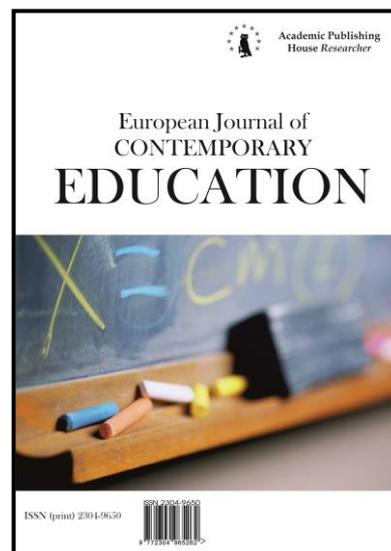




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Cultural Intelligence of the Jordan Teachers and University Students from the Hashemite University: Comparative Study

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Abstract

The present study aimed at comparing the level of cultural intelligence among teachers and university students, and to define whether there are statistically significant differences in the level of cultural intelligence due to gender variables. The sample consisted of 300 teachers and 400 students at the Hashemite University, chosen by random selection, and data collected using the Cultural Intelligence Scale. Results of the study showed a high level of cultural intelligence among teachers and university students and also showed Statistically significant differences were also found in the levels of both cognitive and behavioral cultural intelligence attributed to teachers and university students, in favor of teachers. And statistically significant differences in the level of motivational cultural intelligence in favor of male teachers, and statistically significant differences in the level of behavioral cultural intelligence in favor of female teachers. The results of the study also showed statistically significant differences in the levels of cultural intelligence, meta-cognitive cultural intelligence, cognitive cultural intelligence and motivational cultural intelligence in favor of male students.

Keywords: cultural intelligence, teachers, university students.

1. Introduction

The recently accepted link between culture and intelligence has led to cultural intelligence becoming the subject of a range of research studies in a variety of fields, and this increasing interest and curiosity as regards intelligence has led to the recognition and classification of specific types of intelligence in diverse areas including social intelligence (Thorndike, Stein, 1937) and the more recent study of emotional intelligence by Mayer, Salovey (1993). However, as Sternberg, (1997) pointed out, there is a lack of cross-cultural dimensions in the domains of

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emotional and social intelligence since their area is limited to describing the manner and reason for an individual's response.

The contemporary environment of burgeoning globalization and multi-cultureless involving a wide variety of fields has heightened the focus on an individual's ability to function effectively in a mixed cultural setting, which has resulted in a surge of academic and scientific realization of the necessity for systematic study of cultural intelligence. The concept however is far from novel, having been mooted in 2003, defined as the aptitude to function successfully in miscellaneous cultural situations (Ang, VanDyne, 2008), whereas Earley and Ang (2003) defined cultural intelligence as that of an individual being able to deal effectively in multi or cross-cultural situations, adapting intuitively to collating, inferring and responding to different cultural cues and nuances, while cultural intelligence was defined by Crowne (2008) as a complex multidimensional proficiency using a combination of deeply understood and acquired knowledge, being aware and mindful of cultural mores and taboos, and possessing a wide range of interaction and communication skills.

Due to its comparatively recent introduction in the field there is limited empirical evidence available to the researcher (Alon, Higgins, 2005; Crowne, 2008; Earley, Ang, 2003) with most of the research studies focusing on cultural intelligence-related results (Crowne, 2008) including cultural adaptation and judgment, as well as decision making and task performance in various cultural surroundings (Ang et al., 2007) in addition to successful leadership abilities overseas (Alon, Higgins, 2005).

Crowne (2008) broadened the spectrum, finding a number of significant precursor backgrounds and associates related to cultural intelligence, which included experiences of travelling abroad and holidays spent in foreign countries, as well as studying and working abroad. The predominantly relevant finding in the Crowne study was the benefit of previous experience or tutoring gained by living and travelling abroad and its correlation with the general concept of cultural intelligence, as well as its diversity of dimensions.

According to Sternberg (1986), the complex framework of cultural intelligence is a concept comprising four dimensions:

1) Meta-cognitive: awareness of one's own thought processes and adaptation to different cultural situations (Ng et al., 2012). Individuals having elevated meta-cognitive levels of cultural intelligence will constantly adjust perceptions and adapt approaches to interact appropriately within given cultural settings, responding with acquired reactions and conventions to the prevailing cultural environment (Ang et al., 2007). Meta-cognition is having the capability to absorb and comprehend cultural norms and mores, and respond appropriately.

