Managing with cultural intelligence:
The new secret to multicultural team success
Abstract

The globalization of the economy has made many organizations to rely on multicultural teams to perform creative teamwork in order to meet the challenges of the complex business environment. As this trend continues to grow, managers that are culturally intelligent and skilled at working with culturally diverse individuals are needed.

The current study ties both subjects and analyzes the effect of managerial cultural intelligence on multicultural team performance. Data for the study was collected by a theoretical and a quantitative empirical investigation. The theoretical investigation includes conceptualization, theories and frameworks towards both cultural intelligence and multicultural team work. The empirical investigation was conducted with the use of a questionnaire. The questionnaire results were analyzed in order to reach a conclusion. Besides that, the thesis provides recommendations for future research and a description of the limitations of the study.

Keywords: cultural intelligence, multicultural teams, team performance
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I. INTRODUCTION

Nowadays the business world is more complex and challenging as it has ever been. The globalization of the economy has robustly increased the number of international companies, the fierce competition on the global scene, and the composition of today’s work force. Succeeding in an ever-changing global environment ask of managers to navigate the organizations in a dynamic way and seek constantly for new sources of innovation and creativity in order to supply the more demanding customer needs.

Without doubt, the prevailing conditions of the globalization phenomena impact the way in which business is conducted and reject the hypothesis that business is business everywhere by giving credit to the famous saying “think globally- act locally”(Lane, DiStefano & Maznevski 2006). Organizations need to differentiate their once standardized products and adapt them to local environments. However, adapting into another economy ushers organizations with the need to be more cultural sensitive in order to better understand its customer. This being easier said than done requires organizations to be flexible and constantly alter their strategies in order to follow the industry change. In this sense, multicultural teams have become a major strategic option pursued by global managers.

Considered as being beneficial, multicultural teams have become quite commonly used by global companies that have successfully mined their potential (Gupta 2008). Global corporations usually form diverse teams to achieve certain goals in specific functional areas, to develop strategies and etc. (Lane 2004). Nevertheless, multicultural teams not always create the value expected since cultural differences inhibit and create barriers to effective teamwork (Brett, Behfar & Kern 2006).

Therefore, organizations call for managers that have strong rationale for dealing with culturally different others. In general, the topic of cross-cultural management dates back several decades and has been approached from different perspectives. A method that has been in fashion was to expect others to adapt while pursuing the “be like me” policy. Alternatively, cross-cultural management has been studied also from anthropologists who have investigated the general values across cultures and subcultures. This field has been mainly addressed by academics such as Geert Hofstede, Edward Hall, Fons Trompenaars, Florence Kluckhohn who have developed typologies of various cultures that has been referred to as “everything you need to know” list (Thomas, Inkson 2004,p.13). Recently, a new approach to cross cultural understanding has emerged, that is, to be

To date, several researches have showed the effect of cultural intelligence on creating hybrid culture (Earley, Mosakowski 2000), interpersonal trust, on team acceptance and integration (Ang, Van Dyne 2008) in multicultural teams. However, no particular study investigates the influence of managerial cultural intelligence on the multicultural team work in an Arabic company. Studies are therefore needed to fill that gap.

My motivation to research on this topic lies behind the fact that as international student I have regularly been confronted with the task to work with culturally diverse fellow students. As universities, organizations are also highly multicultural and interactions with culturally diverse people are basically inevitable. Therefore, I prefer to accept, rather than neglect the fact that culture matters in the turbulent business world.

To answer the research problem a number of theories will be used and a quantitative research will be carried out.

II. THEORETICAL BACKGROUND
The chapter of theoretical background aims at providing fundamental theories for the concept of cultural intelligence and multicultural teams. Therefore this chapter consists of two main sections that explore both subjects.

1. The concept of cultural intelligence
   1.1. Basic definition underlying the concept: culture, emic and etic constructs
To get a better understanding of the subject of cultural intelligence, a good start will be to define the concept of culture. The Oxford dictionary defines culture as “the customs and beliefs, arts, way of life and social organization of a particular country or group” (Hornby, Wehmeier 2004).

The problem with this definition is that it is quite oversimplified and quite unspecific which make it look like a list of categories. Therefore, in order to define culture in a more relevant way, a better option will be to explore the literature for more accurate conceptualizations.

Without a doubt, the literature is rich of definitions of the notion of culture, ranking from broad to narrow, and all holding a different perspective. One definition that has received great deal of attention is provided by Geert Hofstede who states that culture is “the collective programming of mind which distinguishes one group or category of people from another” (Lane, DiStefano & Maznevski 2006, p.24). These mental programs represent deep cultural values and principles that are “invisible”, but govern the way people behave, speak, and etc. Further, the author argues that these mental programs are shared for people within a nation. In a similar way, culture is seen to “consists of a shared, commonly held body of general beliefs and values that define the “shoulds” and the “oughts” of life” (Lane, DiStefano & Maznevski 2006, p.24). In other words, culture is an entity with which people identify themselves. This definition holds the idea that culture can exists not only on national level, but can also be developed for instance around professions or organizations (Stahl et al. 2010b).

EMIC AND ETIC CONSTRUCTS
For the purpose of this thesis, it is important to differentiate between emic and etic constructs. On the one hand, a construct or process is considered emic when it exists uniquely in one culture and thus receives meaning by its context. On the other hand, an etic construct is referred to be universal and to exist across cultures (Earley, Murnieks & Masakowski 2007). Murdock (1945) created a list of seventy cultural universals that included variables such as: food taboos, folklore, etc. These universals are usually represented at supra-societal level. Berry (1997), however, argued that there are variables that not as universal as they appear. The author named those variables “imposed-etics” that are usually represented in a number of cultures but not in all. In a similar vein, Earley & Mosanowski (1996) defined imposed-etics to be those constructs that are assumed to be idiosyncratic and universal, but are actually not (Earley, Ang 2003). Nevertheless, CQ is assumed to consist of both etics and emics constructs that will be referred to in the next sections.
1.2. Cultural intelligence

To date, an impressive body of research has been conducted towards the issue of cultural diversity with emphasis on the challenges faced by multicultural teams, global leaders, expatriates, etc. Defining culture as a type of intelligence is a new way of approaching this complex issue that gives researchers a new direction to study two notions that have been a major subject of international management from the 1960s and have already made their own path separately (Ng, Earley 2006). To be culturally intelligent (from now on referred to as CQ) means to “be skilled and flexible about understanding a culture, learning more about it with your ongoing interactions with it, and graduallyreshaping your thinking to be more sympathetic to the culture and your behavior to be more skilled and appropriate when interacting with others from the culture” (Thomas, Inkson 2004, p.14).

The definition of CQ, as Ang (2007) suggests, is consistent with Schmidt & Hunter (2000) definition of intelligence or “the ability to grasp and reason correctly with abstractions (concepts) and solve problems” (Ang et al. 2007). Ang (2007) further highlights that viewing intelligence just as an ability to solve problems was referred to as “classroom” approach. In order to escape from this perspective on intelligence, several academic authors related intelligence with specific domains such as social intelligence that is defined as the ability to understand and get along with others and act appropriately upon that understanding (Ang, Van Dyne 2008, p.291) and emotional intelligence that is described as “the ability to perceive, understand and manage emotions in oneself and others” (Ang, Van Dyne 2008). It is important to add that there are much more types of intelligence but these two were described since they are the closest to CQ. However, CQ differs from both social and emotional intelligence since it is based on the fundamental principle of interactions that are culturally governed. In other words, CQ is that ability that helps people to interact effectively across cultures. Therefore, CQ is suggested to focus on the discovery of both etics and emics through interaction with multiple cultures (Earley, Murnieks & Masakowski 2007).

As CQ is about being successful in a cross-cultural environment, any further discussion about CQ will be meaningless without more precise understanding of the term of effective cultural interaction. At its core, effective intercultural interaction has been characterized by characteristics like good personal adjustment, development and maintenance of good interpersonal relationships with culturally different others, and the effective completion of task-related goals. More specifically, individuals who feel comfortable and positive to interact with culturally different persons in a
cultural different situation and reach the goals that have been given indicate effective intercultural interaction (Thomas, Elron & Stahl 2008).

Based on the definition of CQ and the clarification of what effective cultural interaction is, it is important to look at the components of CQ. Earley and Ang (2003) based on Stenberg and Determan’s work (1986) derived CQ as a multidimensional construct that is composed of either three or four facet that are: metacognition, cognition, motivation and behavior (Ang, Van Dyne 2008). The confusion in relation to the number of facets arises due to the fact that different literature sources cite the model differently. The original work of Earley and Ang notes that the CQ framework consists of three dimensions but emphasize that the facet of cognition includes metacognition. Nevertheless, later on Ang (2008) starts to treat metacognition as a separate dimension.

