Original Article

The effect of cultural intelligence on communication skills

Elham Ahmadian¹; *Mahnaz Amirpour²

¹M.Sc. in sociology, Department of Social Science, Quchan Branch, Islamic Azad University, Quchan, Iran
²Ph.D. in sociology, Assistant professor of Department of Social Science, Quchan Branch, Islamic Azad University, Quchan, Iran

Abstract

Introduction: In the diverse educational and work environment of the present century, stresses due to cultural shock and disturbances and consequences of cultural conflicts should be properly managed. Therefore cultural intelligence has become increasingly important in today's competitive world. The purpose of this study was to investigate the effect of cultural intelligence on improving the communication skills of students.

Materials and Methods: In this survey, the statistical population is all students of Islamic Azad University of Khorasan Razavi, who study in the academic year 2012-13 as number about 8259 people. A sampling method was multi-phase and universities of Mashhad, Quchan, Torbat Heydarieh, Torbat Jam and Kashmar were selected so the sample size as 370 cases is considered. Research instrument was cultural intelligence questionnaire. Data were analyzed by using SPSS software, Kolmogorov-Smirnov and Spearman coefficient.

Results: Cultural intelligence has significant effects on students' communicative skills, listening skills, verbal skills and feedback skills (P<0.001).

Conclusion: In general, cultural intelligence is effective on students' communicative skills.

Keywords: Communication skills, Cultural intelligence, Students

Please cite this paper as:

*Corresponding Author: Department of Social Science, Quchan Branch, Islamic Azad University, Quchan, Iran
amirim@mums.ac.ir
Received: Oct. 29, 2017
Accepted: Mar. 14, 2018
Introduction
As the world is increasingly interconnected, organizations are also moving towards multi-nationalism and consequently greater cultural diversity. One of the results of the presence in environments with cultural diversity is that people face new values, assumptions and expectations that fundamentally differ from their environmental realities. Essentially, to face these differences, a level of cognition or intelligence is needed which is referred to as cultural intelligence. Cultural intelligence with its quadruple factors 1: Meta cognition, 2: Cognition 3: motivational factor and 4: Behavioral factor which provides a model that can be used to measure the amount of effective interactions in high cultural diversity environments (1).

In the diverse educational and working environments of the present century, stresses due to cultural shock and disorder and consequences of cultural conflicts, should be properly managed. Some aspects of culture can be easily seen. The obvious factors such as art, music and behavioral styles are the following but most of the challenging sections of culture are hidden. Beliefs, values, expectations, attitudes and assumptions are the elements of culture that are not seen, but, they affect the behavior of individuals and sometimes cause conflicts and contradictions in work. To this end, adaptation and effective adjustment of cultures are needed. Hence, cultural intelligence has become increasingly important in today's competitive world. Students with low cultural intelligence may not be able to communicate with their classmates and professors from the same culture or other cultures, and as a result, they have difficulties in their business. In fact, cultural intelligence theory explains why some people in comparison with others are successful in their proper routes and guidance in high cultural diversity environments. On the other hand, most of those who know how communication has affected the organization, those who have acceptable written and spoken communication skills and those who have learned how and when to use these skills, are more successful in fulfilling their job duties and play a far more effective role in terms of the dynamics and advancement of their organizational goals than those who lack these skills.

