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The Relationship between Cultural Intelligence and the Performances of Coaches

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ABSTRACT
In this study, the relationship between cultural intelligence and the performances of coaches in Tehran is considered. The findings suggested that there is a positive and significant relationship between cultural intelligence and the performances of coaches; furthermore, studying the relationship between four dimensions of cultural intelligence, the results indicated meaningful relationship between Metacognitive, cognitive, motivational, and behavioral components of cultural intelligence and the performance of coaches. Also, it was shown that cultural intelligence has the ability to predict the performance, but the components of cultural intelligence are not able to predict performance. It can be said that cultural intelligence is one of the most important influencing factors on performance, so this criterion can be used for deciding about selecting and appointing coaches based on their performances.

Keywords: Cultural Intelligence, Performance, Coach

INTRODUCTION
In the new approach of management, organizational culture, team work, and how the manager cooperates with others are important [1]. Management requires specific behaviors in different positions and situations so that the managers can have effective performance. Therefore, one of the effective factors on the performance of a manager is his ability and skill in different positions, especially various cultural positions.

Cultural intelligence is a new form of intelligence which has relationship with various cultural work environments. Peterson defines cultural intelligence as the talent to use skills and abilities in various environments [2]. Many researchers believe cultural intelligence to be the ability of individuals to do the tasks effectively in different cultural situations [3, 4]. Some believe this intelligence to be a multi-dimensional competence which includes cultural knowledge, thoughtful action, and a list of behavioral skills. Thomas and Inkson[5] and Thomas and Elron[6] define cultural intelligence as a system of interactive abilities. In fact, cultural intelligence is a capacity which allows the individuals to have an accurate understanding in front of the wide spectrum of cultures and behave appropriately [7]. Earley and Ang believe cultural intelligence to be an independent structure from culture, which is used in specific cultural conditions [9].

This type of intelligence improves the understanding of intercultural interactions [9]. In order that the individual is culturally considered intelligent, he should have an accurate judgment in situations in which there are various references and understandings, and achieve an accurate one from that situation [8]. Those with high level of cultural intelligence have dominance over expressing emotions and physical states [9]. Cultural Intelligence Center introduces a four-dimensional pattern to measure cultural intelligence, which is also considered the most important conceptual framework of cultural intelligence, used in this study, which are stated by Early and Ang [9], Van Dyne and Ang[10] and Ang, Van Dyne, and
Koh[11], and that the dimensions of this scale include cognitive, metacognitive, motivational, and behavioral factors.

2. Cognitive Components: represent the understanding of individuals from cultural similarities and differences.

3. MetaCognitive Components: mean that how an individual understands cross-cultural experiences.

4. Motivational Components: show the interest of individuals to test other cultures and interact with people from different cultures.

5. Behavioral Components: include the ability of individuals to cope with verbal and non-verbal behaviors suitable for dealing with different cultures. Organizations with intercultural interactions may, because of cultural contradictions, face with some disorders in their performances because the personnel and managers have wide relationships with individuals who have different cultures and even different languages. Successful managers know that they should adapt and adjust with various occupational, national, and organizational cultures[12]. To know and suitably react against cultural differences cause an increase in performance and improve profitability for projects.

Perhaps, the first concept which has been noticed from the beginning of the formation of organization up to now is the concept of organizational performance. Organizational performance is a concept which, alone, can justify the survival and even dissolution of the organizations, and, primarily, the philosophy of organizations is their performances because it builds all the components and offshoots of an organization, a system or a discipline. The performance of each organization depends on the performance of employees and managers, opportunities, resources, and facilities, and is a result of environmental systems and other organizations. The performance of employees, too, depend on individual variables (mental and psychological skills and abilities, and life background), psychological variables (perception, attitude, personality, learning, motivation), and organizational variables (resources, leadership, payments, job structure and plan). Performance should be defined as the results of the work because these results create the strongest relation with strategic goals of the organization, customer's satisfaction, and economic cooperation. Recent models of job performance regard the performance as a function which emphasizes on different aspects of performance[13].

