a multifacets construct.

## 2.2. Achievement motivation

In a review of research on human motives, McClelland, Koestner, and Weinberger (1989) drew an important description about modes of motivational functioning. According to these theorists, motives refer to enduring preferences or needs (e.g., the need to achieve) for the attainment

of certain classes of desired goal states (e.g., doing something better). These motives are triggered automatically by incentives (e.g., mastering a challenging task) intrinsic to performing an activity and influence a persons behavior (e.g., how much effort a person puts into a given task) without a great deal of deliberative thought.



**Figure2: Achievement Need Model**

(Moorhead&Griffin,1969)

In achievement studies, the dependent variable motivation is often equated with the expenditure of mental effort and is accordingly measured with performance indices reflecting speed on a task (Thomas, 1983). As McClelland (1980, 1985) stated, effortful performance qualifies as an indicator of “operant” or spontaneous achievement behavior, provided that the amount of energy a person invests in a given task is left to his or her own initiative. Accordingly, implicit needs to achieve have been suggested and found to predict energetic persistence in effort-sensitive tasks (Biernat, 1989). In keeping with this view, in our present study we considered participants\_ processing speed in the mental concentration test as a measure reflecting the intensity of spontaneous (or self-initiated) effort. Yet, because individuals may differ greatly with respect to their general response speed (Fazio, 1990), we controlled in our statistical analyses of this criterion measure (test performance) individual differences in baseline latencies. Moreover, after they had completed the experimental tasks, participants were asked to indicate on a number of self-report items how much they had enjoyed performing these tasks. In this way, we obtained one further dependent variable (task enjoyment) reflecting participants\_ conscious

appraisals of how much they had liked (or disliked) working on the test tasks. According to McClelland (1980, 1985), such judgments qualify as indicators of “respondent” or deliberate achievement behavior and should therefore be predicted by measures of self-attributed achievement motivation.

### **3. Methodology**

A correlational approach was used to investigate relationship between cultural intelligence and achievement. This approach was selected for logical reasons. The survey method offered a cost-effective means of collecting cultural data on very varied samples. This design was considered a good starting point for an exploratory research into the cultural intelligence-need theories relationship.

#### **3.1. The study**

In this study a sample of 78 middle and top managers, were selected from companies that activated in Iran oil and gas industry. Each manager had at least ten subordinates working for him or her and had several international interaction experiences. Participants were had held a management experience for a minimum of 5 years in your job. The participants included 22 women (28 percent) and 56 men. The samples’ ages ranged from 29 to 68, with a median age of 43. All of the participants held college degrees, with two holding advanced degrees. 45 of the 78 had formal college preparation for international business. Thirty nine managers had early international exposure, traveling as children with their families or as foreign exchange students. The fields of participant employment were: organizational development, technology, finance, manufacturing, human resource development, education, technology development, leisure and entertainment, customer service, purchasing, and communications.

#### **3.2. Measures**

Participants provided information about their cultural intelligence by completing the Cultural Quotient Scale (CQS). The CQS is a 20 item self-report instrument designed to measure of the main features of cultural intelligence using a seven-point scale for each item(ranging from 1=strongly disagree to 7= strongly agree).

The CQS is included four subscales:

- Participants who score high on the CQ- metacognitive scale are likely conscious of your cultural knowledge and check and adjust its.
- Those asserting high on the CQ-cognitive, know ingredients of other cultures such as legal systems, religious beliefs, arts and rules.
- Those with high scores on the CQ-motivational enjoy interacting with other cultures and have self-confidence.
- Participants with high CQ-behavioral scores can change your verbal and non-verbal behaviors consist with situational requirements.

In earlier studies, internal consistency of the CQS was reported high and Cronbach' alpha coefficients were above of 0/7 across all the subscales (Ang et al, 2004; Ang et al, 2007).

In presenting the achievement to the participants, we closely followed the procedure described in Greenwald et al. (1998). The target discrimination was Me vs. Others, and the attribute discrimination was successful vs. not successful. We used successful vs. not successful as attribute labels because these categories are strongly associated with competent performance within achievement-related contexts. In sum, Managers were asked to indicate the extent to which the same adjectives as those displayed as attribute items in the achievement motivation were true of them, using the 5-point response scale including 16-items.

#### **4.Results**

Internal consistency reliability is the accuracy or precision of a measuring instrument, which is the extent of uni-dimensionality, i.e. the detailed items (questions) measure the same thing (Hong & Kim, 2002; Straub, 1989). The internal consistency reliability was assessed by calculating Cronbach's alpha values. The reliability results of the constructs ranged from 0.7722 (for CQ-motivational) to 0.8591 (for achievement need), which were above the acceptable threshold (0.70) (Nunnally & Bernstein, 1994).

