The Effect of Cultural Intelligence on Employees’ Voice considering the Mediating Role of LMX, Job Involvement and Perceived Organizational Injustice

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Abstract: Cultural intelligence and its effect on employees’ performance emphasize the ability of individuals to adapt to values, traditions, and customs. The purpose of this study was to “investigate the effect of cultural intelligence on employees’ voices in the organization, considering the mediating role of leader-member exchange and job involvement and moderating role of perceived organizational injustice.” The study consisted of all employees and managers of International Deputy of Tehran University of Medical Sciences and Health Services with a total number of 200 individuals. A standard questionnaire consisting of 50 questions was used to collect data. Validity was performed using a coefficient of variation ratio method and confirmatory factor analysis for variable validity and reliability was performed with Cronbach’s alpha coefficient. To test the hypothesis, structural equation least method with partial least squares (PLS) approaches were used. The results of the research show that all the research hypotheses have been confirmed indicating that cultural intelligence has an effect on job involvement, voice behaviors and leader-member exchange with 0.435, 0.262, and 0.349, respectively. Leader-member exchanges were effective on job involvement and voice behaviors with 0.321 and 0.357, respectively. Job involvement has an effect on employees’ behavioral voice with 0.303.

Keywords: Cultural Intelligence, Employees Voice Behavior, Job Involvement, Leader-member Exchange, Perceived Organizational Injustice.

INTRODUCTION

In a challenging new millennium environment and in the context of competing between organizations and companies, one of the major components of success for organizations is to focus on the strategic management of human resources. The control of resources (such as physical, organizational, informational, and human resources) will provide a competitive advantage. Meanwhile, human resources are more important as it leads to the productivity and organizations performance (Rasuli et al., 2014).

The link between human resources management (HRM) and organizational behavior will improve the performance of an organization. One of the important components of organizational behavior is paying attention to the employees’ voice (Seyyed-Naqavi and Rafati-Alashti, 2015). The employees’ voice is considered as a communication and interactive strategy in the field of organizational behavior and has a tremendous implication for the performance of the organization (Morrison, 2011). Researchers have defined voice behaviors as expressing seriously and transparently their constructive ideas, suggestions, and
information related to their work so as to improve the organization performance and productivity (Aryee et al., 2017; Morrison, 2011; Gollan et al., 2010; Van Dyne et al., 2003).

Understanding employees’ views of their communication in the organization is crucial for top managers in order to get their input for continuous improvement and awareness of the organization. Their voice could be addressed either through direct interaction between the management group and employees’ or indirectly through their representatives (Morrison, 2011; Krone, 1991), which requires examining the factors that play a direct, mediating, or moderating role in the context (Seyyed-Naqavi and Rafati-Alashti, 2015).

Statement of the Problem

It has now been verified that paying attention to the active behaviors of employees for the survival of organizations and adaptation to dynamic business environments, especially cultural dynamics, is necessary (Aryee et al., 2017; Parker & Collins, 2010). In this regard, concentration to the employees’ voice behaviors in the organization has received special attention in organizational literature.

The importance of employees’ voice in many human resource management decisions has been proven (Dundon & Gollan, 2007); however, it has been established that employees may have important information to share on organizational issues and procedures but they are reluctant to speak out about changing their organizational job status because of point of references such as fear, conservatism or anxiety (Morrison, 2011).

Cultural intelligence is defined as an individual’s ability to effectively function in situations characterized by cultural diversity or the ability of a person to effectively admit in new cultural spaces (Ang and Earley, 2003). It includes meta-cognitive, cognitive, motivational, and behavioral dimensions (Ang et al., 2007). Researchers believe that cultural intelligence of individuals can be a good predictor of the employees’ voice behaviors mainly to employees who have different sub-cultures from the entire culture of the organization and the culture of other employees (Chen et al., 2012; Early and Ang, 2003). One of the important advantages of cultural intelligence is that it helps employees to encounter the communication barriers due to cultural differences and make an important contribution by reducing stress and communication problems with other employees and managers of the organization (Jiang et al., 2017). In this regard, the valuable factors that can play a positive and mediating role in the effect of cultural intelligence while improving the employees’ voice are the leader-member exchange and job involvement in the organization.

Leader-member exchange theory describes the roles of the leader and the subordinates; moreover, it also describes the relationship between leaders and members in different situations with different and various follower (Dionne, 2000). Researchers such as Hooper and Martin (2008) believe that the relationships between employees and managers can have an intermediate role between their cultural intelligence and their voice behaviors in the organization.

