

STUDYING THE ROLE OF MANAGERS' CULTURAL INTELLIGENCE IN THE SELECTION OF THEIR DECISION-MAKING STYLE (CASE STUDY: WATER AND SEWAGE ORGANIZATION IN MASHHAD)

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Abstract: This investigation has been conducted with the aim of studying the relationship between cultural intelligence and managers' decision-making style in Mashhad water and sewage organization. The Statistical population of the study consists of 53 managers and assistants in Mashhad water and sewage organization that has been elected through census and the data has been collected and analyzed through a questionnaire of approved validity and reliability. Results of Pearson correlation coefficient at $p = 0.05$ level of significance, indicated that all the components of cultural intelligence except for the motivational component have a significant and direct relationship with managers' decision-making styles and in cultural intelligence behavior and cultural intelligence strategy components this relationship is more intense.

Keywords: cultural intelligence, Decision-making style, Early & Ang model, Scott & Bruce model

1 Introduction

Due to turbulent and competitive environment, many organizations of 21st century have been multicultural. Today's work environment requires people to be familiar with different cultures and Can communicate with other cultures for this purpose, need of cultural intelligence CI is felt. Cultural intelligence is the new range of intelligence which has great relationship with various working environments. Cultural intelligence allows people to recognize how others think and How to respond to patterns of behavior and thus reduce communication barriers and Gives people the power to manage cultural diversity (Early & Ang, 2003). In diverse work environments in present century, it is necessary to be appropriately managed stresses caused by culture shock and disorders, and the consequences of cultural conflict. Some aspects of culture are easy to see. Obvious factors such as art, music and behavioral style of these examples. But the most challenging part of culture is hidden. Beliefs, values, expectations, attitudes and assumptions are elements of culture which are not seen but affect on people behavior and sometimes are led to conflict and working contradictions. For this purpose, is required to adaptation and adjustment effective cultures. One factor that is very considered and has been dubbed as a moderating factor is cultural intelligence. Cultural intelligence is the key to success in today's world. In order to effective performance of working groups, group should develop cultural intelligence. Heterogeneous groups than mono-cultural groups, have greater success and failure potential. Trick that they should be used, is to maximize the positive effects of cultural diversity and minimize its negative effects. With increasing cultural intelligence, directors and members of the group can be the basis for mutual understanding and respect and enhance the ability of individuals to identify solutions for their own problems (Early & Ang, 2003). Along with cultural intelligence, theories and styles of management in the path of its evolution, have changed Organizations and human and material resources. The most important of these theories and styles, are classical theories, neoclassical (human relations school), the system, contingent and styles of grammatical, persuasive, participatory and devolution. Change the position and expectations of today's organizations requires that pay more attention to theories and styles of management and the role of managers as most important factor of change and creativity and innovation, and making the best decisions in critical situations. For example, organization that has organic structure and takes advantage Participatory management style and system theory compared to organization that have Mechanical and bureaucratic structure, and grammatical style and classical theory, have more emphasis on innovation and improve the quality of goods and services and better suited to the needs of the consumer (Early & Ang, 2003). Managers with having cultural intelligence can be

effective in the choice of decision-making style. Hence cultural intelligence has become increasingly important in today's competitive world. However truly, what managers are successful? Crucial issue appears to be discussed is the effect of a variable called cultural intelligence on management styles of managers in decision-making (Early & Ang 2003).

In this research given the importance of cultural intelligence that we want to answer the question:

What the role of cultural intelligence of managers in their decision making styles in Water and Wastewater Organization of Mashhad is?

2. Research theoretical Foundations

2.1 Culture

Hofstede believes, organizational culture is set of assumptions, beliefs and values of the organization's members which distinguish specific pattern of Organizational behavior and organization from other organizations as distinguishes their individual character from others, and distinguishes the culture of an organization or community from other communities that have their own unique culture, Each organization has its own culture (Gholipour, 2001).

2.2 Cultural Intelligence

Peterson (2004), defined CQ as the talent to apply skills and competences in different environments. Afferman (2004) points out that cultural intelligence is high intelligence which contains various forms of intelligence and (IQ) is only one of them (Green & Hill, 2005).

2.3 Cultural intelligence components

Early & Ang (2003) and Wein Dyne (2005) discusses Cultural intelligence includes four components as follows:

2.3.1 Metacognitive components of cultural intelligence (strategy): is a method in which a person argues intercultural experiences through that. Cultural intelligence strategy means that the person how understands cross-cultural experiences. This strategy represents processes that people use to learn and understand cultural knowledge.

