Moderating Role of Virtual Teams on the Relation between Cultural Intelligence and Strategic Excellence

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Abstract

Based on the theoretical review of researches and studies concerned with virtual teams in organizations, it was found that the role of virtual teams varies from case to another, and it may be positive or opposite. The purpose of the current research is to examine the role of virtual teams in the impact of cultural intelligence on the strategic excellence of Zain worldwide Group. An electronic questionnaire was designed through the (Google) and (Microsoft) forms, and distributed then on a sample of (146) participants with a high organizational level of the HRM departments within the group. The results showed that there was a positive moderator role of virtual teams in the relationship of cultural intelligence and strategic excellence in Zain, as well as improving all effect relationships within the model.

Key-words: Cultural Intelligence, Strategic Excellence.

1. Introduction

Recently, the tasks of human resource management have become complicated as a result of the diversity of the workforce that the human resource department must deal with perfectly, and thus manage these groups of workers and direct them towards the organization's ultimate goal, or that strategic goal embedded in its vision and mission. The global business environment has produced a new form of business models, and it is no longer possible to prefer business models that do not recognize the fact that the world has become more interconnected and stronger than ever before. In recognition of this fact, the first obstacles that business organizations must distinctly overcome are cultural obstacles, which requires creating a state of cultural balance that enables the organization to

unify diverse cultures in order to reach a common understanding of the strategic goal, and thus achieve it.

With the unique role of information and communication technology in global access, which has resulted in a new set of business complexities for organizations in general, and the HRM in particular, the bright side of it is that it is represented an easy and effective form of ability to learn about other cultures, and how to deal with them. However, new HRM tasks, and recent strategies for dealing with these task complexities often take place in a virtual environment, in which virtual teams (VTs) are the core of those processes and activities. On the other hand, the global character of the business sector has recently resulted in new rules in management, as well as greater interest in the cultural diversity of HRM. Therefore, entrepreneurs had to respond to the global character and expand the activities of their organizations to include global markets instead of being satisfied with the local. Then-as a result- a clear need has emerged for the importance of understanding diverse cultures, and dealing with it in an appropriate manner without resulting in any misinterpretation or intent that would result in side conflicts. All of these issues eventually led to the development of the concept of cultural intelligence (CQ), in which represented an effective path towards global access through the window of understanding and awareness of cultural diversity, attract culturally diverse talents as well in order to set a strategic access map towards the global environment.

2. Theoretical Background

2.1. Cultural Intelligence

The intellectual propositions related to culture and its definition in the organizational context focused on the abstract aspects of culture, which often focus on the common values, beliefs and norms of a group of individuals working within a particular organizational entity. The (Hofstede, 1984) works have-for example-focused on culture through the workers values, and according to this view; culture - in general - expresses the total psychological interactions that affect the response of human groups to the environment. With the increasing interest in culture at the business level, the definitions of culture began to evolve to include objective and subjective aspects. The objective aspects were concerned with the impact of culture on legal, economic and political systems. Subjective aspects focus on the intangible part of culture, such as attitudes, assumptions, and beliefs. (Leung & Ang, 2009)

However, interest in the concept of intelligence increased at the academic level at an early stage, and it was later defined - by academic consensus - as the unique ability to comprehend meanings and solve problems. Since then, the concept of cultural intelligence began to form, by describing it as the ability to early recognition of new cultures, and then the ability to deal effectively with. (Ang & Inkpen, 2008) Multiple intelligences include linguistic, logical-mathematical, spatial, musical, kinesthetic, natural, interpersonal, and relational intelligence. It seems that the signs of cultural intelligence fall within the types of interpersonal, relational, and linguistic intelligences, each of which is a necessity for understanding and dealing with cultures effectively (Greenhawk, 1997; Armstrong, 2009).

The concept of cultural intelligence was launched for the very first time by (Earley & Ang, 2003) in their book (Cultural Intelligence: Individual Interactions across Cultures), as a concept adapted from the psychological, social and human sciences. Accordingly, cultural intelligence according to (Earley & Ang, 2003, p. 59) is an individual's ability to effectively adapt to new cultural contexts. As for (Thomas, 2006), cultural intelligence is defined as the ability that allows individuals to understand and act appropriately across a wide range of new cultures. (Ang et al., 2007) However described cultural intelligence as a uniqueness that describes an individual's flexible ability to deal effectively with individuals from other cultures. While (Peterson, 2011) stated that the cultural intelligence is the ability to engage in a set of behaviors that use skills (language or interpersonal skills) and qualities (acceptance of ambiguity, flexibility) so that they are appropriately tuned to values based on culture and attitude.

(Ang et al., 2015) have shown that a definition of cultural intelligence should focus on the individual's ability to be effective across a wide range of multicultural contexts, and that cultural intelligence differs from the innate ability to function effectively in a given culture. This means that it is a skill that needs to be acquired and developed. This context is consistent with the view of (Ang & Van Dyne, 2015) who found that cultural intelligence expresses flexible capabilities that can be enhanced through active participation such as in education, travel, international assignments, and other intercultural experiences. As for distinguishing cultural intelligence from other types of intelligence; (Van Dyne et al., 2012) discovered that cultural intelligence complements other forms of intelligence, such as mental, emotional, social, and practical intelligence, and that these forms of intelligence complement each other in somehow. It turns out that most definitions of cultural intelligence were derived from the definition of (Earley & Ang), which justifies the wide consistency with definitions of cultural intelligence.

2.1.1. Social, Cultural, Emotional Intelligence

Cultural intelligence is similar to other types of intelligence, but the complex nature of culture and its interpretations make cultural intelligence somewhat different from other types of intelligence. However, the most obvious common denominator in the similarity of cultural intelligence with social and emotional intelligence is that cultural intelligence is a form of interpersonal intelligence. According to (Ang et al., 2015, p. 433), Social intelligence is a broader form of interpersonal intelligence; it refers to the ability to understand, manage, and interact with others. Emotional intelligence, on the other hand, refers more specifically to the ability to deal with the others feelings and emotions.