Recent research has also focused on the leader-member exchange as an effective factor in multicultural workplaces and people with different subcultures. For example, Janssens & Brett (2006) have shown that behaviors such as sharing effective information and interpersonal interactions in employees are mainly influenced by their cultural competencies and the important role of employees’ relationship with managers cannot be denied. Leader-member exchange can also improve the ease of obtaining and sharing information between employees and managers (especially in groups) and thus, have an effect on their voice behaviors due to reducing perceived risk and through expressing opinions and suggestions in the organization (Laschinger et al, 2009).

On the other hand, job involvement refers to the extent to which an individual actively engages in and fulfills professional duties and behaviors (Hirschi et al., 2014). Behaviors of creating job involvement of more employees in the organization have been referred as improving performance for development and achieving future professional goals and opportunities, creating professional networks, and pursuing more training to support work plans and factors development that can promote people to professional careers (Hirschi and Jaensch, 2015). Job involvement is indirectly affected by positive self-esteem and hope for a job future
An important question was raised on whether a component with negative effect can affect the effect of cultural intelligence on job involvement and the employees' voice behaviors? The researchers' response in this regard is to pay attention to the moderator role of "perceived organizational injustice." Tett & Guterman (2000) have examined the effective role of perceived organizational injustice in the relationship between cultural intelligence and job involvement. On the other hand, Jiang et al. (2015) argue that the degree of perceived organizational injustice due to negative emotions created by a person as a result of discrimination or humiliation in a different multicultural organization environment can play a negative moderator role in the effect of individual cultural intelligence in the organization and his job involvement. Given that cultural intelligence is a personal characteristic while social injustice is generally recognized as a situational variable. The researchers argue that the theory of activating attributes can explain how the effect of perceived injustice on the effect of cultural intelligence involvement in job involvement is a position factor (Le et al., 2016).

Limited numbers of researches were carried out on the factors affecting the employees' voice in the organization and hence, the authors' of this paper are initiated to bring light the important components. Therefore, the purpose of this study was to examine the direct effect of cultural intelligence on the employees’ voice in the organization by considering mediating role of the leader-member exchange and job involvement and the moderating role of perceived organizational injustice in the International Deputy of Tehran University of Medical Sciences & Health Services based on the theoretical framework.

**Theoretical framework and Research Hypotheses**

Earley and Ang (2003) suggest that cultural intelligence is a multidimensional concept through which individuals acquire and understand cultural knowledge; for example, planning, controlling and regulating mental patterns and cultural assumptions and norms during and after interactions. Researchers in the field of cultural intelligence has been proved that people with higher cultural intelligence are able to collect and process more information with better cognitive, emotional or behavioral actions for managing and controlling cultural marks at the workplace (Earley and Ang, 2003; Jyoti & Kour, 2015). These peoples are also able to perform better and effectively improve their knowledge of cultural systems in a multicultural environment of their cognitive intelligence as a cognitive capacity and facilitate, integrate, or adapt more effectively with a different cultural environment (Ang et al., 2007). On the other hand, cultural intelligent employees may look at the apparent differences in cultural systems in intercultural interactions and thus clearly know how to behave correctly in order to prevent or reduce cultural misunderstandings (Thomas & Inkson, 2005).

From this perspective, cultural intelligence can increase as a psychological capacity, hope, efficiency, flexibility, and job optimism (Luthans, 2006). It can also help people reduce perceived barriers at the workplace by people and encourage people to do more and better jobs (Dollwet and Reichard, 2014). In turn, job involvement and higher participation in jobs and professional activities can be an effective factor in improving the voice behaviors and the sound of employees in the organization (Jiang et al., 2017). Employees who are more capable of engaging in professional activities, especially in multicultural environments, can freely express their ideas and opinions. Therefore, the first and the seventh hypotheses can be depicted as follows (Fig.1.)

**H1**: Cultural intelligence of employees has a positive and direct effect on their job involvement in the organization.

