

Does Cultural Intelligence Influence Management Effectiveness and Conflict Management Styles of University Managers?

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Abstract

The presented study aims to investigate the impact of cultural intelligence on management effectiveness and conflict management styles. The target population of this research includes all senior managers of universities and higher education institutions in Urmia. The nature of the study requires the use of a descriptive-correlational research method. Findings of the study show that there is a significant relationship between cultural intelligence and management effectiveness. Results of stepwise regression analysis show that components of cultural intelligence allow for predicting the avoidance style. Moreover, among the components of cultural intelligence only the metacognitive cultural intelligence allows for predicting management effectiveness.

Keywords: cultural intelligence, cultural intelligence components, management effectiveness, conflict management

1. Introduction

In the 21st century, when the world has been experiencing globalization and emergence of communication technology, cultural intelligence has been conceived. The question behind the idea of cultural intelligence is: why do some but not other individuals easily and effectively adapt their views and behaviors cross culturally? (Van Dyne, Ang, & Livermore, 2010). Cultural intelligence refers to the talent to apply skills and abilities in different environments (Peterson, 2004). It is often believed that cultural intelligence consists of four components: metacognitive, cognitive, motivational, and behavioral cultural intelligences. High cultural

intelligence requires unity and application of the four components composing cultural intelligence (Ang et al., 2004). Cognitive cultural intelligence is an individual's cultural knowledge of norms, practices and conventions in different cultural settings. Triandis (1994) suggests that cognitive cultural intelligence shows knowledge of cultural universals and cultural differences. Motivational cultural intelligence can be defined as an individual's ability to direct attention and energy toward cultural differences. According to Early and Ang (2003), there are two general motivational frameworks used for the understanding the motivational component: self-efficacy and self-consistency. Self-efficacy is an important and inclusive human mechanism which controls human performance through cognitive, motivational, emotional and decision making processes (Ang et al., 2007, 44). Behavioral cultural intelligence is the practical aspect of this concept (Early & Ang, 2003; Early et al., 2006), which includes an individual's ability to adapt appropriate verbal and nonverbal behaviors when he/she interacts with people from different cultures (Ang et al., 2004).

Management is the science and art of organizing the activities of an organization in accordance with clear policies in order to achieve the pre-established objectives and one of the important concepts of management science is effectiveness, based on which many organizations evaluate their function. Peter Drucker (1964) regards effectiveness as doing the right things. He reminds us that effectiveness can and must be learned (Peter Drucker, 2006). The system resource model, developed by Seashore and Yuchtman (1967), defines organizational effectiveness through the survival of the organization, "the ability to exploit its environment in the acquisition of scarce and valued resources to sustain its functioning" (p. 393).

Hoy and Miskel refer to conflict as being a source of positive change and necessary for authentic involvement, empowerment and democracy (Hoy & Miskel, 2008). Furthermore, cultural differences lead to misunderstanding, which leads to conflict, low morale, and lack of productivity in work settings (Levy-Leboyer, 2004). Certainly, it is not possible to manage such organizations which have potentials to create conflict, without having the appropriate strategies to resolve conflicts. Conflict management is the long-term management of conflicts. Putnam and Wilson (1982) identified three styles of conflict management: solution-oriented, avoidance, and control style. Putnam and Wilson (1982) stated that avoidance strategies manage conflict indirectly, by either simply avoiding disagreements or by minimizing controversial issues. Solution-oriented strategies manage conflict both by searching for creative, integrative solutions and by making compromises. Control strategies manage conflict by arguing persistently for their positions and using nonverbal messages to emphasize demands.

University managers have to work and interact with students and professors who have different cultures and ethnic backgrounds. In order to do this effectively, they should possess cultural intelligence. It is believed that it influences other organizational behaviors. Therefore, the presented study aims to investigate the impact of cultural intelligence on management effectiveness and conflict management styles. Deng and Gibson (2008) tried to investigate the importance and implementation of cultural intelligence (CQ) as a key component of cross-cultural leadership capabilities within the context of Western–Chinese cultural differences. The study confirmed that expatriate leaders' CQ can positively impact on their cross-cultural leadership effectiveness. In a study, Ramirez (2010) suggested a 2X2 factorial design test to find out if cultural intelligence levels predict the appropriate conflict resolution strategy adoption, thus the conflict resolution ability. The 2X2 factorial test is used to measure high/low cultural intelligence and strong/weak conflict resolution ability.