Another framework of CQ that Earley and Masanowski (2004) developed suggests that CQ consist of three features being cognitive, physical and emotional that resides in the head, body and heart. Similarly, Thomas and Inkson (2004) comprised CQ as a three part model of knowledge, mindfulness and behavioral skills. Alternatively, Livermore (2010) viewed CQ as a four dimensional model of CQ drive, CQ knowledge, CQ strategy and CQ action.

For this thesis the framework proposed of Earley and Ang (2003) will be adopted since their work is the most referred to and reflected in other scholar writings. However, it will refer to the facet of metacognition as a separate entity.

1.3. The four facet framework of Ang and Earley

This subsection will examine carefully each facet of CQ separately in order to get better understanding of it. A graphical representation of the model was added below:
A) Metacognition

Metacognition refers to “thinking about thinking or knowledge and cognition about cognitive objects” (Earley, Gibson 2002, p.100). However, this definition does not take into account the aspect of culture thus it important to mention that cultural metacognition is “metacognition in a specific domain, that of cultural experiences and strategies” (Thomas, Elron & Stahl 2008, p.131). Particularly, metacognition further refers to one’s cultural awareness during intercultural interactions (Ang, Van Dyne 2008). Consistent with Ang (2008), metacognition controls the processes that each individual uses to gain and understand cultural knowledge.

The concept constitutes of two elements: metacognitive knowledge and metacognitive experience. Metacognitive knowledge refers to the world knowledge that a person possess; it can be further broken down into three general types of knowledge: knowledge about people as thinking organisms, knowledge about task variables, and knowledge about strategy variables. The first knowledge category refers to: person’s belief that he/she can deal with numbers and analyses; the knowledge about other people capabilities; person’s universal or etic knowledge (sense of knowing that for example other people make mistakes). The second knowledge category refers to the type of knowledge acquired by a person. More specifically, some types of information require more time and efforts to be acquired whereas other information types are less challenging depending on the circumstances. The final knowledge category refers to metacognitive strategy that is basically the procedure maintained towards fulfilling the desired goal (Earley, Ang 2003). Metacognitive experience, as Thomas et al. (2008, p.131) denotes is “the ability to consciously and deliberately
monitor one’s knowledge processes…” Furthermore, it is related to the process of incorporating relevant experiences in order to facilitate future interactions (Earley, Peterson 2004).

Flavel (1979) defined the concepts of cultural metacognitive monitoring and regulation. On the one hand, cultural metacognitive monitoring (related to metacognitive experience) involves the awareness of the cultural preferences, assumptions, norms, etc. of oneself and different others. On the other hand, cultural metacognitive regulation (related to knowledge strategy) serves as a control mechanism of the cognitive activities directed towards accomplishing the cognitive goal. Basically, individuals with high level metacognition, who interact cross-culturally, have the strength to question their cultural assumptions and alter their cultural knowledge (Thomas, Elron & Stahl 2008, Ang, Van Dyne 2008).

B) Cognition

While metacognition focuses on higher order cognitive skills, cognitive CQ can be viewed as the knowledge of an individual that has been acquired by personal experience. The reasoning behind this definition lies on the fact that the cognitive facet of CQ has been conceptualized with the help of the self-concept theory that suggests that the self is “a person’s mental representation of personality, social identity, and social roles” (Earley, Peterson 2004, p. 106). It is important to mention that high-CQ requires cognitive flexibility of the self-concept since operating in new cultural situations may require reshaping, adaptation or abandoning of preconceived categorizations. Despite flexibility, CQ requires also strong reasoning skills in order to be able to decipher a completely new context that is unique in its nature, without relying on past experiences.

The cultural knowledge component of CQ consists of three general types of knowledge that are: declarative, procedural and conditional knowledge. Declarative knowledge is the knowledge that one holds about oneself or others; about objects; about an environment. Therefore, CQ calls for specific content knowledge about culture that an individual can rely on when interaction in a cross-cultural setting. This includes culture “universal” knowledge about different systems (economic, social, legal) that all societies have in order to meet their basic physiological needs (Ang, Van Dyne 2008). Besides that, it includes also knowledge about the cultural specific values that Lane, Maznevski & Distefano (2006, p.32) refer to as “cultural maps”. Individuals have access to several cultural maps that provide information about group’s differences, behavior or characteristics. For instance, such map can be Hofstede’s value framework of individualism, power distance,
uncertainty avoidance, masculinity, and Confucian dynamics. Another popular map is Hall’s five
dimension model that explains the impact on time, space, things, friendship, and agreement on
interpersonal behavior (Lane, DiStefano & Maznevski 2006).

In addition to declarative knowledge, cultural cognition refers also to procedural or process
knowledge or basically knowing what actions to execute in order to meet the demands of the
complex cultural environment. In other words, procedural knowledge searches for specific content
knowledge in order to better understand others. Furthermore, through the processes used one can
gain new declarative knowledge (Earley, Ang 2003).

Cultural knowledge refers not only to declarative and procedural knowledge, but also to conditional
knowledge. Conditional knowledge is the knowledge about when and why to use specific cognitive
actions. This means that conditional knowledge requires the procedures, described in the previous
paragraph, to be used in the right time (Earley, Ang 2003).

Without a doubt, the cognitive facet of CQ is of crucial importance when interacting with people
that are culturally different. Nevertheless, just knowledge is not enough. One must be motivated to
use this knowledge in order to interact appropriately. Therefore the next part will focus on the
motivational facet of CQ.

C) Motivation

In order to adapt effectively across culturally different situation, individuals need to be motivated to
do that. Motivation is the individual drive that stimulates people to experience new situations that
further influence one’s desire to interact with culturally different others (Templer, Tay &
Chandrasekar 2006). In order to explain the motivational facet of CQ, Earley and Ang (2003) draw
from Erez et al. (1993) Cultural Self-Representation Theory. As with the cognitive facet of CQ, the
motivational dimension is also closely related with the self-concept that consists of three self-
motives that are: enhancement, efficacy, and consistency.

Firstly, the concept of self enhancement has been studied a great deal and is referred to be affected
by “opportunities in the environment and by self-regulatory processes of sampling, assessing, and
interpreting such opportunities”. Usually individuals aim at maintaining positive self-image and
thus look for situations that offer comfort and bring satisfaction. In general, individuals tend to alter
reality in order to maintain positive self-view. As a result, high self-enhancement will be negatively
related to CQ since it will discourage individuals to explore the unfamiliar world. Oppositely, a low level of self-enhancement will have a positive effect on CQ since it will heighten one’s motivation to search the external world (Earley, Ang 2003).

Secondly, self-efficacy is related to one’s capabilities to deal with a task. As a tendency, people seek out situation in which they judge that they can deal with and ignore those situations for which they believe to lack the necessary capabilities. High self-efficacy can be advantageous for CQ since it promotes that people will be more motivated to overcome hurdles, to interact cross-culturally, and to deal with challenging tasks (Earley, Ang 2003).

Thirdly, self-consistency is one’s desire “to maintain coherence and consistency in their experiences and cognition”. This means that people with high level of self-consistency motivation will be probably unable to adapt to new settings because they tend to ignore information that does not fit into one’s self-view (Earley, Ang 2003, p.75).

D) Behavior

In the previous three sections, the dimensions of metacognition, cognition, and motivation to CQ have been discussed. More often than not, being knowledgeable and motivated is not sufficient. Hence, one must be able to exhibit appropriate behavior when interacting with people from different cultures. CQ requires “having in one’s behavioral repertoire responses needed for a given situation” (Earley, Ang 2003, p.81). As it can be seen from the citation, individuals can rely neither on a particular behavior, nor on a set of well master behaviors, but has to possess a repertoire of behavior that work well across situations. These situations are typically unique and novel in their character, which respectively calls for flexible and adaptive behavior capabilities of both verbal and non verbal actions.

Nevertheless, there are situations in which one cannot provide the desired behavior response because of some deep-set reservations that are usually tide with individual’s reinforcement history. Therefore, it is important to look at how a person can behave effectively in cross-cultural interactions. A useful model that can contribute to this understanding is the self-presentation or impression management framework. Basically, the model suggests that when involved in social interaction, individuals will try to keep a good impression of oneself in the other party. Therefore, individuals “rarely do things that make them appear incompetent, unattractive, or socially
undesirable” (Earley, Ang 2003, p.163). Based on that, the authors suggest that individual concern about their self-presentation is the main obstacle towards effective intercultural interaction.

Across cultures individuals tend to express behaviors that are universal in their character. Triandis (1978) differentiates between several universal type behaviors: associative versus dissociative; superordinate versus subordinate; intimate versus formal. Even though considered as universal, these types of behaviors use to differ in specific contexts and usually carry unique meanings and expressions. Therefore, it is important to analyze behaviors on a micro rather than on a macro-level.