**H7**: Job involvement of employees has a positive and direct effect on their voice behaviors in the organization.

On the other hand, Johnson et al. (2006) suggest that higher cultural intelligence reflects better cultural mutual competencies of employees in work settings in heterogeneous cultural environments. The extension of this concept and opinion creates the argument that the employees' voice behaviors in multicultural work can be influenced by their cultural intelligence. Proposals, ideas, views, and constructive orientations, and convincing others that are important and effective means of employees’ voice behaviors can be attributed to
their cultural intelligence (LePine & Van Dyne, 2001). Although the employees' voice can help improve organizational and effectiveness and affect management decisions, the evolutionary aspects of employees' voices such as the riskiness of presenting ideas and opinions can be evident in a well-developed cultural intelligence (Ng & Feldman, 2012). Individuals with high levels of mental and intellectual capital have strong beliefs about their professional and personal success and also have strong ability to cope with work and professional challenges and will have a higher job involvement (Luthans, et al. 2007). Based on this concept, the second hypothesis can be developed (Fig.1):

**H2**: Employees' cultural intelligence has a positive and direct effect on their voice behaviors in the organization.

Tett, & Guterman (2000) have examined the effective role of perceived injustice in the relationship between cultural intelligence and job involvement. They have found, based on the "trait activation theory", that individuals who have certain traits of character have particular behavior in certain situations. This theory has three basic principles: (1) traits are instinctive tendencies that can be manifested in different ways; (2) traits are expressed under specific positional signs; and (3) the inherent satisfaction of the individual is obtained through the expression of traits. The key principle of this theory is that individual expression of traits is characterized by "related situational signs". In this sense, for example, a person perceives the violation of their rights to be in a particular position, such as discrimination or humiliation by a group or cultural minority in an organizational environment. In general, “trait activation theory” explains why individuals with similar traits may behave differently (Castille et al., 2014). Thus, the third hypothesis is shaped as follows:

**H3**: Organizational perceived injustice modifies the effect of employees' cultural intelligence on their job involvement.

The quality and quantity of the relationship between managers and employees, especially in work environments with a variety of different environments, affect the employees' behavioral stimuli at the workplace (Graen & Uhl-Bien, 1995; Martin et al., 2016). In such environments, employees need more support from their managers and better relationships with them. The quality of such a relationship is determined by trust, open communication, and information sharing (Walumbwa et al., 2011) and leads to high employees' performance in terms of behavior and organizational citizenship behaviors (Martin et al., 2016). The high quality of exchange between leaders and employees of the organization may be influenced by cultural factors. This issue particularly emphasizes the cultural qualities of the leaders. For example, it has been reported that the effectiveness of the leader including promoting his/her exchange with employees is being influenced by multicultural groups (Groves & Feyerherm, 2011).

Ang et al. (2007) show that those with a higher level of cultural intelligence know more precisely how to direct themselves to higher cultural environments and consistently learn new cultural rules and their linguistic and verbal behavior make flexible to meet cultural needs that affect the quality of their work. With these capabilities, they can better understand that it's time to communicate with the organization's leaders and employees and when is it appropriate to offer suggestions, unknown cultural signs that may increase the risk of interacting with managers and colleagues understand better, and thus they have better verbal and non-verbal communication in the organization (Sukoco and Lee, 2010). Therefore, in mutual cultural interactions, employees with a higher cultural intelligence may have a better quality of interactions and exchanges with their leaders and manage better in facing existing cultural barriers to communicate with managers and leaders (LePine & Van Dyne, 2010). According to the above concepts, hypotheses 4, 5 and 6 was developed as follows:

**H4**: Cultural intelligence of employees has a positive and direct effect on the leader-member exchange in the organization.

**H5**: The leader-member exchange in the organization has a positive and direct effect on job involvement of employees in the organization.
**H6**: The leader-member exchange in the organization has a positive and direct effect on the employees’ voice behaviors in the organization.

According to the concepts discussed in the theoretical framework section, the conceptual model of the research, as shown in Fig. 1, was developed so as to demonstrate the relationship between the five variables of research; namely: Cultural Intelligence, Employees Voice Behaviors, Perceived Organizational Injustice, Job Involvement, and Leader-member Exchange based on the model of Lee et al. (2016) and Jiang et al. (2017).

![Figure 1: Conceptual model of research (Developed from Le et al., 2016; Jiang et al., 2017)](image)

**Methodology of the Research**

**Study Method**

This study is an applied research in term of its purpose; because its result can be utilized to solve an intra-organizational challenge as it was developed based on the concept of the effect of cultural intelligence on employees’ voice behaviors in the organization.

**Study Population, Sampling Method, and Sample Size**

The study population evaluated herein includes all experts and managers of International Deputy of Tehran University of Medical Sciences & Health Services with a total number of 200 individuals.

