

CULTURAL INTELLIGENCE: A COMPARISON BETWEEN MANAGERS IN SOUTH AFRICA AND THE NETHERLANDS

by

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- my Creator, for carrying me through and showing me how to proceed when
 I could no longer see the way forward.



DECLARATION

l, Riana van den Bergh, declare that <i>Cultural Intelligence: a comparison</i>
between managers in South Africa and the Netherlands is my own unaided
work, both in content and execution. All the resources I used for this study
are cited and acknowledged in the reference list, by means of a
comprehensive referencing system. Apart from the normal guidance from my
supervisor, I have received no assistance, except as stated in the
acknowledgements. I declare that the contents of this thesis have never
before been used in order to obtain any qualification at any other tertiary
institute.

institute.	in any qualification at any other tertiary
,	t this study has been language edited by f English at the University of Pretoria.
RIANA VAN DEN BERGH	DATE



ABSTRACT

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FACULTY: Economic and Management Sciences

DEGREE: Magister Commerci (Human Resources Management)

The rapid rate of globalisation is changing the face of the business environment. Not only do managers have to deal with challenges such as multiple time zones and geographically divergent locations, but they must also increasingly operate in culturally diverse environments and work with employees from various cultural backgrounds. The importance of culture in the workplace is often neglected, and this may have a negative impact on the overall success of organisations.

Cultural Intelligence is a facet of intelligence that describes the success with which individuals such as managers are able to deal with people from different cultural backgrounds. By exploring the degree of Cultural Intelligence of a management corps, it is possible to address the training needs in a given organisation in order to optimise the performance and productivity of a team.

It was apparent that, because Cultural Intelligence as a concept is a relatively new and unexplored notion, there was an urgent need for further exploration in this field. The purpose of this study was therefore to compare two groups of managers, one from South Africa and one from the Netherlands, in terms of their levels of Cultural Intelligence and to explore the generalisability of a Cultural Intelligence measurement instrument across cultures.



The Cultural Intelligence Questionnaire was administered to the two groups under review and the results were subjected to exploratory factor analysis (EFA), chi-square testing and independent t-tests. Various iterations of the exploratory factor analysis indicated that the primary components of Cultural Intelligence, namely Motivation, Behaviour and Cognition, were present in both groups. Independent t-tests showed that there were no significant differences between the two groups in terms of their levels of Cultural Intelligence. Both groups had high scores on Factor 1: Cultural Identity (related to the behavioural component of Cultural Intelligence) and Factor 3: Willingness to Learn about Different Cultures (related to the meta-cognitive component of Cultural Intelligence), and both groups had moderately high scores on Factor 2: Adaptability to a Multi-Cultural Setting (related to the motivational component of Cultural Intelligence). A high level of reliability for the instrument was established for both groups with a Cronbach alpha of 0.85 for the sample from the Netherlands and a Cronbach alpha of 0.75 for the Exploratory factor analysis yielded similar factor South African sample. loadings for 22 of the 24 items that were included in the final factor analysis.

The exploratory research conducted in this study has contributed to the refinement and expansion of Cultural Intelligence theory. The instrument that was used for assessment can be a useful tool in selecting and developing managers to work with multi-cultural groups.



CONTENTS

ACKNOWL	EDGEMENTS	ii
DECLARA T	ΓΙΟΝ	iii
ABSTRAC [*]	Γ	iv
CHAPTER	1: INTRODUCTION AND BACKGROUND	
1.1	Background	2
1.2	Purpose of the study	3
1.3	Research problem	3
	1.3.1 Research questions	4
1.4	Significance of the study	4
1.5	Outline of the study	6
1.6	Summary and concluding remarks	7
CHAPTER	2: LITERATURE REVIEW	
2.1	Introduction	8
2.2	What is culture?	8
2.3	Theories on cross-cultural interaction	10
	2.3.1 Hofstede's dimensions of national culture	10
	2.3.2 Trompenaars's value dimensions of culture	12
2.4	Cultural conditioning	14
2.5	Cross-cultural interaction	17
	2.5.1 Strategies for overcoming cultural differences	18
2.6	Developing intercultural sensitivity	20
2.7	Cultural Intelligence vs Cross-Cultural Competence	23
	2.7.1 Intelligence	23
	2.7.2 Emotional intelligence	25
	2.7.3 Intercultural competence	27
2.8	Cultural Intelligence	29
2.9	The elements of Cultural Intelligence:	
	Cultural strategic thinking, motivation and behaviour	32
	2.9.1 Cultural strategic thinking/knowledge/meta-cognition	33
	2.9.2 Motivation/Mindfulness	36
	2.9.3 Behaviour	43
2.10	The importance of Cultural Intelligence in the workplace	47



	2.11	Demo	graphic overview of South Africa and the Netherlands	48
	2.12	Summ	nary and concluding remarks	50
CHAF	PTER 3	: RESE	EARCH METHODOLOGY AND METHODS	
	3.1	Introd	uction	52
	3.2	Resea	arch design	52
	3.3	Samp	le	55
	3.4	Data o	collection and instrument	58
		3.4.1	Key considerations in choosing the data collection	
			method and instrument	60
	3.5	Statist	tical analysis	64
		3.5.1	Descriptive statistics	64
		3.5.2	Construct equivalence	67
		3.5.3	Evaluation of the qualitative data	69
	3.6	Summ	nary and concluding remarks	69
CHAF	PTER 4	: RESI	JLTS AND DISCUSSION	
	4.1	Introd	uction	70
	4.2	Partici	pants	70
		4.2.1	Comparison of groups in terms of the biographical	
			variables	70
	4.3	Explor	ratory factor analysis	75
	4.4	Final f	actor solutions and loadings	78
		4.4.1	Final factor solution and loadings (Factor 1)	80
		4.4.2	Scale naming/description (Factor 1)	80
		4.4.3	Final factor solution and loadings (Factor 2)	81
		4.4.4	Scale naming/description (Factor 2)	81
		4.4.5	Final factor solution and loadings (Factor 3)	82
		4.4.6	Scale naming/description (Factor 3)	82
	4.5	Comp	arison of the three factors between the two groups	84
		4.5.1	T-test results for Factor 1: Cultural Identity	
			(Behaviour)	84
		4.5.2	T-test results for Factor 2: Adaptability to a	
			Multi-Cultural Setting (Motivation)	85



APPENDIX	B: CULTURAL INTELLIGENCE QUESTIONNAIRE – VERSION USED IN THE NETHERLANDS	123
APPENDIX	A: CULTURAL INTELLIGENCE QUESTIONNAIRE – VERSION USED IN SOUTH AFRICA	122
REFERENC	CES	115
5.6	Closing remarks on the contribution made by the study	113
5.5	Recommendations for future research	113
	5.4.3 Administration of the questionnaire/cultural barriers	112
	5.4.2 Homogeneity of variances	111
	5.4.1 Sample	111
5.4	Limitations of the study	111
5.3	Exploratory factor analysis and comparison of groups	108
5.2	Achievement of the study objectives	106
5.1	Introduction	106
CHAPTER	5: CONCLUSIONS AND RECOMMENDATIONS	
4.7	Summary and concluding remarks	104
4.6	Qualitative analysis	86
	Different Cultures (Cognition)	86
	4.5.3 T-test results for Factor 3: Willingness to Learn about	t



LIST OF TABLES

Table 2.1:	Hofstede's dimensions of national culture	11
Table 2.2:	Trompenaars's six dimensions of culture	13
Table 2.3:	Summary of the components of Cultural Intelligence	31
Table 2.4:	Sources of self-efficacy beliefs	41
Table 2.5:	Barriers to verbal communication across cultures	45
Table 2.6:	Barriers to non-verbal communication across cultures	46
Table 2.7:	Demographic representation of South Africa vs	
	the Netherlands	50
Table 4.1:	Gender distribution in the sample groups from South Africa	
	and the Netherlands	71
Table 4.2:	Age distribution in the sample groups from South Africa	
	and the Netherlands	72
Table 4.3:	Level of education in the sample groups from South Africa	
	and the Netherlands	73
Table 4.4:	Organisational level for the sample groups from South Africa	a
	and the Netherlands	74
Table 4.5:	Statistics for years worked by members of the sample group	S
	from South Africa and the Netherlands	74
Table 4.6:	Final rotated pattern matrix for the sample from	
	the Netherlands.	77
Table 4.7:	Final rotated pattern matrix for the South African sample	
	group based on 24 items	78
Table 4.8:	Final rotated pattern matrix for the sample groups from	
	South Africa and the Netherlands based on 24 items	79
Table 4.9:	Separate t-test results for Factor 1	85
Table 4.10:	Separate t-test results for Factor 2	85
Table 4.11:	Separate t-test results for Factor 3	86
Table 4.12:	Comparison of responses for themes emerging from	
	Question 38	88
Table 4.13:	Comparison of responses for themes emerging from	
	Question 39	91
Table 4.14:	Comparison of responses for themes emerging from	
	Question 40	94



Table 4.15:	Comparison of responses for themes emerging from	
	Question 41	97
Table 4.16:	Comparison of responses for themes emerging from	
	Question 42	99
Table 4.17:	Comparison of responses for themes emerging from	
	Question 43	102



LIST OF FIGURES

Figure 2.1:	Stabilisation of culture patterns	14
Figure 2.2:	Paths for core beliefs	17
Figure 2.3:	Developmental model of intercultural sensitivity	21
Figure 2.4:	Components of Cultural Intelligence	30
Figure 2.5:	Relationship between the content and process features	
	of Cultural Intelligence	32
Figure 2.6:	Language groupings and languages spoken in	
	South Africa	49
Figure 2.7:	Language groupings and languages spoken in	
	the Netherlands	49
Figure 4.1:	Histogram of eigenvalues of initial exploratory factor	
	analysis for the sample group from the Netherlands	76
Figure 4.2:	Sub-themes emerging from the theme "Accept Invitation"	87
Figure 4.3:	Sub-themes emerging from the theme "Decline Invitation"	88
Figure 4.4:	Sub-themes emerging from the theme "Most exhilarating	
	moment in dealing with different cultures"	91
Figure 4.5:	Sub-themes emerging from the theme "Most embarrassing	
	moment in dealing with different cultures"	94
Figure 4.6:	Sub-themes emerging from the theme "Goals as a	
	manager of a multi-cultural group"	96
Figure 4.7:	Sub-themes emerging from the theme "Learning methods"	99
Figure 4.8:	Sub-themes emerging from the theme "Specific aspects	
	about culture that managers would like answers on"	102



I honour your gods

I drink at your well

I bring an undefined heart to our meeting place

I have no cherished outcome

I will not negotiate by withholding

I am not subject to disappointment

(Celtic vow)



CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1 BACKGROUND

The world we live in challenges us with constant change. A world that was once perceived as a flat object supported by four pillars is now known to be a globe. A world that once consisted of a person's immediate environment, his or her community and possibly a nomad occasionally passing by or a visit to a neighbouring tribe has now expanded into a boundary-less global village. The world has gradually expanded to such an extent that we can look at news from the entire globe on our television screens and computer monitors. Quite unexpectedly, we may find ourselves in unfamiliar territories with strange gods, strange wells to drink from and strange ways of drinking from those wells... and we are expected to honour these differences and produce satisfactory business results in such contexts.

Globalisation and the so-called global village in which we find ourselves have not only revolutionised the speed of communication, travel and the face of business, but they have also brought with them a number of interesting and often confusing dynamics in our interactions with people.

In the business environment, intercultural interactions are no longer reserved for expatriate employees who set out to live and work in another country, or students who want to explore the world before continuing their studies or taking up a job. All employees are increasingly faced with the dynamics of dealing with people from different cultures and countries, and often with the detrimental effects of miscommunication and misunderstanding. More and more organisations are expressing a need for managers "who quickly adjust to multiple cultures and work well in multinational teams" (Early & Peterson, 2004:100). This is a critical managerial challenge – having to build successful



workplace relations and ensuring optimal performance in a multi-cultural setting. Meeting this managerial challenge successfully has been referred to as being "culturally intelligent" (Early & Peterson, 2004:100).

The construct termed "Cultural Intelligence" refers to the extent to which a person is able to adapt to and interact with people from other cultures, and the person's ability to understand and interpret the finer nuances of a culture, in order to build successful relationships (Thomas & Inkson, 2003).

1.2 PURPOSE OF THE STUDY

The purpose of this study is to explore the construct of "Cultural Intelligence", as cultural competence, using a Cultural Intelligence survey questionnaire, in order to establish the construct validity of the concept for managers in two countries, namely South Africa and the Netherlands. Secondly, the opinions about and attitudes of these two groups to Cultural Intelligence are compared by means of open-ended essay-type questions in order to explore the concept of Cultural Intelligence further.

The rationale for this research project was the fact that Cultural Intelligence is a relatively new and unexplored concept. Further exploration of the concept will provide valuable insights and understanding which will be useful in the generation of future hypotheses about and exploration of the theory.

There is undeniably a need in the modern workplace for employees to be adaptive and responsive to different cultures. Refinement and exploration of the concept of "Cultural Intelligence" as a competence will contribute to the development of intercultural training programmes for global managers.

1.3 RESEARCH PROBLEM

The aim of the study was to explore the validity of the instrument that was developed in an earlier study by Du Plessis, O'Neil and Van den Bergh (2007) by comparing the presence of the construct across two culturally diverse and



geographically separated groups of managers. Furthermore, a comparison of the perceptions of the two groups with regard to the construct was explored to discover trends and patterns in the managers' opinions and perceptions. Lastly, the levels of Cultural Intelligence of the two groups were compared. The extent to which the components of Cultural Intelligence were present across different cultures and nationalities provided insight into the universal significance of these components across countries, cultures and nationalities.

1.3.1 Research questions

- Research Question 1: What is the construct validity of the Cultural Intelligence Questionnaire across two managerial groups, one from South Africa and one from the Netherlands?
- Research Question 2: How do managers in South Africa and in the Netherlands perceive Cultural Intelligence?
- Research Question 3: How do the levels of Cultural Intelligence, as a competence, compare between managers in South Africa and managers in the Netherlands?

In order to determine whether or not there is a difference between the levels of Cultural Intelligence of managers in South Africa and in the Netherlands, it was necessary first to explore whether or not similar components are present within each sample. If the components of Cultural Intelligence are not equally present in both samples, the assumption can be made that the construct is not universally relevant and cannot be generalised to different cultures. The components of Cultural Intelligence (Cognition, Motivation and Behaviour) were therefore extracted by means of exploratory factor analysis (EFA) and then compared for both groups.

1.4 SIGNIFICANCE OF THE STUDY

The outcomes of the study contribute to a further exploration of the concept of Cultural Intelligence in order to expand the level of knowledge and understanding of the construct, particularly pertaining to its application to



managers. It also provides useful information that can be used to create intercultural training programmes within organisations, and to increase teamwork and promote interpersonal relationships for organisational success.

South Africa and the Netherlands are both culturally diverse countries where people are confronted with a wide range of cultural differences in their organisations every day. By exploring culturally intelligent competencies, including knowledge, emotions and behaviour, valuable insight is gained with regard to the creation of training and development programmes for local and expatriate employees, particularly managers, to increase internationalism within these countries and to improve the commitment to excellence, collaboration by and competitiveness of an organisation both locally and globally.

The study of intercultural behaviour is especially relevant in the new millennium, because, as the "Global Village" becomes smaller, the relative success of interactions between people from different countries, backgrounds and cultures will be the source of an organisation's competitive advantage. This exploration of Cultural Intelligence therefore provides valuable information for organisations that wish to achieve success in expanding across the borders of their home countries.

The Netherlands is an appropriate choice as a platform for comparison to the South African context, because the Netherlands, like South Africa, has also experienced diversity due to multi-cultural integration and is geographically separated from South Africa. People from various cultural groupings have found asylum in the Netherlands after fleeing from their home countries. At present, the country is home to people of Dutch, Western European, Indonesian, Turkish, Surinami, Moroccan, Antillean and Aruban origins. People who come from a multitude of different cultures therefore have to live and work together in the same country. South Africa is also a country characterised by the diversity of its people. Interesting and useful comparisons can be drawn between these two countries, because in South Africa, the management corps is still largely dominated by a minority group, whereas in the Netherlands, the management



corps is dominated mainly by the Dutch majority. These fascinating dynamics set the stage for a unique and interesting study.

1.5 OUTLINE OF THE STUDY

Chapter 1 provides an introduction and background to the study, introducing and contextualising the construct of Cultural Intelligence. It sets out the motivation for the study and the research questions that the study aims to address.

Chapter 2 clarifies the theoretical basis for the research questions explored in the study. An overview of the literature relevant to the construct of Cultural Intelligence is provided, focusing on some of the key developments in intercultural research and management. The concept of Cultural Intelligence and its underlying components are then explained in an attempt to define the theory underpinning the construct, followed by a brief demographic overview of South Africa and the Netherlands.

Chapter 3 describes the basic methodologies used and discusses the basic rationale for using the ones selected for the study. The scientific research approach that was followed in this study in terms of the methodology, the research design, the sample, the data collection, the research instrument and statistical analysis is explained.

Chapter 4 gives an overview of the results obtained from the exploratory factor analysis, the t-tests and the qualitative analysis for the two sample groups. Basic descriptive statistics are also provided. The results are discussed and compared in order to answer the research questions posed in Chapter 1.

Chapter 5 illustrates the usefulness of the study and the degree to which it has contributed to the field. A brief overview of the results and conclusions drawn from the results is given. The degree to which the study has met its objectives is discussed, followed by an overview of the limitations of the study and their



effect on the results, and by recommendations for future research.

1.6 SUMMARY AND CONCLUDING REMARKS

The world is in many senses becoming smaller and the boundaries between people, countries and cultures are becoming more and more diffuse. Traditional management approaches are often no longer sufficient to ensure success in intercultural interactions and in multi-cultural work teams. By cultivating their Cultural Intelligence, managers can learn to take responsibility for their learning about other cultures and are able to respond to the challenges of dealing with different cultures at a motivational, behavioural and cognitive level. This concept is, however, still quite new to the field of diversity management, and it is of the utmost importance to explore such new concepts to ensure that they are not merely "buzz words" with no sound theoretical basis.

The outcomes of this study contribute to the exploration of this new concept and add to the body of knowledge on Cultural Intelligence as holistic concept.



CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The purpose of this chapter is to provide a solid theoretical basis for the research questions that this study explores. An investigation of previous literature and research provides insight into the theories that preceded the concept under review so that the reader can understand the developments that gave rise to this concept. Deeper insight into the concept of Cultural Intelligence and its underlying components can then be gained in an attempt to explain and describe the construct and provide a broader overview of the related concepts. Lastly, a brief demographic overview is given of the two countries that were used as a basis of comparison in this study.

2.2 WHAT IS CULTURE?

In order to explore the impact of culture in the workplace and to discover core competencies related to intercultural understanding, it is crucial to define what culture is. Culture is a broad and complex term that does not only include an individual's personal attitudes, values and beliefs, but also governs particular groups of people at various levels of society. It influences every aspect of people's lives, including the way in which they interact with other people.

The concept of culture is familiar to most people, but when one actually tries to define the meaning of the word "culture", it becomes clear that there is a relatively high degree of disagreement as to what the term really signifies. Kroeber (1985, cited in Kanungo, 2006:25) documented over 160 definitions of the word "culture". According to Kanungo (2006:25), almost all definitions of culture embrace the idea that culture is based on language, economy, religion, policies, social institutions, class, values, status, attitudes, manners, customs,



material items, aesthetics and education. These factors in turn influence managerial values.

According to Hofstede (1980, cited in Thomas and Inkson, 2003:22), culture consists of shared mental programmes that condition an individual's responses to his or her environment. This means that the ways in which people act, speak and dress are visible manifestations of their deeply embedded culturally-based values and principles.

Culture is based on common experiences that are shared with a particular group of people. The values, attitudes and behaviours people have that are related to a particular culture give them something in common with a definable group of others (Thomas & Inkson, 2003).

Myers (1996) defines culture as the rules by which people live and that are passed down from generation to generation. These "rules" include people's attitudes, values, communication styles, patterns of thinking and behaviour.

Early, Ang and Tan (2006:20) describe culture as the patterned ways in which people think, feel and react to various situations and actions, and that are acquired and shared among people through the use of symbols and artefacts.

Culture can therefore be regarded as a set of shared attitudes, values, beliefs and orientations held by a particular group. It sets different groups apart from each other. This forms an intricate part of each person's existence and is delicately interwoven into every aspect of a person's life – from the smallest and most seemingly insignificant thought a person holds (such as deciding what to eat for lunch), to the most complex interaction between a collective of people. Culture shapes people's thinking, behaviour and motivation for acting and reacting in certain ways, and it provides guidelines for social and moral conduct which are manifested in particular unique behaviours, mannerisms, language and artefacts.



In order to understand the impact of culture on interactions between people, and their effect on managerial success, as referred to in this study, the theories of two authors who did significant work in this field are explored in the next section.

2.3 THEORIES ON CROSS-CULTURAL INTERACTION

No discussion of culture or cultural interactions would be complete without, at the very least, some mention of the work of authors Geert Hofstede and Fons Trompenaars. These two authors continue to contribute significantly to an understanding of cross-cultural interactions in the workplace and they have paved the way for a paradigm shift in the way cross-cultural interactions are managed in the modern workplace.

2.3.1 Hofstede's dimensions of national culture

The legendary and groundbreaking work of Geert Hofstede relating to the national dimensions of culture needs little introduction. Through his initial study in the 1980s in various IBM affiliates across the globe, Hofstede has generated some powerful theories in the field of cross-cultural research. In order to develop a comprehensive understanding of the development of cross-cultural theory, an overview of his work is discussed in this section.