- **Verbal**

Earley (2006) distinguish between three main challenges to verbal intercultural communication-foreign languages, direct versus indirect speech, and conversational style and paralanguage. Firstly, effective intercultural interaction often requires individuals to speak other language that is different from their native. A person who is unable to learn a new language at a level that is enough satisfactory supposes low-CQ since foreign language proficiency is considered as crucial facet of behavioral intelligence. Secondly, effective intercultural communication depends on the directness of speech act which differs, according to Edward Hall, across low-context and high-context cultures. Basically, representatives of low-context cultures prefer accurate speech expressed in words. In contrast, high-context cultures value non-verbal communication. Thirdly, controversial style reflects on the rate of speech, the rhythm, the topic shifting, etc. that also tends to vary across low and high context cultures (Earley, Ang 2003, Earley, Ang & Tan 2006).

- **Non-verbal**

Non-verbal language is also universal, but at the same time culture specific just as the verbal language. Through their body language individuals express their beliefs, attitudes, and values. Furthermore, non-verbal behavior is related to one’s physical appearance and attractiveness, gesturing, facial expression, etc. For instance, the use of gestures is common in every culture, but the meaning attached to a gesture in one culture may significantly differ in another one. Therefore, high CQ masters have to be aware of those meanings in order to interact effectively (Earley, Ang 2003, Earley, Ang & Tan 2006).

1.4. The Cultural Intelligence Scale (CQS)
The CQS was developed by Soon (2007) and her colleagues in order to create a framework that can measure CQ. More specifically, they aimed at testing the dimensions of metacognition, cognition, motivation and behavior with four to six items. Each item was created towards one idea and was formulated in a clear and understandable way. Initially, the scale consisted of a forty item questionnaire that was measured on a seven point Likert scale where 1=strongly disagree and 7=strongly agree. After conducting several specification researches twenty out of forty items were deleted due to high residuals, small standard deviations, etc. Therefore, the original CQS consists of twenty questionnaire items which are distributed as following: four items for metacognitive CQ; six items for cognitive CQ; five items for motivational CQ; and five items for behavioral CQ. In order to conclude on the validity and generalizability of the scale, it was tested across samples, across time and across countries. In sum, the cross validation analyses show strong validity, stability and reliability of the scale. The original scale can be found in Appendix 1 (Ang, Van Dyne 2008, Ang et al. 2007).

Despite the long version of the CQS, the authors suggested that the scale can also have a short version that consists of nine items. Other authors have even further reduced the scale and used only five items of it in their researches (de la Garza, Egri 2010).

1.5. Characteristics supportive of CQ

It have been proven that there are factors that are supporting of CQ meaning that they contribute to one’s capability to function effectively when interacting with individuals that are culturally different. This thesis emphasize on the effect of trait personality and cross-cultural experience on the level of CQ.

A) The Big Five personality traits

Not surprisingly, the big five model consists of five factors: conscientiousness, agreeableness, emotional stability, extraversion, and openness to experience. To start up with, people who are high in conscientiousness are dependable, efficient, and industrious which suggests that such individuals generally perform better. As a consequence, conscientiousness is positive related to the metacognitive facet of CQ. Secondly, individuals with high level of agreeableness are friendly, supportive, helpful, flexible, etc. Therefore, agreeableness is concluded to be positively related to behavioral CQ which as Ang et al.(2006, p.118) emphasizes “makes sense because those who are agreeable are easygoing in their behavior”. Next, emotional stability is generally intrinsic for
individuals who are calm and even-tempered in their nature. High emotional stability was expected to correlate positively with the behavioral facet of CQ, but prove oppositely. One explanation could be that people who are emotionally stable are less communicative. Before last, highly extraverted individuals are appointed to be generally self-confident, sociable, talkative, etc. Therefore, the authors tested its relation to the behavioral and motivational CQ which as a result demonstrated positive relation to both dimensions and plus to cognition. Finally, openness to experience, which is the least understood factor of the Big Five, was theorized to be positively related to all dimensions of CQ. An individual that is open to new experiences is much more imaginative and broad minded which suggests that he/she will be more capable to effectively interact with different others (Ang, Van Dyne 2008, Ang, Van Dyne & Koh 2006). (Ang, Van Dyne & Koh 2006)

B) Cross-cultural experience

The time that people spend overseas in terms of cross-cultural experience is crucial to CQ. Without a doubt, cross-cultural experience is the best method to enhance one’s overall level CQ. While abroad, either as an expatriate, traveler, student or something else, individuals are exposed to a different national culture. This as a consequence, allows an individual to become “familiar with the products, norms, values and assumptions of that culture” (Crowne 2008, p.393). Nevertheless, not all types of cultural exposures influence CQ. Basically, individuals who have been abroad as students or employees usually have higher levels of CQ. In contrast, the level of CQ does not seem to be affected by other types of exposure such as vacation abroad (Crowne 2008).

Except the type of exposure, the depth of exposure is considered as an influencing factor of CQ. Crowne (2008) suggests that the depth of exposure can be measured in terms of countries visited. Further, the author argues that the more counties one visits for education and employment, the higher the level of CQ (Crowne 2008).

One thing important to mention is that individuals can be involved in cross-cultural experiences in their home country as well. That can happen if they are employed in a highly multicultural organization or are part of a multicultural team (Crowne 2008).

1.6. Manager profiles

Earley and Masanowki (2004) argue that one’s level of CQ can determine his/her management style. The authors identified six CQ manager profiles depending on one’s CQ score: the provincial,
the analyst, the natural, the ambassador, the mimic, and the chameleon. The provincial is good at working with people from the same background and usually unsuccessful, if away from home. The analyst use different strategies to explain foreign culture’s rules and expectations. In particular, that kind of manager will be able to discover that he/she is part of a new setting but then through learning will acknowledge how to interact with different others. Next, the natural as it names suggests, relies on his/her intuition when facing multicultural situations. The most common managerial profile is namely the ambassador who is rich in confidence. Before last, the mimic “has high degree of control over his action and behavior” (Earley, Mosakowski 2004a, p. 145). Therefore, he/she has the power to adopt other people style of interaction in order to facilitate the communication process. Lastly, the chameleon, is the most uncommon and unique manager who is high in all facets of CQ. Further, Thomas & Inkson (2004) suggest that such people are “like the ancient Greek Proteus” who could change his shape in order to adapt. In general, however, Earley (2004) suggests that these profiles are rather deterministic and therefore explains that some managers can have a profile that is a mix between the different profiles.

2. Multicultural teamwork

2.1. Definitions: Team & Diversity

A critical concept discussed in this thesis is multicultural teams. However, any further discussion about this subject has to begin with a definition of a team. Teams have been defined by many authors through the years with all emphasizing that a team is not just a collection of people. Martin (2005) referred that a team “implies a small cohesive group that works effectively as a single unit through being focused on a common task” (Brooks 2005-2006, 84). Similarly, a team is conceptualized as “three or more individuals having interactivity in order to perform some common actions” (Earley, Ang 2003, p.239-240).

Having this in mind, teams have also been distinguished as formal and informal. On the one hand, formal teams emerge in organizations to fulfill certain goals and are therefore considered as task orientated. On the other hand, informal teams are usually the outcome of informal and personal interactions among members of the organization (Brooks 2005-2006).

Despite that, teams have also been differentiated in terms of diversity or basically to the extent to which the members of the team are similar or different from each other. For clarification, individuals can differ in dimensions such as gender, ethnicity, race, age, profession, nationality, and
Since this thesis is particularly focused on culture, teams can be categorized as homogeneous, token, bicultural and multicultural. Homogeneous teams consist of people who have a similar background, token teams have only one member who has different background, bicultural teams in which two members come from two different cultures, and finally multicultural teams where more than two cultures are represented. (Adler 2007, 132-133). Some authors (Earley, Gibson 2002, Earley, Gardner 2005) use the term multinational teams rather than multicultural. Earley & Gibson (2002) elaborate that a multinational team is represented by team members who come from different national and thus cultural backgrounds. In this thesis, the two terms will be used as interchangeable concepts. In a similar vein, the terms group and team will referred to as if they have the same meaning.

As the various types of teams were defined, it is also important to highlight how teams function. Thomas & Inkson (2004) distinguished between group process activities and group task activities. Basically, the task activities are the one that are directed towards reaching the desired outcome whereas the process activities supervise the way that the team has taken in order to accomplish the task (Thomas, Inkson 2004).

2.2. A framework of multicultural team performance

The previous section outlined and explored in depth the concept of CQ by providing strong theoretical background that will serve for further analysis. The purpose now shifts toward multicultural teamwork which will be the matter of this chapter.