2) Cognitive: knowledge gained through education or personal experience of a wide range of social and legal practices, regulations and cultural conventions; these higher order thinking skills allow for correlation of similarities and dissimilarities of attitudes and social mores in cross-culture situations which prompt particular responses (Ang et al., 2007; Ng et al., 2012).

3) Motivation: the wish to learn about, understand and function in a different culture, basically an urge to acquire a comprehensive knowledge and understanding of another culture to enable one to function with ease and competence (Ang et al., 2007; Bandura, 2002; Ng et al., 2012).

4) Behavioral: pertaining to acceptable verbal and physical behavior in a different cultural situation, regarding appropriate language tone and content, and including physical actions such as facial expressions and other body language. High levels of both knowledge and sensitivity in these aspects are required to successfully reflect culturally acceptable norms and value systems (Ang et al., 2007; Ng et al., 2012).

Although a number of empirical studies have examined the presence of cultural intelligence and other variables, in the present study we have expanded on this body of work by examining the cultural intelligence construct in a sample of Jordanian teachers and university students. More specifically, the current study attempted to answer the following questions:

Question 1: Is there a statistically significant difference in the level of cultural intelligence among teachers and university students?

Question 2: Is there a statistically significant difference in the level of cultural intelligence among teachers due to the gender variable?

Question 3: Is there a statistically significant difference in the level of cultural intelligence among students due to the gender variable?

2. Methodology

Participants

The current study consisted of all teachers in the Education Directorate of Mafraq and all students at the Hashemite University in the first semester of the academic year 2018/2019. The study sample consisted of 300 teachers (150 male and 150 female) their ages ranged from (23-49 years) 400 university students (200 male and 200 female) their ages ranged from (18-22 years).

The teachers participants were randomly selected from forty primary and secondary public schools from 162. The questionnaires were distributed to the teachers and a week later the questionnaire were collected. Whereas the students sample were selected based on the purposive sample technique from among students enrolled in four university mandatory requirement courses at the Hashemite university.

Study instrument:

Cultural Intelligence Scale: Developed by Ang et al (2007), it includes 20 items measuring four subscales of cultural intelligence: (1) Meta-cognitive (4 items, e.g. "I am conscious of the cultural knowledge I apply to cross-cultural interactions". (2) Cognitive (6 items, e.g. "I know the marriage systems of other cultures". (3) Motivational (5 items, e.g. "I enjoy living in cultures that are unfamiliar to me". (4) Behavioral (5 items, e.g. "I alter my facial expression when a cross-cultural interaction requires it". The cultural intelligence scale was scored on a 7 point Likert scale ranging from (1) Strongly disagree to (7) Strongly agree. Ang et al. (2007) calculated that the internal consistency of the scale using Cronbach alpha was (0.91, 0.88, 0.87 and 0.89) respectively for meta-cognitive, cognitive, motivation and behavioral. For the purpose of the current study, the scale items were translated into Arabic and a back translation performed by an expert and compared with the English version of the scale items, and finally accepted as showing a good concurrence between the English version and the back translation.

For the purpose of verifying the validity of the scale in the Arabic version, the correlation coefficients between the sub-scales were calculated as shown in [Table 1](#).

Table 1. Correlation coefficients between dimensions of cultural intelligence

Dimensions	Meta-cognitive	Cognitive	Motivation	Behavioral	Cultural intelligence
Meta-cognitive	1				
Cognitive	0.55*	1			
Motivation	0.60*	0.72*	1		
Behavioral	0.67*	0.55*	0.59*	1	
Cultural intelligence	0.79*	0.87*	0.87*	0.81*	1

Notes: * Correlation is significant at the level 0.01.

[Table 1](#) shows the four cultural intelligence dimensions to be significantly and positively correlated. The Pearson correlation value between the four dimensions ranged from 0.55 to 0.72, and the Pearson correlation value between the four dimensions and total scale score ranged from 0.79 to 0.87.

For the purpose of verifying the reliability of the scale in the Arabic version, the authors applied the scale to the pilot sample (30 teachers and 40 university students) after a period of two weeks and correlation coefficients between the two applications are shown in [Table 2](#).