The definition of culture posited by Hofstede suggests that culture refers to shared mental programmes that condition people's responses to their environment (Hofstede, 1980, cited in Thomas and Inkson, 2003:22). According to Hofstede (1981:17), each person's mental programme is partly unique and partly shared with others, thus distinguishable at three levels, namely the universal, collective and individual levels:

• the *universal level* is shared by the majority of people in the world, and includes people's biological make-up and behaviours;



- the collective level is shared by people that belong to similar groups or categories and is expressed through language, eating habits, signs of respect and so forth; and
- the *individual level* is unique to each person and refers to a person's personality and unique traits.

For the purposes of this study, the term "culture" is used in both a broad sense (as referring to a national culture) and in a narrow sense (as referring to an individual culture, ethnicity and membership of sub-groupings).

Hofstede identified five value dimensions of national culture based on basic value patterns of cultures around the world, as shown in Table 2.1. He initially described four value dimensions in his earlier work, namely Individualism, Power Distance, Uncertainty Avoidance and Masculinity. Later, he also identified a fifth value dimension – Long-Term Orientation (Lane, Distefano & Maznevski, 2006).

Table 2.1: Hofstede's dimensions of national culture

Value dimension	Description
Power Distance	The degree of inequality among people in a country which is seen as normal.
Individualism	The degree to which people in a country prefer to act as individuals rather than as members of a group.
Masculinity	The degree to which values that are usually associated with men, such as assertiveness, performance, success, and competition, prevail over "tender" values such as quality of life, relationships, service and care.
Uncertainty Avoidance	The degree to which people in a country prefer structured situations, such as clear rules, over unstructured ones.
Long-Term Orientation	The presence of values oriented towards the future, such as saving or thrift and persistence.

Source: Adapted from Hofstede (1993:89-99)

Hofstede's research into culture has provided some groundbreaking insights into the development of cross-cultural thinking and has been especially



influential in the business sphere. Through his work, Hofstede has elicited transformation in the field of cross-cultural management.

Over the years, however, the academic discussion about this model has led to much critique and debate within the scholarly community, as set out in the box below.

Critique on Hofstede's Model (Mead, 2005:48):

- 1. The study is based on the assumption that *national territory* corresponds with the limits of culture, thus assuming a level of cultural homogeneity within a national culture without considering subcultures within the national culture.
- 2. The study was conducted within a *single industry* and a single multinational (IBM). The question that thus arises is the degree to which each IBM unit is representative of the typical culture of the country within which it is based. It can be argued that the employees of the organisation only represent a certain segment of the population that is not an accurate reflection of the entire nation.
- There are questions of bias in questionnaire responses. Respondents from different cultures reacted differently to the concept of confidentiality of responses (in some countries it was treated with scepticism, leading respondents to provide answers that matched the expectations of their superiors).
- 4. *Technical* difficulties, as some of the connotations among dimensions tend to overlap. Aspects such as Power Distance and Masculinity have many similar connotations which could lead to confusion in interpretation.

Irrespective of the critique against his work, the initial study by Hofstede at IBM was the first and most comprehensive of its kind at the time, and the importance of his value dimensions are still relevant in cross-cultural interactions today.

2.3.2 Trompenaars's value dimensions of culture

The work of Fons Trompenaars and his later partner, Charles Hampden-Turner, followed up and expanded on the initial work done by Hofstede, and became the basis for ground-breaking cross-cultural research.

These authors support the value dimensions identified by Hofstede by asserting that foreign cultures are not merely different from each other through random



coincidence, but that they are, in fact, mirror images of one another's values by reversing the order and sequence of looking and learning (Hampden-Turner & Trompenaars, 2002). In other words, different cultures tend to be mirror images of each other. If one culture lies on one side of a value dimension, another culture may lie at the opposite end of that continuum, thus mirroring that culture in the opposite direction.

When one is confronted with different cultures, there are a number of dilemmas that need to be resolved in order to adjust successfully to a new culture. Trompenaars's research suggested that six dimensions of culture (as shown in Table 2.2) form the basis for resolving dilemmas in intercultural interactions (Hampden-Turner & Trompenaars, 2002:11).

Table 2.2: Trompenaars's six dimensions of culture

vs	Particularism (exceptions, special circumstances, unique relations)
vs	Communitarianism (social responsibility, harmonious relations, cooperation)
vs	Diffusion (holistic, elaborative, synthetic, relational)
vs	Ascribed Status (Who you are, potential, connections)
vs	Outer Direction (examples and influences are located outside)
vs	Synchronous Time (time is a dance of fine coordination)
	vs vs vs

Source: Hampden-Turner and Trompenaars (2002:11)

In order to understand the development of cultural dimensions and their impact on behaviour, it is essential to explore the process through which culture conditions people's actions. In the next section, the process of cultural conditioning and its effect on people's behaviour are discussed.



2.4 CULTURAL CONDITIONING

The dimensions and orientations that can be ascribed to a culture form the basis of a person's core beliefs, values and attitudes, thus influencing his or her view of others and the world. Cross-cultural problems do not arise from unfamiliarity with concepts, as people have been trained to adopt certain concepts and values such as honour, duty and love: these concepts are shared by many other cultures; however, the perception or understanding that people have of these concepts differ between cultures, leading people from one culture to view others' beliefs or habits as strange and eccentric (Lewis, 2000). It has been established that culture has a significant influence on human behaviour, but in order to understand the powerful conditioning effect that culture has on behaviour, it is important to find an answer to the question of how culture is formed in the first place. Hofstede (1981:25) tried to answer this question from an anthropological perspective by exploring the stabilising patterns of culture (see Figure 2.1, below).

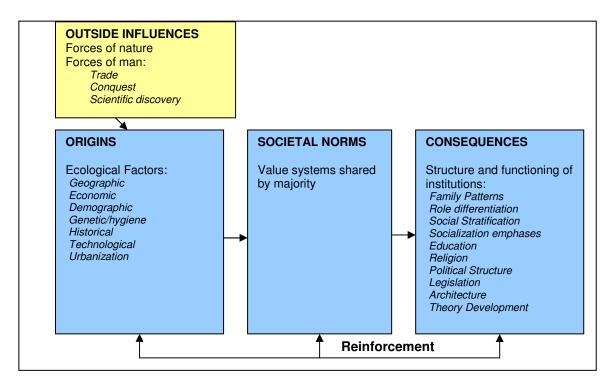


Figure 2.1: Stabilisation of culture patterns (adapted from Hofstede 1981:25)



According to the model depicted in Figure 2.1, the need for the development of a culture is created by *outside influences* (such as trade and scientific discovery), which then influence the *origins of culture*. Culture originates from *ecological factors* (such as geography, history and economy). The *origins of culture* in turn give rise to the establishment of *societal norms*, consequently establishing institutions (such as family patterns and political structures). Throughout the development of culture, these factors continually evolve and reinforce the development of the dominant culture.

From the moment a baby is born, he or she is enveloped by the culture that he or she is born into. Through interactions with parents, teachers and other factors in the environment, children learn behaviour, thinking patterns, views on the world, and so on that equip them to integrate into their own culture and society successfully. National culture is thus imposed on people's behaviour (Lewis, 2000).

The majority of behaviours that people learn as children and adults are adopted through a process of conditioning. *Childhood conditioning* entails learning the basic activities of life, such as eating, drinking and walking. *Adult conditioning* entails learning new behaviours or new ways to perform behaviours that have been conditioned already (Coverdell, 2007).

According to Coverdell (2007), the basic process of cultural conditioning is the same for both adults and children; however, adult conditioning may take longer, as it often requires unlearning behaviours that have been acquired in the past before the learning of new behaviours can take place. The steps in the cultural conditioning process described by Bowens (2007) are listed in the box overleaf.

This process indicates that a person internalises cultural experiences through a number of phases, beginning with observation of the culture. Through continuous interaction with and exposure to a culture, the person learns subconsciously to produce appropriate behaviour. The person therefore becomes conditioned into behaving in a culturally acceptable way within a particular context.



Steps in the cultural conditioning process

1. Observation/Instruction:

The person is beginning to become aware of a particular behaviour.

2. Imitation:

The person makes a conscious effort to carry out the activity that he or she has observed.

3. Reinforcement:

Encouragement is given when the person's behaviour is right, and corrected when the behaviour is wrong.

4. Internalisation:

The level of reinforcement that the person should receive is reduced and the person knows how to carry out a particular behaviour or action.

5. Spontaneous Manifestation:

The person is able to produce the behaviour without paying conscious attention to what he or she is doing and the action comes naturally.

When a person interacts with people from different cultures, his or her core beliefs dictate whether the interaction is successful or not. People's beliefs determine how they interact with alien cultures (cultures that are completely different to their own and that they have no previous experience with), their own culture and so-called "friendly" cultures (cultures that are similar to their own culture or cultures that are relatively similar to their own culture). The paths that people's beliefs tend to follow during interactions with other cultures are illustrated by the model in Figure 2.2 (overleaf), as adapted from Lewis (2000:28). This model implies that people tend to approve and repeat cultural displays within their own culture, based on their values and core beliefs. When faced by a culture that is different, but like their own, a process of semi-acceptance takes place, during which both parties adapt to the other culture and create cultural synergy. When confronted by cultural actions that are completely different to their own values and core beliefs, resistance is displayed, leading to defensive actions and withdrawal from the situation.



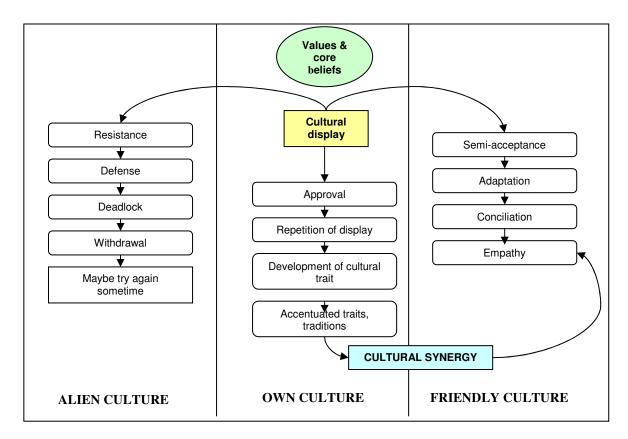


Figure 2.2: Paths for core beliefs (adapted from Lewis 2000:28)

The next section provides an overview of cross-cultural interaction and the dynamic processes underlying it.

2.5 CROSS-CULTURAL INTERACTION

Cross-cultural interaction does not only take place when an expatriate manager leaves his or her home country for an assignment abroad, or when a tourist has to interact with the locals of another country. Often managers and employees are confronted with cross-cultural interactions without even leaving the office. Considering the diverse populations of countries such as South Africa and the Netherlands, as well as the multitude of sub-cultures that exist within the various groups in these countries, it is clear that many of the challenges faced by international teams are also faced by local teams.

Ethnocentric management approaches are no longer relevant as the sole approach to the modern-day workplace, and unless managers and employees change their attitudes toward a more cross-cultural management approach in



the workplace, it will become increasingly difficult for organisations to remain competitive. Failure in multi-cultural teams can be ascribed to the fact that people hold their own preconceptions about others and then rely on stereotypes to form opinions about these others. Furthermore, people are wary of unfamiliar circumstances and enter the workplace with a mass of cultural baggage (attitudes, ideas and perspectives that are fixed and difficult to change) and then feel threatened or uneasy when they have to interact with people who are culturally different. Language barriers such as different accents and dialects, as well as non-verbal cues, contribute to the confusion related to intercultural interactions, which may increase the possibility of failure in such interactions (CountryWatch.Com, 2001; Myers, 1996; Thomas & Inkson, 2003).

These cultural limitations create blockages in the workplace, preventing the organisation from reaching its full potential in a competitive environment.

2.5.1 Strategies for overcoming cultural differences

In order to overcome cultural differences, Thomas and Inkson (2003) suggest three strategies available to managers, namely the *convergence theory* (expecting others to adapt), *understanding cultural differences*, and *becoming* "culturally intelligent" (having Cross-Cultural Competency). These three strategies are elaborated on below.

2.5.1.1 Expecting others to adapt (convergence theory)

Managers using an approach of *expecting others to adapt* follow a "be like me" policy, reasoning that the dominant culture should set the norm for business behaviour and that others should learn how to emulate this dominant culture. This approach is supported by the convergence theory, which states that all cultures are converging to a common norm, assisted by phenomena such as mass communication and the standardisation of consumption. In other words, all cultures are moving towards a point of similarity, due to exposure to a set of "universal" norms.



There is convincing evidence in support of this theory; however, it is argued that excessive use of this approach may lead to a person's being perceived as insensitive by others. If cultural differences are continuously ignored and not respected, the perception of insensitivity can lead to a loss of business opportunities.

2.5.1.2 Understanding cultural differences

The "understanding cultural differences" approach is intended to provide managers with a list of everything they have to know about a particular country or culture. Some of the key dimensions of cultural differences and how they are manifested in business are identified and learnt. The core principle of the understanding cultural differences strategy is to provide a manager with a list of information about a particular culture, which should then lead to positive interactions with the foreign culture.

This approach is extremely time-consuming and may lead to generalisations and stereotypes, as it is impossible to capture the subtle essence of any culture. Furthermore, there are limitations to how far one can go in creating a collective sense of belonging and shared values within an organisation. It is impossible to create an all-inclusive list of differences and similarities between cultures, and even if it were possible to create such a list, knowledge of it would not necessarily ensure successful interactions.

2.5.1.3 Becoming "culturally intelligent" (gaining Cross-Cultural Competency)

The "becoming culturally intelligent" approach implies being skilled and flexible about understanding a culture, learning more about it from one's ongoing interaction with it, and gradually reshaping one's thinking to be more sympathetic to the culture and adjusting one's behaviour to be more skilled and appropriate when interacting with others from the culture.



This approach is thus a holistic approach to cross-cultural interactions, aimed at gaining appropriate skills, competencies, knowledge and behaviours that ensure success in intercultural encounters.

In practice, there are several examples of the failure of the convergence theory in fostering mutual understanding and trust in working relationships in attempts to function successfully in a global environment. The South African business sphere provides an excellent example of a primarily Westernised business environment in which all cultures are expected to adapt to the Western way of doing business. So, for instance, "African time" is not acknowledged in the Western model, and thus employees who would be accepted in their own culture if they adopt a flexible attitude to time are reprimanded and often rejected, disciplined or even dismissed in a Western business environment where "time is money".

The "understanding cultural differences" approach to cross-cultural interactions may be useful for obtaining theoretical knowledge of cultures, but it also creates the possibility of misunderstanding, misinterpretation and the forming of cultural stereotypes. Understanding differences is not enough to internalise the finer nuances of a culture.

It is believed that gaining Cultural Intelligence enables a manager to integrate the relevant information about a culture into his or her own frame of reference, thus ensuring a more holistic and integrative framework for approaching cultural differences. Due to the shortcomings of the "convergence theory" and the "understanding cultural differences" approaches, the *Cultural Intelligence* and *Cross-Cultural Competence* models were chosen to form the basis of this study.

2.6 DEVELOPING INTERCULTURAL SENSITIVITY

A multitude of examples can be given of failed cross-cultural interactions due to misunderstanding and insensitivity. Understanding is the key to successful cross-cultural interaction, and developing such an understanding is an ongoing process (Gardenswartz *et al.*, 2003).



Bennet (cited in Gardenswartz *et al.*, 2003:68,69) developed a model depicting the stages through which intercultural sensitivity is developed. The Developmental Model of Intercultural Sensitivity (DMIS), depicted in Figure 2.3, consists of six phases that progress from the ethnocentric to the ethnorelative stages.

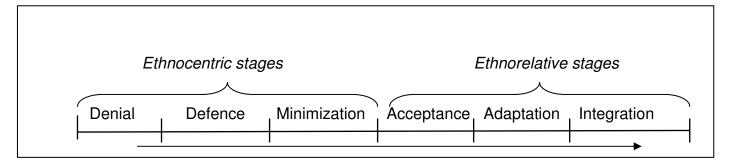


Figure 2.3: Developmental model of intercultural sensitivity (adapted from Gardenswartz *et al.*, 2003:68)

These stages are described in more detail below.

• Ethnocentric stages:

During the ethnocentric stages, the individual unconsciously experiences his or her own culture as central to reality. These stages are:

i. Denial of difference:

In this stage there is no recognition of cultural difference, and the person isolates or separates him- or herself from those who are different. There is a tendency to dehumanise outsiders.



ii. Defence against difference:

There is some recognition of cultural difference, but it is coupled with a negative evaluation of variations from the person's native culture. Cultural development is seen as evolutionary and the person sees his or her own culture as the pinnacle of the evolutionary process.

iii. Reversal:

In this stage there is a tendency to see other cultures as superior while mal-aligning one's own culture.

iv. Minimisation of difference:

In this stage, people recognise and accept superficial cultural differences, but still maintain the opinion that human beings are essentially the same. They emphasise the similarity of people and the commonality of basic values. There is a tendency to define the basis of commonality in ethnocentric terms.

v. Physical universalism:

The emphasis is on the commonality of human beings in terms of physiological similarity.

vi. Transcendent universalism:

Here the emphasis is on the commonality of human beings as subordinate to a particular supernatural being, religion or social philosophy.

• Ethnorelative stages:

Ethnorelativism refers to the successful blending of more than one culture. These stages are:

i. Acceptance of difference:

There is a recognition and appreciation of cultural difference in behaviour and values. Acceptance of cultural differences is seen as an alternative solution to the way things should be done.



ii. Adaptation of difference:

Communication skills that enable intercultural communication are developed. Effective use is made of empathy; this implies an ability to shift one's own frame of reference, understanding and being understood across cultural boundaries.

iii. Integration of difference:

Bicultural or multi-cultural frames of reference are internalised, and people are able to maintain a definition of identity that is "marginal" to any particular culture.

People tend to move subconsciously through these stages as their exposure and experience of international and intercultural experiences increase.

Unfortunately, being aware of the stages through which a person develops cultural sensitivity is not enough to provide practical guidelines to people who are exposed to new cultural situations. In order to ensure successful interaction, a range of skills and competencies are required to ensure successful interaction.

2.7 CULTURAL INTELLIGENCE VS CROSS-CULTURAL COMPETENCE

Before exploring the concepts of Cultural Intelligence and Cross-Cultural Competence, it is important to clarify some related aspects. Cultural Intelligence is based on the theory of Intelligence and Emotional Intelligence. This theory has to be understood as the underlying theoretical basis of the concepts of Cultural Intelligence and Cross-Cultural Competence.

2.7.1 Intelligence

According to Webster's Dictionary (cited in Green *et al.*, 2005:352), "intelligence" refers to a person's capacity to apprehend propositions and their relations, and reason about them. Intelligence is thus a person's ability to understand and think about things, and to gain and use knowledge.



Intelligence consists of various factors, such as verbal fluency, comprehension, reasoning ability, abstract thinking and spatial and numerical reasoning. When these factors are combined, the g-factor or general intelligence factor of a person is represented (Bergh & Theron, 2006).

Horn (1986, cited in Fiedler, 2001) defines intelligence as the ability to apply previously acquired knowledge to the solution of new problems. Most people base their behaviour and decisions on what they have learned before, and then apply previous experience to new situations.

From a functional perspective, intelligence is regarded as the ability of a person to adapt to new situations and solve problems by means of conscious thought processes. This implies that a person is able to solve problems, control, change and adapt to the environment (Bergh & Theron, 2006:147). Wechsler (1944:3) supported the functional view of intelligence when he defined intelligence as the global ability of an individual to act purposefully, think rationally and act effectively towards the environment.

The functional definition of intelligence highlights the impact of environmental influences and learning behaviour on intelligence. According to Fiedler (2001), it is essential to teach managers how to make effective use of their own intellectual abilities, knowledge and experience.

The idea of multiple intelligences was posited by Howard Gardner of Harvard University (Green *et al.*, 2005). Multiple intelligences imply that intelligence is not a generalised term that is relatively constant across a person's life. Instead, it proposes that intelligence constitutes a much broader range of skills, abilities and thus intelligences.

Martin (2001) identifies the following "intelligences" and attendant skills required by a manager today:

- linguistic intelligence;
- mathematical technical logical scientific intelligence;
- visual intelligence;



- auditory intelligence;
- kinaesthetic motor intelligence;
- interpersonal intelligence;
- intrapersonal intelligence;
- naturalistic intelligence; and
- philosophical intelligence.

When one considers the various definitions of intelligence, it is clear that the concept of "intelligence" can be measured at three levels, namely the *cognitive level, the emotional level and the behavioural level*. From the above types of intelligence, it can be concluded that "Cultural Intelligence" is comprised of a number of intelligences, apart from being able to adjust and interact successfully across cultures.

2.7.2 Emotional Intelligence

Much criticism has been raised against the notion of Emotional Intelligence (EI), arguing that EI scales overlap with scales that measure personality, without any scientific clarification of the concept (Bergh & Theron, 2006). However, Martin (2001) argues that the concept of "Emotional Intelligence" is not as new as we would like to believe, and that Thorndike defined "Social Intelligence" as early as 1920.

Interest in the concept of "Emotional Intelligence" has been kindled by the apparent failure of general intelligence (IQ) tests to predict success in life (Dulewicz & Higgs, 2000). According to Goleman (1996, cited by Dulewicz & Higgs, 2000), IQ tests only explain 20% of the factors that determine a person's success in life.