**Data Collection Method**

This study has been carried out based on a descriptive-survey method as the necessary information has been obtained through investigating the status quo of the study sample volume. The instrument used herein for gathering the information was a standard questionnaire containing 50 questions that were adapted from valid sources. Table 1 shows the characteristics of the research questions with the corresponding variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Variables Type</th>
<th>Range of questions</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Intelligence</td>
<td>Independent</td>
<td>1-20</td>
<td>Ang et al. (2007)</td>
</tr>
<tr>
<td>Leader-member exchange</td>
<td>IndependentI</td>
<td>21-27</td>
<td>Scandura and Graen's (1984)</td>
</tr>
<tr>
<td>Employees Voice behaviors</td>
<td>Dependent</td>
<td>28-38</td>
<td>LePine and Van Dyne (1998)</td>
</tr>
</tbody>
</table>
Validity and Reliability of data collection tools
The questionnaire was exposed to content validity and construct validity test. To assess content validity, the questions were evaluated by professors and experts and they confirmed the validity of the questionnaires. In order to assess the construct validity, the method of construct validity measurements using the coefficient of Variation Ratio (CVR) and verifiable factor analysis has been used.
To test the questionnaire reliability, Cronbach’s alpha coefficient has also been used. The results of the survey from eleven experts using the CVR validity coefficient shows at least 0.59 (Hajizadeh and Asghari, 2011) and their variable validity was confirmed. Due to lack of numerical value, three questions (Question number 2, 4 and 46 with C.V.R coefficient of 0.45 each) were excluded from the composition of the questionnaire.

Data Analysis
To investigate the inter-variable relationships in the present study, Kolmogorov-Smirnov test was conducted within the format of study hypothesis and Smart partial least squares (PLS) software was applied. One-sample t-test and SPSS were also utilized to evaluate the current status of the variables in the studied organization.

Results
Socio-demographic characteristics of the study population, reliability and descriptive analysis of the research variables
A total of 200 respondents (128 male and 72 female) were included in the study with 100% response rate. Majority of the respondents were M. Sc degree holders. Majority of the respondents (141; 70.5%) have at least six years of work experiences (Table 2). The reliability rates of the indices pertaining to each of the study variables are presented in Table 3 in which all the variables show at an acceptable reliability level above 0.70 that indicates the reliability of the questionnaire.

<table>
<thead>
<tr>
<th>Socio-demographic characteristics of the study population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>Sc. B</td>
</tr>
<tr>
<td>SC. M</td>
</tr>
<tr>
<td>D. Ph</td>
</tr>
<tr>
<td>Work Experience (Years)</td>
</tr>
<tr>
<td>2-5</td>
</tr>
<tr>
<td>6-10</td>
</tr>
<tr>
<td>&gt;10</td>
</tr>
</tbody>
</table>

Table 3: Reliability coefficients of the questionnaire and each variable and its aspects

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach's alpha</th>
<th>Average</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Intelligence</td>
<td>0.831</td>
<td>3.31</td>
<td>0.980</td>
</tr>
<tr>
<td>Leader-member exchange</td>
<td>0.861</td>
<td>3.11</td>
<td>0.891</td>
</tr>
<tr>
<td>Employees Behavioral Voices</td>
<td>0.806</td>
<td>3.21</td>
<td>0.901</td>
</tr>
<tr>
<td>Job Involvement</td>
<td>0.706</td>
<td>3.13</td>
<td>0.936</td>
</tr>
<tr>
<td>Perceived Organizational Injustice</td>
<td>0.751</td>
<td>3.41</td>
<td>0.889</td>
</tr>
</tbody>
</table>

Data analysis based on partial least squares (PLS) model
Based on the results of Kolmogorov-Smirnov test, the distribution of the population was abnormal, i.e. skewed from the mean distribution and hence; the analysis was performed using a variance-based structural equation
modeling with Smart PLS software. Structural equation modeling is a statistical model for investigating
the linear relationships between latent variables and obvious variables. Prior to statistical analysis, initial
screening of the data and descriptive statistics were performed by checking the accuracy of the input data into
the software in terms of accuracy of the data recording, data analysis in terms of missing data, and evaluating
the variables for the co-linearity between variables and everything was ensured.