2.3.2. Cognitive component of cultural intelligence (knowledge): is knowledge of a person about similarities and differences in culture and reflects general knowledge about culture (For example, information about religious beliefs and spiritual and values and beliefs about work, Time, family relations, customs and language).

2.3.3 Motivational components: Confidence and trust in person that is able to adapt to a new culture. Motivational components of cultural intelligence, shows capacity and energy for people to interact effectively in a new cultural. Motivational dimension of cultural intelligence involves level in which people have trust and confidence about their capabilities in cross-cultural interactions and is the degree of openness to experience; interact with people from other cultures and levels of satisfaction that finds from those interactions.

2.3.4 Behavioral components: show individual capability to display acts of appropriate verbal and nonverbal in interactions with people from different cultures (Early & Mosakofsky 2004). This element of cultural intelligence focuses on this which people while placed in new culture how they act (open acts of person)intelligence, behavioral culture, refers to the ability of person to perform appropriate reaction.

2.3.5 Decision-making style: decision making styles in terms of conceptual represents type of behavior and performance of people when faced with decision conditions. Decision making style represents habitual patterns that they use when making decisions. In other words, decision making styles of each individual are approach of his character in understand and respond to decision-make task (Hadi zade & Tehrani, 2008).

2.4 Types of Decision-making styles

2.4.1 Rational decision-making style: in this style of decision-making, person aware of all solutions and knows that any decision leads to what conclusion and can Sort and organize results of decisions based on priority (most beneficial) maximize attainment of objectives by using an optimization strategy (Hoy & Miskel, 2008).

2.4.2 Intuitive decision-making style: Robbins (2005) believes that this style is unconscious decision-making process that is achieved in the light of deduced experience and is based on people's emotions and implicit learning and does not act apart from reasonable analysis, but these two complement each other.

2.4.3 Dependent decision-making style: This style conceptually, represents relying on decision makers to guidance and help of others when faced to the decision maker conditions. Those who enjoy this style because of poor awareness and lack of ability to get information from their environment during making decisions, depend completely on others (Hadi zade & Tehrani, 2008).

2.4.4 Instantaneous decision-making style: Indicates an emergency situation that person without the backing of previous thought, immediately adopt as soon as possible its original decision (scot & Brouce, 1995) It is possible this method of decision-making be disabled of conditions which are created to manager.

2.4.5 Avoidant decision making styles: According to Parker and his colleagues (2007) this style means, to postpone decisions during faced with difficulties and evasion of reaction to the occurred problem. In this way, decision-maker tends to avoid from any decision and seeks to avoid as much as possible of decision-making position (Hadi zade and Tehrani 2008).

3 Research Background

3.1 Research conducted in within the country

Kashkar et al, (2014) did a study entitled "Comparison of emotional intelligence and decision-making style, managers of physical education offices and other managers of Tehran University students". The results showed that emotional intelligence of Physical Education managers was higher than non- Physical Education managers but there were no significant difference between the styles of their decisions. Also emotional intelligence with rational decision-making style has Positive relationship and has inverse relationship with decision-making based on doubts.

Ghasemi & Medany, (2011)Conducted study entitled "explores the relationship between cultural intelligence and decision-making style middle schools managers "The results showed that There is a significant relationship between Cultural Intelligence of managers and public decision-making styles of middle schools managers in Qazvin Province and also There is a significant relationship between cultural intelligence of managers and Styles of rational, intuitive and instantaneous and a significant relationship was not observed Only between cultural intelligence and avoidant decision-making style.

Kazemi, (2008) in his thesis with the theme "The relationship between cultural intelligence and performance of Mustafa Alalamieh community workers" has been carried out. Results obtained of Spearman correlation test showed that there is a relationship between cultural intelligence and performance, dimensions of cultural intelligence (Metacognitive, cognitive,

motivational, and behavioral) and employee performance. Priority aspects of cultural intelligence of Mustafa Alalamieh community workers based on Results obtained of Friedman test, has been obtained in Such a way; motivational Cultural Intelligence, meta-cognitive cultural intelligence, behavioral cultural intelligence, cognitive cultural intelligence.

Hadi zade and Tehrani, (2008) In a research found that among the styles of Rational and intuitive of Decision-making, Negative significance relationship, Between rational and avoidance decision making and between intuitive and instantaneous decision making, There is a significant positive relationship and also between style of avoidant decision making and each style of instantaneous and dependence decision making, negative Significant relationship was obtained in this study, In this study, a significant relationship was not found between any of the decision making styles and demographic characteristics Work experience and education managers.