Emotional Intelligence is referred to as a psychological concept that emphasises the importance of emotions for intellectual functions and recognises the non-cognitive aspects related to human behaviour (Gabel, Dolan & Cerdin, 2005).



According to Diggins (2004:33), Emotional Intelligence encompasses the thoughts and feelings behind a person's actions, guiding response patterns in various situations. People with high levels of Emotional Intelligence are able to recognise the emotional content in themselves and others successfully, and thus direct their behaviour and responses appropriately.

The components of Emotional Intelligence indicated by Diggins (2004:33) are the following:

- self-awareness recognising and understanding one's own thoughts and feelings as they occur;
- self-regulation managing one's responses appropriately;
- social awareness recognising the thoughts and feelings of others and having empathy; and
- social skills inducing effective and desirable responses in others.

An emotionally intelligent manager is able to understand the underlying motives for people's behaviour, and is thus able to respond adequately. It is important to be flexible and adaptive in an ever-changing environment; and by acquiring a high level of Emotional Intelligence, an individual is able to increase his or her chances of success (Diggins, 2004).

As a construct of intelligence, Emotional Intelligence functions on the cognitive, emotional and behavioural levels, implying that it consists of a set of competencies that can be developed by a manager (Dulewicz & Higgs, 2000).

According to Diggins (2004), there are limits to how much people can improve their IQ, but a person's Emotional Intelligence tends to develop sequentially with an increase in self-awareness. By increasing one's understanding of one's own emotions, one is also able to increase one's understanding of others and hence direct one's responses in a more appropriate way.



Emotional Intelligence can play an important role in a person's adjustment to intercultural situations, as an individual has to be able to manage his or her own ambiguous thoughts and feelings when he or she is confronted by a new environment.

According to Bar-On (1997, cited in Gabel *et al.*, 2005:378), areas of Emotional Intelligence that play an important role in adjustment to intercultural situations are the following:

- intrapersonal abilities emotional self-awareness, assertiveness, selfrealisation and emotional independence;
- interpersonal abilities empathy, social responsibility, social relations, ability to manage strong emotions and control personal drives;
- adaptability reality testing, flexibility, problem solving skills, the ability to adapt to change and resolve problems of a personal and social nature;
- stress management the ability to tolerate stress and keep personal drives under control; and
- general state of mind optimism and happiness.

2.7.3 Intercultural competence

Managerial competencies refer to the knowledge, skills, abilities, cognitive processes and techniques that allow a manager to be successful at specific tasks (Boyatis, 1982, cited in Kayes, Kayes & Yamazaki, 2005:581).

Spitzberg (2000, cited in Graf, 2004:200) suggests that intercultural competence can be subdivided into three systems:

- the individual system;
- the episodic system; and
- the relational system.



Intercultural competence at an individual level encompasses all the characteristics that an individual possesses which facilitate competent intercultural interaction (Graf, 2004). Intercultural competence is thus a concept that describes the knowledge, skills and abilities that allow a manager to be successful in intercultural interactions. These competencies are acquired through a process of learning, training and interactions with different cultures.

Intercultural competence consists of three components, namely a cognitive (intercultural knowledge), an affective (suitable motivation) and a behavioural component (skilled action) (Graf, 2004; Matveev & Milter, 2004). Competencies are not necessarily inherited or inborn traits, and an individual can acquire some competencies by means of a process of learning and absorbing knowledge from different cultures. In order to understand and gain awareness of cultures for efficient knowledge absorption, a person should possess a number of competencies that will enable successful learning in intercultural situations, such as the following ones, listed by Kayes *et al.* (2005):

- valuing cultural differences an understanding of the complexities of cultural differences;
- building relationships within the host culture the generation of new knowledge through contact with others and creating new experiences;
- listening and observing careful observation of the host culture and local practices in order to understand the rationale behind these practices;
- coping with ambiguity the ability to see problems as new challenges and not as ambiguous obstacles, showing comfort in dealing with ambiguous situations;
- translating complex ideas a grasp and command of local language and its meaning (an in-depth knowledge of the host language is essential for deep knowledge absorption);
- taking action the ability to act and cope in challenging situations; and
- managing others internal and external management of conflicts, while maintaining close relationships.



Other competencies that are related to effective cross-cultural interactions are relational abilities, cultural sensitivity, linguistic ability, the ability to handle stress, communication skills, respect, empathy and flexibility (Harris & Kumra, 2000; Jordan & Cartwright, 1998).

From these specific competencies it can be seen that cross-cultural competence functions at the three levels that were mentioned above, namely the cognitive, emotional and behavioural levels. These levels are also closely related to the components of Emotional and Cultural Intelligence.

2.8 CULTURAL INTELLIGENCE

Cultural Intelligence is a fairly new term in the field of diversity management, and it builds on earlier concepts of intelligence, namely the Intelligence Quotient (IQ) and Emotional Intelligence (EI) (Thomas & Inkson, 2003).

Cultural Intelligence reflects a person's ability to adapt to new cultural settings and his or her ability to deal effectively with other people with whom he or she does not share a common cultural background and understanding (Early & Ang, 2003; Early *et al.*, 2006; Early & Mosakowski, 2004; Early & Peterson, 2004; Thomas & Inkson, 2003).

According to Thomas and Inkson (2003), Cultural Intelligence consists of three components that combine to provide a platform for intercultural flexibility and competence, namely:

- knowledge to understand cross-cultural phenomena;
- mindfulness to observe and interpret particular situations; and
- adapting one's behaviour to act appropriately in culturally different situations.

The relationship between these components is illustrated in Figure 2.4 (overleaf).



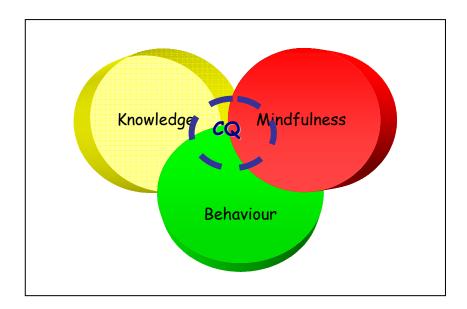


Figure 2.4: Components of Cultural Intelligence (Thomas & Inkson 2003:16)

Training people in cross-cultural aspects, such as Cultural Intelligence, should thus include the following three elements:

- a cognitive component thinking, learning and strategising;
- a motivational component efficacy and confidence, persistence, value congruence and affect for the new culture; and
- a behavioural component social mimicry and behavioural repertoire.
 (Early & Ang, 2003; Early et al., 2006; Early & Peterson, 2004).

There seems to be some disagreement among authors with regard to the naming of the components of Cultural Intelligence – some authors label the three components differently. This apparent contradiction can be ascribed to the fact that the concept is relatively new and unexplored. The essence of each concept is, however, the same, regardless of the label ascribed to it. The components of Cultural Intelligence are summarised in Table 2.3 (overleaf).



Table 2.3: Summary of the components of Cultural Intelligence

Component	Description
1. Knowledge (Thomas & Inkson, 2003) Meta-cognition (Early & Peterson, 2004) Cultural Strategic Thinking (Early et al., 2006)	Knowledge of the fundamental principles of a culture, flexibility and ability to adapt one's own view to complement a new situation. Strategic thinking about application of cultural knowledge.
2. Mindfulness (Thomson & Inkson, 2003) Motivation (Early & Peterson, 2004; Early et al., 2006)	Observation and interpretation of certain situations. Energy and willingness to persevere despite the possibility of failure. Self-efficacy and self-confidence.
3. Behaviour (Early& Peterson 2004; Early & Ang, 2003; Early et al., 2006)	The ability to understand and execute the necessary actions (such as language, greetings and social conduct) with a reasonable level of proficiency.

It is obvious that the components of Cross-Cultural Competence and Cultural Intelligence overlap, which raises the question of what the difference between these two concepts is. Could Cultural Intelligence not just be a new name for an old concept?

From the literature, it appears that Cross-Cultural Competence has a stronger focus on the specific competencies and skills required to deal with culturally different situations and tends to follow a "laundry list approach" in dealing with cultural differences. Cultural Intelligence provides a more holistic approach that is focused on the broad range of traits and behaviours an individual needs in order to adapt to, and function within various culturally diverse situations.

Cross-Cultural Competence is basically synonymous with Cultural Intelligence, but it is also a result of Cultural Intelligence. Thus a person who has a high level of Cultural Intelligence inevitably has a high level of Cross-Cultural Competence. For the purposes of this study, however, the term Cultural Intelligence is used interchangeably with the concept Cross-Cultural Competence.



2.9 THE ELEMENTS OF CULTURAL INTELLIGENCE: CULTURAL STRATEGIC THINKING, MOTIVATION AND BEHAVIOUR

According to Early *et al.* (2006), Cultural Intelligence possesses both process and content features, because the three components of Cultural Intelligence are addressed by three questions:

- Why does cultural strategic thinking matter?
- Why does motivation matter?
- Why does behaviour matter?

The relationship between the process and content features of Cultural Intelligence are depicted in Figure 2.5.

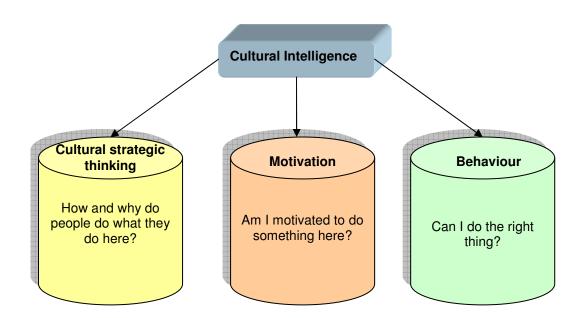


Figure 2.5: Relationship between the content and process features of Cultural Intelligence (Early et al., 2006:23)



2.9.1 Cultural strategic thinking/knowledge/meta-cognition

Traditionally, in training managers to deal with other cultures, the main focus was on providing managers with as much knowledge about a particular culture as possible. In the previous section, various approaches to cross-cultural management were discussed, illustrating the focus on learning local cultural knowledge and sensitivity to different cultural dimensions such as those proposed by Hofstede and Trompenaars (discussed in Section 2.3).

Cognition includes all the processes of knowing, covering the full range of mental functions that are used in acquiring knowledge (Bergh & Theron, 2006). People are able to create meaning and understanding of the world by means of cognitive processes.

Cultural strategic thinking implies that a person should not only have knowledge about a particular culture, but also the ability to develop new ways to gain cultural knowledge (meta-cognition). Thomas and Inkson (2003) refer to the knowledge component of culture as the fundamental principles of cross-cultural interactions, in other words, knowing what culture is, knowing how cultures vary and realising how culture affects behaviour.

Meta-cognition is referred to as "thinking about thinking" or "cognition about cognition", thus encompassing a person's cognitive processes and states, focusing on what the person knows and believes about his or her own cognitive processes (Forrest-Pressley, MacKinnon & Waller, 1985).

During the learning process, meta-cognition plays a central role, as it involves an awareness and consciousness of the psychological processes involved in perception, memory, thinking and learning (Coffield, Ecclestone, Faraday, Hall & Moseley, 2004, cited in Böström & Lassen, 2006).

Meta-cognition can be broken down into meta-cognitive knowledge and meta-cognitive experience. *Meta-cognitive knowledge* encompasses the ways in which a person deals with knowledge gained under a variety of circumstances.



Meta-cognitive experience refers to the incorporation of relevant experiences into a personal frame of reference as a guide for future interactions (Early & Peterson, 2004).

Cultural Intelligence is acquired through a variety of learning processes of which meta-cognition forms the basis. It is not enough for an individual merely to learn about a new culture and apply solutions to problems by falling back on what he or she has learned previously. Culturally intelligent behaviour results in thinking about the appropriate solution to the problem, and then re-thinking it to evaluate its appropriateness for the particular situation (the process of using meta-cognitive knowledge). Furthermore, each intercultural experience results in a different outcome. By internalising the results of such an experience, a person is able to learn appropriate strategies for future situations (to gain meta-cognitive knowledge).

Learning about a new culture can be a highly complex process and thus requires a person to form a coherent picture of the different patterns surrounding him or her, even though the greater context of the different pieces is unclear (Early & Peterson, 2004).

People who lack meta-cognition in their intercultural experiences tend to interpret the behaviours and intentions of other cultures from their own limited perspective, which may not be appropriate in all circumstances. Cultural strategic thinking enables people to pay attention to the finer nuances of a culture to see what is really going on in different cultures, and to understand and process this reality in their own minds (Early *et al.*, 2006).

The characteristics of Cultural Strategic Thinking described by Early *et al.* (2006:51) are the ability to

- be open, alert, and sensitive to new cultures;
- draw distinctions and identify similarities between different cultures;
- develop different strategies for acquiring knowledge relevant to adapting to different cultures;



- engage in active and dynamic thinking in interacting with people from different cultures;
- plan, check, and learn from each encounter; and
- resolve cultural dilemmas or problems in the encounter.

Cultural strategic thinking can be developed through the MAPS model (Making sense and monitoring, Activating thinking and reasoning skills, Prioritising options, Solving problems) (Early *et al.*, 2006:53-59), which illustrates the steps through which an effective approach to understanding new cultural situations can be developed (see box below).

The MAPS model to understanding new cultural situations

- Step 1: Making sense and monitoring
 Active (conscious or unconscious) monitoring, regulation and orchestration of thinking processes to achieve tasks and goals. Repeated use or learning may result in unconscious meta-cognitive processing.
- Step 2: Activating thinking and reasoning skills
 Analogical reasoning, transferring knowledge from one situation to another to achieve greater insight. Ability to apply divergent and creative thinking.
- Step 3: Prioritizing options
 Recognition of the kind of situation, the identity of the person making the decision and the application of decision rules to make a choice.
- Step 4: Solving problems
 Continuous adaptation of one's understanding of a problem while searching for new solutions. Building a mental model, challenging and testing it.

Meta-cognition, knowledge and cultural strategic thinking alone are not enough to achieve culturally intelligent behaviour, or to achieve successful results during interactions. The second pillar of Cultural Intelligence is Motivation and Mindfulness.



2.9.2 Motivation/Mindfulness

When faced by intercultural challenges, situations and interactions, an individual should feel confident in his or her own abilities to take action. In other words, a person might *know* what the correct actions in a particular situation may be, but he or she also needs to have a conviction of his or her own ability to actually perform those behaviours. The Motivation/Mindfulness aspect of Cultural Intelligence aims to deal with this dilemma.

According to Thomas and Inkson (2003), a person should be continuously aware of his or her own assumptions, ideas and emotions in relation to that of the other culture, and should also be able to recognise the apparent assumptions, words and behaviour of the other party. All the senses should be employed in perceiving situations in order to review each situation from various perspectives. Furthermore, the person should also be able to interpret what is happening by creating mental maps and seeking information that will confirm these maps.

Motivation in Cultural Intelligence implies that a person is willing to persevere, in spite of possible difficulties and misunderstandings, during cultural interactions. Early and Peterson (2004) assert that Cultural Intelligence reflects a person's self-concept, whereas self-efficacy is a key facet in motivating a person.

Self-efficacy refers to the "judgement of one's capability to accomplish a certain level of performance" (Bandura, 1986, cited in Early & Peterson, 2004). During cultural interactions, people assess or judge their own capacity to accomplish the behaviours that were determined as appropriate through Cultural Strategic Thinking. A low level of self-efficacy demotivates a person (in other words, it discourages him or her from engaging in the aforesaid actions). In order to achieve a high level of Cultural Intelligence, a person should therefore possess a high level of self-efficacy. According to Early and Peterson (2004), highly efficacious people are able to endure and persevere without external rewards for their actions and are able to engage in problem-solving and strategic thinking in overcoming obstacles.



Another component of the motivational facet of Cultural Intelligence is goal-setting. Through goal-setting, human activities become purposeful and directed. Goal-setting enables an appraisal of possible outcomes and the generation of an emotional reaction to activate people towards goal attainment (Early & Peterson, 2004).

Early *et al.* (2006) emphasise the importance of self-efficacy and goal-setting as motivating factors in Cultural Intelligence. They assert that a person's values, confidence and goals are key features of the motivational component of Cultural Intelligence.

The key factors that (in combination) lead to motivation and mindfulness therefore include a person's values, the person's level of confidence in his or her own abilities, self-efficacy and the ability to set appropriate goals for the cultural interaction in question. These factors are discussed in more detail in the next section.

2.9.2.1 Factors related to motivation in developing Cultural Intelligence

a. Values

Rokeach and Kluckhorn (1961, cited in Joubert, 1986) define values as the enduring belief that a particular mode of conduct is preferable to a contrary mode of conduct. It is the implicit or explicit conception of the desirable and it influences behavioural choices. From this definition it can be seen that values have a very definite impact on a person's motivation for behaving in certain ways. Values form the basic motivational factor for why people do the things that they do. The general value orientations that guide people's actions were described by Parsons and Shils (1973, cited by Early *et al.*, 2006:65), as set out below:

 Value Orientation 1: Affective versus affective neutrality (emotionality and delayed gratification) – the level of desirability of immediate gratification and display of emotionality;



- Value Orientation 2: Self-orientation versus a collectivity orientation (group focus) – relationships with others, pursuing own interests or thinking about actions in terms of others in the group;
- Value Orientation 3: Universalism versus particularism (how general rules are applied) – in universalistic cultures, broad sets of rules guide individual actions and conformity to these standards is expected, whereas in a particularist culture, individuals are guided by the unique aspects of the situation;
- Value Orientation 4: Ascription versus achievement (the degree to which
 position is based on accomplishments) the degree to which people are
 judged by attributes that they possess or by the actions they perform; and
- Value Orientation 5: Specificity versus diffuseness (the degree of interconnectedness between things) – the perception that an individual has with regard to his or her relationship to the world around him or her (indirect or narrow and limited).

People's values develop through personal experiences and external sociocultural factors that determine what is culturally sanctioned and acceptable. Culture is a key driver in the formation of values, but it may also have a limiting effect on the individual (Bergh & Theron, 2006).

b. Confidence

According to Kanter (2004:7), confidence consists of positive expectations of favourable outcomes. A high level of confidence is thus characterised by a positive expectation that a desired outcome will be achieved through a particular action. In the context of Cultural Intelligence, the degree of confidence that a person has in his or her own abilities in respect of successful interaction often determines the success with which he or she is able to adjust to multiple cultural contexts.

A person receives messages about confidence at various levels, starting with the person's confidence in him- or herself, the larger context within which he or



she is functioning, and the relative availability of core resources in order to achieve the desired outcomes. Each level is intertwined with all other levels and thus affects a person's overall confidence in his or her own abilities (Kanter, 2004).

Branden (1998:23-24) defines self-esteem as the "disposition to experience yourself as being competent to cope with the basic challenges of life and of being worthy of happiness". This theory states that self-esteem is one of the most basic needs of a human being and positive self-esteem is essential for success in all areas of life.

Mruk (1995) asserts that self-esteem consists of two components, namely competence and worthiness. Competence is the observable (behavioural) component of self-esteem and worthiness refers to an individual's judgement of his or her own value.

Confidence is not only built by a person's own actions, but is developed through various inputs from the external environment, such as providing consistent, positive (affirming) feedback on a person's actions and generating positive self-feedback through cognitive restructuring (Mruk, 1995).

Managers in cross-cultural interactions are often faced by various challenges and failures in their interactions across cultures. Confidence tends to decrease in the face of perceived failures, leading to a cycle of decline in confidence and to self-fulfilling prophecies of failure (Kanter, 2004). A high level of Cultural Intelligence would entail that a manager is able to remain motivated and confident in the face of adverse circumstances by continually building and increasing self-confidence.

c. Self-efficacy

Self-efficacy refers to "a judgement of one's capability to accomplish a certain level of performance" (Bandura, 1986:391, cited in Early & Peterson, 2004:107).



A person with a high level of self-efficacy thus possesses a relative sense of control over events affecting his or her life.

Appelbaum and Hare (1996:35) argue that beliefs of self-efficacy are the outcome of a process of weighing, integrating and evaluating information about one's capabilities, which in turn regulates the choices people make and the amount of effort they invest in tasks. Self-efficacy is a dynamic concept that changes over time as a person accumulates new information and experiences.

Gist (1987, cited in Appelbaum & Hare, 1996) suggests that three dimensions of self-efficacy can be identified, namely:

- magnitude:
 the level of task difficulty a person believes he or she can attain;
- strength:
 the degree of conviction that a given level of a task is attainable; and
- generality: the extent to which a given judgement of self-efficacy is applicable across different situations.

Self-efficacy beliefs stem from four main sources, namely enactive mastery experiences, modelling, social persuasion and psychological states, as described in Table 2.4 (overleaf) (Wood & Bandura, 1989, cited in Appelbaum & Hare, 1996).



Table 2.4: Sources of self-efficacy beliefs

Enactive mastery experiences	The strengthening of self-efficacy beliefs as a result of successful accomplishment (or mastery) of tasks. When a person is able to overcome challenges and obstacles, it leads to assurance in his or her own capabilities, strengthening self-efficacy and improving a sense of resilience (the ability to endure setbacks or failures without losing confidence).
Modelling (vicarious experience)	Mainly associated with the influence of environmental factors on the individual. Through observation of another person (the model), possible task strategies are provided to the observer which can be used as a basis for comparison and judgement of own abilities. The observer is encouraged to believe that through effort, tasks can be completed successfully despite possible setbacks.
Verbal (social) persuasion	The objective is to convey to the person not to create unrealistically high expectations. If a person's expectations are unrealistic and unreachable, failure will have a negative effect on him or her. The strategic use of verbal persuasion will result in greater task-directed effort on the part of the individual, and especially in the early stages of skill development it will also influence a person's level of self-efficacy.
Subjective personal influences (psychological states)	If an individual feels fearful, anxious or tense, he or she may feel less capable of accomplishing a certain task, thus negatively influencing self-efficacy. Through stress-reduction efforts or efforts to improve physical states, self-efficacy judgements can be improved.