Table 2. Value reliability t-retest and Cronbach Alpha for cultural intelligence subscale

Variables	Teachers		University students	
	test-retest	Cronbach's Alpha	test-retest	Cronbach's Alpha
Meta-cognitive	0.73	0.69	0.81	0.77
Cognitive	0.86	0.77	0.86	0.78
Motivation	0.80	0.77	0.83	0.77
Behavioral	0.77	0.75	0.77	0.75
Cultural intelligence	0.89	0.74	0.91	0.75

Table 2 shows that the values of the reliability of cultural intelligence using test-retest ranged from 0.73 to 0.89 among teachers and from 0.77 to 0.91 among university students. The values of the reliability of cultural intelligence using Cronbach Alpha ranged from 0.69 to 0.77 among teachers and from 0.75 to 0.78 among university students.

Data collocation and analysis:

To achieve the objective of the study, the following implementation procedures were followed: review of theoretical literature and previous studies related to cultural intelligence, the study sample comprised teachers in the Education Directorate of Mafraq and students at the Hashemite University, the study scale was distributed to the study sample who were given an idea of the study objective, and assured that the data would be used for research purposes only. The final stages were collocation of the study tools and inputting of the data, while means, standard deviation, and multivariate analysis (MANOVA) were used to analyses the data. To check the normal distribution of data of the study skewness and kurtosis were collected. To determine the level of cultural intelligence the following standard has been adopted: below 3 = low, 3-4.99 = medium, above 5 = high.

Results:

Question 1: Is there a statistically significant differences in the levels of cultural intelligence between teachers and university students?

To determine whether significant differences exist between the levels of cultural intelligence of teachers and university students. Table 3 presents means and standard deviations for each dimension.

Table 3. Means, standard deviations of the levels of cultural intelligence among teachers and university students

Variables	Teachers		University students	
	M	SD	M	SD
Meta-cognitive	5.63	0.81	5.55	0.89
Cognitive	4.96	1.06	4.76	1.07
Motivation	5.32	0.99	5.39	1.04
Behavioral	5.68	0.84	5.45	0.97
Cultural intelligence	5.39	0.79	5.28	0.86

Table 3 show that there are differences in the level of cultural intelligence between teachers and university students. In order to use MANOVA, we conducted preliminary tests to check for multicollinearity, sphericity, and homogeneity of variance. A multivariate analysis was conducted to investigate the differences in the level of cultural intelligence. In order to evaluate multivariate significance, Wilks's lambda statistic was used. The results indicated statistically significant between teachers and university students in the level of cultural intelligence (F = 9.210, Wilks's lambda = 0.950, sig = 0.00, Partial η^2 = 0.050).

Table 4. Results of MANOVA analysis with respect to teachers and university students of the levels of cultural intelligence

Source	Dependent variable	Sum of squares	df	Mean square	F	Sig	Partial η ²
Teachers-university students	Meta-cognitive	1.097	1	1.097	1.478	0.22	0.002
	Cognitive	6.408	1	6.408	5.560	0.01	0.008
	Motivation	0.990	1	0.990	0.940	0.33	0.001
	Behavioral	8.912	1	8.912	10.475	0.00	0.015
	Cultural intelligence	2.150	1	2.150	3.097	0.07	0.004
Error	Meta-cognitive	518.072	698	0.742			
	Cognitive	804.452	698	1.153			
	Motivation	735.493	698	1.054			
	Behavioral	593.798	698	0.851			
	Cultural intelligence	484.692	698	0.694			
Corrected total	Meta-cognitive	519.170	699				
	Cognitive	810.860	699				
	Motivation	736.483	699				
	Behavioral	602.710	699				
	Cultural intelligence	486.842	699				

The results showed statistically significant differences in the cognitive ($F = 5.560, P = 0.01$) and behavioral ($F = 10.475, p = 0.00$) dimension levels attributable to teachers and university students. For the cognitive dimension, the teachers' mean score ($M = 4.96, SD = 1.06$) was higher than that of the university students ($M = 4.76, SD = 1.07$); for the behavioral dimension, the teachers' mean score ($M = 5.68, SD = 0.84$) was higher than that of the university students ($M = 5.45, SD = 0.97$). The results showed no statistically significant differences between teachers and university students in the levels of cultural intelligence, meta-cognitive and behavioral dimensions.

Question 2: Is there a statistically significant differences in the levels of cultural intelligence due to the teachers' gender variable?

To determine whether significant differences exist between the levels of cultural intelligence due to the teachers gender. [Table 5](#) presents means and standard deviations for each dimension.