3.2 Research conducted outside of Iran

Parker et al. (2007) in a research paid to measure cultural intelligence and its impact on compatibility, decision-making, cultural adaptation and performance of duty. Results of this study showed that aspects of cultural intelligence have relationship with each of these variables and in fact cultural intelligence has been introduced as predictor of these variables.

Parker et al. (2007)In examining five target decision making styles in between the two groups of 20 Students in Commercial in one of the universities in the UK, In the first group between rational style and any decision-making styles of intuitive, instantaneous and avoidant ,negative significance relationship, between Intuitive and instantaneous decision making styles and significant positive relationship was achieved between dependent and avoidant decision making style, In second group the relationship was obtained like the first group between Styles of decision making. In addition in the second group, existence of significant positive relationship was confirmed between avoidant and instantaneous style.

Wein Dainne, (2005) in a research among the 338 business student examined the relationship between personality and the four factors of cultural intelligence and came to the conclusion that conscientiousness has significant relationship with dimension of metacognitive cultural intelligence. Happiness and emotional stability is associated with behavioral aspect of cultural intelligence, extroversion has significant relationship with dimension of knowledge, motivation and behavior.

Sanlehem (2004) in his research in the field of decision making styles. 206 army officers Sweden based on general style of decision-making between rational decision making style and each style of intuitive, avoidant and instantaneous decision making of Subjects, reverse significant relationship and a significant positive relationship was achieved between dependent and avoidant decision making style.

3.3 Research Hypotheses

3.3.1 The main hypothesis

Cultural Intelligence of managers in selection of their decision making styles among managers of water and sewage organization in Mashhad is effective.

3.3.2 Secondary Hypotheses

Cultural Intelligence in selection of Rational decision-making style of managers is effective.

Cultural Intelligence in selection of Intuitive decision-making style of managers is effective.

Cultural Intelligence in selection of Dependent decision-making style of managers is effective.

Cultural Intelligence in selection of Momentary decision-making style of managers is effective.

Cultural Intelligence in selection of Avoidant decision-making style of managers is effective.

3.4. The research model

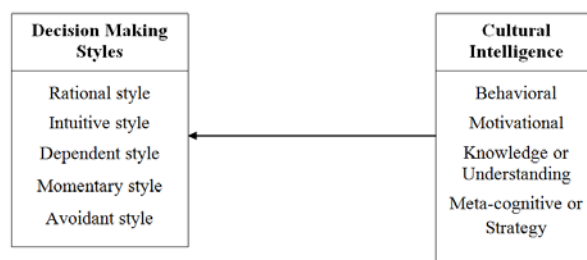


Fig1: Conceptual model

4 Research Methodology

According to the research hypothesis, the study is applied research with experimental design. In this study, the library method is used to collect information. Then descriptive method was used for data analysis and to prove the authenticity of water and sewage organization in Mashhad, field research in selected municipalities Mashhad Will be executed and also the used questionnaire of cultural intelligence and questionnaire of decision-making style was studied by some experts water and sewage organization in Mashhad and its validity was confirmed. Since Cronbach alpha is usually quite good indicator to assess the reliability of internal consistency between the instrument and its elements, this coefficient was used to determine the reliability. Cronbach's alpha coefficient for the questionnaire of cultural intelligence was .881 and for the questionnaire of the decision-making style was .804 and respectively in the questionnaire was .865. With regard to the suitability of alpha coefficients, the internal reliability is confirmed. The population of this research is all managers and assistants of water and sewage organization in Mashhad that the number of this is 53 due to the limited size of the study population was small and placed all of the population under study. To analyze the data in this study, both descriptive and inferential statistics is used using SPSS software. In the descriptive part, the frequency distribution and central indices (mean) and dispersion (standard deviation) is calculated. The relevant charts are drawn. The inferential statistics the correlation coefficient and regression was used to evaluate hypotheses and to examine the hypotheses.

5 Research findings

5.1 Analysis of descriptive statistics

The results on gender respondents indicated that of the 53 respondents, 74% male (most respondents) and 26 percent were female.

The results showed that of the 53 respondents in the age distribution of respondent's age of 66% between 44 and 49 years (the maximum number is included) and 34 % between 50 and 55 years.

The results of the study respondents indicated that 17% of the respondents' level of education below the bachelor, 58% of the license (the highest number) and 25 percent of graduate and above.

The results showed that the record of work in the history of 57% between 15 and 20 years and 43% between 21 and 26 years.

The results showed that the record of work in the history in area of 62% between 12 and 16 years and 38% between 17 and 21 years.

5.2 Analysis of statistics

To verify the hypotheses and determine the significance, the Pearson correlation coefficient was used to continue to analyze and interpret beyond.