Source: Adapted from Wood and Bandura (1989, cited in Appelbaum & Hare, 1996)

According to Early and Peterson (2004), self-efficacy plays an important role in culturally intelligent behaviour because successful intercultural interactions are based on a person's sense of efficacy in dealing with novel cultural settings. Self-efficacy influences the direction of and perseverance in goal-directed behaviour, determining the amount of effort that is made to attain a particular objective (Bergh & Theron, 2006).

People with high levels of self-efficacy do not require constant rewards in order to continue or persist in their actions, as they are able to wait for delayed rewards and are prepared to receive rewards in a form that appears unfamiliar. Furthermore, these individuals are able to engage in problem-solving and adopt a strategic approach to overcoming obstacles (Early & Peterson, 2004).



However, self-efficacy as a motivational component of Cultural Intelligence is not enough in itself to ensure success in intercultural interactions, as success is also closely linked with goal-setting and goal-directed actions.

d. Goal-setting

Human motivation and performance is closely related to the assignment and development of goals. In order to achieve success in intercultural interactions, individuals have to direct their self-efficacious actions in a goal-directed manner. "Goals are central to the direction and perseveration of individual motivation through their relation to performance" (Bergh & Theron, 2006:163).

As part of the motivation facet of Cultural Intelligence, goals and values are related factors in motivating behaviour. Goals are the specific objective that a person is trying to accomplish, and values create the person's desire to behave consistently with the values he or she holds (DuBrin, 2007). Goals and values therefore regulate people's behaviour and serve as motivating factors in people's interactions with other cultures.

According to Hughes (1965), motivation-seeking behaviour can also be described as goal-oriented or goal-seeking behaviour. Goal-oriented individuals tend to exhibit confidence, are action-minded, select activities where they have a chance of winning, dislike supervision, and feel the need to tackle tough goals and achieve them with excellence.

Locke (1991, cited in Appelbaum & Hare, 1996) argues that goals affect the intensity, duration and direction of people's actions. When people master their goals and sub-goals, they experience a sense of mastery and competence, which in turn leads to strong self-efficacy beliefs and increased perseverance. People tend to show a higher commitment to goals that they have set for themselves and that are clear, challenging, yet achievable and measurable (Bergh & Theron, 2006).



There is a reciprocal relationship between goal-setting and self-efficacy, in the sense that the achievement of challenging goals tends to lead to improved self-efficacy, which in turn leads to greater confidence and the setting of higher goals. The converse is also true, so that when someone sets goals that are too high and cannot be achieved, and the person fails, the consequent feelings of failure lead to reduced self-efficacy. As a result, the person will set less challenging goals in future.

2.9.3 Behaviour

The behavioural aspect of Cultural Intelligence is the cumulative result of cultural strategic thinking (meta-cognition) and motivation. Adaptation to different cultures is not only concerned with knowledge and the motivation to persevere, but also with the efficient implementation or enactment of that which has been learned.

Behaviour means that a person possesses an appropriate set of responses (behavioural repertoire) to be implemented in intercultural interactions, as well as the ability to acquire appropriate responses (Early & Peterson, 2004). "Behavioural cultural intelligence (or behavioural CQ) therefore refers to your ability to observe, recognize, regulate, adapt, and act appropriately in intercultural meetings" (Early *et al.*, 2006).

Acquiring Cultural Intelligence is not a linear process in which a person moves from one component to another, but requires experiential learning resulting in an increased behavioural repertoire with each new learning experience and each new cycle of learning (Thomas & Inkson, 2003).

A person with a high level of Behavioural Cultural Intelligence is able to pick up the finer, subtle cues and nuances of a specific culture during an interaction and then to interpret those cues in such a way that they can be mimicked in a socially and culturally acceptable way.



Early *et al.* (2006) categorise human behaviours into universal and culture-specific behaviours. *Universal behaviours* refer to those behaviours that are the same or similar for people across cultures, whereas *culture-specific behaviours* differ in meaning and expression across cultures.

Often behaviours seem to be similar across cultures, but they have very opposite meanings in different parts of the world. In the next section, the different factors that may affect an individual's ability to behave appropriately in different cultural settings are explored.

2.9.3.1 Factors related to behaviour in developing Cultural Intelligence

a. Culture-specific behaviour

As stated before, various types of behaviour are universally exhibited by people. However, the context within which they appear determines the difference in their meaning (Early *et al.*, 2006).

Early et al. (2006) state that in order to form a better understanding of the specific differences in cross-cultural behaviour, it is necessary to distinguish between verbal and non-verbal cross-cultural communication. According to them, verbal communication across cultures poses challenges in the areas of foreign languages and language barriers, direct versus indirect speech acts, and conversational styles and paralanguage. The display of non-verbal behaviours may also vary across cultures with regard to physical appearance and attractiveness, gestures, facial expressions, culture and space and culture and time. The various barriers to non-verbal communication across cultures as described by Early et al. (2006) are summarised in Table 2.5 (overleaf).



Table 2.5: Barriers to non-verbal communication across cultures

Foreign languages and language barriers	Language and language barriers can be a critical factor in determining the success of intercultural interactions. Language in itself is a carrier of culture and allows people to access cultural knowledge, beliefs and values beyond those expressed by their native language.
Directness or indirectness of speech	The degree of directness or indirectness of speech acts may vary between cultures, thus forming one of the greatest differences in intercultural communication. High-context cultures are reliant on non-verbal communication, environmental setting and relationships when inferring meaning from a message. The meaning of a message is thus derived from the situation as a whole, with more emphasis on what is not being said than on the actual words being spoken. In low-context cultures, on the other hand, the accuracy of the message being received depends on the actual words being said, with very little attention paid to the context within which the message is being conveyed. Managers with a high level of Cultural Intelligence should be aware of the differences between cultures and make sure that they are able to communicate effectively in a particular context.
Conversational style and paralanguage	The meaning of aspects such as the rates of speech, rhythm, voice quality and intonation, vocalisation and silence are often misinterpreted or cause clashes when there is an interaction between members of high- and low-context cultures.

Source: Adapted from Early et al. (2006)

Communication and the success of human interactions do not rely solely on what is being said, the way in which it is being said or the context within which it is being said. During their interactions, people also display non-verbal behaviours and body language that influence the message that they are trying to convey.

Body language may be a universal phenomenon, but the meaning of body language can differ greatly across cultures and geographical regions (Early *et al.* 2006). The barriers to verbal communication across cultures as described by Early *et al.* (2006) are set out in Table 2.6 (overleaf).



Table 2.6: Barriers to verbal communication across cultures

Physical appearance and attractiveness	Each culture has its own specific norms of physical appearance and about what is regarded as attractive. A person that does not look as if he or she belongs to a certain culture may find it difficult to communicate successfully in a culture or even find him- or herself being ignored.
Gestures	Gestures involve the hands and different body parts, with different meanings attached to the same gestures by different cultures. A culturally intelligent manager should be acquainted with the different meanings that may be attached to gestures within different cultures, in order to avoid embarrassment, offence or misunderstanding when interacting with different cultures.
Facial expressions	People use facial expressions to communicate the underlying emotions they experience at a particular moment. The most basic facial expressions can usually be correctly decoded due to the fact that the emotions related to them are similar across cultures. However, it is also important to realise that many facial expressions are culture-specific and should not be taken too lightly. What may seem to be one facial expression on the surface may convey many more thoughts and feelings.
Personal space	Preferences with regard to personal space are highly dependent on aspects such as the density of a population, the nature of relationships between people and cultural norms. In "contact" cultures, a much closer proximity is preferred than in non-contact cultures. It is important to understand the norms with regard to personal space and proximity when interacting across cultures, as inappropriate touching or standing too far away may lead to misunderstandings between the different participants in the interaction.
Time orientation	The different conceptions that various cultures have of time may determine the relative success or failure of interactions. Time cultures can be viewed as mono chronic or poly chronic, where mono chronic time cultures view time linearly and as a scarce resource, and poly chronic cultures view time as flexible and plentiful.

Source: Adapted from Early et al. (2006).

According to Early and Peterson (2004), the behavioural facet of Cultural Intelligence is aimed at adapting behaviour to that of a culture through a process of role-playing and mimicry. Through mimicry, an individual is able to integrate and mimic the cues provided from observing others, in an attempt to elicit positive reactions from the interaction. Often the cues that are picked up through interactions with a culture are picked up subconsciously, resulting in a



natural mimicry without the person's even realising it. A Culturally Intelligent manager is thus like a chameleon that constantly adjusts and changes to suit the situation that he or she is faced with.

2.10 THE IMPORTANCE OF CULTURAL INTELLIGENCE IN THE WORKPLACE

In a discussion about the changing face of business, Browning (2001:xvi) states that "big businesses will get bigger and more global in their reach". This statement not only illustrates the rapid pace of globalisation, but also implies a greater possibility of cross-cultural interactions in the workplace.

A greater degree of cross-cultural interaction has a number of implications for working relationships and the way in which business is conducted in general. The way in which organisations deal with and manage their people constantly evolves and changes as the environment poses new challenges based on new needs. The Emotional Intelligence perspective on dealing with and managing people has highlighted the need to be responsive to the human factor of management in the workplace.

However, as the workplace becomes increasingly diverse, and globalisation increases, the need for responding to cross-cultural understanding cannot be overlooked or ignored.

Johnson (2000) states that culture is an important element in strategy development for organisations. Learning is an essential component of dealing with change. Hence, good cross-cultural managers recognise the importance of constantly learning, revising, renewing and expanding their competencies in this field, as learning is absolutely essential for the strategic survival of an organisation. According to Tan (2004), Cultural Intelligence is a fundamental management skill and creates competitive advantage for organisations.

Traditional cross-cultural training methods have proven to be relatively skills-based and focused on a "quick fix", with questionable results (Estienne, 1997).



By adopting a mindset focused on developing Cultural Intelligence in the workplace instead, companies can ensure that managers are equipped with the competencies they need for a true competitive advantage for the organisation.

2.11 DEMOGRAPHIC OVERVIEW OF SOUTH AFRICA AND THE NETHERLANDS

The focus of this study is a comparison between managers in South Africa and the Netherlands with regard to their views and experiences of Cultural Intelligence. Both countries are culturally diverse, and individuals living in these countries are faced with various cultural differences every day, both socially and individually. Both countries also have large numbers of expatriates that take on work assignments abroad.

The Netherlands is an appropriate choice as a platform for comparison to South Africa, because, like South Africa, the Netherlands also experiences diversity due to integration. Various cultural groupings have found asylum in this country after fleeing from their home countries, and at present the country's population consists of Dutch people, Western Europeans, Indonesians, Turks, Surinamese, Moroccans, Antilleans and Arubans.

Thus a multitude of different cultures have to live and work together in the same country. South Africa is a country of great cultural diversity because of its long history of many indigenous cultures and the immigration over about 450 years of people, mainly from Western Europe, Asia and, more recently, the rest of Africa and other regions of the world, resulting in a rich cultural mix. The demographics of the two countries suggest that useful comparisons can be drawn with regard to culturally intelligent behaviour and intercultural interactions in these two countries.

The main languages spoken in South Africa and the Netherlands are illustrated in Figure 2.6 and Figure 2.7 (overleaf); the ethnic groupings represented in each country are illustrated in Table 2.7 (two pages on) (data was retrieved



Online from South Africa Info: South Africa's population; Nationmaster, 2003-2007 and the British Broadcasting Corporation 2002-2005).

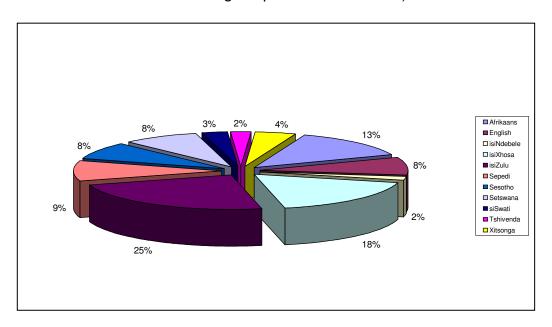


Figure 2.6: Language groupings and languages spoken in South Africa

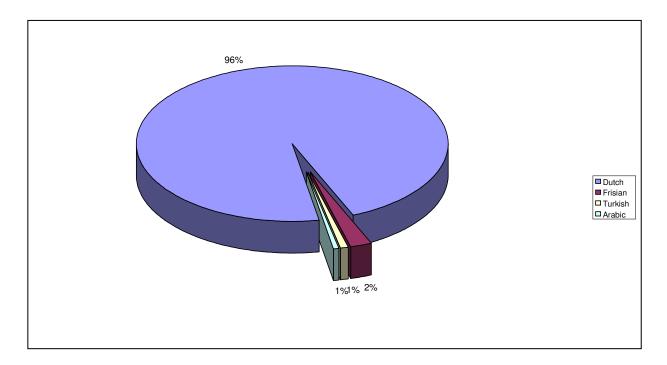


Figure 2.7: Language groupings and languages spoken in the Netherlands



Table 2.7: Demographic representation of South Africa vs the Netherlands

South Africa	The Netherlands	
Black African 79%	Dutch 83%	
White 9.6%	Other (Western) 8%	
Indian/Asian 2.5%	Non-Western* 9%	
Coloured 8.9 %	*Turks, Moroccans, Antilleans, Surinamese and Indonesians	

South Africa has a history of racial segregation and discrimination. Even after ten years of democracy this history still has a significant influence on intercultural interactions in the workplace. The Netherlands forms an excellent basis of comparison, as it is a country of equal diversity, without the recent historical influence of institutionalised segregation found in South Africa, thus resulting in a more integrated society.

2.12 SUMMARY AND CONCLUDING REMARKS

Cultural Intelligence, as a holistic construct, is a relatively new and unexplored field of study. It has become vital to conduct research on this topic in an increasingly globalised workplace with cross-cultural interactions between people. Cultural Intelligence refers to the extent to which a person is able to adapt to and interact with people from other cultures, and the ability to understand and interpret the finer nuances of a culture, in order to build successful relationships, in this case, working relationships.

The concept "Cultural Intelligence" is based on the theories of Intelligence and Emotional Intelligence, with a strong link to the Cross-Cultural Competencies that people (and in this case, managers) need for successful cross-cultural interactions. As a holistic phenomenon, Cultural Intelligence consists of: Cognitive, Motivational and Behavioural components, which should be developed in order to ensure optimal success in intercultural situations.



South Africa and the Netherlands are culturally diverse countries where people are faced with various cultural differences on a daily basis, both socially and individually, and people from both countries take on work assignments abroad. An investigation of Cultural Intelligence will hopefully provide valuable insight with regard to the creation of training and development programmes for employees, managers and managers abroad and from abroad, which will aid in increasing internationalism within these countries.

The study of intercultural behaviour is highly relevant in the new millennium, because, as the global village becomes smaller, the relative success of interactions between people from different countries, backgrounds and cultures will be the source of an organisation's competitive advantage. Exploring Cultural Intelligence will provide valuable information for organisations that wish to achieve success in expanding across the borders of their home countries. It is of the utmost importance to realise that all people are unique and different, and that those differences also hold true in intercultural interactions.



CHAPTER 3

RESEARCH METHODOLOGY AND METHODS

3.1 INTRODUCTION

The field of Social Sciences is often referred to as "soft science" because of the so-called lack of quantification in these sciences, as opposed to the quantification found particularly in the Natural Sciences. When undertaking research in the Social Sciences, it is therefore of the utmost importance to recognise that research in the Social Sciences is absolutely not "soft", and that any attempt to contribute to the field of knowledge about a particular subject should be grounded in a scientifically sound basis. In order to show that a rigorously scientific research approach was followed in this study, the methodology used in the study is described in this chapter, in terms of the research design, the sample, data collection and research instrument, and statistical analysis. The aim of this chapter is to describe the methodologies used and to provide the basic rationale for choosing them, in order to set the scene for the results discussed in Chapter 4.

3.2 RESEARCH DESIGN

According to Lonner and Berry (1986:17), cross-cultural psychology focuses on explaining differences and similarities in the behaviour of people belonging to different cultures. Cross-cultural psychologists tend to believe that their studies meet the requirements of the experimental or quasi-experimental research design. However, this belief is not accurate if the complexity of culture is not recognised. According to Lonner and Berry (1986:52), the effectiveness of any research strategy depends on the relative degree of control that the researcher has over variables and factors influencing the study.



Van de Vijver and Leung (1997:133) list four approaches to cross-cultural research design, namely

- generalisability studies;
- the study of psychological differences;
- theory-driven studies; and
- external validation studies.

The *study of psychological differences* is applicable to the present study, as the theoretical framework of this type of study is not as elaborate as with generalisability studies. This approach provides a platform for the exploration of cross-cultural differences as recommended by Van de Vijver and Leung (1997).

The goal of this study was to build on a previous study on managerial cultural intelligence across different cultures in South Africa by Du Plessis, O'Neil and Van den Bergh (Du Plessis et al., 2007) by replicating the survey in the Netherlands and comparing the results of the two studies, analysing the data from the study by Du Plessis et al. (2007) and the results of the survey in the Netherlands. The Cultural Intelligence Questionnaire (Appendix A), which forms the basis of the current study was previously applied in a South African context (Du Plessis et al., 2007). The original South African questionnaire was distributed to managers enrolled for their Master's in Business Administration (MBA) at the University of Pretoria in South Africa. These students were asked to distribute the questionnaire to their colleagues at managerial levels on a voluntary basis. Interesting results were obtained from this study (Du Plessis et al., 2007; O'Neil, Du Plessis & Vermeulen, 2007). For the purposes of the current study, the South African study was replicated in the Netherlands in order to determine the similarities and differences between respondents in the two countries (South Africa and the Netherlands).

The "study of psychological differences approach" was relevant to this study, because the aim of the study was not to evaluate causal influences on the differences found in the study. Thus level and structure techniques were implemented in the analysis and interpretation of the data.



Considering the nature of the research, the most practical, economical and feasible design for this research project was the "quantitative descriptive survey design", also known as a "survey research design" (De Vos *et al.*, 2002). However, a qualitative part was also added to the survey, as discussed below. The survey design is one of the most familiar methods of collecting primary data, and is used to measure variables by asking people questions about those specific variables.

There are two perspectives from which a research problem can be approached, namely a qualitative and a quantitative perspective. Qualitative research focuses on understanding, observation and subjective measurements that produce descriptive data. Quantitative research, on the other hand, is concerned with objective measurement with the purpose of testing hypotheses, predicting and controlling the behaviour of constructs under investigation (De Vos *et al.*, 2002).

For the purposes of this study, a combination of both qualitative and quantitative methods were applied. Data was collected by means of two surveys — one in South Africa (Du Plessis et al., 2007; O'Neil et al., 2007), one in the Netherlands. The questionnaire that was used consisted of three sections. The first section consisted of closed-ended, forced-choice questions; and the last two sections consisted of open-ended, opinion-based questions. Quantitative methods were used to test the equivalence and frequencies, as stated in the research questions, and qualitative methods were applied to explore the opinions, attitudes, beliefs and perceptions of managers with regard to intercultural interactions in the workplace. The specific quantitative and qualitative methods used are discussed in Section 3.5.

Cultural Intelligence is a relatively new and unexplored concept, which makes a mixed method research approach the logical choice for investigation, as it provides for further exploration and refinement of the concept (De Vos *et al.*, 2002).



Due to the fact that the questionnaire had previously been applied in a South African context (Du Plessis *et al.*, 2007; O'Neil *et al.*, 2007) and that these data were to be reused, the design had to be replicated in the Netherlands. It had to be borne in mind that in cross-cultural survey research a number of key considerations may influence the relative levels of comparability of the data (Van de Vijver & Leung, 1997). Biases such as construct, item and method bias may serve to challenge the equivalence of the data obtained through the questionnaire (Van de Vijver & Leung, 1997:134). Other issues that have to be considered before data collection can commence are construct coverage, the accuracy of translations and the applicability of the original procedure to the new environment.

In order to counter some of the above risks, culture experts at the Vrije Universiteit Amsterdam were consulted. The consultation resulted in changes to the wording of some items, as well as an adjustment to the biographical scales of the questionnaire in order to be more relevant to the context in the Netherlands.

3.3 SAMPLE

Psychological difference studies are usually based on convenience sampling methods that are not related to the theoretical questions that the study aims to address. A key characteristic that has to be considered when deciding on the sampling approach and method is the degree of representivity of the sample in relation to the population to which the results are to be generalised. When a sample is representative, this implies that the sample is a miniature image of the population (Welman & Kruger, 2000).

According to Lonner and Berry (1986), one of the key considerations in cross-cultural research studies relates to the equivalence of the different sample groups involved in the study. Research in cross-cultural psychology is done for two reasons, the first being to collect data in order to make universal generalisations, and the second to examine systematic variation between variables. The aim of this study is not to make generalisations, but to discover



the degree of variation between the variables being examined. Systematic sampling would thus not be a prerequisite for this study, as the interest is more on a particular variable that is presented by the group than the representivity of the sample *vis-à-vis* the population.

A non-probability convenience sampling approach was used in this study, with the implication that the results that were obtained cannot be generalised to the populations from which the samples were drawn. According to De Vos *et al.* (2002), the larger a population is, the larger the sample size that is needed (and vice versa). The implication of relatively small sample sizes and the drawbacks of the sampling method is that the results of the study may not be generalisable to the entire population. Due to the explorative nature of this study, the generalisability of results was not essential to the interpretation of the results – the aim was to explore, describe and compare, not to generalise or draw inferences.