In theory, culturally diverse teams are appointed to be more creative, to generate more unique ideas, and to have the greatest potential for creating value. In practice, however, heterogeneous teams do not always create the desired outcome since they are extremely sophisticated in their nature. Not surprisingly, cultural differences are not only a source of innovation, but are also the main crux in achieving the ultimate success. Cultural diversity is assumed to affect teams in three ways that Mannix and Neale (2005) have identified (Stahl et al. 2010b). Firstly, the similarity-attraction theory suggests that people have the affinity to interact with those people with whom they share common values, beliefs, and attitudes. Next, people usually engage in a categorization process when they interact with others. Therefore, people classify one another in specific groups: in- groups (insiders that are similar to one’s self) and out- groups (outsiders that are different to one’s self). Thirdly, it is common that people treat members of their in-group with sympathy whereas people
treat outsiders “according to group traits (e.g., stereotyping).” In essence, cultural diversity is considered to be a group input that affects the team processes which respectively affects the team performance (Stahl et al. 2010b, p.691).

Therefore, Thomas & Inkson (2004) proposed a process model on actual group performance that describes the effect of cultural diversity in both negative and positive way. As it can be seen from figure 1, the model is rather simple and constitutes of three main parts. The arrow in the middle represents the actual group performance that on the one side is affected by the process losses and on the other side by the process gains. Basically, process loss occurs when a team cannot reach its potential while process gains are experienced when the diverse members create cultural synergy.

![Figure 2: Effect of process on group performance (Source: Adapted from Thomas and Inkson 2004:152)](image)

Therefore, the main challenge that confronts managers of multicultural teams is to minimize as much as possible the process losses while maximizing the process gains (Thomas, Inkson 2004).

A) Group performance

Performance is conceptualized as a process in which team members are involved so that they accomplish the expected goals and produce the desired outcomes (Salas, Cooke & Rosen 2008). However, in order performance to arise teams need to be engaged in taskwork and teamwork processes. The two concepts differ in their approach to work which means that taskwork “do not require independent interactions with other team members”, whereas teamwork is defined as “the interdependent components of performance required to effectively coordinate the performance of multiple individuals” (Salas, Cooke & Rosen 2008, p.541). Parallel with this, performance is also commonly used in combination with the word “effective”, that is, effective performance. Basically,
term effectiveness is usually used as an evaluation of the outcomes of group performance. Adler (2008) suggests that the level of team performance depends on how well diversity is managed. If well managed cultural diversity can turn out to be “asset” and enhance performance whereas if bad managed it can lead to process losses.

Different variables have been derived as affecting the level of performance. Earley & Gibson (2002) grouped these variables with divergence and convergence. On the one hand, divergent processes are those that “bring different values and ideas into the team and juxtapose them with each other” (Stahl et al. 2010b, p.692). Divergent process can have both positive and negative effect on performance and thus can create both process gains and process losses. On the other hand, convergence processes are defined as those processes that unite the team. As divergence processes, convergence processes can also contribute positively and negatively to performance. The table below provides some of the variables that have been identified to affect team processes.

<table>
<thead>
<tr>
<th>Process gain</th>
<th>Process loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convergence</td>
<td>Cohesion</td>
</tr>
<tr>
<td>Divergence</td>
<td>Creativity</td>
</tr>
</tbody>
</table>

In sum, CQ can serve as a tool for dealing with process issues caused by cultural diversity that affect teamwork. A high CQ manager needs to consider and facilitate the team processes as much as possible.

Specifically, team performance has been considered to be affected by certain internal team dynamics factors. Therefore, the next subsection will examine the internal team dynamics and also propose different ideas that can enhance team performance.

- **Team dynamics**

Earley (2005) argues that there are specific internal team dynamics that influence the effective performance of a multicultural team. Furthermore, the author suggests that the dynamics underlying a multicultural team are: clear goals, differentiated roles, rules for social interaction, and task related monitoring and reporting. Consequently, Earley (2005) relates these four characteristics with
various intervening and outcome variables. The framework is very well explained in the graphical representation below.

Firstly, multicultural teams are considered more effective when they have a unified task to achieve. Particularly, more challenging goals can increase the team member’s motivation to accomplish the task and thereby enhance the overall performance of a team (Earley, Gardner 2005). A powerful motivator in a team has been considered to be collective efficacy that is defined by Bandura (1997) as a “group’s belief in its capabilities to perform a task objective” (Earley, Gardner 2005, p.12). Not surprisingly, challenging tasks call for “specialized” roles as Adler (2008, p.141) suggests. Role identity is “best thought of as a product resulting from a tension between distinctiveness and integration with the team” (Earley 2002, p.288). Moreover, since diverse team members usually hold different norms and share different views about how the team should go about its task, how to behave, etc., it is important to emphasize on clear rules for interactions. Finally, usually multinational teams show reliance on monitoring processes. Team members have different orientation towards time as suggested by Edward Hall who differentiates between monochronic and polychronic distinction between cultures. Representatives of a monochronic time culture prefer to take each task at a time whereas polychronic time orientated focus simultaneously on several tasks. Obviously, the lack of agreement between those two types can cause misinterpretations which make it necessary to introduce control mechanisms (Earley, Gardner 2005).

A high-CQ manager can help multicultural teams to develop shared goals by expressing clearly how their mission contributes to the company in order to enhance group efficacy. Moreover, a high-CQ manager has the metacognitive skill to understand, observe and catalog team member’s actions and intentions and in that way contribute to the teammate’s awareness of role clarity. Manager on a
multicultural team can improve social interactions by adopting a flexible working style in order to create good relationship with all team members. High CQ score means that a person can determine control mechanisms in order to govern the activities of the team so it finally arrives at the desired destination (Earley 2002, Earley, Gardner 2005).

B) Process losses

Hill (1982) emphasize that “culturally heterogeneous teams are more likely to suffer from increased process losses and have lower group performance than would homogeneous groups” (Thomas 1999, p.244). Therefore, cultural diversity usually provides the greatest potential to hinder effective teamwork that can discourage managers. Most of the literature connected to cultural differences has looked at the “dark” side of diversity that might be explained by the fact that negative events are usually more visible than positive (Stahl et al. 2010a). Therefore, it is important to look at some of the problems associated with diversity since they have proven effect on teamwork.

❖ Conflicts

Jehn and Mannix (2001) distinguished between three types of conflicts: task, relationship and process conflicts. In general, a conflict is categorized to be an “expression of differences in opinion or priority because of opposing needs or demands”. A task conflict occurs when differences in opinions and viewpoints between members arise in relation to the task. A relationship conflict is takes place when group members feel tension and friction due to interpersonal incompatibilities. Process conflict occurs when team members cannot reach agreement on how they will proceed with the accomplishment of their task.

In light of the above definitions it is easy to see that conflict will be probably something quite common in multicultural teams since members of that team usually hold different beliefs, norms and values which serve as a guidance to interpret, prioritize, etc. Therefore, conflicts in multinational teams usually occur due to miscommunications.

❖ Communication as a source of conflict

Adler (2007) emphasize that cross-cultural communication can be disrupt by three sources: misperception, misinterpretation, and misevaluation. Firstly, perception is a process that is: selective – individual allows only specifically selected information to one’s mind; learned- meaning that personal experience guides one about how to perceive; culturally determined- one see things from
his/her culture based perspective; consistent-usually one’s perceptions do not change; and inaccurate-individuals perceive what they want to perceive based on their cultural background (Adler 2007). Secondly, misinterpretation “means that we categorize situations from our own countries perspective and apply it to other countries” (Appelbaum, Shapiro & Elbaz 1998, p.222). A popular form of categorization is the stereotypes that people hold to describe others behavior. Typically, stereotypes can be both a helpful or harmful guide for evaluating a person or a situation. Thirdly, cross-cultural misevaluation refers to judging a situation, if it good or bad, from one’s own cultural perspective (Adler 2007).

Not only conflict arises because of misperception, misinterpretation, and misevaluation but also because individual from different cultures have different communication styles: direct versus indirect. Gupta (2008) emphasize that direct communicator like the Americans tend to express clearly and promptly their thoughts. In contrast, indirect communicators transmit “verbal messages that camouflage and conceal speaker’s true intentions” (Gudykunst, Kim 2003, p.70). As a consequence, miscommunication can lead to unwanted conflict situation.

If that occurs, a team manager has to be able to react appropriately in order to resolve the occurred problem. A high-CQ manager has the knowledge to differentiate between a behavior that is culturally unique or universal. Being able to do that, allows him/her to initiate the needed behavioral response or actions. This cultural chameleon has the ability to adapt his behavior across situation in order to put others at easy. Likewise, this manager can mimic one’s behavior successfully without harming other person’s reputation in order to facilitate the communication process. Finally, the high-CQ manager can increase team’s motivation to accomplish its goals and tasks.