According to (Crowne, 2009), social intelligence allows an individual to interact effectively with others, which appears to be a common trait with cultural intelligence, indicating the possibility that cultural intelligence is a subset of social intelligence. This view is consistent with the view of (Thomas et al., 2008), who found that cultural intelligence is dynamic and involves continuous learning from interactions in social situations, which seems to indicate a link between social and cultural intelligence. On the other hand, using emotions appropriately in the context of international business allows for establishing and maintaining better relationships with others, which indicates the importance of integrating the two types of intelligence, emotional and cultural in the global business environment (Cabral et al., 2020). In summary, (Crowne, 2009) presented a model for the relationship between social, emotional, and cultural intelligence, he concluded that social intelligence affects emotional intelligence and cultural intelligence in several ways, and that a higher level of cultural or emotional intelligence will lead to higher social intelligence, because Emotional and cultural intelligence are two subsets of social intelligence.

2.1.2. The Need for Cultural Intelligence

Several empirical researches have indicated a link between an individual's high cultural intelligence with the ability to perform effectively in culturally diverse situations, such as working on a project with culturally diverse colleagues, or those tasks that have a global dimension, such as working with suppliers or customers in global markets (Fang et al., 2018). According to (Leung et al., 2014) individuals and teams with high cultural intelligence will achieve a number of key benefits, such as effective adaptation to cultures, better judgment of new cultures, increased personal confidence, improved decision-making, creative collaboration, as well as other performance

outcomes. Organizations can also reap other additional benefits resulting from the employees' cultural intelligence, such as increased profitability, reduced costs Via innovative approaches, greater expansion into international markets, services meet the specific needs of different groups of customers as well (Livermore, 2011).

To be globally effective, organizations need leaders, teams, and employees who can enhance the values and needs of the organization while adapting to the cultures in which the organization operates, this requires more effort than just cultural sensitivity and awareness (Livermore & Van Dyne, 2015). Accordingly, (Azevedo, 2018), summarized a set of the greatest benefits resulting from the diverse workforce that is characterized by the capabilities of cultural intelligence, which are (1) Promote adaptation towards new cultures. (2) Improving cultural judgment and decision-making. (3) More Effectiveness in Intercultural Negotiations. (4) Higher levels of trust, sharing of ideas and information, and creative collaboration. (5) Performance Boost.

2.1.3. The Elements of Cultural Intelligence

(Earley & Ang, 2003) proposed three elements of cultural intelligence: cognitive, motivational, and behavioral elements. The cognitive elements are divided into two levels, the meta-cognitive level, and the cognitive level. Later, (Ang et al., 2007) presented the further explanations of the dimensions of cultural intelligence, as follows:

- **Metacognitive elements:** which reflect the mental processes that individuals use to acquire and understand cultural knowledge, including knowledge and individual thought processes related to culture. Individuals with metacognitive cultural intelligence are consciously aware of the cultural preferences of others before and during interactions (Brancu et al., 2016; Ersoy, 2014).
- **Cognitive elements:** knowing norms, practices, and conventions in different cultures gained from learning and personal experiences, as well as the ability to understand and distinguish similarities and differences across cultures (Afsar et al., 2019; Dangmei, 2016; Yari et al., 2020).
- **Motivational elements:** which are the desire and ability to direct attention and energy towards learning and action in situations characterized by cultural differences (Afsar et al., 2020).

- **Behavioral elements**: which are the ability to act and select an appropriate verbal and non-verbal expression when interacting with people of different cultures (Ott & Michailova, 2018).

2.2. Strategic Excellence

The philosophy of the excellence concept in organizational performance level is to express the need to combine the management and the building organizations elements on superior way to achieve high capabilities in dealing with external variables and circumstances (Jamer, 2015). In addition, the term of "performance excellence" refers to an integrated approach to organizational performance management, which results in delivering ever-improving value for customers and stakeholders, thereby achieving organizational sustainability, improving overall organizational effectiveness and capabilities as well (Malkawi et al., 2017).

It can be said that the definition of performance excellence focuses more on managing the performance of the organization internally, while the definitions of organizational excellence refer to the organization's excellence capabilities externally, that is, its commitment to sustainable development in order to satisfy customers and enhance profitability to be more superior (Hashemy et al., 2016). This definition is consistent with the definition of (Al Shobakib et al., 2017), which he defined it as the ability to reconcile and coordinate between organizational and operational elements for integration and interdependence to achieve higher efficiency rates. Taking organizational excellence as a necessity for organizations seeking access and strategic excellence (SE) (Hadi et al., 2019, p. 7) Ali found that organizational excellence is setting strategic plans aimed at achieving long-term prosperity in line with the organization and its environment, as well as implementing those Plans to ensure the growth and strengthening of the organization in various fields. This definition gives the first intellectual indications that organizational excellence is the ladder of strategic excellence, and it is the previous step leading to strategic excellence.

Strategic excellence has been defined as the consolidation of diverse strategies towards a unique state of competition and influence, as well as the ability to set the game rules and demonstrate control (D'Aveni, 1999). In a few time later (D'Aveni et al., 2001) again defined strategic excellence as a special kind of power that it impact goes beyond scale and scope, and is what companies know how to use, rather than just have. (Strikwerda, & Rijnders, D, 2005) has emphasized that understanding and defining strategic excellence is through the fact that companies not only compete for customers or for market share, but also deliberate behavior that drives competitors out of the

market, and adopt strategies to control competitors through taking competitive power as a means to achieve that. Finally, in their book "Strategic Excellence in the Architecture, Engineering, and Construction Industries", the authors (Plenert & Plenert, 2018) opened their book by describing strategic excellence as a goal and a process. As a goal, Strategic excellence is known through being a moving target that requires Review on an ongoing basis, annually at least. And as a process, it requires continuous improvement to enhance the outcomes of this process.