**Reliability of the measurement tools**
The measurement model test involves evaluating the reliability (internal consistency) and construct validity
(discriminant validity) of the research tools. The reliability of the test relates to the accuracy of the
measurement and its stability of test scores over time. That is, if a test runs multiple times on a responsive
one, its score is the same in all cases. The second meaning of reliability refers to the alignment of the items,
i.e. how much the test questions are correlated to each other. In order to investigate the reliability of
constructs, Fronell and Larcker (1981) propose three criteria: 1) the reliability of each of the items; 2) the
composite reliability of each of the constructs; 3) the average variance extracted. Regarding the reliability of
each item, factor loadings of 0.5 and more of each item in the confirmatory factor analysis indicate a well-
defined construct. Also, the factor loadings should be at least at a level of 0.01 (Gefen & Straub, 2005). To
calculate T-statistics, Bootstrap test (with 300 subsamples) was used to determine the significance of factor
loadings. The T-coefficients ±1.96 to ± 2.58 are significant at the level of 0.05 and T-coefficients above ± 2.58
are significant at the level of 0.01. The Dillon · Goldstein coefficient (cp) was used to check the composite
reliability of each of the constructs. Since the least squares method, in contrast to the Ordinary Least Squares
(OLS) multiple regression, uses the factor scores of the subjects for analysis, taking into account the factor
loadings of each item in the computation of the reliability index is necessary. However, the Cronbach’s alpha
coefficient gives equal weight to the items and reliability show lower; so the cp coefficient was used.
Acceptable values of cp should be 0.7 or greater (Fronell and Larcker, 1981). The third marker of reliability is
the average of the extracted variance (Fronell and Larcker, 1981). Fronell and Larcker recommend AVE
values of 0.5 and greater. This means that the considered construct is about 50% or greater of the variance of
its markers. Table 4 indicates the Cronbach’s alpha, the Dillon · Goldstein and AVE coefficients. Figures 2 to
7 show the confirmatory factor analysis as proposed for each of the five latent variables. It should be noted
that because of the effect of loadings factor, 10 questions from 18 questions related to the construct of cultural
intelligence; 2 out of 11 questions related to constructing the employees’ voice behavior, and 2 out of 8
questions of the construct of job involvement had factor loadings below 0.5. These 14 questions were discarded
in the final analysis and hypothesis testing.

**Table 4:** Composite reliability and average value of extracted variance for all the studied latent variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cp</th>
<th>AVE</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Intelligence</td>
<td>0.817</td>
<td>0.561</td>
<td>0.794</td>
</tr>
<tr>
<td>Leader-member exchange</td>
<td>0.894</td>
<td>0.547</td>
<td>0.862</td>
</tr>
<tr>
<td>Employees Behavioral Voices</td>
<td>0.893</td>
<td>0.547</td>
<td>0.862</td>
</tr>
<tr>
<td>Job Involvement</td>
<td>0.792</td>
<td>0.595</td>
<td>0.787</td>
</tr>
<tr>
<td>Perceived Organizational Injustice</td>
<td>0.770</td>
<td>0.573</td>
<td>0.712</td>
</tr>
</tbody>
</table>
Figure 2: The output of PLS software on the factor analysis of cultural intelligence

Figure 3: The output of PLS software on t-test of cultural intelligence
Figure 4: The output of PLS software on (i) factor analysis and (ii) t-test of Leader-Member Exchange

Figure 5: The output of PLS software on (i) factor analysis and (ii) t-test of Employees Voice Behavior

Figure 6: The output of PLS software on (i) factor analysis and (ii) t-test of Job involvement
Validity Review: Colinearity amount and Divergent Validity

The collinearity between the time variables shows the existence of a strong relationship between the variables with a correlation of greater than 0.9, which results in the conception of redundant data. The recurring of data reduces the predictive power of each independent variable (Field, 2009; Pallant, 2007). The results of correlation coefficients between research variables are shown in Table 5.

Table 5: The results of the colinearity test of the latent variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cultural Intelligence</th>
<th>Leader-member Exchange</th>
<th>Employees voice behaviors</th>
<th>Job Involvement</th>
<th>Perceived Organizational Injustice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural intelligence</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader-member exchange</td>
<td>0.349</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees voice behaviors</td>
<td>0.521</td>
<td>0.643</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job involvement</td>
<td>0.442</td>
<td>0.645</td>
<td>0.649</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Perceived organizational injustice</td>
<td>0.013</td>
<td>0.407</td>
<td>0.402</td>
<td>0.411</td>
<td>-</td>
</tr>
</tbody>
</table>

In the divergent validity study, one of the criterions is that the square root of AVE within the variables should be more than the correlation between the variables. According to Table 6, the average square root of the extracted variance of all research variables is greater than their correlation with other variables. Therefore, the investigation criterion of the divergent validity of the research variables is established. In addition, the numbers under the diameter of the correlation matrix are reported to examine the relationship between the variables and the correlation coefficient of all variables is positive and significant.