The concept of cultural intelligence was first introduced by Earlie and Ong of London business school researchers. These two have defined cultural intelligence as being able to learn new patterns in cultural interactions and provide correct behavioral responses to these patterns (2). They believed that in the face of new cultural situations, it is hard to find familiar signs that could be used to communicate. In these cases, the individual must develop a common cognitive framework based on the information available even if this framework does not have sufficient understanding of local behaviors and norms. Creating such a framework can only be left to those who have a high cultural intelligence. In another definition of Peterson, cultural intelligence is an individual ability to understand, interpret and act effectively in situations of cultural diversity, and it is related with those concepts of intelligence which consider it more as a cognitive ability (3). In accordance with this definition, in fact, with cultural intelligence’s focus on certain features that are necessary for high quality personal relationships and effectiveness in different cultural contexts, it focuses on another aspect of cognitive intelligence. Cultural intelligence also incorporates individual insights that are useful for adapting to intercultural situations and...
interactions and the successful presence in multicultural working groups.
In Falke's view, the success of an organization depends on the communication skills of all employees of that organization. Studies show that many employees consider the role of communication skills to be more important than special technical skills in the success of their job tasks (4).
Twenty-year researches of two graduates in business administration from the University of "Stanford of the United States" came to this conclusion that not any skill in the field of commercial activity is more important than an effective communication. Another research that was conducted from 150 executive directors in a thousand great companies showed that 14 percent of those 40 hours in a work week, due to lack of proper communication between the manager and the staff, goes to waste (5).
Sung Ong is one of the thinkers who suggested the variables such as cognitive-meta cognitive, motivational and behavioral in four dimensions of strategy, knowledge, motivation and behavior of cultural intelligence, to explain cultural intelligence (6).
A) Cultural Intelligence Strategy
This means that how one understands cross-cultural experiences. This strategy represents the processes people use to gain and understand cultural knowledge. This happens when people judge their and others intellectual processes. The strategy of cultural intelligence involves developing a strategy prior to cross-cultural interaction, examining assumptions while interacting and modifying mental maps if the actual experiences differ from previous expectations.
B) Cultural Intelligence Knowledge
This knowledge reflects a person's perception of similarities and cultural differences and shows the general knowledge, cognitive and mental maps of the individual from other cultures. The cultural intelligence aspects of knowledge includes the recognition of economic and legal systems, norms of social interaction, religious beliefs, recognition of aesthetic values and other language.
C) Motivating cultural intelligence
It expresses one's interest in testing other cultures and interacting with people from different cultures. This motive includes the inner value of individuals for multi-cultural interactions and the self-esteem that allows one to act effectively in different cultural situations.
D) Cultural intelligence behavior
This behavior involves the individual's ability to adapt to those verbal and non-verbal behaviors that are appropriate for dealing with different cultures. Cultural intelligence behavior includes a set of rational behavioral responses that can be applied in different situations and can be modified and adapted to a particular interaction or specific situation (7). It should be noted that cultural intelligence has more to do with interactions with alien cultures, but it has also the ability to generalize to ethnic and racial subcultures within the national culture (7). As in countries like India (72 nations), Iran, China etc. which have a cultural diversity within their borders, it can also be internally addressed. For example in our country, the interaction of diverse cultures such as Turks, Lors, Kurds, Fars etc. can be a reason for the attention and study of cultural intelligence. The statistics show that 51% of Iranians are Fars, 24% Azari, 8% Gilaki and Mazani, 7% Kurdish, 3% Arab, 2% Baloch, 2% Turkmen, 2% Lor and 1% Other tribes (8). Each of these tribes has their own language, dialect, customs and attitudes in their own culture; so, local administrators can use it in everyday interactions.
On the other hand, with the evolution of human societies and the advent of the information and communication age, the challenges of communication and media have become more and more challenging, and they are exposed to the curious and scrutinizing eyes which take care of every move. In such a world, getting to the mechanisms of communication and the media can open the way to success for humans. Understanding the rules and regulations governing communication is one of the most important relationships that a person has in society with others, and in this situation it will be the widest element and factor of success, and everyone tries to understand it. The ruling facts of societies and humans, correctly point to the fact that those who have knowledge-based communication have better and more accurately achieved their goals, and despite the deprivation of material and natural resources, eventually have made a better life for themselves.

With such a look, every intelligent and cultivated person is looking for communication skills training and is more interested in anything with the name of the communication. In order to achieve such an important point he, on the one hand, deals with the teaching of communication theories and mechanisms; on the other hand, as the implementer of this effective technique he evaluates his own and others behaviors. The recognition and comparison of communication theories for humans led to this conclusion which permits them to recognize various theories, and to look at the logic of the behavioral interaction from different landscapes and aspects and choose the best or combine them to evolve this part of their human behaviors. Better understanding of the communication theories make it possible to communicate and predict the behavior of others better, and with such a power, they will find the ability to control and influence others which for them guarantees a high degree of success. Communication practice in such a situation will be considered in different ways.

Communication practitioners, who today are a lot and are in the public view from different directions, will benefit a lot from this awareness. Journalists, public relation professionals in organizations, managers and supervisors, individuals and organizations involved in commercial advertising, political parties etc. all of them are dealing with people and they want to influence them in at least two directions: firstly, informing and transferring meaning or concept, and secondly, convincing and persuasive effect which in fact is lead-based behavior that ultimately leads to coercing the person into doing something or preventing him from doing what he has done. All of these individuals and organizations and dozens of others who are not mentioned here, are trying to influence their opponents and direct their behavior according to their will.