Table 5. Means, standard deviations of the levels of cultural intelligence according teachers gender

Variables	Male		Female	
	M	SD	M	SD
Meta-cognitive	5.63	0.80	5.64	0.81
Cognitive	5.07	0.99	4.85	1.13
Motivation	5.54	0.86	5.09	1.06
Behavioral	5.58	0.87	5.77	0.81
Cultural intelligence	5.43	0.73	5.30	0.84

[Table 5](#) show that there are differences in the level of cultural intelligence due to the teachers gender. In order to use MANOVA, we conducted preliminary tests to check for multicollinearity, sphericity, and homogeneity of variance. A multivariate analysis was conducted to investigate the differences in the level of cultural intelligence. In order to evaluate multivariate significance,

Wilks's lambda statistic was used. The results indicated statistically significant between male and female teachers in the level of cultural intelligence ($F = 9.544$, Wilks's lambda = 0.885, sig = 0.00, Partial $\eta^2 = 0.115$).

Table 6. Results of MANOVA analysis for comparing levels of the cultural intelligence with respect to teachers gender

Source	Dependent variable	Sum of squares	df	Mean square	F	Sig	Partial η^2
Teachers gender	Meta-cognitive	0.007	1	0.007	0.011	0.91	0.000
	Cognitive	3.521	1	3.521	3.102	0.07	0.010
	Motivation	15.323	1	15.323	16.123	0.00	0.051
	Behavioral	2.765	1	2.765	3.864	0.05	0.013
	Cultural intelligence	1.229	1	1.229	1.968	0.16	0.007
Error	Meta-cognitive	196.275	298	0.659			
	Cognitive	338.288	298	1.135			
	Motivation	283.212	298	0.950			
	Behavioral	213.235	298	0.716			
	Cultural intelligence	186.029	298	0.624			
Corrected total	Meta-cognitive	196.282	299				
	Cognitive	341.809	299				
	Motivation	298.535	299				
	Behavioral	216.000	299				
	Cultural intelligence	187.258	299				

The results showed statistically significant differences due to teachers' gender in both motivation ($F = 16.123$, $P = 0.00$) and behavioral (3.864) levels. For the motivation dimension, male teachers' mean score ($M = 5.54$, $SD = 0.86$) was higher than that of female teachers ($M = 5.09$, $SD = 1.06$). For the motivation dimension, female teachers' mean score ($M = 5.77$, $SD = 0.81$) was higher than that of male teachers ($M = 5.58$, $SD = 0.87$), whereas the results showed no significant differences attributable to teachers' gender in the levels of cultural intelligence, meta-cognitive, and cognitive dimensions.

Question 3: Is there a statistically significant differences in the cultural intelligence levels due to the students' gender variable?

To determine whether significant differences exist between the levels of cultural intelligence due to the students gender. [Table 7](#) presents means and standard deviations for each dimension.

Table 7. Means, standard deviations of the levels of cultural intelligence according students gender

Variables	Male		Female	
	M	SD	M	SD
Meta-cognitive	5.69	0.84	5.42	0.93
Cognitive	4.96	0.94	4.57	1.15
Motivation	5.55	1.05	5.24	1.01
Behavioral	5.51	0.91	5.39	1.02
Cultural intelligence	5.39	0.81	5.11	0.88

Table 7 show that there are differences in the level of cultural intelligence due to the students gender. In order to use MANOVA, we conducted preliminary tests to check for multicollinearity, sphericity, and homogeneity of variance. A multivariate analysis was conducted to investigate the differences in the level of cultural intelligence. In order to evaluate multivariate significance, Wilks's lambda statistic was used. The results indicated statistically significant between male and female students in the level of cultural intelligence ($F = 4.892$, Wilks's lambda = 0.953, sig = 0.00, Partial $\eta^2 = 0.047$).

Table 8. Results of MANOVA analysis for comparing levels of the cultural intelligence with respect to students gender

Source	Dependent variable	Sum of squares	Df	Mean square	F	Sig	Partial η^2
Student gender	Meta-cognitive	7.290	1	7.290	9.226	0.00	0.023
	Cognitive	15.734	1	15.734	14.012	0.00	0.034
	Motivation	9.486	1	9.486	8.832	0.00	0.022
	Behavioral	1.440	1	1.440	1.523	0.21	0.004
	Cultural intelligence	7.840	1	7.840	10.775	0.00	0.026
Error	Meta-cognitive	314.500	398	0.790			
	Cognitive	446.909	398	1.123			
	Motivation	427.472	398	1.074			
	Behavioral	376.358	398	0.946			
	Cultural intelligence	289.594	398	0.728			
Corrected total	Meta-cognitive	321.790	399				
	Cognitive	462.643	399				
	Motivation	436.958	399				
	Behavioral	377.798	399				
	Cultural intelligence	297.434	399				