2. Methodology

The target population of this research includes all senior managers of universities in Urmia; 263 managers were selected as the study sample due to the limited volume of statistical population. A survey instrument (questionnaire) used in the study contained three essential sections. The first section contained the cultural intelligence scale, a 20-item scale developed by Ang et al. (2007), which consists of positively worded question items: “four metacognitive, six cognitive, five motivational, and five behavior” (p. 344). The Cronbach alpha coefficient of reliability of the whole scale was satisfactory ($\alpha = 0.74$). The second section contained the standardized questionnaire of conflict management styles which had been designed based on the viewpoint of Putnam and Wilson. Putnam and Wilson (1982) developed the Organizational Communication Conflict Instrument. This measure consists of 35 items designed to assess communicative choices in conflict within organizations. Initially, items were based on the five-category Blake and Mouton scheme but as a result of factor analysis they were later grouped in three subscales: (1) avoidance, (2) solution-orientation, and (3) control. Reliabilities of the subscales were relatively high (alphas ranging from .82 to .93), the Cronbach alpha coefficient of the reliability of the whole scale was determined as $\alpha = 0.85$. Final part of the survey was the management effectiveness scale developed based on the viewpoint of Zimmermann et al. (2007). They assessed five functions of the POSDCORB management tasks: planning, organizing, directing, staffing and

coordinating. It contained 20 questions, four questions for each of the functions. The respondents were asked to grade on a scale from 0 to 4. Reliability was established by means of Cronbach's alpha and the value was 0.95, which shows that the reliability of the scale is acceptable. In this study, descriptive and inferential statistics (Pearson's correlation coefficient and stepwise regression analysis and ANOVA test) were used to analyze data.

3. Results

H1. There is a significant relationship between the managers' cultural intelligence and management effectiveness.

1-1. there is a significant relationship between cultural intelligence components and management effectiveness.

Table 1 shows that Pearson's correlation coefficient (r) equals 0.288 and $\rho=0.011$. Thus, it can be said with the confidence of 0.95 that there is a significant relationship between cultural intelligence and effectiveness ($\rho < 0.05$). As the significance levels obtained from the motivational and metacognitive components of cultural intelligence are lower than the level of 0.05, it can be said with the confidence of 0.95 that there is a significant relationship between motivational and metacognitive cultural intelligence with management effectiveness. Moreover, the significance levels obtained from the behavioral and cognitive components are larger than 0.05 and it can be said that there is no significant relationship between behavioral and cognitive components of cultural intelligence with management effectiveness.

Table 1. The results of testing the correlation between cultural intelligence and its components with effectiveness

Predictive variable	Criterion variable	Correlation coefficient	Significance level
Cultural Intelligence	Effectiveness	0.288*	0.011
Motivational component		0.248*	0.028
Metacognitive component		0.31199	0.005
Cognitive component		0.136	0.231
Behavioral component		0.173	0.130

* Significance at the level of 0.05 ** Significance at the level of 0.01

H2. There is a significant relationship between managers’ cultural intelligence and conflict management styles.

Considering the significance levels obtained from the relationship between cultural intelligence and solution-oriented as well as cultural intelligence and control style are lower than the significance level (0.05); it can be said with a confidence of 0.95 that there is a significant relationship between cultural intelligence with solution-oriented and control style. It should be noted that the relationship between cultural intelligence and the control style is negative. In addition, considering the significance level obtained from the relationship between cultural intelligence and the avoidance style is greater than 0.05, it can be said that there is no significant relationship between cultural intelligence and the avoidance style.

Table 2. The results of testing the correlation between cultural intelligence and conflict management styles

Predictive variable	Criterion variable	Correlation coefficient	Significance level
Cultural Intelligence	Solution-oriented style	0.281*	0.012
	Avoidance style	0.046	0.685
	Control style	-0.328**	0.003

* Significance level 0.05 ** Significance level 0.01

In this section, the hypotheses will be investigated using stepwise regression analysis, in which the components of cultural intelligence have been considered as predictors of conflict management styles as well as management effectiveness.

As Table 3 shows the significance level obtained from cultural intelligence components for predicting the solution-oriented style is greater than 0.05, the regression is not significantly different from zero. Therefore, cultural intelligence components are not significant predictors of the solution-oriented style.