Tesslimi et al. in a research on the ways to improve the cultural intelligence of government executives in international affairs, and to answer the main question that which strategies can be made to promote cultural intelligence, at the end of the research findings presented three strategies for promoting cultural intelligence generally as follows:

Continuous interactions at transnational level and international travels, activities in multinational teams, nourishing new teachers in intercultural communication with the knowledge of the day.

In 2006, Farideh Yousefi in a research on the relation between emotional intelligence and communication skills in students, using Shot and other emotional intelligence scale and Gerabak’s communication skills questionnaire, showed that emotional
intelligence with communication skills were positively correlated. The findings also revealed that sexual differences in emotional intelligence and communication skills are not significant (12).

Ali Keshtkaran and colleagues in a study conducted in 2011, as the study of communication skills of managers from the staff’s point of view in the field of professorship of Shiraz University of Medical Sciences, concluded that the average level of communication skills of effective listening and feedback can be due to lack of enough scientific and practical attention of managers to the issue of communication. It was suggested that innovation and retraining of managers are done in order to get acquainted with the importance of effective communication and reduction of communication barriers in the form of workshops (13).

Robert House also states in his 2002 research project GLOBE that the behavior of successful leaders varies among different cultures. According to the research, senior executives also need to know the differences between the ethical and regional culture of the working environment and the multicultural society of employees around the world in order to guide their organization in the 21st century. It has become clear that the behavior of leaders must be aligned with the cultural diversity that exists in the global environment (14).

Nowadays communication skills are a major concern of the present century. Managers and the staff who are skilled at creating communication face fewer problems, make fewer mistakes, waste less resources and face more effectively with their opponents. Therefore, in the age of ever increasing technology and global marketing advancement, having communication skills for students who enter the job market after graduation is unavoidable, and research in this field seems to be necessary. According to the conducted researches and reviewing them, the aim of this research was to investigate the effect of cultural intelligence on communication skills of the individuals.

**Materials and Methods**

According to the subject and hypotheses, the present research is in the category of applied researches whose information is collected through a survey, but in terms of analyzing information, it is descriptive and correlated. In the pursuit of this research, the researcher studies the relationship between cultural intelligence and communication skills of postgraduate students (case study students of Quchan, Torbat Jam, Torbat-Haidariyeh and Kashmar universities). In order to control the variables that intervene with the time of collecting the questionnaires, the researcher tried to avoid the subjects being at their working time when responding, and free time was used for this purpose. In order to control the length of time, the questionnaires were distributed and collected over a week.

In this research, some of the intervening variables related to the reaction of subjects to the conditions and method of data collection such as ensuring the confidentiality of information that could affect the rate of returning questionnaires, moral assurance was given to sample individuals.

In the present study, the statistical society includes all students of Islamic Azad universities who had been studying in the academic year 2012-13, and number about 8259 cases. For the purpose of this study according to the characteristics of the statistical society, a step by step sampling method was selected. The statistical society selected among the universities of Khorasan Razavi, universities of Mashhad, Quchan, Torbat Heydarieh, Torbat Jam, and Kashmar. The sample size, in stratified method proportional to the size, was...
considered among the postgraduate students of the mentioned cities, which each university is considered one cluster, and each postgraduate student is considered as a sample. Also, to determine the necessary sample size, Jersey Morgan and Krejcie’s sample size estimation table was used (15). Therefore 370 subjects were selected. Since some people were guessed that would not respond to the questionnaires, 390 questionnaires were distributed randomly and in a stratified order. Finally 370 questionnaires were completed and returned. Therefore, the return rate is 95%.

Research instrument
A) Cultural Intelligence Questionnaire: The instrument used in this study was the cultural intelligence questionnaire which was prepared by Ang and Vendine in 2004. In 2011, it was translated by qualified professors in Persian and used in the research project of Dr. Mehdi Zirak and his colleague (2011), and it achieved a desirable result (16). The communication skills questionnaire was prepared and validated by Kohandel in 2010. In the same year, it was used by him in the dissertation on the relationship between communication skills and productivity, and a desirable result was obtained. The questionnaire consisted of 18 closed questions and prepared with 3 indicators of the research. Since the questionnaires were standard, their validity was verified. Since Cronbach's alpha is usually a very suitable indicator for measuring the reliability of the measurement tool and the internal coordination among its elements; therefore, the reliability of the questionnaire used in this study was evaluated using Cronbach's alpha (17). Given the suitability of the alpha coefficients, the validity of the internal validity was confirmed. For data analysis in this research, descriptive statistics and inferential statistics are used. In the
descriptive section, frequency distribution tables and central indices (mean) and dispersion (standard deviation) are calculated. Also, the corresponding diagrams are drawn. In the inferential statistics section, collected hypotheses from Kolmogorov-Smirnov test will be used to determine the normality of the variables, and Spearman’s correlation test will be also used. Meanwhile, SPSS software will be used for data analysis.