The groups that were included in the study were not chosen on the basis of the theoretical constructs that the study aims to answer, but on the basis of their level in the organisation, availability and convenience. The South African sample was obtained by distributing the questionnaire to students at the University of Pretoria completing their MBA. These students were asked to distribute the questionnaire to at least five to ten of their colleagues at the managerial level in different businesses and in different sectors. Participation was voluntary.

The Netherlands was decided upon as a basis of comparison based on the fact that the University of Pretoria has a collaborative agreement with the Vrije Universiteit Amsterdam. This agreement enables students from the University of Pretoria to study and conduct research at the Vrije Universiteit, which reduces the challenges faced by a researcher during the course of the research. The sample in the Netherlands was obtained by involving students enrolled for a Masters of International Business Administration at the Vrije Universiteit. These students were asked to distribute the questionnaire to their colleagues at managerial levels. Furthermore, managers from various organisations such as



ABN/Amro, ING Bank and Greefa were approached to participate in the study, in order to develop a snowball sample for the population in the Netherlands.

A convenience sample of 500 managers was drawn in South Africa, with 353 unspoiled responses. A sample of 300 managers was drawn in the Netherlands, with a total number of 213 responses, of which 105 responses were unspoiled.

Guadagnoli and Velicer (1988) suggests that for the purposes of factor analytic research, a minimum sample size of between 100 and 200 respondents is adequate in order to determine stable solutions. According to these authors, smaller samples may make the factor solution unstable. Other opinions on sample size and the number of variables suggest that factor analysis generally requires the number of cases to be much larger than the number of variables, although various authors remain vague on the allowable limit: "Unfortunately, nobody has yet worked out what a safe ratio of the number of subjects to variables is" (Gorsuch, 1983:332). A ratio of five to ten subjects per item is advised by De Vellis (1991). The sample sizes that were obtained in this study are thus sufficient for further analysis in terms of Guadagnoli and Velicer (1988). Factor analysis and other statistical methods that were applied in this study are discussed in more detail in Section 3.5.

In this study, non-probability sampling was used instead of probability sampling. Preference was given to non-probability sampling for the sake of convenience, practicality, cost-effectiveness and ease of application.

One of the main problems that arise from non-random sampling procedures such as the one implemented in this study relates to the homogeneity of the two sample groups. In order to draw successful comparisons, it is important that the two groups to be compared are similar. They may, however, differ with regard to important variables such as gender, age, formal education and other biographical variables (Lonner & Berry, 1986). Where that happens, a process of matching can be used to equate the two groups being compared. However, matching was not applied in this study, as Lonner and Berry (1986:90) warn that this method is laden with defects and that samples should rather be left as they



are. As recommended, the characteristics of the samples are discussed in detail so that future researchers can refer back to the discussion where they need to do so.

The possibility of bias, lack of sampling variability, and the fact that reliability cannot be accurately measured for non-probability samples poses some of the most important disadvantages of non-probability type of sampling method (Van de Vijver & Leung, 1997). However, the nature of this study is mainly exploratory, with the purpose of describing perceptions, questionnaire testing, exploration and hypothesis development for future research, which makes some of these risks unimportant.

3.4 DATA COLLECTION AND INSTRUMENT

Where resources are limited, the implementation of a questionnaire is a viable solution, as it is a relatively inexpensive method of investigation with a relatively high response rate. This was deemed an appropriate choice for this study, given the nature of the study.

A self-assessment instrument to determine and develop a person's level of Cultural Intelligence on the levels of Cognition, Behaviour and Motivation was developed by Linn van Dyne and Soon Ang (cited in Early *et al.*, 2006). This assessment instrument consists of a number of multiple-choice questions, describing various interactions with other cultures. The instrument used in this study (the Cultural Intelligence Questionnaire) was developed and refined by a panel of experts at the University of Pretoria. The "Self-Assessment of Your CQTM" was initially used as a guideline for the development of the specific instrument used in this study.

The Cultural Intelligence Questionnaire was applied in the South African context in a pen-and-paper format, and the results were captured after completion (Du Plessis *et al.*, 2007; O'Neil *et al.*, 2007). For the sample in the Netherlands, an online equivalent of the questionnaire was developed and customised, and the link to the questionnaire and the consent form were e-mailed to respondents.



The lack of personal interaction between the researcher and the respondents could be one of the main reasons for the relatively low response rate (33.01%) for the sample group in the Netherlands.

The Cultural Intelligence Questionnaire as applied in the South African context (see Appendix A) consisted of the following three sections:

- Section A: Biographical Information (Age, Gender, Economic sector, etc.)
 This section consists of open-ended questions and forced-choice options.
- Section B: Cultural Intelligence (Meta-cognition, Motivation, Behaviour)
 This section consists of closed-ended questions that are measured on a five-point Likert-type scale ranging from Never, Seldom, Often, Always and Unsure, and of five open-ended questions.
- Section C: Evaluation of the Questionnaire (Questions, Comments, Problems, etc.)

This section consists of three open-ended questions that are aimed at determining the overall perceptions of the questionnaire, as well as which questions respondents feel should be left out or rewritten.

Based on the literature review, Cultural Intelligence can be conceptualised in terms of three components: Cognition, Motivation and Behaviour. The Cultural Intelligence Questionnaire (Du Plessis *et al.*, 2007; O'Neil *et al.*, 2007) was applied to the South African sample and then subjected to factor and item analysis. The results of the initial analysis yielded a quantitative part of the questionnaire, consisting of 24 items, measuring three constructs.

The Cultural Intelligence Questionnaire was customised for the specific context in the Netherlands (see Appendix B). Changes were made to the biographical information requested in the questionnaire, and to the wording of certain items. However, the items used in the original South African Questionnaire (Du Plessis *et al.*, 2007) were retained in the questionnaire used in the Netherlands in order to determine whether the application of the questionnaire in a different setting would yield similar results.



The initial questionnaire designed for the South African situation included 37 closed-ended items on the following constructs (Du Plessis *et al.*, 2007):

Construct	Item
Meta-cognition	4, 11, 20, 21, 23, 26, 30, 31, 32, 33, 34, 36 = Total 12
Motivation	3, 7, 13, 14, 17, 18, 24,25, 27, 29, 35, 37 = Total 12
Behaviour	1, 2, 5, 6, 8, 9, 10, 12, 15, 16, 19, 22, 28 =Total 13

From the final analysis of the South African study, the following three constructs and 24 items were identified as actually measuring Cultural intelligence (Du Plessis *et al.*, 2007):

Construct	Item	
Cultural identity	2, 3, 7, 8, 14, 19, 22, 25, 29	= Total 9
Adaptability to a multi-	1, 9, 10,11, 12, 15, 21,24	= Total 8
cultural setting		
Willingness to learn about	6, 13, 17, 23, 26, 35, 37	= Total 7
Different cultures		

3.4.1 Key considerations in choosing the data collection method and instrument

When conducting a research project, there are a number of considerations that the researcher should take into account that are related to the particular study. The key considerations that should be considered in terms of data collection and the instrument that are relevant to this study are discussed in this section.

3.4.1.1 Equivalence

Unless equivalence is achieved in cross-cultural research, it is not possible to draw meaningful comparisons between cross-cultural groups, because one can only compare different groups if the data for the groups is comparable (Van de Vijver & Leung, 1997). According to Van de Vijver and Leung (1997), there are



three types of equivalence that should be achieved through cross-cultural research, namely structural equivalence, measurement unit equivalence and scalar equivalence:

- Structural equivalence in cross-cultural research refers to the similarity of psychometric properties of data sets from different cultures, especially in terms of the correlations of items of the instrument. Structural equivalence is established by determining the psychometric properties of the instrument (correlations and inter-item correlations), multi-dimensional scaling, factor analysis and analysis of variance. If equal factor structures are obtained for the two groups, it can be concluded that the psychological constructs underlying the instrument are identical. For the purposes of this study, structural equivalence was determined by means of exploratory factor analysis.
- Measurement unit equivalence in cross-cultural studies is achieved when the unit of a measure is equivalent, but the scales have different origins. This type of equivalence enables a researcher to compare differences between the scores of respondents both within and across cultures, but the scores themselves can only be compared within cultures. Implicit or explicit references to South African culture may therefore form part of the instrument in this case, even if a language equivalent form of the instrument is used, which would put respondents in the sample group from the Netherlands at a disadvantage. The measurement instrument was not significantly adjusted for the two groups, but respondents were given the opportunity to indicate which items were unclear to them. This information was then considered when interpreting the results.
- Scalar equivalence in cross-cultural studies can be achieved by using similar scales or intervals across cultural groups. For the purposes of this study, scalar equivalence was achieved by using the same scale for both groups.

3.4.1.2 Bias

All the nuisance factors that pose a threat to the validity of comparisons across cultures are encompassed by the term "bias". The main forms of bias that can



creep in during cross-cultural research are construct bias, method bias and item bias (Van de Vijver & Leung, 1997:10).

- Construct bias posed a very real threat to this study because of the fact that all the participants in the study may not understand English, or only speak English as a second, third or fourth language. For most of the participants in the Netherlands (as it was for many of the South African respondents), English is a second or a third language, which has an impact on their level of understanding and interpretation of different items. Definitions of the construct may be incomplete for different cultures, which can lead to misunderstanding and may then affect the reliability of the data being explored. Van de Vijver and Tanzer (1997) suggest that the theoretical conceptualisation underlying a measure should be clearly specified and the incompetence of the measure for certain groups should be acknowledged in the interpretation of the results. The convergence approach can be used to discover construct bias by applying the original questionnaire from a previous study to a culturally distant group in order to see if the results that are obtained coincide. If the results coincide, it can be concluded that the cultural origin of the original study did not bias the results (Van de Vijver & Leung, 1997:13,14). Provision was made for the impact of construct bias on this study through comparison of the results between the two groups, thus following the convergent approach, as suggested by Van de Vijver and Leung (1997).
- Method bias implies that the fact that a construct is well-presented in the instrument does not automatically indicate that there is no bias in the results. Another source of bias is that of the administration of an instrument, and its particular characteristics. Different groups and cultures may add different connotations to the same scale, which obviously biases results. Furthermore, the circumstances surrounding the administration of the instrument can also influence the validity of results. Questionnaires are not always administered in the presence of the researcher, and respondents may delegate the completion of the questionnaire to their secretaries or personal assistants, which leads to biased results. Constant interruptions during the administration of the questionnaire may have a further negative



influence on results. Another source of bias could be related to the online administration of the questionnaire, as respondents may not have the patience to complete a questionnaire online, and if they are not able to access the questionnaire, or have a bad internet connection, they may lose interest and not complete the questionnaire. This type of bias affects the questionnaire as a whole, and tends to have a significant effect on t-tests and analysis of variance. A low consistency in responses is indicative of method bias (Van de Vijver & Leung, 1997:16,17). Method bias was mitigated in the online administration of the questionnaire. Respondents were not given the options of saving the questionnaire and then returning to it later, thus forcing them to complete the entire questionnaire at once. Furthermore, uncompleted questionnaires, and questionnaires with inconsistent responses in both sample groups, were not included in the final statistical analysis.

• Item bias is also referred to as "differential item functioning". This type of bias can pose a significant threat to the validity of results, and may stem from sources such as the content of the items, inadequate item formulation relating to complex wording and inadequate translation in multi-lingual versions of a test. Item bias for an instrument can be determined by analysis of variance and item response theory. The focus of this study was exploratory, and not instrument development; hence, this type of bias does not pose a significant threat to results.

3.4.1.3 Reliability

Reliability implies that an instrument measures the same constructs in different situations. If two groups yield similar results upon separate administrations of the same questionnaire, the reliability of the instrument can be established (De Vos, *et al.*, 2002). Cronbach's coefficient alpha is a mean split-half reliability coefficient that aims to establish the internal consistency of a test (Huysamen, 1998). According to Huysamen (1998:27), standardised tests should show reliability coefficients in excess of 0.85 if one is making decisions about individuals, but coefficients as low as 0.65 are acceptable for making decisions about groups.



This study aimed to make inferences about two groups, with the result that an alpha coefficient larger than 0.65 was still acceptable in order for a high level of internal reliability to be assumed.

3.5 STATISTICAL ANALYSIS

The statistical program SAS was used to analyse the quantitative data that was gathered. The qualitative data was captured on a Microsoft Excel spreadsheet and was then analysed using frequency analysis.

3.5.1 Descriptive statistics

Through descriptive statistics, data is arranged, summarised and presented in such a way that the most meaningful and essential information can be extracted and interpreted from the dataset. Biographical data is often represented by means of descriptive statistics, in order to broaden the scope of comparison between and within groups. Cross-tabulations as recommended by StatSoft Inc (2003) and chi square tests and t-tests as recommended by Field (2000) were used in this study.

3.5.1.1 Cross-tabulations

Cross-tabulations are used to describe more than one variable of the same sample and indicate the number of cases that possess a certain characteristic. The chi-square, phi and Cramer's V are the most commonly used tests to determine the significance of the relationship between categorical variables (StatSoft Inc, 2003). These tests were used in this study to determine the strength of the association (where an association existed) between variables within the groups, and the homogeneity between the two samples was determined.



3.5.1.2 Chi-square

The basic Pearson's chi-square test was used in this study to determine the significance of association between categorical variables. The assumptions that need to be met for this test is that all expected counts should be greater than one and that no more than 20% of the expected counts should be less than five (Field, 2000). If the significance value was p<0.05, the hypothesis that variables were independent would have to be rejected and it would have to be accepted that they were related. In other words, when comparing the two sample groups for South Africa and the Netherlands, the similarity between the two groups would be determined by a value of p<0.05.

3.5.1.3 T-tests for independent samples

T-tests aim to test for differences between and within groups. The null hypothesis of a t-test is that there are no differences across cultural groups (Van de Vijver & Leung, 1997). Significant differences between the two groups in this case would be indicated by p<0.001. If the significance value is greater than 0.001 it can be assumed that there are no significant differences between groups (Field, 2000). The following t-tests are used when there are two experimental conditions and different subjects have been assigned to each condition: Levene's F for variability, the pooled T, the separate T and Mann-Whitney tests.

If Levene's test for variability is significant at p≤0.05, homogeneity of variances cannot be assumed, and if p>0.5 it can be assumed that the variances between the groups are roughly equal (Field, 2000).

The Mann-Whitney test looks at the differences in ranked positions of scores in different groups and is highly significant at p<0.001. If the p value for this test is small, it can be concluded that the two populations have different medians (Field, 2000).



3.5.1.4 Measures of central tendency and variability

Measures of central tendency are used to determine the most representative score of a data set and include measures such as the mode, mean, median and distribution (frequency). Measures of dispersion or variability are summaries of the size of the differences between scores and include measures such as the range, variance and standard deviation (Trochim, 2002).

The mean is the average score for a particular aspect of the data set. In order to determine individual values or ranges of values for each variable, a frequency analysis was conducted. In order to determine the impact of biographical variables on the data set, the mean, variance, standard deviation, skewness, kurtosis, minimum and maximum values were calculated.

3.5.1.5 Hotelling's T-square and Malhanobis D-square

Hotelling's T-square statistic aims to test differences between the mean values of two groups, with a null hypothesis that the centroids of the two groups do not differ (Statistics.Com, 2007). The null hypothesis for this statistic is that the mean vector of the two groups are equal if p<0.0001 (Pennsylvania State University, 2007).

Malhanobis D-square statistic is an index of the extent to which the discriminant functions discriminate between criterion groups, thus measuring the distance between groups (Garson, 1997).

In this study, chi-square tests were used to determine the homogeneity between the two groups in terms of the biographical variables age, gender, qualification and level in the organisation. Levene's F for variability and separate t-tests were conducted in order to determine any significant similarities and differences between the two groups in terms of their levels of Cultural Intelligence based on the components of Cultural Intelligence measured by the instrument.



3.5.2 Construct equivalence

Cross-cultural research brings with it various factors that may have an impact on the validity and reliability of the comparisons across cultures (Welkenhuysen-Gybels & Van de Vijver, 2001). In order to draw valid comparisons, it was essential that all the respondents attach the same meaning to the construct as a whole. This study was conducted across two nationalities, various languages and cultural groupings, which imply that there may have been bias if the constructs being measured were not interpreted equivalently by participants in the study. Exploratory factor analysis was the process through which construct equivalence was defined operationally as factorial invariance, as recommended by Welkenhuysen-Gybels and Van de Vijver (2001).

3.5.2.1 Exploratory factor analysis (EFA)

Huysamen (1998) states that factor analysis is used to identify clusters of items that show high correlations among themselves and lower correlations with items from other clusters. According to Van de Vijver and Leung (1997), the main aim of analysis is to express observed scores as scores on a limited set of underlying factors. By means of factor analysis, these observed scores are decomposed into the underlying factors.

In cross-cultural research, it seems natural that one can carry out a factor analysis for each group and then address the similarity of the factor-analytic structures of each group. However, this leads to what is known as the "rotation problem". Without rotation of the factor structures of the groups, the agreement between the factors is underestimated. Factorial agreement can be estimated by carrying out a target rotation (Van de Vijver & Leung, 1997). The rotated factor matrix differs from the unrotated factor matrix in that distinct clusters of relationships are delineated in the rotated factor matrix (Rummel, 1970).

Factor rotations intend to maximise the loading of each variable, whilst minimising the loading of all the extracted factors. The varimax, quartimax and equamax rotations are orthogonal rotations, and the direct oblimin and promax



rotations are oblique rotations. The quartimax rotation is designed to maximise the spread of factor loadings for a variable across all factors, increasing the ease of interpretation (Field, 2000).

For the purposes of this study, the *direct quartimin rotation* (which is an oblique rotation) was applied, referring to the sorted rotated factor loadings.

The factor analysis done for the two groups was compared to determine whether the factor structures of the two groups were identical or not, as recommended by Darlington (s.a.). The exploratory factor analysis resulted in identical factor structures for the two groups, with the exception of item 24 and 37 in the sample from the Netherlands, which loaded differently from the way the South African sample loaded. A detailed discussion of the results of the exploratory factor analysis can be found in Sections 4.3 and 4.4

Fabrigar *et al.* (1999) assert that in deciding which factors to retain, a preference for choosing too many factors rather than too few is better, as it is more likely to lead to a situation where the loadings that are obtained are well-estimated, with additional poorly defined factors. They suggest that the following methods can be used for determining factors: Kaiser's (1960) eigenvalue, Cattell's scree test and goodness-of-fit statistics.

After deciding upon the number of factors to retain, the loadings on each of the factors have to be extracted. According to Newsom (2005), there are five basic extraction methods, namely the principal components analysis (PCA), canonical factoring (maximum likelihood), alpha factoring, image factoring and least squares approaches. He argues that the best evidence of success exists for the principal axis factoring and maximum likelihood approaches.

In this study, *Kaiser's eigenvalue of one* and the *canonical factoring* and *maximum likelihood* approaches were used as extracting methods.



3.5.3 Evaluation of the qualitative data

Qualitative data analysis was conducted on the open-ended questions of the instrument by means of a process of content analysis. Themes in the data set were identified through open-coding. The themes were then interpreted on the basis of the frequency of their occurrence and the way in which each theme was interpreted by the respondent.

3.6 SUMMARY AND CONCLUDING REMARKS

This study was conducted from a Social Sciences perspective with the aim of exploration, comparison and instrument development. The research design contained both exploratory and descriptive components, resulting in the use of qualitative and quantitative methods of gathering data. By comparing the results of the different cultural groupings, deeper insight and understanding into the concept of Cultural Intelligence were obtained for future research, and a draft instrument for measuring Cultural Intelligence in the workplace was designed.



CHAPTER 4

RESULTS AND DISCUSSION

4.1 INTRODUCTION

In this chapter, an overview of the results obtained from the statistical analysis of the responses to the Cultural Intelligence Questionnaire is provided. The sample from the Netherlands yielded 105 usable questionnaires, and the sample from South Africa yielded 353 usable questionnaires. The results of the two samples were subjected to selected statistical analysis and then compared, as described in this chapter.

4.2 PARTICIPANTS

The Cultural Intelligence questionnaire was administered to two target population groups, namely managers from the South African business sphere, and managers from the Netherlands, with various levels of experience.

A total of 500 questionnaires were distributed in South Africa, with 353 (70.6%) usable responses (Du Plessis *et al.*, 2007), and 300 questionnaires were distributed in the Netherlands, with 105 (33.01%) usable responses. Some of the South African respondents did not complete the biographical information.

4.2.1 Comparison of groups in terms of the biographical variables

The following section provides a comparative overview of the two sample groups in terms of the following biographical variables: gender, age, qualification, years worked and organisational level.



4.2.1.1 Gender and age

The gender distribution of the two groups is depicted in Table 4.1; and the age distribution for the two groups is set out in Table 4.2 (overleaf).

The gender distribution of the two groups was relatively similar with more male respondents than female respondents in both groups. There were slightly more male respondents than female respondents in the sample from the Netherlands, with more males than in the South African group, and fewer females than in the South African group.

The majority of respondents in the South African group ranged between the ages of 26 and 45, with the majority of respondents between the ages of 31 and 35 years. The majority of respondents in the group from the Netherlands ranged between the ages of 25 and 40, with the majority of respondents in the age range of 25 years and younger. The average age of the sample population in the Netherlands is thus much younger than that of the South African sample.

There were thus significant differences between the two groups in terms of age (p<0.0001). There were, however, no significant differences between the two groups in terms of gender (p=0.2054; p>0.0001).