5.3 The main hypothesis

Cultural Intelligence of managers in selection of their decision making styles among managers of water and sewage organization in Mashhad is effective.

Table 1: The correlation coefficient of Pearson between Cultural Intelligence and decision making style

Variables	The correlation coefficient of Pearson	Sig
Cultural Intelligence and decision making style	.681	Less than .0001

H₀: There is no significant relationship between Cultural Intelligence and decision making style.

H₁: There is significant relationship between Cultural Intelligence and decision making style.

According to the results in Table 1 can be seen that, Amount of significance level in this test is less than .001 and Pearson correlation coefficient is .681. So null hypothesis is false and one hypothesis is confirmed.

5.3.1 First Secondary Hypotheses

Cultural Intelligence in selection of Rational decision-making style of managers is effective.

Table 2: The correlation coefficient of Pearson between Cultural Intelligence and Rational decision-making style

Variables	The correlation coefficient of Pearson	Sig
Cultural Intelligence and Rational decision-making style	.509	Less than .0001

H₀: There is no significant relationship between Cultural Intelligence and Rational decision-making style.

H₁: There is significant relationship between Cultural Intelligence and Rational decision-making style.

According to the results in Table 2 can be seen that, Amount of significance level in this test is less than .001 and Pearson correlation coefficient is .509. So null hypothesis is false and one hypothesis is confirmed.

5.3.2 Second Secondary Hypotheses

Cultural Intelligence in selection of Intuitive decision-making style of managers is effective.

Table 3: The correlation coefficient of Pearson between Cultural Intelligence and Intuitive decision-making style

Variables	The correlation coefficient of Pearson	Sig
Cultural Intelligence and Intuitive decision-making style	.545	Less than .0001

H₀: There is no significant relationship between Cultural Intelligence and Intuitive decision-making style.

H₁: There is significant relationship between Cultural Intelligence and Intuitive decision-making style.

correlation coefficient is .545. So null hypothesis is false and one hypothesis is confirmed.

5.3.3 Third Secondary Hypotheses

Cultural Intelligence in selection of Dependent decision-making style of managers is effective.

According to the results in Table 3 can be seen that, Amount of significance level in this test is less than .001 and Pearson

Table 4: The correlation coefficient of Pearson between Cultural Intelligence and Dependent decision-making style

Variables	The correlation coefficient of Pearson	Sig
Cultural Intelligence and Dependent decision-making style	.550	Less than .0001

H₀: There is no significant relationship between Cultural Intelligence and Dependent decision-making style.

H₁: There is significant relationship between Cultural Intelligence and Dependent decision-making style.

According to the results in Table 4 can be seen that, Amount of significance level in this test is less than .001 and Pearson correlation coefficient is .550. So null hypothesis is false and one hypothesis is confirmed.

5.3.4 4th Secondary Hypotheses

Cultural Intelligence in selection of Momentary decision-making style of managers is effective.

Table 5: The correlation coefficient of Pearson between Cultural Intelligence and Momentary decision-making style

Variables	The correlation coefficient of Pearson	Sig
Cultural Intelligence and Momentary decision-making style	.297	.031

H₀: There is no significant relationship between Cultural Intelligence and Momentary decision-making style.

H₁: There is significant relationship between Cultural Intelligence and Momentary decision-making style.

According to the results in Table 5 can be seen that, Amount of significance level in this test is .031 and Pearson correlation coefficient is .297. So null hypothesis is false and one hypothesis is confirmed.

5.3.5 5th Secondary Hypotheses

Cultural Intelligence in selection of Avoidant decision-making style of managers is effective.

Table 6: The correlation coefficient of Pearson between Cultural Intelligence and Avoidant decision-making style

Variables	The correlation coefficient of Pearson	Sig
Cultural Intelligence and Avoidant decision-making style	.365	.007

H₀: There is no significant relationship between Cultural Intelligence and Avoidant decision-making style.

H₁: There is significant relationship between Cultural Intelligence and Avoidant decision-making style.

According to the results in Table 6 can be seen that, Amount of significance level in this test is .007 and Pearson correlation coefficient is .365. So null hypothesis is false and one hypothesis is confirmed.

6 Conclusion and Recommendations

Statistical analysis obtained the following results:

6.1. The main hypothesis

Because of the significant level in Pearson correlation coefficient is less than .0001, Null hypothesis of no relationship is rejected, so there is a significant relationship and relatively strong with intensity .681 Between cultural intelligence and decision-making style. The direction of relationship is positive. Namely by increasing cultural intelligence, style of decision-making increases and vice versa.