The results showed statistically significant differences in the students' gender variable in the levels of cultural intelligence ($F = 10.775$, $P = 0.00$), meta-cognitive ($F = 9.226$, $P = 0.00$), cognitive (14.012 , $P = 0.00$) and motivation ($F = 8.832$, $P = 0.00$) dimensions. For the cultural intelligence level, male students' mean score ($M = 5.39$, $SD = 0.81$) was higher than that of female students ($M = 5.11$, $SD = 0.88$). For the meta-cognitive dimension, male students' mean score ($M = 5.69$, $SD = 0.84$) was higher than that of female students ($M = 5.42$, $SD = 0.93$). For the cognitive dimension, male students' mean score ($M = 4.96$, $SD = 0.94$) was higher than that of female students ($M = 4.57$, $SD = 1.15$), and for the motivation dimension, male students' mean score ($M = 5.55$, $SD = 1.05$) was higher than that of female students ($M = 5.24$, $SD = 1.01$). However, the results showed no statistically significant differences attributable to the students' gender variable in the behavioral dimension levels.

3. Discussion

The study results showed that the level of cultural skills and expertise among teachers was high. According to the researchers, this result is due to the teachers' experience in the education field at both school and university levels in dealing with students from a variety of local and regional cultural backgrounds. The teachers have there for developed the necessary knowledge, understanding and skills which allow them to interact positively across the whole student body spectrum and achieve the desired educational goals. This result may be due to the fact that the teachers themselves have the desire to adapt to students and other employees from various

cultures so as to facilitate school performance and achieve the desired goals, or that teachers have the required skills and sufficient knowledge to interact and deal positively with all individuals in their schools, which reflects the teachers' intelligence level.

The study results revealed that the teachers' meta-cognitive dimension level was high. The researchers accredit this result to the ability of teachers to adapt their cultural knowledge when they interact with and deal with students who belong to cultures that differ from their own. Another valuable asset is the teachers' ability to identify cultural knowledge when they interact with individuals from cultures or cultural backgrounds different from their own.

The study results revealed that the teachers' cognitive dimension level was intermediate. The researchers attribute this result to the fact that teachers have the essential knowledge of the common cultural values in the society that are derived from the different cultural backgrounds and religious beliefs and practices that individuals from various cultures believe in, in addition to their knowledge of rules related to nonverbal expressions of individual behavior, and other language rubrics in terms of the use of vocabulary, grammatical and linguistic rules.

The study results revealed that the teachers achieved a high grade in the motivation dimension, which the researchers explain is due to the teachers' ability to adapt and deal naturally with the pressures that may result from the existence of individuals or groups belonging to different cultures, and having different beliefs or value systems to those which the teachers themselves have traditionally been accustomed to. This stress-free familiarity allows the teachers there for to create a relaxed and enjoyable atmosphere when interacting with individuals belonging to different cultures.

The study results revealed a high level for the teachers' behavioral dimension, the researchers attributing this result to the teachers' ability to adapt their verbal behavior regarding the suitable dialect and tone of voice, as well as the rate of speech when interacting with individuals from other cultures. This may indicate that these teachers are knowledgeable about these individuals' cultures, and illustrate this awareness for instance in their facility to adopt suitable facial expressions, by varying the speed at which they speak or using a pause while speaking, thereby adapting to the requirements and social mores of different local cultures.

The study results revealed that there are no statistically significant differences in the level of cultural intelligence between teachers and university students in the whole degree of meta-cognitive and motivation dimensions. The researchers attribute this result to the similarity of the teaching methods used in both universities and schools that focus on the development of critical thinking, which reinforces the ability to possess cultural awareness within the educational environment. The presence of teachers and students in a varied cultural environment helps them to possess the skills of cultural intelligence and its practice in their daily life. All of them live in varied cultural environments, cope with each other and practice different, cultural activities regardless of their jobs, all of which helps to diminish differences among them.

The study results revealed that there are statistically significant differences in the cognitive and behavioral dimension among teachers and university students and in favor of teachers. The researchers attribute this result to the teachers being more aware of cognitive and behavioral intelligence compared to students who may be busy with other non-related issues. Teachers may have more awareness and interest than students in the field of culture in general, including its derivatives such as behavioral cognitive intelligence, which they are interested to learn about and particularly its effect on school work, and the benefits which result for the educational institution as a result of teachers possessing this kind of intelligence.