Table 4.1: Gender distribution in the sample groups from South Africa and the Netherlands

		Male	Female	Total
NL	Frequency	71	34	105
	Row %	67.62	32.38	
SA	Frequency	166	108	274
	Row %	60.58	39.42	



Table 4.2: Age distribution in the sample groups from South Africa and the Netherlands

		25 yrs or less	26 – 30 yrs	31 – 35 yrs	36 – 40 yrs	41 – 45 yrs	46 – 50 yrs	51 - 55 yrs	Over 55 yrs	Total
NL	Frequency	27	18	16	20	8	9	4	3	105
	Row %	27.71	17.14	15.24	19.05	7.62	8.57	3.81	2.86	
SA	Frequency	24	69	91	79	44	18	14	14	353
	Row %	6.86	19.43	25.71	22.57	12.29	5.14	4.00	4.00	

4.2.1.2 Level of education/qualifications

The distribution of the level of education of the two groups is depicted in Table 4.3 (overleaf). Of the South African respondents who completed this section, 174 had a post-graduate degree (an Honours, a Master's degree or a doctorate); 88 had a Bachelor's degree; 67 had a higher vocational education and 16 had a higher secondary education. The majority of respondents in this group therefore possessed at least a university degree and/or had post-graduate university education.

Of the respondents in the Netherlands, 24 had a post-graduate university qualification; 35 had a basic university degree; 26 had higher vocational education; 18 had a higher secondary education and two had a lower secondary education. The majority of respondents in this group therefore had at least a higher secondary education, a university degree and/or post-graduate university education.

From the results, it can thus be seen that the majority of the South African sample have a university degree and/or a post-graduate qualification, including a Master's degree and/or a doctorate, whereas the majority of respondents in the Netherlands had a university degree or a post-graduate qualification up to Master's level.

A chi-square test indicated that the two groups were not significantly similar to each other in terms of the respondents' qualifications (p<0.001). However, it is very difficult to compare the two groups accurately in terms of their levels of



education, as the schooling system in South Africa differs significantly from the Dutch schooling system with regard to the labelling used for various levels of education. The result of this difference is that possible similarities between the two groups may not be recognised through statistical analysis.

Table 4.3: Level of education in the sample groups from South Africa and the Netherlands

		Lower secondary education	Higher secondary education	Higher vocational education	University education	Post- graduate university education/ PhD	Total
NL	Frequency	2	18	26	35	4	105
	Row %	1.90	17.14	24.76	33.33	22.86	
SA	Frequency	0	16	67	88	174	345
	Row %	0.00	4.64	19.42	25.51	50.45	

4.2.1.3 Organisational level and years worked

The participants in the South African sample worked at the following organisational levels: 122 of respondents worked at the senior management level; 149 of participants worked at the middle management level and 59 of respondents worked at the supervisory level.

The average number of years worked in a particular sector for the South African respondents was 4.15 years (SD 1.7622).

The participants in the sample from the Netherlands worked at the following organisational levels: 20 of respondents worked at the senior management level; 61 of participants worked at the middle management level and 24 of the respondents worked at the supervisory level.

The average number of years worked in a particular sector for the respondents from the Netherlands was 8.5 years (SD 7.9602).

The majority of respondents in the South African group worked at the senior and the middle management level. It is possible that a certain number of these



managers also find themselves in professional business services and other levels such as consulting. However, the latter two options were not included in the questionnaire distributed to the South African sample. The respondents in the Netherlands were given the options of "Professional business services" and "Other" above the different levels of management. In order to create an equal basis of comparison between the two groups, respondents in the "Professional business services" category were pooled with the middle management category and respondents in the "Other" category were pooled with the supervisory category. The majority of the respondents from the Netherlands indicated that they were active in professional business services, senior and middle management.

The distribution of the level in the organisation for the two groups is set out in Table 4.4. The statistics for the number of years worked can be found in Table 4.5.

Table 4.4: Organisational level for the sample groups from South Africa and the Netherlands

		Senior management	Middle management	Supervisory	Total
NL	Frequency	20	61	24	105
	Row %	19.05	58.10	22.86	
SA	Frequency	122	149	59	330
	Row %	36.97	45.15	17.88	

Table 4.5: Statistics for years by members of the sample groups from South Africa and the Netherlands

	NL	SA
Mean	8.5428	4.1586
Std dev	7.9602	1.7622
Sample size	105	363
Maximum	31.0000	8.0000
Minimum	1.0000	1.0000
P-value	9.61	5.60
(Pooled T)		



Levene's F for variability and pooled t-tests for the two groups were conducted in order to determine the variability in the years worked in a particular sector between the two groups.

On average, the respondents in the Netherlands had more years working experience than the respondents in the South African group, with the result that the two groups are significantly different in terms of years worked in a particular sector (p<0.00001).

The two groups are not significantly different in terms of organisational level p=0.0030 (p>0.0001); and homogeneity of variances can be assumed.

4.3 EXPLORATORY FACTOR ANALYSIS

The initial 37 items tested on the South African sample (Du Plessis *et al.*, 2007) were intercorrelated and subjected to exploratory factor analysis (EFA). Based on Cattell's scree plots, Kaiser's eigenvalues and chi-square goodness-of-fit statistics, three factors were extracted and rotated to a simple structure with the direct quartimin rotation.

The exploratory factor analysis for the sample from the Netherlands on the 37 items produced six factors with eigenvalues larger than 1. The histogram of eigenvalues of the unaltered correlation matrix for the first round of exploratory factor analysis is depicted in Figure 4.1 (overleaf).

The histogram shows that there are also three factors, as in the South African study (Du Plessis *et al.*, 2007), that explain most of the variance in the questionnaire.



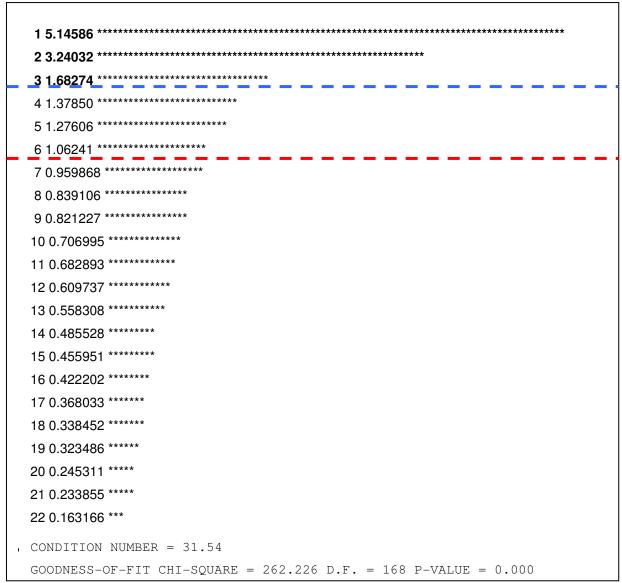


Figure 4.1: Histogram of eigenvalues of initial exploratory factor analysis for the sample group from the Netherlands

A final round of factor analysis on the sample from the Netherlands was conducted omitting Items 4, 5, 16, 18, 20, 27, 28, 30, 31, 32, 33 and 34. The purpose of this final analysis was to serve as a basis of comparison with the South African sample. The rotated pattern matrix of this analysis is depicted in Table 4 (overleaf).

This final rotation accounts for 44.81% of the variance in Factor 1, for 24.71% of the variance in Factor 2 and for 15.50% of the variance in Factor 3.



Table 4.6: Final rotated pattern matrix for the sample from the Netherlands

Item	Factor 1	Factor 2	Factor 3
1	-0.086	0.558	-0.198
2	0.678	-0.041	0.057
3	0.634	-0.193	0.053
6	-0.041	-0.069	0.269
7	0.471	0.030	0.044
8	0.369	0.038	0.000
9	0.121	0.522	-0.087
10	-0.230	0.784	0.068
11	-0.068	0.394	0.109
12	0.372	0.422	-0.130
13	0.262	0.183	0.670
14	0.640	-0.085	0.124
15	-0.038	0.621	0.179
17	0.225	0.104	0.583
19	0.672	-0.123	-0.155
21	-0.046	0.407	0.084
22	0.803	-0.066	-0.084
23	-0.369	0.049	0.419
24	0.299	0.231	0.213
25	0.630	0.070	0.018
26	0.379	0.330	0.267
29	0.709	0.009	0.048
35	0.179	0.115	0.418
37	-0.336	-0.297	-0.213



The rotated pattern matrix for the South African sample is depicted in Table 4.7. This final rotation accounts for 37.77% of the variance in Factor 1, for 24.87% of the variance in Factor 2 and for 10.65% of the variance in Factor 3.

Table 4.7: Final rotated pattern matrix for the South African sample group on 24 items

Item	Factor 1	Factor 2	Factor 3
1	-0.266	0.468	0.008
2	0.372	-0.093	0.002
3	0.555	-0.059	-0.039
6	-0.210	-0.055	0.252
7	0.377	0.030	0.085
8	0.497	-0.063	0.101
9	-0.111	0.443	0.018
10	-0.268	0.731	-0.137
11	0.022	0.563	0.087
12	0.144	0.520	0.140
13	0.158	0.266	0.460
14	0.530	-0.011	-0.037
15	-0.206	0.588	0.094
17	0.127	0.254	0.637
19	0.605	0.099	-0.059
21	0.175	0.286	0.108
22	0.581	0.081	-0.138
23	-0.411	0.087	0.310
24	0.244	0.419	-0.024
25	0.432	-0.080	-0.001
26	-0.034	0.083	0.391
29	0.512	0.010	0.008
35	-0.250	0.057	0.543
37	0.069	-0.109	0.648

4.4 FINAL FACTOR SOLUTION AND LOADINGS

The results of the exploratory factor analysis and the direct quartimin rotation on the final 24 items of the questionnaire indicated three dominant factors that explained 73.28% of the variance for the South African data, and 85.02% of the



variance for the data collected in the Netherlands. The final rotated pattern matrix for the two groups is depicted in Table 4.8. The individual factors that emerged are discussed in detail in Sections 4.4.1 to 4.4.6.

Table 4.8: Final rotated pattern matrix for the sample groups from South

Africa and the Netherlands based on 24 items

	South Africa n=353				Netherlands n=105			
	Item	Factor 1	Factor 2	Factor 3	Item	Factor 1	Factor 2	Factor 3
1	1	-0.266	0.468	0.008	1	-0.086	0.558	-0.198
2	2	0.372	-0.093	0.002	2	0.678	-0.041	0.057
3	3	0.555	-0.059	-0.039	3	0.634	-0.193	0.053
4	6	-0.210	-0.055	0.252	6	-0.041	-0.069	0.269
5	7	0.377	0.030	0.085	7	0.471	0.030	0.044
6	8	0.497	-0.063	0.101	8	0.369	0.038	0.000
7	9	-0.111	0.443	0.018	9	0.121	0.522	-0.087
8	10	-0.268	0.731	-0.137	10	-0.230	0.784	0.068
9	11	0.022	0.563	0.087	11	-0.068	0.394	0.109
10	12	0.144	0.520	0.140	12	0.372	0.422	-0.130
11	13	0.158	0.266	0.460	13	0.262	0.183	0.670
12	14	0.530	-0.011	-0.037	14	0.640	-0.085	0.124
13	15	-0.206	0.588	0.094	15	-0.038	0.621	0.179
14	17	0.127	0.254	0.637	17	0.225	0.104	0.583
15	19	0.605	0.099	-0.059	19	0.672	-0.123	-0.155
16	21	0.175	0.286	0.108	21	-0.046	0.407	0.084
17	22	0.581	0.081	-0.138	22	0.803	-0.066	-0.084
18	23	-0.411	0.087	0.310	23	-0.369	0.049	0.419
19	24	0.244	0.419	-0.024	24	0.299	0.231	0.213
20	25	0.432	-0.080	-0.001	25	0.630	0.070	0.018
21	26	-0.034	0.083	0.391	26	0.379	0.330	0.267
22	29	0.512	0.010	0.008	29	0.709	0.009	0.048
23	35	-0.250	0.057	0.543	35	0.179	0.115	0.418
24	37	0.069	-0.109	0.648	37	-0.336	-0.297	-0.213
Variance		37.77%	24.87%	10.65%		44.81 %	24.71 %	15.50 %
Alpha		0.746	0.640	0.407		0.841	0.719	0.474



From the factor analysis, it can be seen that the original items that were intended to measure Factors 1, 2 and 3, based on the constructs of Meta-Cognition, Motivation and Behaviour, in fact did not measure what they were intended to measure, and the factors were renamed as discussed in Section 4.4 and 4.5.

4.4.1 Final factor solution and loadings (Factor 1)

The first factor that emerged from the factor analysis indicated a dominant factor with eigenvalues of 4.44 for the South African sample and 5.63 for the sample from the Netherlands. The first factor explained 37.77% of the variance of the South African data and 44.81% of the variance for the data collected in the Netherlands.

4.4.2 Scale naming/description (Factor 1)

From the factor analysis, it is clear that the original items that intended to measure Factor 1, based on the constructs of Meta-Cognition, Motivation and Behaviour, in fact did not measure what was intended. The new Factor 1 that emerged was named "Cultural Identity", as it compared with the theoretical model of Cultural Intelligence. The items underlying this construct attempted to define a respondent's perception of his or her own culture in relation to other cultures and the degree to which the person is able to relate to people from other cultures in daily interactions.

Factor 1 (Cultural Identity) covered the following critical elements:

- the ability to relate with co-workers from different cultural backgrounds;
- the degree to which a supervisor/manager is comfortable with reprimanding and/or praising employees from different cultural backgrounds;
- fear of losing one's own culture if one learns from new cultures;
- the degree to which an individual sees other cultures as "out-groups"; and
- adaptability to a multi-cultural setting.



This dimension can also be related to the Behavioural component of Cultural Intelligence, as previously described in the literature (see Section 2.9.3).

4.4.3 Final factor solution and loadings (Factor 2)

The final factor analysis yielded a second factor with eigenvalues of 3.145 for the South African sample and 3.359 for the sample from the Netherlands. The second factor explained 24.87% of the variance of the South African data and 24.71% of the variance for the data collected in the Netherlands.

4.4.4 Scale naming/description (Factor 2)

Factor 2 can be described as "Adaptability to a Multi-Cultural Setting". The items underlying this construct were meant to define the degree to which a respondent is mindful about other cultures, and the degree to which the person is able successfully to adapt to a multi-cultural setting.

Factor 2 (Adaptability to a Multi-Cultural Setting) covered the following critical elements:

- willingness to change and adapt to different cultures in varying settings;
- the degree to which an individual is willing to take the preferences of another culture into account when dealing with problems or working in diverse teams;
- willingness to vary interaction style, speech and gestures to relate with individuals from different cultures; and
- mindfulness of the possible meanings that one's own body language and gestures may have for people from other cultures.

This dimension can also be related to the Motivation/Mindfulness component of Cultural Intelligence.



4.4.5 Final factor solution and loadings (Factor 3)

The third factor that was yielded by the final factor analysis had eigenvalues of 1.683 for the South African sample and 1.691 for the respondents from the Netherlands. The third factor explained 10.65% of the variance of the South African data and 15.5% of the variance for the data collected in the Netherlands.

4.4.6 Scale naming/description (Factor 3)

Factor 3 can be described as "Willingness to Learn about Different Cultures". The items underlying this construct relate to the degree to which a respondent is willing to learn about other cultures, and to question his or her own cultural beliefs.

Factor 3 (Willingness to Learn about Different Cultures) covered the following critical elements:

- the degree to which an individual is willing to learn about other cultures;
- the extent to which an individual feels that it is important for other people to understand his or her own behaviour;
- the degree to which an individual engages in cognitive strategies to plan his or her intercultural interactions; and
- the relative ability of the individual to change his or her perception of his or her own culture.

This dimension can also be related to the cultural strategic thinking/knowledge/meta-cognition component of Cultural Intelligence.

From the final factor analysis it can be seen that the Cultural Intelligence Questionnaire yielded identical factor loadings for both sample groups, with the exception that Items 26 and 37 loaded differently for the two sample groups. Despite the fact that these two items loaded on different factors, they were core



to explaining the underlying construct that they present and were therefore not omitted from the final factor analysis.

Item 26 states that a person thinks about his or her views of other cultures. From the factor analysis, it is clear that this item seems to load similarly for all three factors, with the strongest loading on Factor 1 for the sample in the Netherlands. For the South African sample, this item loaded on Factor 3. It is apparent that managers in the Netherlands interpreted Item 26 mainly as a component of one's Cultural Identity, whereas managers in South Africa interpreted it as a component of one's willingness to learn about different cultures. This difference in interpretation between the two groups can be related to the fact that these two factors are, in principle, closely related. Respondents in the Netherlands seemed to view this item in terms of their own cultural identity and thus build their views about other cultures on this identity. South African respondents viewed this item in terms of learning about other cultures, as learning about cultures is a key issue in the South African context at present.

Item 37 deals with the relative amount of free time that a manager spends on learning about other cultures. Respondents in the sample from the Netherlands indicated that they spend very little or none of their spare time on learning about different cultures, whereas the South African sample indicated the exact opposite. This item loads negatively on all factors for the sample from the Netherlands, with the strongest negative loading on Factor 3. Item 37 loads on Factor 3 for the South African sample.

This interesting difference can be ascribed to the very different socio-political situations in the two countries. Managers in South Africa are constantly faced with diversity issues in the workplace. Due to the apartheid legacy of the past and the current employment equity legislation enforced by government, South African managers are sensitized to other cultures and inclined to learn more about them. In the Netherlands, there is a very strong tendency to protect the Dutch language and culture, and consequently, all new immigrants to the country have to learn to speak the language and write a test on Dutch history



and culture in order to obtain residence rights. Learning more about different cultures is thus not as important in the Netherlands as it is in South Africa, except for persons who do not come from the dominant (Dutch) culture, and have to learn about the dominant culture.

4.5 COMPARISON OF THE THREE FACTORS BETWEEN THE TWO GROUPS

After the extraction of the final three factors, it was determined that new constructs emerged which can be related to the components of Cultural Intelligence. These constructs are the following:

- Cultural Identity (the Behaviour construct as set out in the literature);
- Adaptability to a Multi-Cultural Setting (the Motivation construct as set out in the literature); and
- Willingness to learn about Different cultures (the Meta-Cognition construct as set out in the literature).

The final 24 items were subjected to separate t-tests in order to determine the homogeneity of variance between the two groups. The results of the t-tests are discussed in the Sections 4.5.1 to 4.5.3 below.

4.5.1 T-test results for Factor 1: Cultural Identity (Behaviour)

For Factor 1, Cultural Identity, the sample from the Netherlands had a mean of 4.7849 (SD 0.7086) and the South African sample had a mean of 5.0821 (SD 0.5507). This indicates that the majority of respondents from the Netherlands indicated that they often engage in the behavioural component of Cultural Intelligence. In the South African population, the majority of respondents indicated that they always engage in this component of Cultural Intelligence. It can be deduced that there are no significant differences between the two groups in terms of the Cultural Identity/Behavioural component of Cultural Intelligence, as p=0.0001(p>0.0001).



The results of the t-test for Factor 1 are depicted in Table 4.9.

Table 4.9: Separate t-test results for Factor 1

Factor 1: Cultural Identity (Behaviour)	NL	SA
Mean	4.7849	5.0821
Std dev	0.7086	0.5507
Separate T (P-value)	0.0001	

4.5.2 T-test results for Factor 2: Adaptability to a Multi-Cultural Setting (Motivation)

For Factor 2, Adaptability to a Multi-Cultural Setting, the respondents from the Netherlands had a mean of 3.9578 (SD 0.8546) and the South African respondents had a mean of 3.6005 (SD 0.9507). This indicates that the majority of respondents in both sample groups indicated that they sometimes engage in the Motivational component of Cultural Intelligence. It can be deduced that there are no significant differences between the two groups in terms of the Adaptability to a Multi-Cultural Setting/Motivational component of Cultural Intelligence, as p=0.0003 (p>0.0001).

The results of the t-test for Factor 2 are depicted in Table 4.10.

Table 4.10: Separate t-test results for Factor 2

Factor 2: Adaptability to a Multi-cultural Setting	NL	SA
(Motivation)		
Mean	3.9578	3.6005
Std dev	0.8546	0.9507
Separate T (P-value)	0.0003	•



4.5.3 T-test results for Factor 3: Willingness to Learn about Different Cultures (Cognition)

For Factor 3, Willingness to Learn about Different Cultures (Cognition), the respondents from the Netherlands had a mean of 4.2914 (SD 0.8288) and the South African respondents had a mean of 4.1880 (SD 0.9482). This indicates that the majority of respondents in both sample groups indicated that they often engage in the Cognitive component of Cultural Intelligence. It can be deduced that there are no significant differences between the two groups in terms of the Willingness to Learn about Different Cultures/Cognition component of Cultural Intelligence, as p=0.2796 (p>0.0001).

The results of the t-test for Factor 3 are depicted in Table 4.11.

Table 4.11: Separate t-test results for Factor 3

Factor 3: Willingness to Learn about Different	NL	SA
Cultures/Cognition		
Mean	4.2914	4.2880
Std dev	0.8288	0.9482
Separate T (P-value)	0.2796	

4.6 QUALITATIVE ANALYSIS

Section C of the Cultural Intelligence Questionnaire consisted of six open-ended questions intended to create deeper insight into the challenges faced by managers in multi-cultural situations. Responses were coded and the most common themes that emerged from the two sample groups were extracted for comparison through frequency analysis. The general themes that emerged for each item are discussed per question.