It must be said here that the competitive field of strategic excellence has assumed greater importance through previous intellectual discussions, and for that, the dimensions of strategic excellence have been based mainly on (D'Aveni's) thoughts, which established according to the case of intense competition. These dimensions are; sphere of influence, competitive pressure, and competitive configuration. These dimensions have been measured in several researches and academic works such as (Al-Zu'bi, 2017; Strikwerda, & Rijnders, 2005) works. According to (Dou et al., 2019), the purpose of spheres of influence is to strengthen, defend, and protect the standing of the organization. Therefore, it is critical to define the regional, national, and international spheres in which decision makers want to establish a leadership in order to reach a state of strategic excellence. Competitive pressure in another hand refers to the state of intense competition between companies operating in a particular market, in which it is difficult to capture the appropriate opportunity to create value for their customers as a result of competitive pressures that they are exposed to by other (D'Aveni., 2002). Competitive configuration is the diversification of the components of the competitive strategy with the aim of creating an industrial structure of alliances, goals and common areas that reflect the organization's view of the competitiveness in the market (John McGee & Sammut-Bonnici, 2014).

2.3. Virtual Teams

The term teamwork was used for the first time in 1960 in the USA, yet, it became more common during the eighties of the same century when it was widely used during the total quality management revolution developments (Kirkman et al., 2001). Later, with the spread of teamwork and the early access of some countries to ITC devices and services, the "virtual teamwork" teams was first introduced in 1965 in the United States and the United Kingdom (Kirkman et al., 2002). The popularity and spread of virtual teams have expanded rapidly throughout the world, as (Martins et al., 2004) stated that all of the organizational teams nowadays are virtual to some extent, with rare exceptions. According to (Gupta & Pathak, 2018), Virtual teams were not limited to a specific field or

industry, but extended to include services, construction, manufacturing, healthcare, automobiles, retail, non-profit organizations and many more.

According to (Lipnack & Stamps, 1997) the concept of virtual teams expresses a radically new type of small group emerging in the age of networks. (Gassmann et al., 2003) described virtual teams as a group of people and sub-teams interact through interconnected tasks guided by common goals, operate across different place, time and organizational boundaries. (Martins et al., 2004; Hertel et al., 2005) definitions focused on the fact that virtual teams are teams in origin; the virtualization is one of these teams' characteristics. Members in virtual teams are often geographically dispersed, coordinating their work through information and electronic communication technologies (e-mail, video conferencing, telephone, etc). (Ale Ebrahim et al., 2009; Zuofa & Ochieng, 2017) definitions highlight virtual teams as small temporary groups of workers that do not share real time, but coordinate their tasks using information and electronic communication technologies to accomplish one or more organizational tasks.

(Wong & Burton, 2000) discussed the characteristics of virtual work teams in three aspects; Context, composition, and structure. On the context side, team members can be quickly assembled to exploit emerging opportunities. In composition, the team is often made up of culturally and organizationally diverse members whose unique knowledge and talents are pooled to maximize the team's potential to exploit market opportunities. Finally, the virtual team structure describes the nature and strength of the relationships patterns between individuals in virtual teams. Relationships between members tend to be lateral but weak due to a lack of prior relationship, as well as cultural and organizational barriers. (Berry, 2011, p), summarized six characteristics of virtual teams, the first four of which are believed to be common features in almost all teams, these features are: temporary membership, interconnected work, shared responsibility, collective relationships, distribution Geographical, finally adopting technological means.

The contexts in which virtual teams were discussed will be vastly diverse, each simulating the type of virtual team and the power distance within it. The discussions of virtual teams were not limited to the contexts of their type or form of authority, but rather extended to include other factors that constitute the appropriate virtual team type, such as cultural factors, industrial sector type factors, cost factors and others. Accordingly, the intellectual opinions that discussed the elements of measuring the effectiveness of virtual teams varied. Trust was an element of broad agreement in the measurement of virtual teams (Ferris & Minielli, 2004; Furumo & de Pillis, 2007; Clark et al., 2010; Mukherjee et al., 2012; Bhat et al., 2017; Alsharo et al., 2017; Serrat, 2017). The channel richness, on the other hand, obtained a great intellectual agreement as well, so that it was considered the key

element for the effectiveness of the virtual teams (Ferris & Minielli, 2004; Kirkman & Mathieu, 2005; Clark et al., 2010; Mukherjee et al., 2012; Pangil & Chan, 2014; Krawczyk-Bryłka, 2016). However, knowledge sharing among virtual team members is just as important as other elements, indeed, it is necessary to achieve team goals (Sénquiz-Díaz, & Ortiz-Soto, 2019; Jarrell, 2020; Hung, et al., 2021; Davidavičienė, et al., 2020).

3. Research Model

The conceptual model of the research shows the form and type of relationships between the research variables, as shown in Figure (1). Cultural intelligence (CQ) represents the independent variable, while achieving strategic excellence (SE) acts as dependent variable. Meanwhile, virtual teams (VTs) represents the moderator variable, in which the main hypothesis assumed that virtual teams could moderate the cultural intelligence effects on strategic excellence at Zain worldwide. The cultural intelligence variable was measured according to the developed (Zhou et al., 2018) scale, which was mainly developed to measure cultural intelligence in organizations operating within the international scope. The scale subset dimensions were; Cognition (CO), Motivation (MO), Collaborative communication (CC1), and finally behavioral adaptability (BA). With regard to measuring strategic excellence, the ideas of (D'Aveni, 1999) was relied on in measuring that variable, Which suggested that strategic excellence can be measured across three dimensions: spheres of influence, competitive pressure, and competitive configuration. Finally, as for virtual teams, the authors found that the (Davidaviciene et al., 2020) scale is more appropriate to achieve the research objectives, because it discussed the multicultural work teams operating at a global level, as well as its cultural affinity with the community and sample of the current research. The (Davidaviciene et al., 2020) Scale consists of four dimensions: trust (TR), ICT richness, knowledge sharing (KS), and language. The language dimension has been excluded because all Zain Group employees basically share the Arabic language. As such, the research hypotheses are as follows:

H01: Cultural intelligence affects positively the strategic excellence at Zain Worldwide.