Table 3. Stepwise regression analysis results for predicting solution-oriented style

Criterion variable	Predictive variable	β	t	Significance level
Solution Orientation	Metacognitive	-0.057	-0.432	0.667
	Cognitive	-0.056	-0.425	0.672
	Motivational	0.105	0.706	0.483
	Behavioral	0.205	0.635	0.528

Table 4 indicates that the coefficient obtained from the factors tested is 0.133 in model number (1) and 0.183 in model number (2). This shows that the predictive variables studied in the presented study influence the selection of the avoidance style, and 0.133 and 0.183 of the variability in the avoidance style can be explained by these factors respectively.

Table 4. Summary of the model of avoidance style predicted by research variables

Model	Variables entered	Coefficient of determination	Adjusted coefficient	Standard Error of Estimate
1	Cognitive	0.133	0.120	4.909
2	Cognitive/metacognitive	0.183	0.158	4.801

The data in Table 5 show coefficients and the significance of each of the factors influencing the avoidance style. The column of standardized coefficients (β) shows the order of the effect of the variables on the avoidance style.

Table 5. Stepwise regression analysis results for predicting the avoidance style

Model	Non-standardized coefficients		Standardized coefficients		Sig
	B	SE	β	t	SE
Constant	24.81	3.080	–	8.056	0.000
Cognitive score	0.514	0.162	0.364	3.178	0.002
Constant	33.74	5.378	–	6.276	0.000
Cognitive score	0.545	0.159	0.386	3.429	0.001
Metacognitive score	–0.623	0.310	–0.226	–2.006	0.049

Table 6 shows the results of regression analysis for predicting the control style. Given that the significance levels obtained from the components of cultural intelligence for predicting are greater than 0.05, the regression is not significantly different from zero and the components of cultural intelligence are not significant predictors of the control style.

Table 6. Stepwise regression analysis results for predicting the control style

Criterion variable	Predictive variable	β	t Statistics	Significance level
Control	Metacognitive	–0.124	–0.970	0.335
	Cognitive	–0.003	–0.024	0.981
	Motivational	–0.037	–0.267	0.791
	Behavioral	–0.036	–0.254	0.800

Tables 7 and 8 show stepwise regression analysis results for predicting effectiveness. The coefficient of determination for the factors examined in model number (1) is 0.093. This shows that the predictive variable (metacognitive component) studied in the presented research influences management effectiveness and 0.093 of the variability in effectiveness can be explained by this factor. In addition, Table 9 shows the results of variance analysis of the regression test. As the obtained significance level is less than 0.05, model number (1) can be used to explain changes in the criterion variable. Data of Table 10 show the coefficients and significance of the factors influencing effectiveness. The column of the standardized coefficients (β) indicates the order of the influence of the variables on management effectiveness.

Table 7. Stepwise regression analysis results for predicting effectiveness

Criterion variable	Predictive variable	Regression coefficient	β	t	Significance level
Effectiveness	Metacognitive	2.905	0.305	2.790	0.007*
	Cognitive	-	0.092	0.838	0.405
	Motivational	-	0.192	1.741	0.086
	Behavioral	-	0.085	0.734	0.465

*Significance level 0.01

Table 8. Summary of the prediction model of effectiveness based on research variables

Model	Variable entered	Coefficient of determination	Adjusted coefficient	The standard error of estimate
1	Metacognitive	0.093	0.081	18.616

Table 9. Results of variance analysis for predicting management effectiveness

Model 1	Sum of squares	Degree of freedom	Mean squares	F Statistics	Significance level
Regression	2697.105	1	2697.105	7.782*	0.007
Remaining	26338.658	76	346.561		
Total	29035.764	77			

* Significance level 0.01

Table 10. Stepwise regression analysis results for predicting management effectiveness

Model 1	Not-standardized coefficients		Standardized coefficients		sig
	B	SE	β	t	S.E
Constant	60.859	60.929	–	3.821	0.000
Metacognitive score	2.905	1.041	0.305	2.790	0.007

4. Discussion and Conclusion

The results of the correlation coefficient test between two variables of cultural intelligence and effectiveness indicate that there is a significant relationship with the confidence of 0.95 between these two variables. Managers with higher cultural intelligence are more effective in their tasks in different cultural situations. The results of research on the performance of managers of multinational companies showed that managers with higher cultural intelligence have achieved better performance compared with managers with lower cultural intelligence (Ang et al., 2004). Ang et al. (2007) showed the effects of cultural intelligence on performance. In a study on the effects of cultural intelligence on the success of immigrants, the researchers reached a similar conclusion (Templer et al., 2006).