Table 1 reports descriptive statistics including means and standard deviation for samples. In current study, the means of CQS and achievement scores are higher than previously reported in the literature and standards deviations are slightly lower (Greenwald,2002 ; Ang et al,2007).

Table 1: Means and standard deviations for variables included in the study

	M	SD
TOTAL CQ	6.01	.31
METACOGNITIVE CQ	6.00	.45
COGNITIVE CQ	5.95	.44
MOTIVATIONAL CQ	6.05	.46
BEHAVIORAL CQ	6.01	.40
ACHIEVEMENT	4.02	.31
NOTES: N = 78		

Table 2, which present the correlations of each of the eleven items. Pearson correlation matrix reveals that cultural intelligence and their dimensions are all significantly and highly correlated with achievement. . It was predicted there would be a positive relationship between total CQ and achievement need. According to table 2, hypotheses were supported. Strong positive correlation was found between total CQ and achievement ( $r=0/604$ ,  $p<0/01$ ). Also was found Strong positive relationship between all dimensions of CQ and achievement. Correlations among different dimensions of CQ were supported except for metacognitive CQ and motivational CQ with behavioral CQ.

Table 2: Intercorrelations for the variables included in the study

		Correlations					
		cognitive	metacognitive	motivational	behavioral	totalcq	achievem
cognitive	Pearson Correlation	1	.420**	.510**	.302**	.798**	.514**
	Sig. (2-tailed)	.	.000	.000	.007	.000	.000
	N	78	78	78	78	78	78
metacognitive	Pearson Correlation	.420**	1	.381**	.137	.700**	.524**
	Sig. (2-tailed)	.000	.	.001	.232	.000	.000
	N	78	78	78	78	78	78
motivational	Pearson Correlation	.510**	.381**	1	.185	.753**	.394**
	Sig. (2-tailed)	.000	.001	.	.105	.000	.000
	N	78	78	78	78	78	78
behavioral	Pearson Correlation	.302**	.137	.185	1	.552**	.255*
	Sig. (2-tailed)	.007	.232	.105	.	.000	.024
	N	78	78	78	78	78	78
totalcq	Pearson Correlation	.798**	.700**	.753**	.552**	1	.604**
	Sig. (2-tailed)	.000	.000	.000	.000	.	.000
	N	78	78	78	78	78	78
achievem	Pearson Correlation	.514**	.524**	.394**	.255*	.604**	1
	Sig. (2-tailed)	.000	.000	.000	.024	.000	.
	N	78	78	78	78	78	78

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

### 5. Conclusions

The current paper examines the relationship between CQ and achievement need in Iran gas and oil industry. We review literature and its

roles in the effective management, especially in intercultural interactions. Then we use CQS, a recently valid and reliable scale developed by “Cultural Intelligence Center” for assessing cultural intelligence capabilities and McClelland questionnaire for evaluating achievement need of participants. The most finding of this paper is recognition of CQ as leadership critical success factor in multicultural environments. The results provide some evidences to support links between CQ and achievement need. Furthermore, it shows Leaders, who have higher CQ, probably have more achievement need than the others. Already, role of IQ and EQ was specified, but these two capabilities are lack of cultural context and act similar in domestic and international environments. When we studied job file of some participants, we have muse. We find managers, who were considered, as successful manager in your assignments and were shown more CQ capabilities, but their IQ or EQ test results was average or even low. This point is very important, because rely to special intelligence and neglect others, can be misleading. Moreover it seen CQ is more determinant than other intelligences in successful leadership in divers culturally contexts and better justifies why some leaders act effective and cannot others.

With respect to CQ plays an importance role in effective management, it should be considered in human resource management policies. Organizations can use CQ test as a quality criteria to appoint managers to intercultural assignment. This policy prevents from innumerable costs to cultivate CQ abilities. However, CQ is assuasive and organizations can develop programs to improve this ability. There are some offered programs to enhance CQ such as a six steps mandate provided by Early & Mosalofski (2004). It should be stressed that developing effective leaders is not limited to human resource department; rather entire organization is responsible (Alon & Higgins, 2005).

This study certainly has limitations. First, CQ is a new construct. Thus, there has been a little research about it and its measures. The lean body of literature may be influenced validation and reliability of CQ. This limitation addressed to produce most of relevant literature. Second, samples were only selected a few countries. It could be argue that the results are not generalizable to other countries. Nonetheless, the results of this paper were comparable with other studies accomplished in various cultures.

Despite of above limitations, current paper pave the way for further researches and present an excellent studying field. Linking between CQ and achievement can be discussed same other kinds of intelligence and even

more. It should be consider that CQ firstly need to comprehensive scales able to measure all sides of this deep construct. These scales can be different for every country or every culture respect to their special features.

Finally, we believe CQ is not limited to international interactions, rather encompassed national subcultures communications and organizational cultures. Culturally viewpoint, some countries and organizations considered as a small world and cultural intelligence approach can help them to act more effective and properly.

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