H02: Virtual Teams positively moderate the Cultural intelligence effects on the strategic excellence at Zain Worldwide.

Figure 1 - Research Model
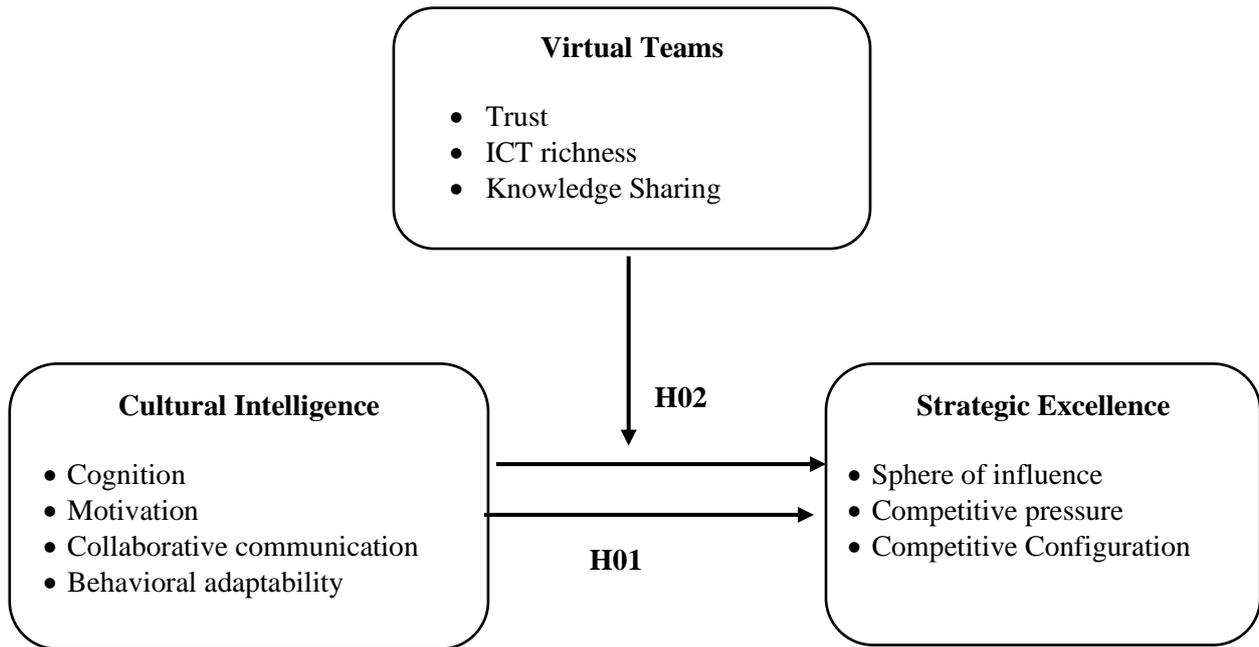
4. Method

4.1. Population and Sample

Zain Group is a leading group locally and regionally, it also one of the largest telecommunications companies in the Middle East. Zain provides services to (47.8) million subscribers, (16) million of them are from Iraq. With Zain's provision of the 5G services for wireless communications, Zain's services are considered a high international level of advanced wireless services globally. HR in Zain Group are characterized by a high cultural diversity resulting from the company's branches in Asia and Africa, accordingly, respondents can understand the paragraphs contained in the research questionnaire, and answer them accurately.

4.2. Instruments

4.2.1. Questionnaire

The HRM departments were chosen to represent the research sample. An electronic questionnaire was prepared and distributed in two languages: Arabic and English, by making use of (Google forms) and (Microsoft Forms). The respondents in the survey were 42, while the number of

respondents in the final survey was 146 that are valid for analysis. The questionnaire items were distributed according to the five-point Likert scale. The degrees of response varied as follows: Totally Agreed =5, Agreed =4, Neutral =3, Disagreed =2, totally Disagreed =1.

4.2.2. Financial reports

Zain Group discloses a set of annual reports through the website (Zain.com), including financial reports, key indicators, and sustainability reports. The group's annual reports for 2020 have been accessed through the company's website to take advantage of the necessary information to complete the research, such as the group's vision and mission, the countries in which operates, the ownership percentage, the total number of customers and employees. The Zain Group annual report for 2020 can be found at https://www.zain.com/en/investor-relations/financial-reports/

5. Results and Discussion

5.1. Preliminary Tests

We conducted some preliminary tests to analyze the research hypotheses, including the internal consistency test by (Cronbach's alpha), Variance inflation factor (VIF) and finally the multiple correlation test. The results were showed in following tables.

Table 1 - Internal Consistency & Variance Inflation Factor Analysis

Variables	Cronbach's alpha	VIF
Cognition	.680	1.997
Motivation	.788	2.596
Collaborative Communication	.766	2.593
Behavioral Adaptability	.730	2.121
Cultural Intelligence	.866	
sphere of influence	.886	
competitive pressure	.869	
competitive configuration	.812	
Strategic Excellence	.886	
Trust	.800	
ICT richness	.861	
Knowledge sharing	.853	
Virtual Teams	.869	
The whole model	**.942**	

Table 1 shows that the internal consistency values were all acceptable, and ranged between (0.680-0.886) which is an evidence of the validity of the research tool to measure its objectives. In addition, it turns out that all the coefficients of variance inflation factor had values greater than 5, which means that the data is free from the problem of multicollinearity, and therefore the data are valid for regression analysis.