Moreover, the results of the correlation test between the motivational component of cultural intelligence and effectiveness indicate that there is a significant relationship between these two variables. Highly motivated managers will be more effective than less motivated managers for learning and interaction with different people in work conditions. The results of the test of the correlation coefficient between two variables of the metacognitive component of cultural intelligence and effectiveness indicate that there is a significant relationship between these two variables. Thus, managers with high metacognitive cultural intelligence are expected to be more effective compared with those with lower metacognitive cultural intelligence in various cultural situations. Some studies stressed the role of the metacognitive component in the job performance and success of managers in various environments from the cultural viewpoint (Ang et al., 2004; Alon and Higgins, 2005; Templer et al., 2006).

It should be noted that the conflict management styles are the managers' different styles for dealing with conflict and these styles are separate from each other. Thus, there is no overall score for conflict management based on which

the relationship of a variable with conflict management could be evaluated. The relationship between a variable with conflict management is examined based on the relationship of that variable with each of the conflict management styles. The results of the correlation test between cultural intelligence and the solution-oriented style indicate that there is a significant relationship between these two variables. Managers with high cultural intelligence are inclined towards the solution orientation style, which is based on collaboration. Several research findings indicate that successful managers use the solution orientation style when facing conflicts. But regarding the relationship between cultural intelligence and the conflict management styles, no studies have been conducted in this field to be compared with the findings of this research. Test results of the correlation test between cultural intelligence and the control style indicate that there is a negative relationship between these two variables. In other words, managers with high cultural intelligence are not willing to use the control style to resolve conflicts. Little research has been conducted in this field.

Regression analysis was performed to check the effects of the components of cultural intelligence on the conflict management styles and effectiveness. The results of regression analysis regarding the solution-oriented and control styles showed that the cultural intelligence components do not have the ability to predict these two styles. Also, the results of regression analysis regarding the avoidance style reveal that the cognitive and metacognitive components have a positive contribution to predicting the avoidance style. The results of regression analysis showed that management effectiveness can be predicted by the metacognitive component of cultural intelligence.

While most studies have focused on examining and explaining cultural intelligence, cultural differences and their influence on management effectiveness in business organizations (e.g., Deng & Gibson, 2008; Mohammed, White, & Prabhakar, 2008; Ersoy, 2014), this study evaluates a new and important avenue of research in educational settings, especially universities. And it also provides empirical data to the understanding of both practical and theoretical discussions on the role of CQ among university managers. As for real effectiveness, leaders need all the four CQ capabilities because focusing only on one factor of CQ may actually result in increased cultural ignorance rather than resulting in enhanced cultural intelligence (Van Dyne, Ang, & Livermore, 2010), this study investigated four components of cultural intelligence and their relationships with management effectiveness and the conflict management styles. As selecting an appropriate conflict resolution strategy that is suitable for the situation has been found to be one of the key factors in determining the quality of the outcome resolving

conflict (Wood & Bell, 2008), this study builds on previous literature to present a model examining how the components of cultural intelligence might potentially impact on the conflict resolution ability. Since different ethnic and religious groups live in Iran, students or faculty members of different cultures may study or work in a single university. Therefore, managers should improve their cultural intelligence in order to manage educational activities of their departments or universities effectively.

Cultural intelligence can be learned by almost anyone. Given that the research findings related to the main hypotheses and considering the development of cultural diversity in the organizations as well as the growing trend of globalization and positive effects of cultural intelligence on management in diverse cultural environments, the authorities should take action to improve the cultural intelligence of managers by holding training courses and educational workshops. To improve motivational cultural intelligence, it is recommended that sufficient training should be considered to enhance the sense of self-efficacy. Also, it is recommended that respect for sub-cultures and other cultures should be considered in the higher education system and positive aspects of other cultures should be mentioned to improve the motivational component. In addition, since the coefficient of the effect of the metacognitive components on management effectiveness is the most important ($\beta=0.305$), it should be more emphasized in cultural intelligence. The findings of this study also have significant implications for individual higher education managers. As cultural intelligence is not inherent and can be learned (Earley & Ang, 2003), managers should strive to improve their cultural intelligence in their daily practice.

Limitations include the geographical concentration of individuals found in Urmia universities, which might not be indicative of individuals found throughout the other regions. Future studies are required to confirm the results. Another limitation is that the individuals being tested on cultural intelligence, conflict management styles and management effectiveness are managers dealing with students and professors from various cultures daily since various ethnic groups live in this city. This might cause the results to be skewed toward higher levels of cultural intelligence than pulling a random sampling from the general public.

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