C) Process gains

Cultural diversity creates not only barrier to teamwork but also opportunities. Distefano & Maznevski (2000, p.46) implicitly state that multicultural teams have an “enormous wealth of material with which to create innovative approaches” and besides that a “broad range of operating modes” about how the team goes about it task. As a consequence, cultural heterogeneous groups should result in more creativity.

- Creativity
Creativity is usually the result of the increased range of viewpoint and alternatives that multicultural teams have about evaluating a problem. Gupta (2008, p.80) emphasize that cultural diversity “brings richness to problem solving”. Oppositely to homogeneous teams, culturally diverse teams usually challenge their ideas and rarely experience group-think.

III. METHODOLOGY

The theoretical chapter of this thesis stands as a solid foundation from which to construct a research that is empirical in its nature in order to examine the problem statement.

1. Introduction to research

When it comes to research, Blumberg (2008) emphasize on the factors that make a good research. Not surprisingly, a good research has to be professionally planned and conducted in order to generate data that can be relied on. The authors further emphasize that “a good research follows the structure of the scientific method” (Blumberg, Cooper & Schindler 2008, p.15). The scientific method can serve as a guideline for conducting the desired research and consists of nine criteria: clearly defined purpose of the research, described research procedure, planned research design, applied ethical standards, honestly reported flaws in the procedure, adequate analyses, clearly presented findings, justified conclusions, reflected researcher experience (Blumberg, Cooper & Schindler 2008). In sum, Martyn Denscombe (2003, p.3) suggests that “the crucial thing for good research is that the choices are reasonable and that they are made explicit as part of any research report”.

2. The Empirical Method

In general, when selecting an empirical method, researchers can choose between two widely recognized business research methods: qualitative and quantitative. The key characteristic that distinguishes the two approaches in related to treatment of data. As Blumberg (2008, p.192) notes “qualitative studies rely on qualitative information (i.e. words, sentences, narratives)”, while quantitative studies are more “number” orientated as their name suggests. This means that the qualitative research transforms the information collected from observations, recordings, etc. into words, whereas the quantitative research tends to be associated with analyses in terms of statistics procedures (Denscombe 2003).
As a consequence, the qualitative approach is usually preferred by researchers in the field of anthropology, whereas quantitative studies are quite common in economics. However, it is important to clarify that usually the research method is selected on the basis that it “will provide the data you require to produce a complete peace of research” (Bell 2006, p.115).

3. Data collection

Blumberg (2008) differentiates between two types of data—primary and secondary. The latter refers to data that has been already recorded by someone else, for instance, in books and articles. This thesis uses secondary data that is related to the specific topics of cultural intelligence and multicultural teamwork. Therefore, it is noticeably important to look at the factors that underline primary data. Researchers may choose between two alternatives when it comes to gathering primary data: they can do a case study or a survey. Respectively, investigators can choose to observe different events, process or people or to communicate with people on different subjects. This thesis chose the communication approach, and thus used a survey to collect the necessary information. In this sense, it is also important to emphasize that there are different types of surveys: interviews and questionnaires. Both types have their advantages and disadvantages that have to be taken in consideration before choosing a method. On the one hand, interviews can be concluded to have the following list of advantages (Blumberg, Cooper & Schindler 2008, Denscombe 2003, Bell 2006):

- The data obtained by an interview is more rich and detailed
- Respondents can be selected so that they match the population profile
- An interviewer can ask follow up questions and probe for answers
- A qualified interviewer can investigate motives and feelings in order to clarify a response

Nevertheless, interviews have also certain disadvantages that make them less desirable method for data collection. Some the main drawbacks of the interviews are (Blumberg, Cooper & Schindler 2008, Denscombe 2003):

- Interviews are a highly costly way for conducting surveys
- Interviews are usually time consuming
- A successful interview calls for a trained interviewer
- Both the interviewer and the respondent might be biased
Inappropriate behavior (word emphasizing, tone of voice, and etc.) from the interviewer can alter the results

Interviews are used only for a small number of people

Weighed against this, questionnaires are expected to have the following advantages (Blumberg, Cooper & Schindler 2008, Denscombe 2003):

- Questionnaires usually cost less in comparison with interviews
- Questionnaires expand geographic borders
- Questionnaires send by e-mail can reach otherwise inaccessible respondents like chief executives, managers and doctors
- Questionnaire provide anonymity

Not surprisingly, questionnaires are also related to have certain drawbacks (Denscombe 2003):

- Questionnaires have very low response rate (usually 20% of all questionnaires send)
- Questionnaires may take longer time to be answered
- Incomplete or almost complete answers
- The truth of the answers cannot be checked

Bearing the advantages and disadvantages of both methods in mind, the questionnaire has been chosen as a method for data collection. Not only is that method a better alternative for data collection in terms of the research problem of this project, but is also much more appropriate for bachelor students who almost no research experience. As Blumberg (2008, p.19) highlights “clear confidence in the research is warranted if the researcher is experienced”. Furthermore, interviews are related with high expenses that students cannot afford. Finally, the respondents (managers) that were approached with the questionnaire would have never been accessible for a long and time consuming interview with such a novice researcher as the bachelor student.

4. The questionnaire

As the previous section concludes, a questionnaire was used as a tool for collecting the primary data of this project. The questionnaire consisted of thirteen questions that are mainly “closed” except two “open” type questions. Nevertheless, all questions were developed with the aim to answer the research problem.
The first three questions were designed in order to make the respondent relaxed about the questionnaire: “What is your gender?”, “What industry sector do you work in?”, and “How long have you been working for the company?”. Noticeably, two of the three introduction questions are opened which provides the respondent with the opportunity to type the answer. The opened questions were developed with the purpose to escape from the “cold” vision of the questionnaires that Descombe (2003, p.16) suggests. Afterwards, the next three questions have the purpose to determine one’s level of cross-cultural experience and broad-mindedness. The next set of questions has its main focus on measuring the respondent’s level of CQ with a nine point CQS adopted by Ang et al. (2007). The next four questions are concentrated on multicultural team’s dynamics, problems and performance. The last question was formulated in order to obtain information about respondent’s general preference: “In general, do you prefer working with heterogeneous or homogeneous teams?”

It is important to mention that most of questions have been adopted from previous studies or have been drawn from conclusion that different authors have reached. The questionnaire can be found in Appendix 2.

5. Selection of respondents

The questionnaire was sent to the Shanfari Group of Companies that operate in a range of industries such as road & infrastructure, oil & gas, construction, information technology, manufacturing, and automotive among others. Basically, the questionnaire was send by e-mail to the Chief Executive Adviser of the company who together with his colleagues assisted in appointing persons that have been or are managers, supervisors or team leaders of multicultural teams. The e-mail consisted not only of a link to the questionnaire, but also of information about the research problem and its importance. Despite that, the company was promised that the results will be analyzed only by me and there will be confidentiality. Finally, the company will be provided with a copy of the thesis once it is finished.

As a result, the questionnaire was send to one hundred and fifty persons that were expected to fill out the questionnaire. Unfortunately, the response rate was not as high as expected since the questionnaire was answered just fifty three times. However, as Descombe (2003, p.3) explicitly states “any social researcher will be lucky to get as many as 20 per cent of the questionnaires returned”.


6. Data analyses

The primary data gathered by the questionnaire survey will be analyzed in this section by the use of descriptive statistics and correlations analyses. It is important to mention that for the analyses the statistical program SPSS was used.

Even though the response rate of the questionnaire was less than expected (53 answers), the answers are considered enough to proceed. To start up with, there are 39 males and 14 females in the sample, giving a total of 53 respondents. This means, that 73.6% of the respondents are males whereas 26.4% are females. Besides that, the respondents work across industry sectors such as gas and oil, manufacturing, travel, etc. The average time the respondents have worked for the company is around 6 years. Further, most of the respondent admitted to work “Somewhat” often or “Often” with multicultural teams. 5.7% of the respondents chose the “neutral” answer and none of them answered that he/she does not work with multicultural teams.

<table>
<thead>
<tr>
<th>Table 1: How often do you work with multicultural teams?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Valid</td>
</tr>
<tr>
<td>3-Neutral</td>
</tr>
<tr>
<td>4-Somewhat</td>
</tr>
<tr>
<td>5-Often</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

In general, 50.9% of the respondents showed preference to work with culturally diverse teams, whereas only 15.1% admitted that they prefer homogeneous teams. The rest 34% come from participants that are neutral if they work with homogeneous or heterogeneous teams.
A) The CQS

In order to measure the level of CQ of the managers from Shanfari Group of Companies, the CQS developed by Ang and her colleagues was adapted.