Question 38: An employee from another culture invites you for dinner and you know that the food may be different to what you are used to. What do you do?

The majority of the participants who responded to this question indicated that they would accept the invitation if they were invited to dinner by an employee of another culture, as it would be interesting to try new things. However, many respondents from both groups also indicated that they would accept the invitation with some reservations, such as informing the host of their own dietary requirements (allergies, vegetarianism, religious requirements). From the wide variety of reservations and requirements that respondents included for accepting the invitation, it is clear that managers in both groups tend to be cautious about interacting with employees from other cultures at such a personal level as having dinner together.

A very small number of respondents in both groups indicated that they would not accept the invitation or would suggest alternatives.

The responses of the two groups are set out in Table 4.12 (overleaf) and a summary of the main themes that emerged are illustrated in Figure 4.2 and Figure 4.3 (overleaf).

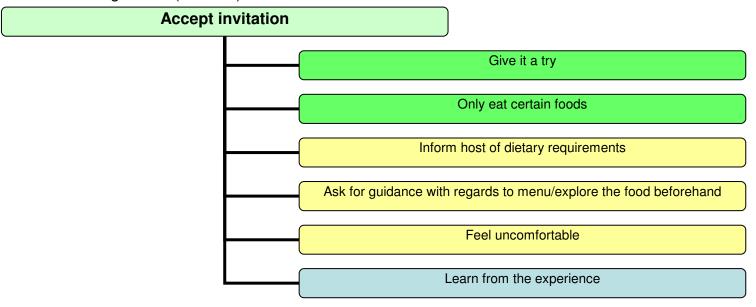


Figure 4.2: Sub-themes emerging from the theme "Accept Invitation"



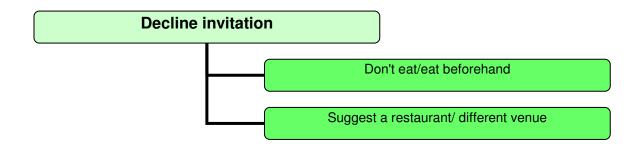


Figure 4.3 Sub-themes emerging from the theme "Decline Invitation"

Table 4.12: Comparison of responses for themes emerging from Question 38

	Verbatim: Question 38						
Accept invitation	Respondents from South Africa	Respondents from the Netherlands					
Give it a try	"If you accept the invitation you must be prepared to eat what is provided. You can reserve the right not to eat anything though. Make sure you eat something before you go so that you have to eat only out of politeness and not hunger." "I would definitely go – as I like trying out new things." "I enjoy trying new things that are different from what we are used to."	"Am excited to try tasty new things!" "Try it and maybe ask how to eat it, or take a look how others are eating it." "I am willing to try and learn and accept different cultural/authentic dishes." "I will try the food."					
Only eat certain foods/eat what I like	"Test the unknown food and eat what tastes good." "There are some dishes I cannot tolerate from other cultures. So I would say yes if I know that the food we will be eating will not be very different from what I am used to eating. I also believe in agreeing to disagree. The dinner is fine if I will be allowed to pick my own choice of dishes." "I prepare myself for the dinner and tell myself that I will eat what I find enjoyable and what I will not like, leave it."	"If you are in Rome, do as the Romans do. I will eat dinner, but if there is something that I really don't want to eat, I will tell the host." "Check the food out and eat it if it looks delicious and healthy".					
Inform host of dietary requirements	"Since I am a vegetarian, I politely inform my host of this, and it always encourages further positive cultural interaction. To date, I have never been put in an uncomfortable position into eating any meat products." "As a Hindu, I do not eat beef and	"I will tell him or her that I'm vegetarian and explain to him or her what I mean by that." "I let him or her know what I'm allergic to and then see what the dinner will consist of."					



	pork. So I will definitely inform my host of this. I will accept the invite and enquire what will be [on] the menu, so that I can also take something along if possible." "Tell them in advance about my food likes' and 'dislikes'. Sometimes propose a meal to be prepared." "If it is for religious purposes, I will request a change. If it is not for religious purposes, I will adapt."	"I take the invitation and explain that I have some other attitudes towards food as I am a vegetarian and I cannot stand palm oil for health reasons. If it is not possible to explain this I sometimes accept meat, even if I am quite a strict vegetarian."
Ask for guidance and further information with regard to menu, table manners and etiquette	"Accept the invitation but declare up front that I might not know what will be on the menu and therefore would require to be guided on the menu and even on the do's and don'ts at the table." "I would find out more details about the menu. If it is food that I have not eaten, I am always willing to try something new. If it is that I know I have tried and I do not like I will notify the host in time."	"If I have time I will probably look up on the internet what their customs are, see if it does not differ extremely from my customs and most of the time I will (partly) adapt to their customs." "Accept the invitation and ask which traditions/manner/behaviour is involved." "Accept the invitation gratefully and enjoy a splendid evening. Ask questions and learn about their eating habits." "Enquire about it and eat it."
	"I would ask my employee in advance about the food. I don't have a problem with other people's diet, as long as the food is nice, why not?"	"Prepare myself a bit by reading about the culture, habits and, of course, types of food."
Decline invitation/Suggest alternatives/Not eat	"Decline in a nice way." "I usually eat before going to a party and excuse myself from eating at a party." "Accept the invite and see dinner as a challenge to make new friends/acquaintances. Suggest a mutual venue that caters for all cultures. Offer to pay the bill." "We have to discuss the type of dish he or she will prepare taking our different cultures into consideration. Maybe, we may end up settling for a restaurant instead of coming over to his or her home."	"I will make an excuse not to go." "Try and read about their cultures and if I really don't like the food I will eat before the time."

Question 39: My most exhilarating moment in having to deal with people from different cultures was:...

The word "exhilarating" was meant to be interpreted in a positive sense. However, in this question, mixed responses were elicited, especially for the respondents in the sample from the Netherlands. It seems that the meaning of



this word was not clear to all the respondents and that it led to misunderstanding.

The majority of participants who responded to this question indicated that the most memorable moments in their interactions resulted from moments where mutual understanding was established between two cultures. Other important themes that emerged were related to experiences in the workplace through teamwork with people from different cultures and education-related experiences.

It was interesting that the work-related experiences indicated by the two sets of respondents differed significantly between the two groups. The South African respondents tended to relate these experiences to working with people from different cultures within multi-cultural teams and teambuilding events. The respondents from the Netherlands, on the other hand, do not even mention participation in teambuilding events, and are much more focused on business results such as negotiating and achieving success in multi-national work teams.

Furthermore, it was also noteworthy that the respondents from the Netherlands mention participating in traditional rituals much more often than the South African respondents do. This is an interesting phenomenon because one would expect managers living and working in Africa to be much more involved in ethnic cultural events than one would expect from European respondents.

The responses of the two groups are discussed in Table 4.14 (overleaf) and a summary of the main themes that emerged is illustrated in Figure 4.4 (overleaf).



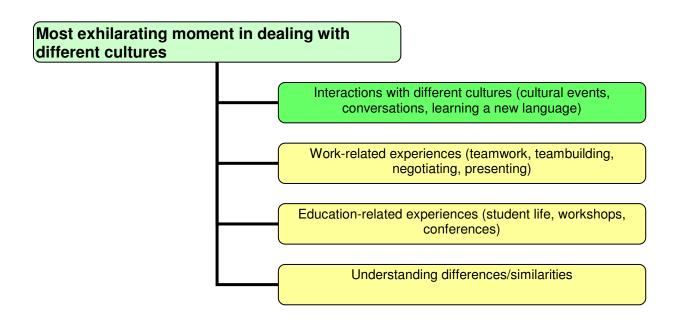


Figure 4.4 Sub-themes emerging from the theme "Most exhilarating moment in dealing with different cultures"

Table 4.13: Comparison of responses for themes emerging from Question 39*

Verbatim: Question 39		
Most exhilarating moment	Respondents from South Africa	Respondents from the Netherlands
Interactions with different cultures (cultural events,	"When I had to give a speech at a sub- ordinate's wedding."	"Attending the ritual butchering of a lamb."
conversations, language barriers)	"Attending a funeral and eating their food that tasted totally different."	"Joining the slaughter event in Morocco together with Moroccan families."
	"When I visited Austria. I found the people extremely friendly. A lot of them enquired about my culture, which was	"To learn about a traditional African wedding and to see the photos."
	great!"	"Having dinner in Ghana. There was nothing left on the plates after eating
	"When in Canada I found out that diversity to them is not the same as in	chicken and fish. Even no bones."
	SA. They have gone beyond race and gender and are more in cultural understanding."	"Inviting some Moroccan friends over during Ramadan for an iftar (breaking of the fasting at evening) and each making something typical for his or her culture.
	"When they speak their language that I don't understand."	So I made some typical Dutch dishes which they weren't used to in Ramadan!
	"Trying to communicate and learn their language."	"Being alone with 10 Mongolians in a 'ge while having to drink and eat tradition



	T	
	"Language barrier. In most cases if you are dealing with a group of people from the same culture they tend to speak their language and you end up not understanding anything and feel left out."	food and drink to establish good relations for my company." "Communicating with a foreign language." "Seeing the light in their eyes when they understand what I am trying to say, without having the same language." "When I did not understand what someone meant with 'my mother passed away' It was a lack of my English."
Work-related experiences (teamwork, teambuilding, negotiating, presenting)	"It was a presentation I made while in the UK before a group of people from different countries." "Addressing a room full of Pakistani bankers."	"Trying to comfort a shaking Nepali, who had to present something on insurance business planning, he already visited 5 temples in the morning before the meeting started."
	"When I was a key negotiator during a strike. Meeting the people at their level of understanding and successfully convincing them to see things my way and understand from my perspective and as such change their mindset was great." "Forcing a 'handshake' deal to sign a contract with client."	"Making a deal with a Turkish major. Working together on an international search for Marketing Directors in several countries." "Leading the marketing department at TELE BARTA Limited in Dhaka with some 30 people, all Muslim and Bangladeshis, except for myself and one Dutch colleague."
	"We went out as a group for a teambuilding and I learnt a lot from other cultures such as Portuguese, Zulus, Afrikaans, Xhosas etc."	
Education-related experiences (student life, workshops, conferences)	"When I first started my career in 2001 I was a student." "While completing my MBA at NMMU in 2006." "In my Matric year, we had a student groups selected from different schools, six different cultures, and we went on a camping weekend. We all enjoyed—and it was great fun" "Training black athletes and realising that they have the same desires in terms of recognition, success, dignity and group feelings or belonging as their white counterparts." "Coaching young engineers that started working at SASOL after completing their university degrees."	"Going to an MBA programme with 40+ nationalities and having to work with all of them during the years; and later on working with an oil and gas company where the team was composed of about 12 nationalities within a 25 person team." "During a training in Germany. This looks such a small step to our neighbours but I got aware that even this small step has huge differences. It was fun and great to learn from them about me looking into the world." "A dance workshop with Aboriginals in Central Australia." "Working as an HR Consultant at an international company. Explaining Dutch employment law to managers from other countries can be challenging."
	our people from across the cultural spectrum getting on with each other	



	and enjoying each other's company as well as adding their 'flavour' to the mix."	
Understanding differences/similarities	"Understanding where they come from and why they do things differently from us."	"The different behaviours of the different cultures. Different ways of doing things".
	"Finding that in more ways than one we tend to be similar in some practices and the values are no different."	"The actual large differences between countries close to the Netherlands, i.e. the UK, Germany and Belgium!"
	"When we all celebrate our differences and making that diversity to the betterment of everyone."	"Pakistanis who had just become parents, they were Muslim, but had very different ways of doing things in comparison to me (I am also Muslim)."
	"That we are different yet very similar, we all want to be treated with respect and understanding."	"Seeing that underneath, everybody is the same."
	"Realising that the gentleman I was dealing with truly saw things the way I did (no pretensions)."	"Understanding their culture and background, learning about simple things that affect their everyday lives."

^{*}Responses that were interpreted in a negative sense are highlighted.

Question 40: My most embarrassing moment in having to deal with people from different cultures was:...

The majority of participants who responded to this question indicated that the most embarrassing moments in their interactions resulted from participation in cultural events such as dinners or other social gatherings. Further causes of embarrassment that they mentioned were being discriminated against, especially on the basis of gender and, in the case of the South African sample, racial discrimination. Respondents also indicated that misunderstandings due to language barriers, lack of knowledge about cultural habits and general insensitivity can lead to embarrassing situations.

The main themes that emerged from this question are illustrated in Figure 4.5 (overleaf). A comparison of the sub-themes and responses of the two groups is set out in Table 4.14 (overleaf).



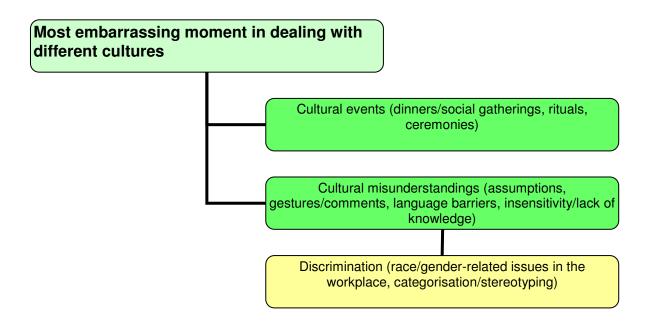


Figure 4.5: Sub-themes emerging from the theme "Most embarrassing moment in dealing with different cultures"

Table 4.14: Comparison of responses for themes emerging from Question 40

Verbatim: Question 40		
Most embarrassing moment	Respondents from South Africa	Respondents from the Netherlands
Cultural events (dinners/social gatherings, rituals, ceremonies)	"Participating in a traditional dance routine."	"When I had to sing in front of a Chinese audience when I was in China."
	"Attending a celebration ceremony - the opening of a wellness centre at Motherwell, PE."	"Exchanging Christmas presents with Muslims and Hindus."
	"Occasion where I did not understand the required protocols at a wedding."	"When at a wedding and as a man engaged to be married, relatives of young unmarried women started matching me with their children,
	"I got sick in front of everyone, when I was offered to drink 'sorghum' beer with elders."	grand-children or nieces for rather obvious purposes."
	"Hosting dinner and forgetting to cater for non-pork eaters!"	"When I was on a diet, and had to refuse a tapas dinner from a Spanish colleague. Even when explaining to him why I was not permitted to eat I felt embarrassed with the situation."
		"When I put my spoon and fork on the wrong position when I was finished with eating."



Cultural misunderstandings
(assumptions,
gestures/comments,
language barriers,
insensitivity/lack of
knowledge)

"When you assume something and it happens to be opposite."

"Meeting "Mr Potgieter" and I was expecting to meet a white person."

"Failing to follow the greeting procedure which involves kissing the person welcoming you when I was first to enter a room where everyone else kissed the host on the cheek on entry to the room."

"A friend of mine introduced me to his mother and I addressed her as aunt because in my culture any person at the same age as my parents I should address them likewise, in this case the lady was offended."

"Getting cross due to lack of knowledge."

"When attending workshops with people from different cultures some tend to speak their own language and pretend that they don't notice your presence. I tend to think they are making a fool out of me."

"Trying to understand them because they don't speak English.

"Misunderstandings due to differences in habits. In Norway for example, I wore shoes inside the apartment of my friend. She said 'Jacquie, your shoes'. I was like, yeah these are my winter shoes. I was totally unaware of the local habit to always remove your shoes in the house."

"When my Greek agent kissed me on the cheeks. It is a Greek custom to kiss your friends on the cheek (I am referring to friendly relationships between men)."

"Not understanding their culture."

"Language barriers."

"Saying something that meant something else. 'Je wijf is aan de lijn' (your wife is on the line)... and realizing that the translation into Dutch from English wasn't the same."

Discrimination (race/gender- related issues in the workplace, categorisation/stereotyping)

"Using conversation-stopping remarks (idioms) that have no specific race meaning in our normal conversation in group regard and having to explain/excuse this when it offends people from other races. Eg. Come on Boytjies – let's do it / He is a white man."

"Working in a racial environment late 1980s – management all white who had procedures and policies which affected Blacks, which I did not agree on, but I had to work in order to keep my job."

"When I was told in a first meeting with a group of black men that they don't listen to a woman."

"When I go to a shop and they think that I am going to steal because I am black." "Where people from different cultures see the woman as the lesser gender and treat me the same way!!"

"Being seen by people in the Middle East as 'strange' because I am 36 years old and not yet married....and having to justify a trip I made to Israel (as a tourist) to a Muslim team who saw me as a 'traitor' after having visited that country."

"During the economic crisis in Asia declaring that the biggest mistake of Indonesia was becoming independent. One of my co-workers came from Indonesia! I never apologised, she interpreted it as a 'discussion breaker' for opening people and making them express their opinion."

"All the times when I presume that a person will do this or that and I see that I was stereotyping again (e.g. I presume that a Moroccan girl has been in a Mosque, or that a Moroccan colleague will be on a vacation in



	Morocco for several weeks, as she was going on holiday in the Netherlands for two weeks."
	"Making assumptions and stereotyping."

Question 41: What are your goals as a manager of a multi-cultural group?

The participants of both groups that responded to this question indicated two main goals for managing multi-cultural groups. Respondents indicated that their first and foremost goal for a multi-cultural team is to achieve results, regardless of culture and to get the team to work together to achieve organisational goals. Secondary to achieving results, the managers of both groups indicated that they would like to create an atmosphere of mutual respect and understanding.

The main themes that emerged from this question are illustrated in Figure 4.6. A comparison of the responses for the two groups is summarised in greater detail in Table 4.15 (overleaf).

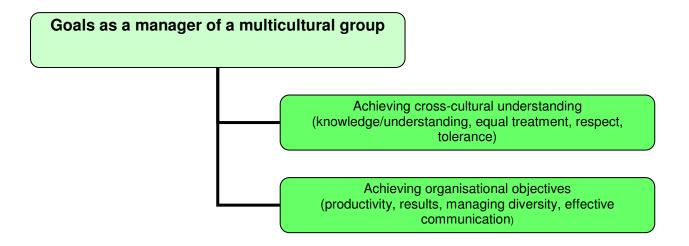


Figure 4.6: Sub-themes emerging from the theme "Goals as a manager of a multi-cultural group"



Table 4.15: Comparison of responses for themes emerging from Question 41

	Verbatim: Question 40		
	Respondents from South Africa	Respondents from the Netherlands	
Achieving cross-cultural understanding (knowledge/understanding, equal treatment, respect, tolerance)	"My goals are to learn about different cultures so that they can work more effectively within multi-cultural groups."	"Understanding others' backgrounds in order to treat others as true human beings and to have an understanding for their way of doing things. It will reduce conflict to a large extent."	
	"Teamwork, learn from one another. To ensure that my group has enough knowledge (cultural) about each other so they can understand one another's behaviour."	"Understanding their cultures more and to understand the reason behind some behaviour."	
	"To ensure respect for the different cultures – however, not to have it influence the working environment."	"Unity, respect of each other's difference. All are different yet equal." "Creating respect amongst co-workers	
	"To respect, and the group's cultures must be taken into consideration." "Treat everyone equally. Ensure that	"To treat everybody fairly and to share in their successes and assist if they are not coping with specific tasks."	
	people who have better people skills influence other team members." "To treat people equally and fairly, but	"To treat people as equals in all regards."	
	keeping cultural likes and dislikes in mind."		
Achieving organisational objectives	"Productivity/results."	"Achieving the company goals whilst everybody is helping."	
(productivity, results, managing diversity, effective communication)	"To get every individual to become productive and become part of the team."	"Maximum productivity, collaboration and achieve the goal and deliverables in time and within budget."	
	"I believe that although cultural differences have some influence in the workplace, we need to put them to one side and not use them as an excuse. Get the work done."	"We pursue the same goals. It doesn't matter whether someone is either black or white or green or yellow."	
	"To create an environment that stimulates reward and recognition regardless of cultural grouping."	"Achieving the best quality result for our clients, while maintaining a bond within the group so that everybody feels responsible for the result."	
	"To get people to meet objectives no matter where they come from."	"To get the job done as a team. In that order."	
	"To set an environment where everybody is free to express ideas, and fully participate – feel secure to	"To get the job done together." "To get ALL members of different groups	
	make mistakes." "To ensure clarity in communication and interaction." "Diversity strengthens groups and	"To leverage the team's international and cultural strengths, so that we are a team that is greater than the sum of its parts."	



should be encouraged. Take into consideration different requirements for different cultures. Ensure the understanding of the different cultures by all in the group."

"To achieve the most out of every member based on our diversity. To yet unite our diverse culture to see them as one fragmented system."

"Managing the diversity, shifting mental models."

"To leverage the diversity and value of difference in the group – to create an inclusive atmosphere."

"Value diversity and let it work for me."

"That our differences are our strengths."

Question 42: Are you actively trying to learn about other cultures? How?

The majority of respondents in both sample groups indicated that they apply active learning methods in order to try to learn about other cultures. Respondents indicated that they mainly learn about other cultures through direct interactions such as participation in cultural events and travelling. Furthermore, television, radio and the Internet serve as other important sources for learning about cultures. A large number of respondents also indicated that they are making an effort to learn a new language. Other forms of active learning that respondents indicated were attending workshops or training and reading about other cultures. A small minority of respondents indicated that they are not attempting to learn about new cultures, or that they are passively learning.

The main themes that emerged from this question are illustrated in Figure 4.7 (overleaf). A comparison of the responses for the two groups is summarised in greater detail in Table 4.16 (overleaf).