Maclean and Zakrajesc[14] offered a multi-factor model of the performance of coaches based on team maintenance, work and technical behaviors, training and development of athlete, public relations, management factor and knowing the team, financial issues, team performance, and individual performance of the coach. Performance in this research is the processes and behavioral and job outcomes that a coach shows during training, practicing and competition. In Maclean and Zakrajesc's ideas the coaches are measured by these behavioral and job factors (performance criteria). Studies have shown that cultural intelligence can be regarded as one of the factors affecting performance. The reasons for this claim is that by the expansion of international trade, the need for and ability which helps the managers to deal with the cultural complexities can be felt more than ever[15]. SoonAng[16] in his study, examined four dimensions of cultural intelligence (metacognitive, cognitive, motivational, and behavioral) and job performance in multicultural environments. In this study it was shown that metacognitive cultural intelligence and behavioral cultural intelligence have the ability to predict job performance. The results of the research by Ang, Van Dyne, Koh, Yee Ng, Kok, Templer, Tay, and Chandrasekar[11] show that the dimensions of cultural intelligence have relationship with performance variable, and, in fact, cultural intelligence is considered as the predictive factor of this variable, and that the dimensions of strategy and behavior of cultural intelligence affect on the task performance of individual. The results of the research by Chen, Yi-chun, Lin, and Irin[17] showed that there is a positive relationship between cultural intelligence and performance, and that cultural intelligence can be proposed as a predictor for the performance of an individual in cultural opposition position, and is seen as a key factor affecting other cultural factors such as culture shock. The results of the studies by Yi-chun Lina, Angela Shin-yih Chenb, Yi-chen Songc[18] showed that cultural intelligence and its dimensions have a unique ability to predict intercultural performance and implementation. Although, in the studies done so far, cultural intelligence has been more attentive to the interactions with foreign cultures, it has the ability to be generalized in ethnic subcultures within national culture. There is a wide range of emotions and feelings in the subcultures within a national culture, in such a way that differences in language, ethnicity, and many other characteristics can be emerged as potential contradictory sources, and if there is no accurate understanding of the development, creates problems for suitable job relations[19]. As, in countries like India, China, and Iran, which in their inland areas have a variety of cultural backgrounds, can internally pay attention to this issue. For example, in Iran, the interaction of diverse cultures the Turks, Lors, Kurds, Persians, etc. could be the reason for the attention and investigation of cultural intelligence inside the country. Statistics show that 51% of the Iranians are Persian, 24% Azeri, 8% Gilaki and Mazeni, 7%
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Kurd, 3% Arab, 2% Baloch, 2% Turkmen, 2% Lor and other ethnic groups. Each of these groups in its own culture has its own language, dialect, customs and attitudes; so, the coaches can use them in their everyday interactions. Hence, according to the different cultures in a society that has led people, with different cultural backgrounds, to the economic, social, cultural, and sports organizations, and sports organizations, which according to the nature of the activity, have more interactions with many people in the society, and according to the fact that sports teams or Iran’s sport is involved in different subcultures, it should be noted that how coaches can benefit from this cultural diversity in the organization and create creativity and innovation in the organization and provide consistency and compatibility among the athletes. So, coaches should recognize and respect this cultural diversity; as a result, sports organizations should consider being equipped with multi-nationality. The present study is to challenge the position of this management ability of the coaches in sports organizations.

MATERIALS AND METHODS

The population of the study consists of 12,528 coaches working (in the individual and team sports) at the Youth and Sports Organization, Education, and the Municipality of Tehran, and based on Morgan table 375 individuals were randomly selected as sample. In this study, individual information questionnaire (gender, education level, sports background, etc) was used to collect demographic data, and the cultural intelligence standard questionnaire, which has been developed by Cultural Intelligence Measurement Center in the United States and localized by an internal researcher Karami,[20], has been applied in the research. The questionnaire consists of four sections which are cognitive variables of cultural intelligence, metacognitive variables of cultural intelligence, motivational variables of cultural intelligence, and behavioral variables of cultural intelligence, respectively, and has been measured by Likert scale (from 1 to 5) and the reliability and validity of measurement equal to 93% and 82%, respectively. It worth mentioning that the compilation of performance questionnaire was done based on the classification of Maclean and Zakrzesick[14] in which, after the analysis of practical-discovery, eight factors, with the special value of more than one in two groups of processes and outcomes with overall reliability of the tools=0.75, were detected, and reliability coefficient of identified factors was determined by using Cronbach’s alpha between α= 0.63 to α= 0.88, and seven questions, due to having load factoring less than 0/40 were excluded from the original questionnaire[21]. In this study, descriptive statistics was used to present the population characteristics. Moreover, inferential statistics, including Pearson correlation coefficient (to investigate the relationships between variables), Smirnov Kolmogorov test (for normality of distributed data) and linear regression (for predicting variables), have been used. In studying hypothesis test, a significance level of (P ≤ 0.05) was considered.