Table 6: Correlation and square root matrix of the average of variance extracted from each of the variables of research

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cultural Intelligence</th>
<th>Leader-Member Exchange</th>
<th>Employees voice behaviors</th>
<th>Job Involvement</th>
<th>Perceived Organizational Injustice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural intelligence</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader-Member exchange</td>
<td>*0.349</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees voice behaviors</td>
<td>*0.262</td>
<td>**0.435</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job involvement</td>
<td>*0.357</td>
<td>*0.404</td>
<td>*0.201</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Perceived organizational injustice</td>
<td>*0.303</td>
<td>*0.213</td>
<td>*0.319</td>
<td>*0.345</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.01
**Structural model test**

To predict the employees' voice behavior, the proposed conceptual model is investigated through structural equation modeling method and according to the research hypotheses that was referred to it in the theoretical framework section, the least squares method is used for model estimation. The structural model test of the research and the research hypotheses in the PLS method is possible by examining the path coefficients (factor loading sings) and the values of $R^2$. The Bootstrap method (with 300 sub-samples) was also used to calculate T-values to determine meaningfulness of the path coefficients. The path coefficients are used to find out the contribution of each of the predictor variables in the explanation of the variance of the used criterion variable and the values of $R^2$ represent the explained variance of the criterion variable by the predictor variables. In addition, the Stone-Gisser coefficient $Q^2$ was used to examine the ability to predict dependent variables from independent variables. The positive values of this coefficient indicate the ability to predict and realize the role and formation of individual constructs and their relationships with each other (Vinzi, Henseler & Wang, 2010). The tested model of the relationship between the research variables is shown in Figures 8 and 9 and the effects of the numbers inside the circle of variance are explained.

![Figure 8: The tested research model](image-url)
Figure 9: T coefficients of the tested research model without moderate variable

The estimates of path coefficients and variance explained by the research variables and the result of the research hypothesis test have been reported (Table 7). As can be seen in Table 7, all the hypotheses are approved because of the fact that their t-statistics are at an upper limit of 1.96 and their p-value is less than 0.05, which indicates the significance of the research model.

Table 7: Path coefficients and t test for the effects of variables in research hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Variables</th>
<th>Path coefficient (β direct)</th>
<th>Statistics-T</th>
<th>Value-p</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cultural intelligence</td>
<td>Job involvement</td>
<td>0.435</td>
<td>8.234</td>
<td>0.000</td>
</tr>
<tr>
<td>2</td>
<td>Cultural intelligence</td>
<td>Employees voice behaviors</td>
<td>0.262</td>
<td>4.870</td>
<td>0.000</td>
</tr>
<tr>
<td>3</td>
<td>Perceived organizational injustice</td>
<td>moderates the effect of employees cultural intelligence on their job involvement</td>
<td>0.231</td>
<td>2.223</td>
<td>0.000</td>
</tr>
<tr>
<td>4</td>
<td>Cultural intelligence</td>
<td>Leader-member exchange quality</td>
<td>0.349</td>
<td>5.965</td>
<td>0.000</td>
</tr>
<tr>
<td>5</td>
<td>Leader-member exchange quality</td>
<td>Job involvement</td>
<td>0.321</td>
<td>3.311</td>
<td>0.000</td>
</tr>
<tr>
<td>6</td>
<td>Leader-member exchange quality</td>
<td>Employees voice behaviors</td>
<td>0.357</td>
<td>5.557</td>
<td>0.000</td>
</tr>
<tr>
<td>7</td>
<td>Job involvement</td>
<td>Employees voice behaviors</td>
<td>0.303</td>
<td>5.094</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The fitness of the model and validation of sharing and variables elimination

In this section, the structural model is examined and the general model of research is fitted. For this purpose, the significance and path coefficients of the research model using the Bootstrap method (repeated and successive sampling) and the t-test statistics have been investigated. In fact, the determination coefficient is clearer than the correlation coefficient of the criterion and is the most important criterion by which the relationship between the two variables can be explained. This coefficient expresses the variations percentage of the function by the independent variable.

The numerical determination coefficient is between 0 and 1. If the determination coefficient is equal to 0, that is, the regression line has never been able to attribute the changes of the function variable to the independent variable.
function. In other words, if there is no change in the dependent variable, there is no expression by the regression relation and hence, the value of the determination coefficient is zero. If the determination coefficient is equal to 1, that is, the regression line can exactly attribute the changes of the dependent variable to the independent variable changes. In other words, if all the changes in the dependent variable are explained by the regression relation, the value of the determination coefficient will be equal to 1 and the other values will be between these two limits, the values of $R^2$ close to 0.67 are favorable, close to 0.33 are normal and values close to 0.19 are weak.