Table 2 - Multiple Correlation Analysis

Variables	CO	MO	CC1	BA	SI	CP	CC2	TR	ICT	KS
CO	1									
MO	.654**	1								
CC1	.538**	.716**	1							
BA	.594**	.577**	.673**	1						
SI	.390**	.611**	.522**	.529**	1					
CP	.389**	.656**	.488**	.529**	.659**	1				
CC2	.506**	.691**	.600**	.595**	.682**	.793**	1			
TR	.475**	.693**	.610**	.592**	.680**	.664**	.806**	1		
ICT	.598**	.637**	.575**	.748**	.631**	.609**	.615**	.612**	1	
KS	.636**	.698**	.611**	.736**	.620**	.615**	.671**	.643**	.810**	1

The results of the table 2 show that all the correlation coefficients between the research variables were positive, and they are statistically acceptable at the level of significance (0.01). Therefore, the correlation of the variables with each other was good, and it indicates that changing any of those variables would change the others in same direction at Zain Group.

5.2. Hypotheses Analysis

The Structural Equation Modeling (SEM) was built to analyze the research hypotheses and determine the impact of cultural intelligence on the strategic excellence of Zain Group as a first experiment, and then determine the change in that effect by entering the virtual teams as a moderator variable. SEM was carried out using AMOS v.22 uses the maximum likelihood method for o validate the measurement, and regression for hypotheses analysis. Figure 2-3 illustrated the flow of effects within the model.

Figure 2 - First Experiment, Regression Without Virtual Teams as a Moderator
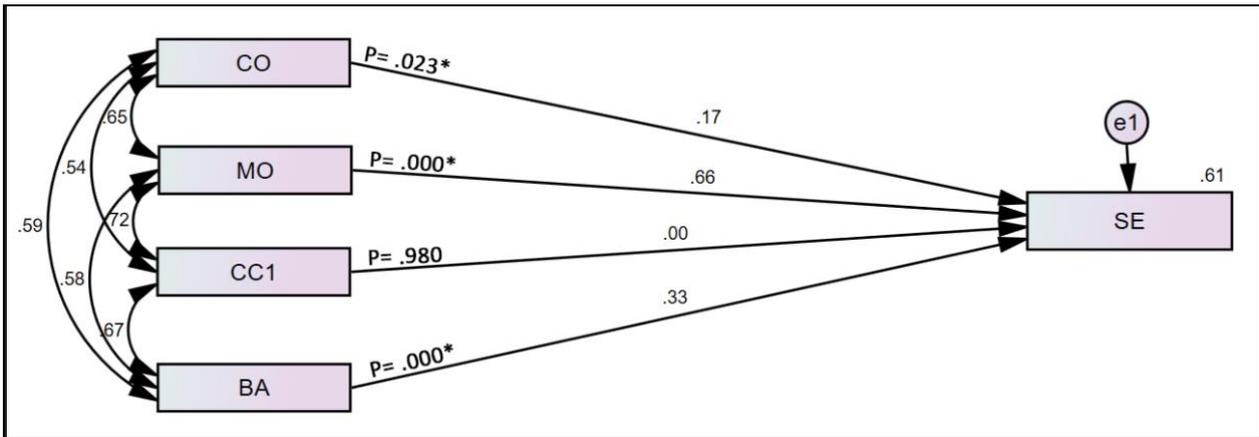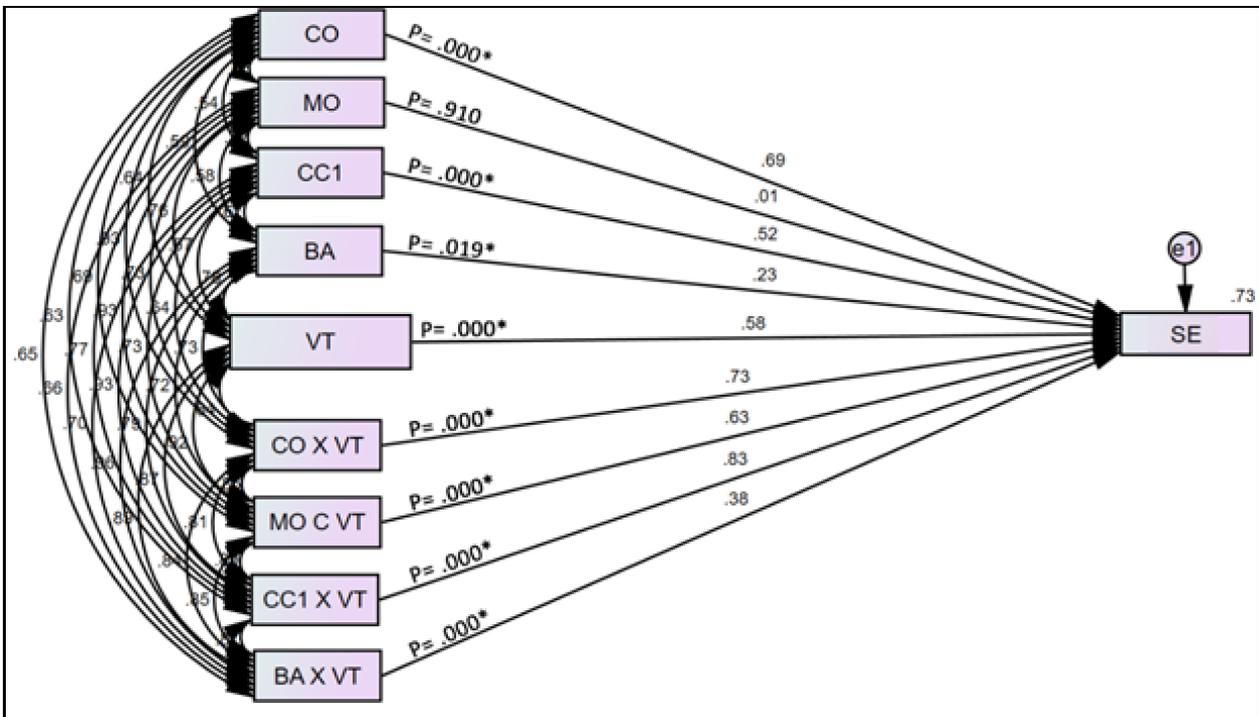