- **Scale reliability**

The original CQS consists of 20 items that measure the four facets of CQ. However, for this thesis the items used were only 9. More specifically, the 9-point scale used consisted of 2 items for metacognition, 3 items for cognition, 2 items for motivation, and 2 items for behavior. Sample items include: “I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds”, “I know the rules (e.g., vocabulary, grammar) of other languages”, “I enjoy interacting with people from different cultures”, “I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it”. Since, Soon et al. (2008) has tested the scale reliability for 20-items, it was important to test if the created 9-point scale was reliable as well. In order to do that, the Cronbach’s coefficient alpha for the scale was calculated. Basically, this statistics provides an indication about the reliability of the scale by calculating the average correlation among the items included. Table 2 shows that the Cronbach’s Alpha for the 9-point scale is 0.756. Nunally (1978) suggests that usually a minimum of 7 is required for a scale to be considered reliable (Pallant 2007).
Table 2: Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.756</td>
<td>9</td>
</tr>
</tbody>
</table>

- **CQS Score**

Participants in the survey were asked to indicate a score from 1 (strongly disagree) to 7 (strongly agree), correspondingly, for all 9 items. By the score the respondents indicated, the overall level of the sample’s CQ was calculated. Therefore, 4 variables were computed in order to calculate the scores of the four dimensions separately. For example, the variable of metacognition was computed as the mean of the two items used in the questionnaire to measure metacognition. The procedure for the remaining three facets was the same. Afterward, the overall CQ score was computed in the following way: CQS = Mean (metacognition, cognition, motivation, behavior).

As it can be seen from Table 3, the mean level of CQ for all participants (N=53) equal **4.6625**. Respectively, the lowest score is **2.33** whereas the highest is **6.33**. Basically, managers with score above 6 match the profile of the cultural chameleon, whereas those below 4 have areas to improve. Having the overall score, however, indicates that most managers are probably ambassadors or mimics.

Table 3: Descriptive statistics for CQS

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CQS</td>
<td>53</td>
<td>2.33</td>
<td>6.33</td>
<td>4.6625</td>
<td>.67830</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>53</td>
<td>2.33</td>
<td>6.33</td>
<td>4.6625</td>
<td>.67830</td>
</tr>
</tbody>
</table>

In particular, some of the managers lacked either metacognitive or cognitive knowledge; appropriate behavioral repertoire or enough motivation to interact with culturally different others. In general, participants described themselves to possess more metacognitive knowledge rather than cognitive. The values about motivational CQ and behavioral CQ are close to each other; however, in total the mean average of the responses for the motivational items is higher than for the behavioral. The descriptive statistics calculated separately for the facets is available in the table below.
B) Characteristics supportive of CQ

As it was mentioned in the literature overview, there are some characteristics supportive of CQ that are: *openness to experience* and *level of cross-cultural experience*. Basically, it is suggested that individuals that are more open to experience will have higher levels of CQ. Likewise, those that have cross-cultural experiences will also have higher levels of CQ.

- **Openness to Experience**

  This section aims to test if:

  - *Openness to experience is positively related to all 4 facets of CQ.*

Recent research, conducted in 2006 by Ang, demonstrates that CQ is related to the Big Five personality traits: consciousness, agreeableness, emotional stability, extraversion and openness to experience. In particular, the research showed that the 4 dimensions of CQ are strongly related to openness to experience. Therefore, this analysis specifically focuses on openness to experience rather than on some other personality trait. Respondents openness to experience was measured on a 5 point Likert Scale (1=not opened; 5=extremely opened). The mean for the question is **4.49** which suggest that most of the respondents are opened or extremely opened to new experiences.

However, in order to explore whether there is correlation or relationship between metacognitive, cognitional, behavioral and motivational CQ and openness to experience, a bivariate Pearson correlation test was conducted. Table 4 presents the results from the test. The Pearson’s correlation for CQS (metacognition, cognition, motivation, behavior) and openness to experience is **0.807** at p< 0.01.

Two main conclusions can be drawn from this number. Firstly, the relationship between CQS and openness to experience is positive. This means that open individuals will tend to be high in CQ.

### Table 3a: Descriptive Statistics for the 4-facets of CQ

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>metacog</td>
<td>53</td>
<td>3.00</td>
<td>7.00</td>
<td>4.906</td>
<td>1.13294</td>
</tr>
<tr>
<td>cognition</td>
<td>53</td>
<td>2.33</td>
<td>6.33</td>
<td>4.296</td>
<td>0.91035</td>
</tr>
<tr>
<td>motivation</td>
<td>53</td>
<td>2.00</td>
<td>7.00</td>
<td>4.820</td>
<td>1.08793</td>
</tr>
<tr>
<td>behavior</td>
<td>53</td>
<td>1.50</td>
<td>6.50</td>
<td>4.726</td>
<td>1.10317</td>
</tr>
<tr>
<td>Valid N (Listwise)</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Secondly, the number is within the interval of 0.5 until 1.0 which indicates that the correlation is large, according to the guideline proposed by Cohen (1988) (Pallant 2007).

Further, the analyses confirm once again the result that Soon (2006) achieved in her research. Oppositely, if the number was negative, that would have proposed a negative relationship between the two variables.

- **Cross-Cultural Experience**

  This section aims to test if:

  - *Cross cultural experience is positively related to all four facets of CQ*

Most of the participants in the survey answered that they are either “slightly experienced” or cross culturally “experienced”. Only two respondents in the sample indicated that they are “not experienced”. The descriptive statistics provide a mean of **2.53**. Bivariate Pearson Correlation analysis was used again in order to examine the relationship between CQS and cross-cultural experience. Basically, a positive value will indicate that the higher the level of cross-cultural experience, the higher the score of CQ. Table 5 supports that statement since it can be seen that the Pearson Correlation is **0.515**, significant at p<0.01. Thus, cross-cultural experience is related to all four facets of CQ in a positive way.
The value of 0.515 proposes a large relationship since it is within the interval from 0.5 until 1.0. In sum, both openness to experience and cross-cultural experience are positively related to the level of CQ. Therefore managers that are opened to new experiences and have cross-cultural experience tend to have high-CQ score.

C) Multicultural team performance

The managers that took part in the survey were asked to state how successful their team in attaining team output is on a 5-point Likert scale (1=very unsuccessful; 5=very successful). The average of the answers provided amounts \(4.36\) as it can be seen from Table 6. This means that most of the managers evaluated their teams as successful. Exceptions do exist, though, since the “minimum” column in the table noticeably indicates that the lowest score is 2. Basically, there is a respondent(s) that have evaluated their team as slightly unsuccessful.

<table>
<thead>
<tr>
<th>Table 6: Descriptive Statistics on team success</th>
</tr>
</thead>
<tbody>
<tr>
<td>How successful is your team in attaining team outcomes (problems solved, decisions implemented, productivity raised)?</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>53</td>
</tr>
</tbody>
</table>

Internal team dynamics
As stated in the theoretical section of this report, internal team dynamics are suggested to have effect on multicultural team performance. A CQ manager should be able to determine clear goal and roles for his/her team and this should lead to increased performance.

Therefore, the next analyses will be aimed at examining if there is a relationship between CQ and one’s ability to determine clear goal and roles for culturally diverse teams. Moreover, the next sections will also explore if clear goals and roles are positively related to multicultural team performance. Therefore, Pearson’s correlation statistics will be used again. Nevertheless, it is important to mention that regression analyses that would have aimed to test if multicultural team teamwork is affected by goal setting and role identity would have been more appropriate. However, since the response rate (53 answers) is lower than expected, the generalizability assumption that has to be fulfilled in order to launch regression analyses was unfortunately not satisfied. Basically, Tabachnic and Fidell provided a formula for calculating sample size requirements that takes in consideration the number of independent variables that will be used in the regression. In this case, we want to test the effect of clear goals and distinct roles (2 independent variables) on multicultural team success (1 dependent). The formula is \( N > 50 + 8m \) (m=number of independent variables). “N” (53 answers) for this case is smaller rather than bigger of 66.

- **Goal setting**

This section aims to test if:

- **Overall CQ score will be positively related to one’s ability to determine clear goals for a team**
- **Determine clear goals for the team will be positively related to multicultural team success**

Participant in the survey were asked to answer on a 5-point Likert Scale (1=Not at all; 5=Yes, I have) if they were able to determine clear goals for their team. The average for this question is 3.66 which was not as high as expected. Most of the respondents answered that they have “Somewhat” expressed the goals that the team has to achieve. Despite that, there were significant number “Neutral” answers. In general, the “Neutral” answer serves to provide the respondents with an option not to choose a side and skew the results. In this case, those who have answered “Neutral” were not sure if they have not been able or have been able to express clear goals for their team.

As argued in the theoretical chapter, managers that are high-CQ should be able to determine clear goals for their teams. Therefore, overall CQ score should be positively related to one’s ability to
determine clear goals. Opposite to what expected, manager’s ability to express clear goals to the team was correlated with metacognitive (0.570, p<0.01), cognitional (0.288, p<0.05), and behavioral (0.280, p<0.05), but not with the motivational (0.122, not significant) CQ.