The predictive capability of the model was also evaluated using the non-parametric test of Stone-Giesser. In the Stone-Giesser test, two values (values $R^2$) are presented: CV. Redundancy (CV. Red) and CV. Communality (CV. Com). The CV. Red value evaluates simultaneously the structural and measurement model while the CV. Com value only evaluates the measurement model. The positive and large $R^2$ value indicates the high predictive capacity of the model and negative $R^2$ value represents a very weak estimate of the latent variable (Henseler et al., 2014).

Finally, the general fitting of the model is referred and GOF index in the least squares-based model was used, which should be more than 0.3. This index is calculated according to the formula for the present model and indicates the suitability of the overall model. The determination coefficients and the values of $R^2$, the path coefficients, and the t-test statistical values of the research model are shown in Table 8. As shown in Table 8, the values of the determination coefficients for the latent variables of the model represent the influence rate of the dependent variables on the independent variable. The values 0.222: 0.563 and 0.391 infer the variable changes of the leader-member exchange, the employees’ voice behaviors, and the job involvement, respectively and are the variable that is independent of cultural intelligence. In addition to that the determination coefficient values are not negative and the CV. Red and CV. Com values were also in the favorable range, which is greater than 0.5.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Determination coefficient ($R^2$)</th>
<th>CV.Red</th>
<th>CV.Com</th>
<th>GOF index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Intelligence</td>
<td>-</td>
<td>0.821</td>
<td>0.821</td>
<td>0.514</td>
</tr>
<tr>
<td>Leader-member exchange</td>
<td>0.222</td>
<td>0.768</td>
<td>0.762</td>
<td></td>
</tr>
<tr>
<td>Employees Behavioral Voices</td>
<td>0.563</td>
<td>0.582</td>
<td>0.506</td>
<td></td>
</tr>
<tr>
<td>Job Involvement</td>
<td>0.391</td>
<td>0.511</td>
<td>0.502</td>
<td></td>
</tr>
<tr>
<td>Perceived Organizational Injustice</td>
<td>-</td>
<td>0.581</td>
<td>0.519</td>
<td></td>
</tr>
</tbody>
</table>

**Discussion and Suggestions**

In the tests carried out by the structural equation method, it was shown that all the relations between the research variables were established. On the other hand, the effect of employees’ cultural intelligence on their job involvement and also the effect of employees’ job involvement on their voice behaviors in the studied organization have been confirmed. This result was consistent with the research reported by Ang and Earley (2003) and Jyoti and Kour (2015). They have acknowledged that people with higher cultural intelligence are able to collect and process more information and provide better cognitive, emotional or behavioral actions for management and control of cultural signs in a multi-cultural workplace. This result was also consistent with the results of Dollwet and Reichard (2014), which believe that cultural intelligence can help to reduce perceived barriers at the workplace and encourages people to more activities and better jobs. It is also consistent with the results of Jiang et al. (2017), which concluded that job involvement and higher participation in job and professional activities could be effective in improving the sound and voice of employees’ behavior in the organization.
In the other hand, confirmation of the effect of employees' cultural intelligence on their voice behaviors in the study organization agrees with the studies of LePine and Van Dyne (2001) that believe that the employees voice behaviors in the field of multi-cultural work can be influenced by their cultural intelligence and suggestions, ideas, opinions, constructive orientations, and convincing others are important tools for employees' voice behaviors.

Another result of this study indicates confirmation of the moderating role of perceived organizational injustice on the effect of employees' cultural intelligence on their job involvement in the organization. This result also agrees with the results of Tett & Guterman (2000) that have examined the effective role of perceived injustice in the relationship between cultural intelligence and job involvement based on the trait activation theory. The effect of employees' cultural intelligence on the leader-member exchange in the organization has also been confirmed. This result was also consistent with Groves & Feyerherm (2011) study, which recognizes the high quality of exchange between leaders and employees of the organization influenced by cultural factors.

The influence of the leader-member exchange in the organization on job involvement as well as the effect of the leader-member exchange in the organization on the employees' voice behaviors have also been confirmed in the studied organization. These results are also consistent with research findings of Ang and et al (2007), which show that those with a higher level of cultural intelligence know exactly how to direct themselves in higher cultural diversified environments and consistently learn new cultural rules and develop their linguistic and verbal behavior and understand what is the right time to communicate with the leaders and employees of the organization.

Therefore, considering all the results and assumptions of the current research, the following conclusions and recommendations can be made to the managers of organizations in order to improve the cultural intelligence, job involvement, and voice behaviors of their employees and understanding of the level of justice in the organization, perceived organizational injustice, and leader-member exchange.