Figure 3 - Second Experiment, Regression with the Moderating Role of Virtual Teams

As for the first experiment, Figure 2 shows that cultural intelligence positively affects the strategic excellence at Zain. The value of the coefficient of determination (R^2) was (0.61), which means that cultural intelligence explains 61% of the variation in the strategic excellence of the Zain Group, which is high explanation range that indicates a high impact of what employees in the Zain Group have in terms of cultural intelligence capabilities on strategic excellence there. However, the effect of cultural intelligence was due to only three dimensions, cognition, motivation, and behavioral adaptability. Collaborative communication In contrast had no impact on achieving strategic excellence for Zain Group. The value of Standardized Beta Coefficient at the highest was 0.66, which

describes the impact of motivation on strategic excellence, which means that motivation is the most important influence in achieving strategic excellence in Zain Group.

With regard to the results of the second experiment, it was found that the virtual teams have a moderate and positive role on the impact of cultural intelligence on strategic excellence in Zain Group. This result is confirmed by the value of the coefficient of determination (R^2), which reached (0.73) with a difference (0.12) from its value in the first experiment, which means that Zain Group's pursuit of strategic excellence will be better if virtual teams are adopted as one of the work strategies.

Figure 4 - Relations Flow and Effect Values within the Model
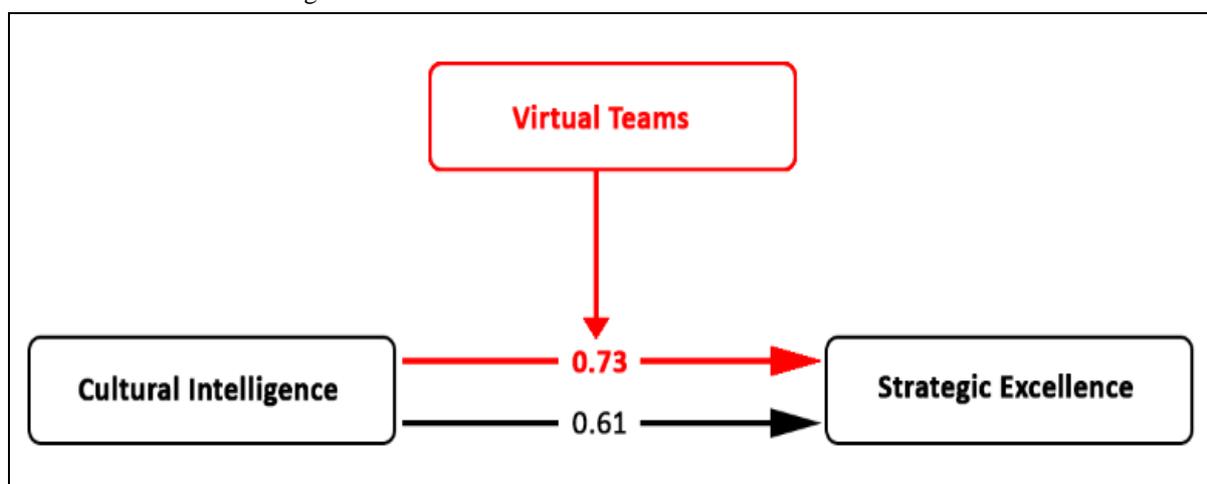
At the sub-dimension level, the virtual teams changed the strength and shape of the relationships within the model. As all dimensions became statistically significant, except for the dimension of motivation, which had no significant effect after virtual teams entering into the model. Standardized Beta Coefficient was at its highest value when the effect of collaborative communication on the strategic excellence of Zain Group with the presence of virtual teams, and its value reached (0.83). This result indicates the significant role of the virtual teams in changing the influence relationships within the model, a large part of which has become statistically significant. Finally, it was found that virtual teams not only improve the strategic excellence of Zain Group, but also enhance the impact of the sub-dimensions of cultural intelligence, making them more important for achieving strategic excellence. Figure 4 summarizes the relations flow including the effect values within the model.

6. Conclusions

Cultural intelligence represents an advanced stage of intellectual work's interest in discussing culture in the organizational milieu, which stressed the importance of managing it effectively. Since Hofstede's writings on culture, researchers' vision has deepened on the way in which organizational culture should be established and effectively link sub-cultures to it. With the development of business organizations' access to the global environment, the cultural debate was brought back to the fore again, which eventually settled on the importance of workers possessing cultural intelligence as one of the basic skills required. Therefore, the benefits of cultural intelligence are not limited to improving dealing with new or different cultures, but also include the personal aspects of the individuals themselves. This was approved by a wide group of academic works that showed the reflection of cultural intelligence on the personal values of employees, motivating to cooperate and initiative, improving decision-making capabilities and higher levels of performance in general.

Despite the broad agreement on the importance of cultural intelligence to global organizations, the signs of virtual teams' contribution to strategic superiority are still unclear. The intellectual debate about the mediation of virtual teams in organizations' quest for excellence has not yet reached a point of agreement. However, there seems to be a different case in the Zain group. Cultural intelligence had a positive impact on the strategic excellence of the group. In addition, Zain Group's adoption of virtual teams enhances the positive impact of cultural intelligence on Zain's strategic excellence. Therefore, it turns out that we are on the side of academic works that emphasized the positive role of virtual teams. Our arguments are that the virtual teams have changed the effect of a set of dimensions of cultural intelligence to be statistically significant (as in the case of the cooperative communication).