Results
Educational intelligence of postgraduate students has a significant effect on their communication skills. Analysis of variance and statistical characteristics of regression (by effect coding) indicate that students' cultural intelligence has a positive effect on the amount of communication skills.

The effect of each of the independent variables on the variable depends on the following:
1. The amount of regression statistics showed the effect of cultural intelligence strategy on communication skills is 2.283 and the significance level is 0.023. The effect of cultural intelligence strategy on communication skills is 19.8.
2. The amount of regression statistics showed the effect of knowledge of cultural intelligence on communication skills is 1.916 and the significance level is 0.042. The effect of knowledge of cultural intelligence on communication skills is 1.22.
3. The amount of regression statistics on the effect of cultural intelligence on communication skills is 4.626 and the significance level is equal to 0.0001. The effect of cultural intelligence on communication skills is 34.9.

1. The amount of regression statistics revealed the effect of cultural intelligence on communication skills is 1.939 and the significance level is equal to 0.04. The effect
of cultural intelligence behavior on communication skills is 24.

**Table 1.** The results of regression analysis of students' cultural intelligence on communication skills

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Degree of freedom</th>
<th>Mean of squares</th>
<th>F</th>
<th>Significance level</th>
<th>R</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>8.058</td>
<td>4</td>
<td>2.014</td>
<td>16.727</td>
<td>0.0001</td>
<td>0.403</td>
<td>0.162</td>
</tr>
<tr>
<td>Residual</td>
<td>41.55</td>
<td>345</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49.608</td>
<td>349</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2.** The results of regression coefficients of students' cultural intelligence on communication skills

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression coefficient</th>
<th>Standard deviation of coefficient</th>
<th>Standard regression coefficient</th>
<th>T statistics</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed amount</td>
<td>2.194</td>
<td>0.107</td>
<td></td>
<td>20.515</td>
<td>0.0001</td>
</tr>
<tr>
<td>Strategy of cultural intelligence</td>
<td>0.497</td>
<td>0.043</td>
<td>0.198</td>
<td>2.283</td>
<td>0.023</td>
</tr>
<tr>
<td>Knowledge of cultural intelligence</td>
<td>0.390</td>
<td>0.064</td>
<td>0.221</td>
<td>1.916</td>
<td>0.042</td>
</tr>
<tr>
<td>Motivation of cultural intelligence</td>
<td>0.258</td>
<td>0.056</td>
<td>0.349</td>
<td>4.626</td>
<td>0.0001</td>
</tr>
<tr>
<td>Behavior of cultural intelligence</td>
<td>0.468</td>
<td>0.05</td>
<td>0.240</td>
<td>1.939</td>
<td>0.04</td>
</tr>
</tbody>
</table>

1- Cultural intelligence of postgraduate students has a significant effect on their verbal skills. Analysis of variance and statistical characteristics of regression (by impact coding method) show that the effect of cultural intelligence on students' verbal skills has a positive effect. The amount of regression statistics is 3.546 and the significance level is 0.0001. The impact of cultural intelligence on students' verbal skills is 18.7%.

**Table 3.** The results of regression coefficients of students' cultural intelligence on verbal skills

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Degree of freedom</th>
<th>Mean of squares</th>
<th>F</th>
<th>Significance level</th>
<th>R</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.88</td>
<td>1</td>
<td>2.88</td>
<td>12.574</td>
<td>0.0001</td>
<td>0.187</td>
<td>0.035</td>
</tr>
<tr>
<td>Residual</td>
<td>79.705</td>
<td>348</td>
<td>229</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>82.585</td>
<td>349</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of Table 3 of analysis of variance and statistical characteristics of regression (by impact coding method) indicate that the cultural intelligence of postgraduate students has a positive impact on the skills of the listener. The amount of regression statistics of the impact of cultural intelligence on graduate students on eavesdropping skills is 2.546 and the significance level is 0.011. The effect of cultural intelligence of postgraduate students on listening skills is 13.5.

2. Cultural intelligence of postgraduate students has a significant effect on their listening skills. Analysis of variance and statistical characteristics of regression (by effect coding) indicate that the cultural intelligence of postgraduate students has a positive impact on the skills of the listener. The amount of regression statistics of the impact of cultural intelligence on graduate students on eavesdropping skills is 2.546 and the significance level is 0.011. The effect of cultural intelligence of postgraduate students on listening skills is 13.5.