RESULTS AND DISCUSSION

Based on demographic analysis, 49.9 percent of the coaches were male and 50.1 percent of them were women. The highest percentage of teachers aged between 26 to 30 years age class and the lowest percentage aged less than 20 years old. The highest percentage related to swimming (22.5%), fitness (20.1) and handball (14.6), respectively. The lowest percentage was (0.8), which was the table tennis sport. The highest percentage of coaching(57.7) related to the coaching grade of 3 and the lowest percentage (2.2) related to the national coaching degree. The highest percentage of coaching experience was less than 5 years (26.3) and the lowest percentage of coaching experience related to 26 year-old class and older (5.1). 23 percent of the sample had a Diploma degree, 13.8 percent had Associate Diploma degree, 44.7 had a bachelor's degree, 14.4 had a master's degree, and 1.1 percent of them were university students. The percentages of winning according to the levels of school, college, club, country, regional, continental, and the world were 13.3, 9.2, 13.6, 14.6, 24.6, and 5.7 percent, respectively.

Distribution of the factors in provided answers to the variables, in this study, was normal, and the parametric tests were used to examine the relationship between variables.

Table 1: Correlation coefficients of the components and total score of cultural intelligence and performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>71.16</td>
<td>8.64</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivational</td>
<td>49.62</td>
<td>7.44</td>
<td>0.69</td>
<td>**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metacognitive</td>
<td>35.48</td>
<td>6.43</td>
<td>0.73</td>
<td>**</td>
<td>0.59</td>
<td>**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Behavioral</td>
<td>18.24</td>
<td>3.30</td>
<td>0.72</td>
<td>**</td>
<td>0.57</td>
<td>**</td>
<td>0.71</td>
<td>**</td>
</tr>
<tr>
<td>Cultural Intelligence</td>
<td>168.91</td>
<td>22.15</td>
<td>0.93</td>
<td>**</td>
<td>0.84</td>
<td>**</td>
<td>0.86</td>
<td>**</td>
</tr>
<tr>
<td>Operation</td>
<td>219.31</td>
<td>19.96</td>
<td>0.24</td>
<td>**</td>
<td>0.15</td>
<td>**</td>
<td>0.19</td>
<td>**</td>
</tr>
</tbody>
</table>

**. P ≤ 0.01 *. P ≤ 0.05
As it is shown in Table 1, all of the factors are significant in \( P \leq 0.05 \) level. The relationship between cultural intelligence and coaches’ performance (\( r=0.22, \ P \leq 0.01 \)) is confirmed, and components of cultural intelligence have a significant positive relation with performance and cognitive components have the highest correlation. In Table 2, the simultaneous Regression has been examined to predict the performance based on the total score of cultural intelligence.

**Table 2: Simultaneous Regression**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>R</th>
<th>R²</th>
<th>R2 Adjusted</th>
<th>F(df)</th>
<th>Cultural Intelligence</th>
<th>B</th>
<th>Beta</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>0.22</td>
<td>0.05</td>
<td>0.05</td>
<td>11.03*</td>
<td>Fixed</td>
<td>186.85</td>
<td>18.49</td>
<td>0.00</td>
<td>(1,207)</td>
</tr>
<tr>
<td>Total Score</td>
<td>0.19</td>
<td>0.22</td>
<td>0.32</td>
<td>0.00</td>
<td>of Cultural Intelligence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* \( P \leq 0.05 \)

According to Table 2 and the multiple correlation coefficient 0.22, the determination coefficient obtained \( R^2=0.05 \), the \( t \ F=11.03 \), and with degrees of freedom \( (1,207) \), knowing the total score of cultural intelligence 5 percent of the performance variables changes. Based on the standardized regression coefficients (coefficient analysis path), it is shown that the importance of cultural intelligence is \( (\beta=0.22) \), and by knowing the total score of cultural intelligence based on the following regression equation, the performance levels can be explained by:

\[
\text{Cultural intelligence score} = 19.0 + 186.85 \times \text{Performance of coaches}
\]

In Table 3, simultaneous Regression is used to predict the performance based on cultural intelligence components.