References

Afsar, B., Shahjehan, A., Shah, S. I., & Wajid, A. J. I. J. O. I. R. (2019). The mediating role of transformational leadership in the relationship between cultural intelligence and employee voice behavior: A case of hotel employees. 69, 66-75.

Al Shobakib, M. J., Abu Amuna, Y. M., Abu Naser, S. S. J. I. J. O. I. T., & Engineering, E. (2017). Organizational Excellence in Palestinian Universities of Gaza Strip. 6(4), 20-30.

Ale Ebrahim, N., Ahmed, S., Taha, Z. J. A. J. O. B., & sciences, a. (2009). Virtual teams: a new opportunity to develop a business. *In International Conference on Entrepreneurship Across Boundaries.*

Alsharo, M., Gregg, D., Ramirez, R. J. I., & Management. (2017). Virtual team effectiveness: The role of knowledge sharing and trust. 54(4), 479-490.

Al-Zu'bi, H. (2017). Diagnosis of Perception Strategic Planning to Ensure Strategic Supremacy. *International Business Management,* 11, 1240-1245.

Ang, S., & Inkpen, A. C. J. D. S. (2008). Cultural intelligence and offshore outsourcing success: A framework of firm-level intercultural capability. 39(3), 337-358.

Ang, S., & Van Dyne, L. (2015). Conceptualization of cultural intelligence: Definition, distinctiveness, and nomological network. *In Handbook of cultural intelligence* (pp. 21-33): Routledge.

Ang, S., Rockstuhl, T., Tan, M.L.J.I.E.O.S., & sciences, B. (2015). Cultural intelligence and competencies. 2, 433-439.

Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C., Review, O. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance. 3(3), 335-371.

Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C., Review, O. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance. 3(3), 335-371.

Armstrong, T. J. M. I. A. T. W. (2009). When cultures connect: Multiple intelligences theory as a successful American export to other countries. 17-26.

Azevedo. (2018). Cultural Intelligence: Key Benefits to Individuals, Teams and Organizations. 10(1), 52-56.

Berry, G. R. J. T. J. O. B. C. (2011). Enhancing effectiveness on virtual teams: Understanding why traditional team skills are insufficient. 48(2), 186-206.

Bhat, S. K., Pande, N., & Ahuja, V. J. P. C. S. (2017). Virtual team effectiveness: An empirical study using SEM. 122, 33-41.

Brancu, L., Munteanu, V., Golet, I. J. P.-S., & Sciences, B. (2016). Understanding cultural intelligence factors among business students in Romania. 221(7), 336.

Cabral, Â. M. R., Carvalho, F. M. P., & Ferreira, J. A. V. J. B. S. (2020). The Effect of Emotional and Cultural Intelligences on Networks' Behaviors in International SMEs: Evidence from Portugal. 10(11), 163.

Clark, W. R., Clark, L. A., & Crossley, K. J. M. M. J. (2010). Developing multidimensional trust without touch in virtual teams. 20(1), 177-193.

Crowne. (2009). The relationships among social intelligence, emotional intelligence and cultural intelligence. 6(3), 148-163.

Dangmei, J. J. I. J. o. R. (2016). Cultural intelligence: Bridging the cultural differences in the emerging markets. 5(9).

D'Aveni, R. A. (1999). Strategic supremacy through disruption and dominance. *MIT Sloan Management Review,* 40(3), 127.

D'Aveni, R. A., Gunther, R. E., & Cole, J. (2001). Strategic supremacy: How industry leaders create growth, wealth, and power through spheres of influence: Simon and Schuster.

D'Aveni. (2002). Competitive pressure systems: Mapping and managing multimarket contact. *Sloan Management Review,* 44(1), 39.

Davidavičienė, V., Al Majzoub, K., & Meidute-Kavaliauskiene, I. (2020). Factors Affecting Knowledge Sharing in Virtual Teams. *Sustainability,* 12(17), 6917.

Davidaviciene, V., Majzoub, K. A., & Meidute-Kavaliauskiene, I. J. I. (2020). Factors Affecting Decision-Making Processes in Virtual Teams in the UAE. 11(10), 490.

Dou, H., Juillet, A., & Clerc, P. (2019). *Strategic Intelligence for the Future 1: A New Strategic and Operational Approach: Wiley.*

Earley, P. C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures: Stanford University Press.*

Ersoy, A. J. J. o. Y. U. (2014). The Role of Cultural Intelligence in Cross-Cultural Leadership Effectiveness: A Qualitative Study in the Hospitality Industry. 35(9).

Fang, F., Schei, V., & Selart, M.J.I.J.O.I.R. (2018). Hype or hope? A new look at the research on cultural intelligence. 66, 148-171.

Ferris, S. P., & Minielli, M. C. (2004). *Technology and virtual teams.* In Virtual and collaborative teams (pp. 193-212): IGI Global.

Furumo, K., & de Pillis, E. (2007). Individual personality dimensions that impact trust in virtual teams. *Paper presented at the Referred proceedings of the Decision Sciences Institute Southwest Regional Meeting in San Diego, California.*

Gassmann, O., Von Zedtwitz, M. J. R., & Management, D. (2003). Trends and determinants of managing virtual R&D teams. 33(3), 243-262.

Greenhawk, J. J. E. l. (1997). Multiple intelligences meet standards. 55(1), 62-64.

Gupta, S., & Pathak, G. S. J. J. o. O. C. M. (2018). Virtual team experiences in an emerging economy: a qualitative study.