**Table 4.** The results of regression coefficients of students' cultural intelligence on listening skills

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Degree of freedom</th>
<th>Mean of squares</th>
<th>F</th>
<th>Significance level</th>
<th>R</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.88</td>
<td>1</td>
<td>2.88</td>
<td>12.574</td>
<td>0.0001</td>
<td>0.187</td>
<td>0.035</td>
</tr>
<tr>
<td>Residual</td>
<td>79.705</td>
<td>348</td>
<td>229</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>82.585</td>
<td>349</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of table 4 of analysis of variance and statistical characteristics of regression (by effect coding) indicate that the students' cultural intelligence has a positive impact on the listening skills.

3. Cultural intelligence of postgraduate students has a significant effect on their feedback skills.

Analysis of variance and statistical characteristics of regression (by impact coding method) show that cultural intelligence of postgraduate students has a positive impact on feedback skills.

The amount of regression statistics of the impact of cultural intelligence on graduate students on feedback skills is 8.937 and a significant level of 0.0001. The impact of cultural intelligence of postgraduate students on feedback skills is 43.2.

Table 5. The results of regression coefficients of students' cultural intelligence on feedback skills

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Degree of freedom</th>
<th>Mean of squares</th>
<th>F</th>
<th>Significance level</th>
<th>R</th>
<th>R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>14.475</td>
<td>1</td>
<td>14.475</td>
<td>79.866</td>
<td>0.0001</td>
<td>0.432</td>
<td>0.187</td>
</tr>
<tr>
<td>Residual</td>
<td>63.073</td>
<td>348</td>
<td>0.181</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>77.548</td>
<td>349</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of Table 5 of analysis of variance and statistical characteristics of regression (by effect coding) indicate that the high school students' cultural intelligence have a positive impact on feedback skills. Given the results as well as the impact of each component on cultural intelligence, the main model of the research is unaffected.

Discussion
Based on research findings cultural intelligence of postgraduate students has a significant effect on their communication skills, verbal skills, listening skills and feedback skills.

Assuming that cultural intelligence can be raised as other aspects of personality, in this regard we must emphasize two points. Firstly, qualified individuals such as professional psychologists can only do this. Secondly, the improvement of cultural intelligence should be in line with the comprehensive strategic plan for human resource development of the organization and should be done among other aspects of the program. The acquisition of cultural intelligence also requires learning through social interaction. Such social learning is a very powerful way of transforming people's experiences into knowledge and skills. Promoting cultural intelligence through learning social experience means paying attention to and admiring the important differences between oneself and others in the culture and the background. This will require some knowledge about aspects of differences between cultures and how culture affects behavior. To gain such knowledge, we need to be able to convey what we learn from a particular experience to subsequent interactions in other situations (18).

It is suggested that students' cultural intelligence be under education. To take action to educate students in identifying cultural differences, university authorities can send them to specific designated training...
courses such as courses that give MBA certificate. Another suggestion is that students can be involved in work that is team-motivated and composed of people with different cultures. When people work in multicultural teams, members of the team face different cultures which in turn will have a beneficial effect on improving the cultural intelligence of individuals, and provides the ability to adapt to complex multicultural situations (19).

Finally, in order to promote this kind of intelligence deeply among people, it is better to start all the necessary education from the infancy of children and from kindergartens to primary schools. Indeed, if the practice of accepting interpersonal differences begins in childhood, in adulthood people will easily be able to accept differences and disagreements. Lack of cooperation in answering questions and lack of honesty in answering questionnaires from some students can be cited as the limitations of the research.

**Conclusion**
From the findings of the research, cultural intelligence of postgraduate students has a significant effect on their communication skills.

**References**
2. Amini M. [Investigating the relationship between communication skills and educational performance of faculty members of Jahrom University of Medical Sciences]. Azad University; 2004: 67. (Persian)
3. Ismail Pour R. [Investigating the effect of effective communications on increasing productivity of the Stock Exchange Organization]. Islamic Azad University; 1995: 45. (Persian)
5. Pasha Sharifi H. [Introductory study of Gardner’s Multiple Intelligence Theory, on students’ curriculum and adaptation]. Quarterly journal of educational innovations 2005; 4: 45. (Persian)
10. Fayyazi M, Jan Nesar Ahmadi H. [Cultural intelligence; the need of managers in the century of diversity]. Tadbir Scientific-educational monthly 2006; 17: 67. (Persian)