Test results of hypothesis 1: Confirmation of the effect of employees' cultural intelligence on job involvement. It is recommended to take actions by considering the material and spiritual motivation for employees due to their cultural differences in order to make employees satisfied with their work activities. Improve the interaction of their employees with other employees and managers of the organization and also take actions by observing similarities and cultural proportions, especially among employees of a group or a department in order to enhance the employees' job involvement that ultimately leads to superior business performance.

Test results of hypothesis 2: Confirmation of the effect of employees' cultural intelligence on their voice behaviors. It is recommended to concentrate to the individuals and cultural values of employees in the organization so as to augment the cultural compatibility of employees with the organization and improve the relations between them and take affirmative action considering the cultural differences of employees to prevent job dissatisfaction, organizational silence, job obligation, and so on....

Test results of hypothesis 3: Confirmation of the moderating role of perceived organizational injustice in the effect of employees' cultural intelligence on their job involvement. It is recommended to develop awareness to the organizational justice, especially interactional justice, which improves relations and communications between employees and managers in addition to improving their exchanges in the organization. This can affect the positive voice behaviors of them and be the top priorities of their organization. Organizational justice can also be improved by creating positive relationships and interactions between employees with different cultures, such as the formation of formal and informal meetings, the exchange of opinions and thoughts, etc., which results in the proximity of employees from different cultural groups to each other; as a result, they will improve the interactions between them and with their managers and hence, perceived injustice. It also reduces the causes and origins of the conflict between individuals and the organization including cultural and social conflicts, which improve the relations of managers and employees and influences their voice in the organization through a better perception of organizational justice.
Test results of hypothesis 4: Confirmation of the effect of employees’ cultural intelligence on the quality of the leader-member exchange in the organization. It is recommended that in order to improve in-group and out-group activities and provide a better context of interaction between managers and employees, provision of proper training how to interact with other employees from different cultures is necessary based on credible studies and research. Organizing different awareness meeting to cultural differences will help the team members and managers to understand the cultural characteristics of each individual or groups, which can increase the quality of the interactions of managers and employees in the organization.

Test results of hypothesis 5: Confirmation of the effect of the quality of the leader-member exchange on job involvement. It is recommended that it’s scientific and managerial capabilities to attract the best peoples from different cultural groups by considering the cultural differences and ethnic values of different employees in the organization, can provide a variety of opportunities to the organization to improve the performance in different work units.

Test results of hypothesis 6: Confirmation of the effect of the quality of the leader-member exchange on the employees’ voice behaviors. It is recommended to take steps to improve the employees voice behaviors due to factors such as rectifying the views of employees in different fields of work and culture in the organization, establishing the proportion between their job and the employees personality of the organization with regard to their ethnic and cultural values, and considering important issues such as the variety of skills, the meaningfulness and importance of duties, and independence in work, and their ability and providing feedback for them.

Test results of hypothesis 7: Confirmation of the effect of job involvement on the employees’ voice behaviors. It is recommended that employees’ training to accept the values of all colleagues in order to improve the efficiency of group work and the performance of the organization, empowering employees, particularly their psychological empowerment is more important for managers in order to have better adaptation to different types of cultures in the organization. Promote the employees culture and involvement in the organization’s decision-making process.

Conclusion

To conclude, this study has assisted us to recognize better how cultural intelligence affects the employees’ voice in the organization in terms of the role of leader-member exchange, job involvement and perceived organizational injustice towards the performance of the employees and organizational productivity. Culturally diversified employees in an organization have a negative influence on the performance of individuals unless the cultural intelligence barriers minimized and encouraging employees to speak out their ideas, opinions or concerns. The results of the study indicate that employees’ voice has potential implications for the development of an organization and also improving the employees’ productivity. Hopefully, this paper will serve to guide and motivate future research efforts in a way that will be fruitful for intensifying our understanding of the effect of cultural intelligence on employee voice.

Limitations of the Study

One of the possible limitations of this study is due to the nature of the research questionnaire the respondents may not have responded well to questions due to fatigue and frustration. The other limitation is the failure to fully address all factors affecting the employees’ voice behaviors in the organization due to time and budget constraints.

Acknowledgments

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Declaration of interest statement

The authors declare that they have no competing interests.
Endnotes

1 In the Bootstrap method, proposed by Hensler et al. (2009), 10,000 times with a volume of 60 people (equal to the original sample size) were performed repeatedly and sequentially.

References