6.2 First Secondary Hypotheses

Because of the significant level in Pearson correlation coefficient is less than .0001; Null hypothesis of no relationship is rejected, so there is a significant relationship and relatively average with intensity .509 between cultural intelligence and Rational decision-making style. The direction of relationship is positive. Namely by increasing cultural intelligence, style of Rational decision-making increases and vice versa.

6.3 Second Secondary Hypotheses

Because of the significant level in Pearson correlation coefficient is less than .0001; Null hypothesis of no relationship is rejected, so there is a significant relationship and relatively average with intensity .545 between cultural intelligence and Intuitive decision-making style. The direction of relationship is positive. Namely by increasing cultural intelligence, style of Intuitive decision-making increases and vice versa.

6.4 Third Secondary Hypotheses

Because of the significant level in Pearson correlation coefficient is less than .0001; Null hypothesis of no relationship is rejected, so there is a significant relationship and relatively average with intensity .550 between cultural intelligence and Dependent decision-making style. The direction of relationship is positive. Namely by increasing cultural intelligence, style of Dependent decision-making increases and vice versa.

6.5 4th Secondary Hypotheses

Because of the significant level in Pearson correlation coefficient is .031 and this is less than .05, Null hypothesis of no relationship is rejected, so there is a significant relationship and relatively weak with intensity .297 Between cultural intelligence and Momentary decision-making style. The direction of relationship is positive. Namely by increasing cultural intelligence, style of Momentary decision-making increases and vice versa.

6.6 5th Secondary Hypotheses

Because of the significant level in Pearson correlation coefficient is .007 and this is less than .05, Null hypothesis of no relationship is rejected, so there is a significant relationship and relatively average with intensity .365 between cultural intelligence and Avoidant decision-making style. The direction of relationship is positive. Namely by increasing cultural intelligence, style of Avoidant decision-making increases and vice versa.

7 Research proposal

7.1 The main hypothesis

According to the results obtained from testing the main hypothesis that, Indicates a high correlation between the components of cultural intelligence and decision-making style, Shows the high validity of the relationship between cultural intelligence and decision-making style so people use of knowledge and control of individual thought processes related to culture and will gain infrastructure for receive and decode their behavior and others and become aware and relative to their cultural similarities and differences and others and when communicating with others In different cultural-position use suitable decision making styles. Attention of managers to use any of these styles makes them able to act effectively in different cultural situations.

7.2 First Secondary Hypotheses

Due to Results obtained of the first sub-hypothesis test that showed high correlation coefficient, between cultural intelligence and components of rational decision-making style and Its intensity is moderate, In order to increase the strength of this relationship is suggested to managers that identify all possible solutions during deciding by rational method pay to evaluate the results of each strategy from all different aspects and finally select an optimal and favorable solution when faced with a deciding conditions.

7.3 Second Secondary Hypotheses

Due to Results obtained of the Second sub-hypothesis test that showed high correlation coefficient, between cultural intelligence and components of Intuitive decision-making style and its intensity is moderate. It can be suggested that In cases where managers have less tendency to follow the principles of completely rational and logical approach of purely rational decision-making style, pay more to follow feelings, insights and internal experiences and Instead of operate all the effort and time in order to identify all possible solutions, and decisions by relying on Insight into and past experiences of its decision.

7.4 Third Secondary Hypotheses

Due to Results obtained of the Third sub-hypothesis test that showed high correlation coefficient, between cultural intelligence and components of Group Dependency decision-making style and its intensity is moderate. This suggests that manager somewhat acts independent in its decisions. In this context, it is recommended to use as far as possible, from views of others in his or her decision and take advantage from its suggestions and comments in final decision.

7.5 4th Secondary Hypotheses

Due to Results obtained of the Fourth sub-hypothesis test that showed high correlation coefficient, between cultural intelligence and components of instantaneous decision-making

style and its intensity is weak. In this case, it is felt that managers do not use of this style in the face of problems in different cultures. Decision-making skills in crisis situations are one of the needed skills by managers. As a result, it is suggested to managers that pay attention to the position in such circumstances. And by appropriate analysis conditions and impulse control use of their managerial capabilities.

7.6 5th Secondary Hypotheses

Due to Results obtained of the Sixth sub-hypothesis test that showed high correlation coefficient, between cultural intelligence and components of avoidant decision-making style and its intensity is moderate, is emphasis on early doing decisions. In this field it is suggested to managers that control their emotions and feelings in Communicating with others. And avoid from situations that cause increased stress and thus escape the status decision and delays in decision. As a result, if raise their self-esteem, better will be able react without escape from decision-making positions against opportunities and threats of the organization.

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