**Table 3: Simultaneous Regression**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>R</th>
<th>R²</th>
<th>R2 Adjusted</th>
<th>F(df)</th>
<th>Cultural Intelligence Components</th>
<th>B</th>
<th>Beta</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>0.23</td>
<td>0.05</td>
<td>0.04</td>
<td>2.98*</td>
<td>Fixed</td>
<td>184.69</td>
<td>16.8</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(4,204)</td>
<td>Cognitive</td>
<td>0.29</td>
<td>0.12</td>
<td>0.93</td>
<td>0.35</td>
</tr>
<tr>
<td>Motivational</td>
<td>0.16</td>
<td>0.05</td>
<td>0.43</td>
<td>0.67</td>
<td>Behavioral</td>
<td>-0.43</td>
<td>-0.06</td>
<td>-0.59</td>
<td>-0.56</td>
</tr>
<tr>
<td>Meta Cognitive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.37</td>
<td>0.12</td>
<td>1.04</td>
<td>0.30</td>
</tr>
</tbody>
</table>

\( P \leq 0.05 \)

According to the multiple correlation coefficient of 0.23 and the obtained determination coefficient of \( R^2=0.05 \), the amount of \( F=2.98 \) with degrees of freedom \( (4,204) \) of Table 5, it can be seen that based on standardized regression coefficients (path coefficients analysis), none of the components of cultural intelligence will predict the performance variable changes.

**CONCLUSION**

Thinking on the results of this study indicates that there is positive and significant relationship between cultural intelligence and performance of coaches of Tehran. On the other hand, in an independent study of the dimension relationships of cultural intelligence including metacognitive, cognitive, motivational, and behavioral with performance an independent and significant relationship was observed. The consistency of the present research findings with those of Traendis [19], Ang and Early, Koh, and Van Dyne [11], Chen, Chan Lin [17], demonstrates the validity of high relationship and strong correlation between cultural intelligence and coach performance, so that the relationship among all components of cultural intelligence with performance was confirmed, and this means that interest rates, the ability of coaches, their understanding of cultural similarities and differences and general knowledge of coaches about other cultures and interacting with different cultures have relationship with the performance of coaches. Simultaneous Regression analysis showed that cultural intelligence, generally, can predict the performance, but none of its components can alone predict performance. The research by Angela Shin, Chan Lin [18] shows that cultural intelligence can generally predict the performance which is consistent with current research. The researches by SoonAng [16], Traendis [19], Ang and Early, Koh, Van Dyne [11], Lin, Angela Shin, Chen, and Yi-chenSong [18] are inconsistent with the current research, and in all of these researches each of the components of cultural intelligence is able to predict performance. The reason of the non-conformity of these researches may be because of different measurement tools as well as the population, type of organizational culture, and type of different work environments, and that the population of the study is sports coaches, who have not been studied in this research. According to the
results of the research, the coaches, to improve their performance, should consider cultural intelligence and its dimensions, and develop different capabilities like cultural intelligence in themselves; as the cultural intelligence gets higher, their performance gets better; in other words, a smart coach, is culturally able to, by the help of his experiences, express the behavior which was fully suitable for the present situation; it causes the coaches to understand cultural differences apart from value judgments, and by understanding and accepting cultural differences accept cultural adaptation. Cultural adaptation will not be possible without having or escalating cultural intelligence capacity. Since cultural intelligence, as to other aspects of personality, can be grown, some recommendations can be given to the heads of the sports organizations, but, in this context, it is necessary to mention two things: first, growing the cultural intelligence can only be performed by qualified professionals such as psychologists, and secondly, improving cultural intelligence must be developed in line with a comprehensive growing program of strategic human resource of organization and beside other aspects of this program. Some methods to train and strengthen cultural intelligence are the ways which Earley and Mosakowski[12] have proposed. Based on the opinions of these two scholars, to strengthen cultural intelligence, it is important to determine training program after measuring this intelligence in people and determining their strong and weak points. According to the results of this study, as, in general, the mean score of cultural intelligence of the coaches of this study was average, and regarding motivational and behavioral dimensions, compared with other dimensions, it was lower, attending in aforementioned classes or using programmed training models for cultural intelligence dimensions of Earley and Peterson[22], and, also, stimulated practices and playing the role so as to increase cultural intelligence of the coaches in this field can be proposed; furthermore, considering approving the hypotheses of the research about predicting the performance by cultural intelligence, it can be said that cultural intelligence is one of the most important influencing factors on performance, so this criterion can be used for deciding about selecting and appointing coaches based on their performances, determining types of training for coaches, and, also, selecting appropriate factors for evaluating the performance of the coaches which, ultimately, can be effective in promoting the efficiency of sports organizations. Based on the multidimensional nature of cultural intelligence and the relation of these aspects with performance, new research contexts are provided, and in future researches such questions can be examined that whether each aspect of cultural intelligence can be effective on the performance or not; and that how these effects would be in people with different personalities; also, how cultural intelligence will relate to individual levels of job like job satisfaction can be examined.

REFERENCES