One explanation for this result could be that managers need to have metacognitive and cognitive knowledge to express the goals clearly and they need to have the needed behavioral repertoire to express it in a way that is understandable to all members no matter from what culture they come from. Therefore, managers do not need any specific motivation for themselves but by expressing clear goals they can raise the motivation or the collective efficacy within the team. The statistics supports that expressed clear goals will be positively related to multicultural team success. The Pearson Correlation calculated is 0.452, significant at p<0.01 meaning that the more clearly the goals are expressed, the more successful a team is. The statistical table has not been included.

- **Role identity**

This section aims to test if:

- **Overall CQ score is positively related to one’s ability to determine distinct roles for each team member**

- **Distinct roles for each member will be positively related to multicultural team success**

Similarly to the previous section, manager’s ability to determine distinct roles for team members was measured on a 5-point Likert Scale. Again likewise with team goals, the average for this
question was lower (3.85) as well. The reasons are not so much different since many of the respondents relied on the “Neutral” answer.

In reference to the correlation statistics provided in Table 8, metacognition is the only dimension of the CQ that showed positive relationship with one’s ability to determine distinct roles.

### Table 8: Correlation between metacognition and determined distinct roles

<table>
<thead>
<tr>
<th></th>
<th>When managing a multicultural team, have you been able to determine distinct roles for each member?</th>
<th>metacog</th>
</tr>
</thead>
<tbody>
<tr>
<td>When managing a multicultural team, have you been able to determine distinct roles for each member?</td>
<td>Pearson Correlation</td>
<td><strong>0.410</strong></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>p&lt;0.002</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>53</td>
</tr>
<tr>
<td>metacog</td>
<td>Pearson Correlation</td>
<td><strong>0.410</strong></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>p&lt;0.002</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>53</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.01 level (2-tailed).*

Stated another way, as manager’s metacognitive or one’s “knowledge and cognition about cognitive objects” (Earley, Ang 2003, p.100) went up, so did the capability of an individual to determine distinct team roles. This means that a high metacognitive CQ manager has the skills to observe and understand the internal functioning of the team in order to “determine the dominant role identities for each team member, how these identities lead members to interact mutually, and how the work context of the team might make certain identities more silent than others” (Earley, Ang 2003, p.242).

Being able to do that, affect positively multicultural team success as the correlation statistics indicates. The correlation value between determined distinct role identities and multicultural team performance is **0.364**, significant at p<0.01. The table that provided this result has not been included in this paper.

In addition, high-CQ managers are capable to determine clear goals and distinct roles for their team which further influence the performance of that team.

- Manager’s ability to react appropriately when problems in multicultural teams occur
Manager’s ability to react appropriately to problems occurred in multicultural teams was measured on a 5-point Likert Scale where “1” indicated that the person was not able to react appropriately whereas “5” indicated that the managerial intervention was successful. The average provided from descriptive statistics for this question is 4.08. Therefore, most of the respondents answered that they have or have somewhat reacted appropriately to problems.

- CQ score and manager’s ability to react appropriately to problems

As Thomas & Inkson (2004) suggest that a high-CQ manager should be able to minimize process losses in multicultural team, it becomes important to check if such relationship is credible.

This section aims to test if:

- **Overall CQ score increases manager’s capability to react appropriately when problems in multicultural teams occur**

Table 9 provides support for Thomas & Inkson (2004) suggestion since the result further highlight the positive relation between the two variables. The correlation between the two variables is quite large since 0.679>5 at significance level p<0.01.

<table>
<thead>
<tr>
<th>If a problem appeared (conflict, miscommunication, decision-making issues), have you been able to react appropriately?</th>
<th>CQG</th>
<th>Pearson Correlation</th>
<th>Sig (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>CQG</td>
<td>Pearson Correlation</td>
<td>0.679*</td>
<td>0.000</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Sig (2-tailed)</td>
<td>0.000</td>
<td>53</td>
<td></td>
</tr>
</tbody>
</table>

**Note**: Correlation is significant at the 0.01 level (2-tailed).
The high-CQ manager has the ability to identify a cultural problem that has occurred in a team. Further, he/she has a “mental” map to which to refer to in order to react appropriately to solve the problem (Earley, Ang 2003, p.190). He/she has the needed behavioral response and the motivation to intervene effectively.

- Manager’s ability to react appropriately to problems occurred and multicultural team performance

Basically, Table 10 serve just to illustrate that successful management intervention to problems will result in higher multicultural team performance. The result of 0.518 supports that problems solved are positively related to team’s effectiveness. As a result, process losses have been minimized and the team can better focus on creating process gains.

<table>
<thead>
<tr>
<th>Table 10: Correlation between one’s ability to solve problems and multicultural teams performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>If a problem appeared (conflict, miscommunication, decision-making issues), have you been able to react appropriately?</td>
</tr>
<tr>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

D) The overall relationship between CQ score and multicultural team performance

The final correlation that will be tested in this thesis is between CQ score and its effect on multicultural team success. Therefore, the following is proposed:

- CQ will be positively related to multicultural team performance
Table 11 implicates that as the level of manager’s CQ rose, so did the probability of success for the team. The relationship between the two variables is significantly large and positive.

### Table 11: Correlation between CQ score and team success

<table>
<thead>
<tr>
<th></th>
<th>How successful is your team in attaining team outcomes (problems solved, decisions implemented, productivity raised)?</th>
<th>CQS</th>
</tr>
</thead>
<tbody>
<tr>
<td>How successful is your team in attaining team outcomes (problems solved, decisions implemented, productivity raised)?</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>How successful is your team in attaining team outcomes (problems solved, decisions implemented, productivity raised)?</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>53</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Basically, as the level of CQ increases, so does the level of success of the team managed. In contrast to that, a negative correlation would have meant that CQ diminish team’s success.

IV. Discussion and recommendations

This thesis sought for answer to the following research question: **How does managerial CQ influence multicultural team performance?** Therefore this section discusses what the finding of the data analyses mean and how they related to previous studies. What is more, this chapter includes recommendations for future researches and limitations of the study.

1. Discussion of results

In order to fully analyze the research problem, this research aimed to measure manager’s score of CQ and tests its influence on multicultural teamwork. Manager’s level of CQ was measured with the help of 9-item CQS that was first analyzed for reliability. The overall score that the managers reached was somewhat medium in its nature. Results also demonstrated that one’s level of CQ is dependent on his/her openness to experiences as Ang et. al (2006) have previously verified.
Despite that, the result demonstrated that the higher one’s level of cross-cultural experience, the higher the level of CQ. This supports Crowne’s (2008) research results that provided evidence for the existence of a relationship between cultural exposure and level of CQ.

Once general analyses for CQ have been done, it was important to focus on multicultural team performance. The results reached are straightforward. Firstly, the results indicate that a team that has clearly defined goals and roles is more successful. Therefore, manager can contribute positively to team success by expressing clear team goals and roles. A positive correlation was found between metacognitional, cognitional and behavioral CQ and one’s ability to set goals. Further, the findings suggest that managers that have higher order cognitive skills are more capable of determining distinct roles for the team members.

Secondly, as argued in the theoretical section of this thesis, multicultural team work can diminish due to process losses in terms of conflicts. Therefore, it was considered as vital to check if managers were able to react appropriately when conflicts situations occur. Analyses showed that appropriate intervention from management side affected positively team performance. What is more, the probability of successful interferences increases together with manager’s overall level of CQ. Finally, direct relationship between manager’s CQ score and multicultural team success was evident from the analyses. Basically, manager’s that are CQ affect positively multicultural team success. In other words, it appears that a successful team will be most probably managed by a CQ manager.

2. Recommendations for future research

CQ is an area that worth investigations, especially in connection with the challenging topic of multicultural teams. Therefore, several suggestions for future research can be made. Firstly, a research that investigates the same research problem can be conducted again, however, using interviews as method for data collection, rather than a questionnaire. Another future study can be specifically directed towards the effect of managerial CQ on process losses or process gains in multicultural teams. Moreover, researches can focus on multicultural virtual teams and how manager’s CQ can influence the performance of such teams. Likewise, studies can be orientated to test the destructive effect of a low-CQ manager on team performance.
Without a doubt, more studies are needed in the United Arab Emirates. A good idea will be to compare samples across countries in order to investigate the effect of national culture on the level of CQ.

In addition, the newness of the concept of CQ provides researchers with the possibility to choose from a range of unexplored areas depending on their interest.