Hadi, A.-A., Abdullah, H., & Atshan, N. J. I. J. O. O. A. (2019). Effect of organisational integrity and leadership behaviour on organisational excellence.

Hashemy, S. H., Yousefi, M., Soodi, S., Omidi, B. J. P.-S., & sciences, b. (2016). Explaining human resource empowerment pattern and organizational excellence among employees of emergency of Guilan's University hospitals. 230, 6-13.

Hertel, G., Geister, S., & Konradt, U. J. H. R. M. R. (2005). Managing virtual teams: A review of current empirical research. 15(1), 69-95.

Hofstede, G. (1984). Culture's consequences: International differences in work-related values (Vol. 5): sage.

Hung, S. W., Cheng, M. J., Hou, C. E., & Chen, N. R. (2021). Inclusion in global virtual teams: Exploring non-spatial proximity and knowledge sharing on innovation. *Journal of Business Research,* 128, 599-610.

Jamer, H. M. (2015). The impact of the adoption of the institutional model of excellence.

Jarrell, A. (2020). The Experiences of Team Managers with Knowledge Sharing within Diverse Virtual Teams.

Kirkman, B., Gibson, C. B., & Shapiro, D. (2001). "Exporting" teams - enhancing the implementation and effectiveness of work teams in global affiliates. *Organizational Dynamics,* 30.

Kirkman, B., Rosen, B., Gibson, C., Tesluk, P., & McPherson, S. (2002). Five challenges to virtual team success: Lessons from Sabre Inc. *Academy of Management Executive,* 16. doi:10.5465/AME.2002.8540322

Krawczyk-Bryłka, B.J.J.O.I.M. (2016). Intercultural challenges in virtual teams. 8(3), 69-85.

LEUNG, K., & Ang, S. (2009). Culture, organizations, and institutions: An integrative review. In Cambridge handbook of culture, organizations, and work (pp. 23-45): Cambridge University Press.

Leung, K., Ang, S., & Tan, M.L.J.A.R.O.P.O.B. (2014). Intercultural competence. 1(1), 489-519.

Lipnack, J., & Stamps, J. (1997). Virtual Teams: Reaching Across Space, Time, and Organizations with Technology: Wiley.

Livermore, D., & Van Dyne, L. J. I. R., SHRM Foundation, Printed in the United States of America. (2015). *Cultural intelligence: The essential intelligence for the 21st century.*

Livermore. (2011). The Cultural Intelligence Difference: Master the One Skill You Can't Do Without in Today's Global Economy', *AMACOM Div.*

Malkawi, N., Obeidat, A. M., Halasa, A. J. I. R. O. M., & Research, B. (2017). Achieving Performance Excellence through Cloud Computing Atmosphere-Applied Study at Zain Telecommunications Company-Jordan. 6(1), 229.

Martins, L. L., Gilson, L. L., & Maynard, M. T. J. J. O. M. (2004). Virtual teams: What do we know and where do we go from here?, 30(6), 805-835.

Martins, L. L., Gilson, L. L., & Maynard, M. T. J. J. O. M. (2004). Virtual teams: What do we know and where do we go from here?, 30(6), 805-835.

McGee, John & Sammut-Bonnici, Tanya. (2014). Competitive Strategy. 10.1002/9781118785317.weom120174. P3

Mukherjee, D., Hanlon, S. C., Kedia, B. L., & Srivastava, P. J. C. C. M. A. I. J. (2012). Organizational identification among global virtual team members.

Ott, D. L., & Michailova, S. J. I. J. O. M. R. (2018). Cultural intelligence: A review and new research avenues. 20(1), 99-119.

Pangil, F., & Chan, J. M. J. J. O. K. M. (2014). The mediating effect of knowledge sharing on the relationship between trust and virtual team effectiveness.

Peterson, B. (2011). Cultural intelligence: A guide to working with people from other cultures: Nicholas Brealey.

Plenert, G., & Plenert, J. (2018). Strategic Excellence in the Architecture, Engineering, and Construction Industries: How AEC Firms Can Develop and Execute Strategy Using Lean Six Sigma: CRC Press.

Sénquiz-Díaz, C., & Ortiz-Soto, M. (2019). A multifold perspective of knowledge sharing and virtual teams: The development of an IMOI model. *Journal of technology management & innovation,* 14(2), 88-96.

Serrat, O. (2017). Managing virtual teams. *In Knowledge Solutions* (pp. 619-625): Springer.

Strikwerda, J., & Rijnders, D. (2005). Possible End Games in the European Postal Market: Qui Bone?". *In MA Crew, & PR Kleindorfer (Eds.), Regulatory and Economics Changes in the Postal and Delivery Sector. Amsterdam: Kluwer Academic Pub-lishers.*

Thomas, D., Elron, E., Stahl, G., Ekelund, B., Ravlin, E., Cerdin, J.-L., Aycan, Z. (2008). Cultural intelligence: Domain and assessment. 8(2), 123-143.

Van Dyne, L., Ang, S., Ng, K. Y., Rockstuhl, T., Tan, M. L., Koh, C. J. S., & compass, p. p. (2012). Sub-dimensions of the four factor model of cultural intelligence: Expanding the conceptualization and measurement of cultural intelligence. 6(4), 295-313.

Wong, S.-S., & Burton, R. (2000). Virtual Teams: What are their Characteristics, and Impact on Team Performance? *Computational & Mathematical Organization Theory,* 6, 339-360. doi:10.1023/A:1009654229352

Yari, N., Lankut, E., Alon, I., & Richter, N. F. J. E. J. o. I. M. (2020). Cultural intelligence, global mindset, and cross-cultural competencies: A systematic review using bibliometric methods. 14(2), 210-250.

Zuofa, T., & Ochieng, E. G. J. T. P. M. A. I. J. (2017). Working separately but together: appraising virtual project team challenges.