The study results revealed that there are no statistically significant differences in the level of the students' cultural intelligence due to the students' gender variable in the total grade, the meta-cognitive and cognitive levels. The researchers consider this result due to the partnership between the motivation that pushes students to achieve and succeed and building the positive and constructive relationships which are of prime concern in achieving different individual interests regardless of gender. The process of success at the cultural level in the tasks required of teachers is a necessity for all parties and is not gender exclusive. The process of technological development, which facilitated cultural rapprochement, was not confined to a specific category of either males or females, and thus its affect reached all groups without discrimination.

Although the results of this present study differ from those of Baez, (2012); Brancu, Munteanu, Golet (2016); Keavanloo, Seyedahmadei, Mokhtar (2013), which all pointed to the

existence of statistically significant differences in cultural intelligence due to the gender variable and in favor of males, the opposite is found in the following studies: Al-Jarrah (2016); Al-Momani, Atoum (2016); Engle, Nehrt (2012); Ward, Festcher (2008), where the results are in agreement with those of the present study, finding no statistically significant differences in cultural intelligence due to the gender variable.

Results of the present study showed that there are statistically significant differences in the motivation dimension due to the teachers gender variable and in favor of male teachers, and this result is explained by the researchers as success in life being related to the motivation level; as they developed in the education process they become more aware of their cultural desires and ambitions. Males have more motivation than females for schoolwork and educational plans and their future development. Males have a different attitude and perspective to that of females that may indicate a clear gender variation with regard to their motivation to work. The result of this study agrees with that of Cavanaugh, 2007, which indicated that there are statistically significant differences in the motivation dimension due to the gender variable and in favor of male teachers.

Regarding the behavioral dimension however, results of the present study show statistically significant differences due to the teachers' gender variable and in favor of female teachers. The researchers are of the opinion that female teachers are generally more interested in cultural matters related to other cultures than male teachers, and attach greater importance to being aware of other cultures' values, principles, beliefs and issues than male teachers. Female teachers may be more readily influenced by behavioral cultural issues than their male counterparts, particularly in language, type of speech, way of expressing oneself, and the dialect used, these are all factors that may be more influential in women than men, possibly because they are more sensitive, emotional and empathetic in this aspect.

In the field of cultural intelligence, the study results revealed a high level among the university students which in the researchers' view, is due in the main to the nature of the study sample, whose many cultural skills and mental abilities are naturally engendered by being exposed to a multi-cultural student body, and since the sample is of university students, it represents a level of maturity of an individual's personality, and attributes to him the awareness, understanding and knowledge of various cultures in the social environment, and teaches him how to deal and interact with these different cultures.

Allowing for personal differences in the level of ability, it becomes clear that the university students have the degree of awareness, knowledge and active practice of the skills required to successfully interact with different cultures, by acquiring the language, social habits and behaviors to deal with and accept the other in one homogenous society. Given that the students consider living in this way as their natural environment, their high cultural heritage level is therefore no surprise.

Students' motivation to interact with others and widen their range of experiences has a role in increasing cultural intelligence, including the ability to analyze symbols and cultural signals, to modify aspects of differences and promote agreement between them, and determine its importance, which offers students a chance to adapt to these cultural variances in all their different sources and variety (Ang, 2011). These results support those of Erez et al. (2013); Imai, Gelfand (2010); Keavanloo, Seyedahmadei, Mokhtar (2013); Okulu (2013); Brancu, Munteany, Golet (2016); Al-Jarrah (2016); Naughton (2010); Keung (2011) all of which pointed out the high level of cultural intelligence among university students.

In contrast however, the present study results differ from the results of Al-Momani, Atoum (2016), which found the level of cultural intelligence among university students was intermediate.

The present study results revealed that the university students' level in the meta-cognitive dimension was high, the researchers attributing this result thus, that students attempt at this stage to control their conduct and behavior through awareness of these behaviors and practices in order not to become so immersed in the other culture that they forget their original culture, its components and dimensions, while maintaining the same levels of cultural interaction and dealings with members of other cultures in the environment, especially since the individual's knowledge of the principles and origins of his own culture is still incomplete, and his knowledge of the other culture still needs more training and education in order to master it.

Regarding the university students and the cognitive dimension, their level was intermediate. This was explained by the researchers as being due to a low level of awareness of training to

prepare for the engagement of students entering university and being exposed to an unfamiliar and culturally diverse environment, for which their previous life-experience in secondary schools, villages, and various rural and urban environments has not prepared them. The university environment is indeed a strange new world and students need help and support to understand the nature of the huge variety in the university environment, which is reflected in the principles and cultural systems that rule it, and this novelty and bewilderment is further exacerbated by the intrinsic low level of knowledge of other cultures.