3. Limitations of the study

As every study, this study also has its limitations. The first and major limitation is that the sample used for the survey is small in size which does not allow any general conclusions to be drawn. Moreover, focusing only on the managerial perspective and not considering the team view is also limited in its nature. A manager can state that he/her has been able to react appropriately to problems that have occurred in the team, whereas the team can hold a different opinion about that. Therefore, if several teams have been examined together with their leaders, it would have been much more probable to reach a more valid and reliable conclusion. The validity of the answers that the participants have provided are doubting as well, since individuals usually tend to hold a good view about oneself. For example, when participants were asked to describe themselves on a 7-point Likert scale in order to measure their level of CQ, they could have ticked a higher score because they perceive themselves as such. The truth, however, can be completely different.

V. Conclusion

The dramatic shift of the economy and the absence of barriers to trade have made organizations borderless. Even though considered as a “culture-free” science for decades, business is now more than ever culturally bound {{50 De Anca, C. 2007/f, p.84;}}. In order to sense the needs of the different regions around the world, international organizations constantly form multicultural teams who are expected to achieve innovative outcomes. Together with that, cultural diversity usually presents barriers to effective performance. Therefore, multicultural teams place special demands on managers. Rather than expect other to be like them, managers need to be culturally intelligent, that is, to be capable “to function and manage effectively in culturally diverse settings” (Thomas, Elron & Stahl 2008, p.126). This thesis took in consideration both subjects and in that way formulated the research problem that was about to be investigated: How does managerial cultural intelligence influence multicultural team performance?
In order to reach a conclusion, the construct of CQ was described and explored in depth. It was defined to consist of four components, namely metacognition, cognition, motivation and behavior that a manager need to possess in order to be culturally intelligent. Further, manager’s personality characteristics and cross-cultural experiences were taken in consideration since those two factors, according to the literature, are predictive of CQ. Whether an individual is high versus low CQ can be measured by the use of the Cultural Intelligence Scale, developed by Ang et al. in 2007. Depending on the score one’s achieve, he/she should fit within one of the six manager profiles: the provincial, the analyst, the natural, the ambassador, the mimic or the cultural chameleon. Without a doubt, the cultural chameleon is the manager that has the highest level of CQ and such as a chameleon can adapt to different situations.

The topic of multicultural teams was afterwards discussed. For better understanding of the subject, the core concept of a team was carefully defined. In order to measure team performance, a framework that takes in consideration both the negative and positive effect of diversity on team performance was introduced. It was therefore proposed, that a team manager must be able to minimize the process losses and maximize the process gains and thereby contribute positively to team performance.

The model of internal team dynamics developed by Earley (2005) served as a tool to describe the features that influence the success of a multicultural team. These features include clear goals for the team, distinct roles, clear rules for social interaction and task-related monitoring. Manager’s ability to express clear goals and determine distinct roles for the team members was tested among others. The statistical analyses calculated suggest that a manager who is CQ is more capable determine goals and roles for the team which also positively influence the performance of the team.

The process losses that a team can experience and a manager has to minimize were, in this case, problems due to conflicts, miscommunication, etc. In the statistics, positive relationship was found between manager’s ability to react to problems appropriately and his/her level of CQ. This as a consequence affects positively multicultural team performance.

Finally, Person correlation analyses explored for linear relationship between manager’s CQ score and how successful his/her team is in attaining team output. Fortunately, it became visible that the higher the overall score of CQ, the more successful the team is.
There is no doubt that a high-CQ manager can contribute positively to the performance of a multicultural team. That kind of manager has the needed metacognitive and cognitive knowledge, the motivation and the behavioral skills to face the challenges coming along with multicultural teams. This manager is like a chameleon that changes when the circumstances require it.

VI. Bibliography


## Appendix 1

### The Cultural Intelligence Scale (CQS)

Read each statement and select the response that best describes your capabilities. Select the answer that BEST describes you AS YOU REALLY ARE (1 = strongly disagree; 7 = strongly agree)

<table>
<thead>
<tr>
<th>CQ factor</th>
<th>Questionnaire items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metacognitive CQ</strong></td>
<td></td>
</tr>
<tr>
<td>MC1</td>
<td>I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.</td>
</tr>
<tr>
<td>MC2</td>
<td>I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.</td>
</tr>
<tr>
<td>MC3</td>
<td>I am conscious of the cultural knowledge I apply to cross-cultural interactions.</td>
</tr>
<tr>
<td>MC4</td>
<td>I check the accuracy of my cultural knowledge as I interact with people from different cultures.</td>
</tr>
<tr>
<td><strong>Cognitive CQ</strong></td>
<td></td>
</tr>
<tr>
<td>COG1</td>
<td>I know the legal and economic systems of other cultures.</td>
</tr>
<tr>
<td>COG2</td>
<td>I know the rules (e.g., vocabulary, grammar) of other languages.</td>
</tr>
<tr>
<td>COG3</td>
<td>I know the cultural values and religious beliefs of other cultures.</td>
</tr>
<tr>
<td>COG4</td>
<td>I know the marriage systems of other cultures.</td>
</tr>
<tr>
<td>COG5</td>
<td>I know the arts and crafts of other cultures.</td>
</tr>
<tr>
<td>COG6</td>
<td>I know the rules for expressing nonverbal behaviors in other cultures.</td>
</tr>
<tr>
<td><strong>Motivational CQ</strong></td>
<td></td>
</tr>
<tr>
<td>MOT1</td>
<td>I enjoy interacting with people from different cultures.</td>
</tr>
<tr>
<td>MOT2</td>
<td>I am confident that I can socialize with locals in a culture that is unfamiliar to me.</td>
</tr>
<tr>
<td>MOT3</td>
<td>I am sure I can deal with the stresses of adjusting to a culture that is new to me.</td>
</tr>
<tr>
<td>MOT4</td>
<td>I enjoy living in cultures that are unfamiliar to me.</td>
</tr>
<tr>
<td>MOT5</td>
<td>I am confident that I can get accustomed to the shopping conditions in a different culture.</td>
</tr>
<tr>
<td><strong>Behavioral CQ</strong></td>
<td></td>
</tr>
<tr>
<td>BEH1</td>
<td>I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.</td>
</tr>
<tr>
<td>BEH2</td>
<td>I use pause and silence differently to suit different cross-cultural situations.</td>
</tr>
<tr>
<td>BEH3</td>
<td>I vary the rate of my speaking when a cross-cultural situation requires it.</td>
</tr>
<tr>
<td>BEH4</td>
<td>I change my nonverbal behavior when a cross-cultural situation requires it.</td>
</tr>
<tr>
<td>BEH5</td>
<td>I alter my facial expressions when a cross-cultural interaction requires it.</td>
</tr>
</tbody>
</table>

© Cultural Intelligence Center 2005. Used by permission of the Cultural Intelligence Center. Note: Use of this scale granted to academic researchers for research purposes only. For information on using the scale for purposes other than academic research (e.g., consultants and non-academic organizations), please send an email to cquery@culturalq.com. The Chinese version of the scales is available on the MOHR website.
Appendix 2

Questionnaire

1. What is your gender?
   - Male
   - Female

2. What industry sector do you work in?
   ....

3. How long have you been working for the company?
   ....

4. How often do you work with multicultural teams?
   - Not often at all
   - Slightly
   - Neutral
   - Somewhat
   - Often

5. How would you evaluate your openness to experience (curiosity, broad-mindedness, imagination, etc.)
   - Not opened
   - Slightly
   - Neutral
   - Opened
   - Extremely Opened

6. How would you evaluate your level of cross-cultural experience?
   - Not experienced
   - Slightly experienced
   - Experienced

7. Read each statement and select the response that best describes your capabilities (1-Strongly disagree, 2-Disagree, 3-Slightly disagree, 4-Neutral, 5-Slightly Agree, 6-Agree, 7-Extremely agree)
• I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.
• I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me
• I know the cultural values and religious beliefs of other cultures
• I know the rules (e.g., vocabulary, grammar) of other languages
• I know the rules for expression non-verbal behavior in other cultures
• I enjoy interacting with people from different cultures
• I am sure I can deal with the stress of adjusting to a culture that is new to me
• I change my verbal behavior (e.g., tone, accent) when a cross-cultural interaction requires it
• I use pause and silence differently to suit different cross-cultural situations

8. When managing a multicultural team, have you expressed clearly the team goals?
   - Not at all
   - Slightly
   - Neutral
   - Somewhat
   - Yes, I have

9. When managing a multicultural team, have you been able to determine distinct roles for each member?
   - Not at all
   - Slightly
   - Neutral
   - Somewhat
   - Yes, I have

10. If a problem appeared (conflict, miscommunication, decision-making issues), have you been able to react appropriately?
    - Not at all
    - Slightly
    - Neutral
    - Somewhat
    - Yes, I have
11. How successful is your team in attaining team outcomes (problems solved, decisions implemented, productivity raised)?
- Very unsuccessful
- Slightly unsuccessful
- Neutral
- Slightly successful
- Very successful

12. In general do you prefer working with heterogeneous or homogeneous teams?
- Heterogeneous
- Homogeneous
- Neutral