The study revealed that the motivation dimension of university students was high, a result the researchers accredit to the students' confidence with which they can practice social communication with members of a community who belong to unfamiliar cultures. This practice and positive interaction with their colleagues may lead to a sense of enjoyment and feeling of happiness associated with the experience of being able to communicate naturally with these individuals and provide them with the help or advice they may require.

Levels of the behavioral dimension were also high among the university students, the researchers accredit this result to the university students' ability to use suitable ways of expressing themselves while talking to their colleagues, relating to pausing or keeping silent for example, the student using his knowledge and judgment in adapting his/her response according to the requirements of the various conditions and situations he/she may face, in accordance with the nature of the different cultures. Thus university students may use facial expressions or other body language to correspond with the nature of the existing relationship with individuals, and in accordance with the nature of the culture to which these individuals belong. Frequent practice of such interactions leads to increasing understanding of situations and the ability to respond suitably to the situation and its requirements.

4. Conclusion

The study results revealed that there are statistically significant differences in the level of cultural intelligence due to the teachers' gender variable in the total degree, and in the meta-cognitive dimension, cognitive and motivation dimensions, in favor of the male teachers. The researchers attribute this result to the nature of the role played by males concerning cultural issues that are directly connected to their work. Despite the globalization of functional aspect roles, males are still the most important component in the performance of the tasks required from them, and thus care and attention to the cognitive dimensions of other cultures is a strategic variable for their success in the performance of their tasks, failure reduction, goal achievement confirmation, a stronger interaction that brings them pleasure in performing the tasks, both academic and functional. In addition, Jordanian society is a male dominated society where the role of women is in the home, and this is undoubtedly the major factor in controlling the distribution of gender-related roles in general. Males have the necessary aspiration and interest required to carry out the research needed in order to study, understand and assess this novel field of cultural intelligence, and put it into practice with their colleagues in the future.

This result agrees with the studies by Baez (2012); Brancu, Munteanu, Golet (2016); Keavanloo, Seyedahmadei, Mokhtar (2013), which pointed out that there are statistically significant differences in cultural intelligence due to the gender variable and in favor of males. The study result however differs widely from the studies by Al-Jarrah (2016); Al-Momani, Atoum (2016); Engle, Nehrt, (2012); Ward, Festcher (2008), which concluded that there were no statistically significant differences in cultural intelligence attributable to the gender variable.

The study results revealed no statistically significant differences in the behavioral dimension due to the students' gender variable. The researchers point out that both teachers and students are similar in their verbal behavior according to the appropriate dialect, the tone of voice that can elicit the required response, and the ability to vary the speed of speech in their conversation, their similarity of facial expressions while dealing with others of different cultures, since that requires matching the individuals' facial expressions suitably with the cultural requirements dictated by the person to whom he is speaking. In addition, the use of hand movements is an expressive aid to verbal transmission of the meaning or the required idea to the other side.

5. Limitations

The current study was limited to a sample of undergraduate university students from the Hashemite University at the academic year 2018-2019 and teachers enrolled in the education Directorate of Mefraq. In the light of the findings of the current study researchers recommended maintaining the level of cultural intelligence among teachers and university students by offering reinforcement in the form of designing training programs for teachers and university students to improve cultural intelligence cognition. Finally, to conduct more studies investigating the relationship between cultural intelligence and other variables such as psychological adjustment.

References

- Al-Jarrah, 2016 – Al-Jarrah, A. (2016). The cultural intelligence level among international students in Jordanian Universities. *Educational Research Quarterly*, 39(3), 23-39.
- Al-Momani, Atoum, 2016 – Al-Momani, A.L., Atoum, A. (2016). Cultural intelligence among Jordanian university students. *International Journal of Education and Management Studies*, 6(1): 48-53.
- Alon, Higgins, 2005 – Alon, I., Higgins, J.M. (2005). Global leadership success through emotional and cultural intelligences. *Business Horizons*, 48(6): 501-512.
- Ang, 2011 – Ang, S. (2011). *Leading with cultural intelligence: The new secret to success*, New York: AMACOM.
- Ang, Van Dyne, 2008 – Ang, S., Van Dyne, L. (2008). Conceptualization of cultural intelligence: Definition, distinctiveness, and nomological network. In S. Ang & L. Van Dyne (Eds.), *Handbook of cultural intelligence: Theory, measurement, and application* (pp.3-15). Armonk, NY, USA: M. E. Sharpe.
- Ang et al., 2007 – Ang, S., Van Dyne, L., Koh, C., Ng, K.Y., Templer, K.J., Tay, C., Chandrasekar, N.A. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance. *Management and Organization Review*, 3(3), 335-371.
- Baez, 2014 – Baez, D. (2014). Cultural intelligence in foreign language classes. Unpublished Ph.D. Thesis, Indiana State University, Terre Haute, Indiana.
- Bandura, 2002 – Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology: An International Review*, 51 (2): 269-290.
- Branču et al., 2016 – Branču, L., Munteanu, V., Golet, I. (2016). Understanding cultural intelligence factors among business students in Romania. *Procedia-Social and Behavioral Sciences*, 221(7): 336-341.
- Cavanaugh, Gooderham, 2007 – Cavanaugh, A., Gooderham, S. (2007). Cultural intelligence: Factors and measurement. New York: Oxford University press.
- Crowne, 2008 – Crowne, K.A. (2008). What leads to cultural intelligence? *Business Horizons*, 51: 391-399.
- Earley, Ang, 2003 – Earley, P.C., Ang, S. (2003). Cultural intelligence: Individual interactions across cultures. Palo Alto, CA: Stanford University Press.
- Engle, Nehrt, 2012 – Engle, R.L., Nehrt, C.C. (2012). Antecedents of cultural intelligence: The role of risk, control, and openness in France and the United States. *Journal of Management Policy and Practice*, 13(5): 35-47.
- Erez et al., 2013 – Erez, M., Lisak, A., Harush, R., Glikson, E., Nouri, R., Shokef, E. (2013). Going global: Developing management students' cultural intelligence and global identity in culturally diverse virtual teams. *Academy of Management Learning & Education*, 12(3): 330-355.
- Imai, Gelfand, 2010 – Imai, L., Gelfand, M.J. (2010). The culturally intelligent negotiator: The impact of cultural intelligence (CQ) on negotiation sequences and outcomes. *Organizational Behavior and Human Decision Processes*, 112(2): 83-98.
- Keavanloo et al., 2013 – Keavanloo, F., Seyedahmadei, M., & Mokhtar, R. (2013). A comparison of cultural intelligence in students. *International Research Journal Applied Basic Sciences*, 6(4): 481-483.
- Keung, 2011 – Keung, E.K. (2011). What factors of cultural intelligence predict transformational leadership: A study of international school leaders (Doctoral dissertation, Liberty University, 2011). *Dissertation Abstracts International*, 72(11), 111. (AAT 3468229).

Mayer, Salovey, 1993 – Mayer, J.D., Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence*, 17(4): 433-442.

Naughton, 2010 – Naughton, W.M. (2010). Do highly effective principals also have high levels of cultural intelligence? University of La Verne.

Ng et al., 2012 – Ng, K.Y., Vandyne, L., Ang, S. (2012). Cultural Intelligence: A review, reflections, and recommendations for future research. In A.M. Ryan, F.T.L. Leong & F.L. Oswald (Eds.). *Conducting multinational research: applying organizational psychology in the workplace* (pp. 29-58). Washington, DC: American Psychological Association.

Okulu, 2013 – Okulu, K. (2013). Cultural intelligence (CQ) in action: The effects of personality and international assignment on development of CQ. *International Journal Intercultural Relation*, 39(1): 189-198.

Oolders et al., 2008 – Oolders, T., Chernyshenko, O. S., Stark, S. (2008). Cultural intelligence as a mediator of relationships between openness to experience and adaptive performance. *Handbook of cultural intelligence. Theory, Measurement, and Applications*: 145-158.

Sternberg, 1997 – Sternberg, R.J. (1997). The Concept of Intelligence and Its Role in Lifelong Learning. *American Psychologist*, 52: 1030-7.

Sternberg, 1986 – Sternberg, R.J. (1986). A framework for understanding conceptions of intelligence. In R.J. Sternberg & D.K. Detterman (Eds.). *What is intelligence? Contemporary view points on its nature and definition* (pp. 3-15). Norwood, NJ: Ablex.

Thorndike, Stein, 1937 – Thorndike, R. L., Stein, S. (1937). An evaluation of the attempts to measure social intelligence. *Psychological Bulletin*, 34(5): 275.

Ward, Fischer, 2008 – Ward, C., Fischer, R. (2008). Personality, cultural intelligence, and cross-cultural adaptation. *Handbook of cultural intelligence* (Ed SLVD Ang), 159-73.