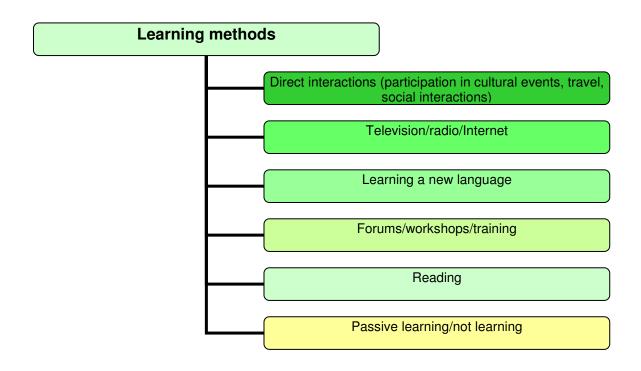


Figure 4.7: Sub-themes emerging from the theme "Learning methods"

Table 4.16: Comparison of responses for themes emerging from Question 42

	Verbatim: Question 42	
	Respondents from South Africa	Respondents from the Netherlands
Direct interactions (participation in cultural events, travel, social interactions)	"Yes. Travel. Participate in various holidays/events of different cultures." "Hold team meetings in different countries. Understand key priorities/challenges of staff in different countries." "Yes, Travelling to other regions." "Yes. Travel. Participate in various holidays/events of different cultures." "Hold team meetings in different countries." "Not actively, learning through travelling. Conversations with friends." "Yes! Social interaction, Reading."	"Sure. By visiting other countries, especially in Africa and Asia and by reading about other cultures. At home I visit cultural events and participate in activities." "I do actively learn about other cultures by reading books on cultures, talking, dining and celebrating with people from other cultures, by travelling and by watching movies and TV-channels and listening to music from other cultures (so no Hollywood movies but Bollywood and Iranian etc.)" "By showing interest in people from other cultures, trying to taste the other cultures whilst visiting other countries." "When I have time: yes; mainly by travelling."



		"Travelling, asking questions, making
		friends, travelling."
		"Yes, mostly by asking people questions, visiting places, travelling, taking the initiative to become friends and observe lifestyles."
Television/radio/Internet	"Watch documentaries on TV about other cultures."	"Documentaries on TV/books Yes, sometimes, read the papers, television and travel around."
	"It may not be direct; I try to listen to radio station or read newspaper, etc. Watching T.V."	"No, passively I do, through travel and television."
	"Watching special programmes/travel channel.	"Yes, reading, the Internet."
	Reading."	"Yes, research on Internet, reading."
	"Reading, e-communities, dating women from other cultures, learning new languages, field trips – active engagement in conversations."	
Learning a new language	"By learning the basic words to communicate in their own language I am learning to speak Sepedi."	"Yes, more their languages and how they feel about themselves working in a certain organisation."
	"I am not that actively learning about other cultures, would like to become more active, huge advantage. My maid is busy teaching me Zulu."	"Trying to learn at least some of their language. Before visiting a foreign country I read about the country, population, geography and habits."
		"Yes, a language."
Forums/workshops/training	"Listening, reading, workshops, clear communication."	"By studying in foreign countries."
	"Yes, we've created a diversity forum within a few mates – where each of us presents and speaks on views from our different cultural backgrounds."	"By maintaining contact with people from other cultural backgrounds; inviting them in my team; being active on an international business level; teaching cross-cultural awareness to other people."
	"Yes, I have chosen a course elective towards my completion of my MBA in 2006."	
Reading	"Yes, I will read about other cultures, will always engage people from other cultures to get to know	"Yes, reading and questioning experienced people."
	more about their culture."	"Reading, talking to all kinds of people when I'm travelling."
	"Ask questions. Read about it. Get it from the person from a different culture."	"Yes, reading and talking to people."
		"Yes, I speak with people, I read about other cultures, etc."



Passive learning/not learning

"I am fascinated by other cultures and beliefs. I do not necessary learn or study into this but still enjoy and understand why people have different cultures."

"No. Being alive in these times it is very fashionable to learn about other cultures. We see it in the books we read, in the TV we watch and the destinations we choose to travel to. I don't think I have to 'actively' learn about cultures."

"Not particularly. I will use the opportunities when they arise, but seldom seek them out."

"Sometimes, when an occasion requires it, or when I am confronted with information, so it is not really active."

"No, passively I do, through travel and television."

"Not really, but I do like to travel all over the world."

Question 43: In having to deal with people from different cultures I would like to have answers on the following:...

Two main themes emerged from this question, namely questions regarding correct social conduct and questions regarding perceptions of culture. The majority of respondents in both samples indicated that they would like to have answers on certain specific questions related to the correct forms of social conduct such as the do's and don'ts of a particular culture, correct protocol in terms of greetings and signs of respect and forms offence and taboos. Furthermore, respondents indicated that it is important for them to find out what other cultures think of them and their own culture, stereotypes and to gain deeper insight into the reasons why other cultures behave in certain ways.

The main themes that emerged from this question are illustrated in Figure 4.8 (overleaf). A comparison of the responses for the two groups is summarised in Table 4.17 (overleaf).



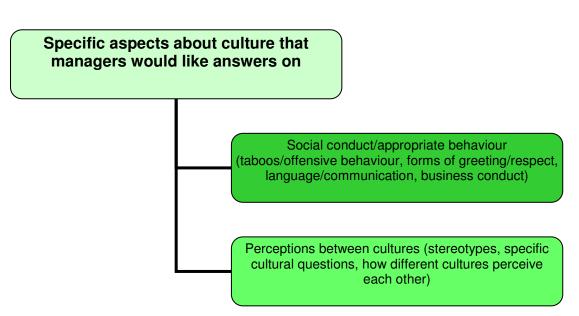


Figure 4.8: Sub-themes emerging from the theme "Specific aspects about culture that managers would like answers on"

Table 4.17: Comparison of responses for themes emerging from Question 43

Verbatim: Question 43									
	Respondents from South Africa	Respondents from the Netherlands							
Social conduct/appropriate behaviour	"Business approaches of different cultures."	"In what way do people of a specific cultural background act differently within a corporate/professional setting from							
(taboos/offensive behaviour, forms of greetings/respect,	"Funeral behaviour, wedding ceremonies and celebration."	how they would act in non-professional settings? In other words, do people leave some of their cultural background							
language/communication, business conduct)	"Approach for handling complex business problems."	behind when acting in professional environments?"							
	"What offends them, what typical rules/customs are in their culture that will affect business? What are their expectations (cultural)?"	"I will try to get some information about to do's and don'ts, plus the general working attitude."							
	"What motivates people in different cultures? What is offensive? What is the best way to get individuals to open up and communicate be they pleased or displeased by certain actions?	"What is typical for their culture, so I will understand from where they come from and the reasons why they act or say things."							
	What stimulates individuals to think and develop a mind that enquires?"	"Basics like prayer time, anything relating to personal interaction, work schedules, food and drink, softer issues							
	"Their traditions and beliefs."	like sub-ordination and the relative ability of people from a different culture							
	"For Cultural Intelligence sake: beliefs, standards, background, struggles,	to deal with the workplace."							
	good times, childhood, hobbies."	"Customs, rituals, socially accepted behaviours, socially unaccepted							



	"Religious beliefs of different cultures."	behaviours."
	"Greetings, exchanges of appreciation, thanks, etc. Traditions, History."	"Traditions, beliefs, customs."
	"What offends the culture? What delights the culture? How to greet properly? How to display respect?"	
Perceptions between cultures (stereotypes, specific cultural	"Mainly their perceptions about me, and the issues at hand."	"What are the biggest differences between our cultures?
questions, how different cultures perceive each	"How they perceive multi-culturalism?"	"How they feel about me or a situation, i.e. reciprocal cross-cultural
other)	"How hey perceive me and my values? Ease of accepting and working with me? Whether to treat/approach them fairly?"	communication, and in-depth professional contact, on the actual situation, from their point of view" . "Why do you do what you do?"
	"How do you experience me as a "representative" of my culture? What is your frame of reference when looking at the world? Do you feel like an equal citizen in our country? What are the most important things that you hold dear and are very proud of in your culture?"	"What do they know about my culture? What kind of research has been done on diversity in the workplace."
	"Why Venda women bow to men, why Sotho speaking people talk so loud?"	

From the qualitative analysis it can be seen that certain universal themes emerged from all the open-ended questions. The most important themes that emerged universally are the following:

- participating in multi-cultural events through attending dinners, social gatherings, traditional rituals and travel;
- establishing an atmosphere of mutual understanding and acceptance among team members from different cultures and learning from each other's differences;
- gaining insight and understanding into the business practices of a particular culture, and achieving business results regardless of cultural differences; and
- learning and gaining insight and understanding of different cultures through observation, interaction and the media.



4.7 SUMMARY AND CONCLUDING REMARKS

The homogeneity of the two groups was established in terms of age, gender, level of education/qualification, organisational level and years worked. Chi-square tests indicated that the two groups are only significantly similar in terms of gender and level in the organisation.

The Cultural Intelligence Questionnaire was subjected to exploratory factor analysis in order to compare the results obtained in South Africa and in the Netherlands. Various iterations of exploratory factor analysis indicated the primary factors for each of the components of Cultural Intelligence. The final factor analysis yielded a questionnaire consisting of 24 items and three factors for both sample populations.

The *first factor* measured by the questionnaire was named "Cultural Identity", and is related to the Behavioural component of Cultural Intelligence, as described in the literature review. This factor yielded a reliability coefficient of 0.746 for the South African sample, and accounted for 37.77% of the variance in this sample. For the sample from the Netherlands, a reliability coefficient of 0.841 was obtained, accounting for 44.81% of the variance.

The *second factor* measured by the questionnaire was named "Adaptability to a Multi-Cultural Setting" and is related to the Motivation/Mindfulness component of Cultural Intelligence as described in the literature review. This factor yielded a reliability coefficient of 0.640 for the South African sample and accounted for 24.87% of the variance. For the sample from the Netherlands, a reliability coefficient of 0.719 was obtained, accounting for 24.71% of the variance.

The *third factor* measured by the questionnaire was named "Willingness to learn about Different cultures". This factor is closely related to the Cultural Strategic Thinking/Meta-cognition component of Cultural Intelligence as described in the literature. This factor yielded a reliability coefficient of 0.407 for the South African sample and accounted for 10.65% of the variance. For the sample from



the Netherlands, a reliability coefficient of 0.474 was obtained, accounting for 15.50% of the variance.

From the final exploratory factor analysis, it can be seen that the three components of Cultural Intelligence are present in both sample groups. In order to compare the similarities and differences between the two groups, separate t-tests were conducted. The separate t-tests indicated that there were no significant differences between the two groups in terms of any of the three factors measured (p>0.0001).

Items 26 and 37 loaded on different factors, but were retained in the final factor analysis due to the fact that they support the underlying construct. Item 26 loaded on Factor 1 for the sample from the Netherlands and on Factor 3 for the South African sample. Item 37 loaded on Factor 3 for the South African sample and had a negative loading on Factor 3 for the sample from the Netherlands. The differences of interpretation between the two groups can be related to the different socio-political situations that managers are faced with in the two countries.



CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

Much research has been done in the field of intelligence and culture, but very little has been done to combine these two concepts into a holistic concept. The term "Cultural Intelligence" aims to fill the gap in multiple intelligence theory, by taking into consideration the degree to which a person is able to adjust and interact successfully in culturally different situations.

The world is rapidly becoming smaller, and managers are increasingly expected to deal with diversity successfully, whether they are working abroad or as local managers of a diverse firm. A question that arises from the concept of Cultural Intelligence is whether it is not just a new name for an existing concept, such as Cross-Cultural Competence.

For this reason, it is important to consider what elements constitute Cultural Intelligence and to determine how effectively these elements can be generalised to managers across and within cultures.

The final chapter of the study aims to outline the conclusions drawn from the study and to make recommendations for future research.

5.2 ACHIEVEMENT OF THE STUDY OBJECTIVES

The *aim of this study* was to explore the validity of the Cultural Intelligence measurement instrument that was developed during an earlier study by Du Plessis *et al.* (2007), by comparing the results of the questionnaire administered to two samples, one of managers in South Africa and one of managers in the Netherlands. The perceptions of the two groups toward the construct were also



determined by means of qualitative analysis in order to explore trends and patterns in their opinions and perceptions.

A comprehensive literature review was conducted in order to determine the underlying theoretical constructs of the concept "Cultural Intelligence". Cultural Intelligence is a very new concept, and very little literature is available regarding the construct. In order to determine what this concept entails, a deeper investigation into previous work on culture (such as the work of Hofstede and Trompenaars) was undertaken. Concepts related to Cultural Intelligence, such as intelligence and Cross-Cultural Competence, were also explored in order to obtain a more holistic view of the concept of Cultural Intelligence.

Cross-Cultural Competence is the term used to describe the competencies related to effective cross-cultural interactions, such as relational abilities, cultural sensitivity, linguistic ability, the ability to handle stress, communication skills, respect, empathy and flexibility (Harris & Kumra, 2000; Jordan & Cartwright, 1998).

According to the literature, Cultural Intelligence consists of three components, namely Cognition, Motivation and Behaviour (Early & Ang, 2003; Early *et al.*, 2006; Thomas & Inkson, 2003).

Comparing these three concepts to the competencies and skills reflected by Cross-Cultural Competence, it can be seen that these competencies are also reflected by the three levels of Cultural Intelligence. From the literature it was deduced that Cross-Cultural Competence and Cultural Intelligence are two related concepts that can be used interchangeably, but that Cultural Intelligence is a broader concept than Cross-Cultural Competence, which encompasses more than specific competencies needed for success. Cross-Cultural Competence is thus both a sub-component and a result of Cultural Intelligence.

Cultural Intelligence can be defined as a person's ability to adapt to new cultural settings and the capability to deal effectively with those who do not share the person's own cultural background and understanding (Early & Ang, 2003;



Early et al., 2006; Thomas & Inkson, 2003). This concept thus deals with a person's ability to change and adapt comfortably to new cultural situations and to read the finer nuances of a culture to ensure business success. The three components of Cultural Intelligence are also referred to as the mind, heart and hands of Cultural Intelligence, and forms the basis of the Cultural Intelligence Questionnaire that was developed by Du Plessis et al. (2007). The three components of Cultural Intelligence or Cultural Competence derived from the South African study (Du Plessis et al., 2007) are Cultural Identity, Adaptability to a multi-cultural setting and Willingness to learn about different cultures. These components are related to the original components of Cultural Intelligence (Early et al., 2006), namely motivation, behaviour and meta-cognition/cultural strategic thinking.

This study was conducted within the framework of the Social Sciences, using an exploratory research design consisting of both qualitative and quantitative methods of gathering data. Primary data was obtained for the South African sample from a previous study done by Du Plessis *et al.* (2007) at the University of Pretoria. The data was then reinterpreted for the purposes of comparison.

For the sample from the Netherlands, primary data was obtained through the electronic administration of the Cultural Intelligence Questionnaire. The process of achieving the aim of the study, namely the comparison of the findings of the Cultural Intelligence Questionnaire regarding managers in South Africa and managers in the Netherlands is summarised below.

5.3 EXPLORATORY FACTOR ANALYSIS AND COMPARISON OF GROUPS

The relative level of homogeneity between the two groups was determined by means of chi-square tests. It was determined that the two groups were significantly similar in terms of gender and level in the organisation. It was noted that the South African respondents were much older, with relatively fewer years of service than the respondents in the Netherlands, where the managers were younger, with longer years of service.



With regard to the years of service, it can be asserted that the South African labour market is not particularly stable at present. Due to the high level of competition for skilled labour in the country, managers are not inclined to stay in one organisation for a long time. In the Netherlands, the competition for skilled managers is not as high as in South Africa, and the labour market is much more stable, with the result that managers tend to stay in one organisation for longer.

The Cultural Intelligence Questionnaire that was applied in the South African context was subjected to exploratory factor analysis prior to this replication study. The exploratory factor analysis on this dataset resulted in a 24-item questionnaire with three dominant factors.

In order to determine the degree to which the instrument could be used across cultures, it was decided to replicate the study with managers in the Netherlands. The original instrument that was applied in the South African context was used for the sample group in the Netherlands, with minor modifications (see Section 3.4). Data was collected through online administration of the Cultural Intelligence Questionnaire, and managers based in the Netherlands from various experience levels and economic sectors were approached to participate in the study.

After various iterations, the final exploratory factor analysis for the Netherlands sample yielded an identical factor structure to that of the South African population, with a 24-item questionnaire consisting of three factors.

Two items did not load similarly for the two groups (Items 26 and 37). This difference can be related to a difference in interpretation of these items between the two groups. These two items are core to the underlying construct and were therefore not omitted from the final analysis.

From the results of the factor analysis, it is clear that the Cultural Intelligence Questionnaire did in fact measure the same constructs across different cultures, and that the final questionnaire had a relatively high level of reliability on the various factors.



The items that represented each of the three factors were evaluated, and after careful deliberation, they were labelled as follows:

- Factor 1: Cultural Identity (adapted from Behaviour);
- Factor 2: Adaptability to a Multi-Cultural Setting (adapted from Motivation);
 and
- Factor 3: Willingness to Learn about Different Cultures (adapted from Metacognition).

Separate t-tests were then conducted in order to compare the two groups in terms of each of the three factors that were measured by the Cultural Intelligence Questionnaire.

From the t-tests it can be seen that there were no significant differences between the two groups for any of the three factors measured. The two groups both scored high in terms of "Cultural Identity" and "Willingness to learn about other cultures" and moderately in terms of "Adaptability to multi-cultural settings".

Themes that emerged from the open-ended questions in the questionnaire were determined by means of frequency analysis for both samples. From the responses, it can be seen that the majority of managers in both samples had similar needs and opinions related to cross-cultural interactions and learning about cultures. It was noted that managers in both samples indicated that achieving business objectives should take preference above intercultural differences.

In conclusion, it can be seen that the two groups are very similar in their views and experiences of cross-cultural interactions and that Cultural Intelligence is a relatively stable concept across and between cultures. Although the Cultural Intelligence Questionnaire is still in a developmental phase, it has a high level of construct validity between different cultural groupings. The construct for both sample groups as a whole seems to load on 24 items with three dominant



factors that account for 73.28% of the variance for the South African data, and 85.02% of the variance for the data collected in the Netherlands.

5.4 LIMITATIONS OF THE STUDY

5.4.1 Sample

A non-probability sampling method was used to obtain data. The limitations of this method are discussed in Section 5.4.1. It is important to remember that the samples used for this exploratory study may not be representative of the entire populations that they present, and that results may thus not be generalisable. However, the aim of this study was to explain, explore and compare the presence of a certain construct across cultures, in order to develop hypotheses for future research. Thus the risks associated with this type of sampling method were minimised.

The sample size for the sample from the Netherlands was relatively small in comparison to the South African sample. The result of these differences in sample size is that further analysis of the data (using techniques such as structural equation modelling) cannot be implemented for comparative analysis purposes. The size of the two samples was, however, adequate for exploratory factor analysis in accordance with the guidelines for sample size as set out by Guadagnoli and Velicer (1988).

5.4.2 Homogeneity of variances

One of the key considerations in cross-cultural research is the degree of equivalence between the two samples involved in the study. The two groups were compared in terms age, gender, years of service, organisational level and level of education. From this comparison, it was found that the two groups were only significantly homogenous in terms of gender and organisational level. The differences between the groups imply that the accuracy of the comparisons that were drawn can be questioned. A process of matching can be used in order to equate the two sample groups in terms of biographical variables. However, it



was decided not to follow this approach and to leave samples as they are, for the purposes of future comparison.

5.4.3 Administration of the questionnaire/cultural barriers

The Cultural Intelligence Questionnaire was administered in a pencil-and-paper format for the South African sample, and this meant that a much higher response rate was obtained from the South African sample than for the group from the Netherlands.

An online equivalent of the Cultural Intelligence Questionnaire was developed for use in the Netherlands. The link to the questionnaire and the consent form were e-mailed to potential respondents.

Although this method provided the researcher with access to a much larger pool of respondents, the response rate was quite low. The online application of the questionnaire had a number of drawbacks that hampered the response rate. Firstly, there was a lack of direct interaction between the researcher and respondents, and this depersonalisation between the researcher and the respondent reduced the number of responses. Secondly, some of the respondents experienced problems with accessing the questionnaire through the link that was e-mailed to them, thus leading to a higher non-response rate. Thirdly, the original questionnaire (including both the quantitative and qualitative sections) was quite long (43 questions), which caused respondents to lose interest in the questionnaire and not complete it. This problem was compounded by the fact that respondents could not save their responses and return to the questionnaire to complete it at a later time.

In order to counter some of these problems, the researcher sent out reminders to respondents. This approach was not sufficient to overcome all the problems and should be kept in mind in future research.

Further limitations of the study can be ascribed to the fact that the Cultural Intelligence Questionnaire was developed in a South African context, by South African researchers. This questionnaire was then directly applied to a sample in



the Netherlands with only minor changes to the biographical information in the questionnaire to suit the Dutch schooling system. Several words in the questionnaire were therefore not very clear to respondents, which led to confusion and misinterpretation.

5.5 RECOMMENDATIONS FOR FUTURE RESEARCH

This study aimed to explore the concept of Cultural Intelligence in two cultures by means of a survey questionnaire. The focus of the study was not on validation of the questionnaire, but on the development of a measurement instrument. Furthermore, the intention was the comparison of two groups in order to determine the existence of a concept such as cultural intelligence. The following recommendations can be made for future research:

- the development of a measurement scale that aims to measure a person's level of cultural intelligence that would provide information on training and development needs;
- the investigation of the wording of the instrument to ensure that it is not culture-specific or ambiguous to prevent misunderstanding and misinterpretation when applied to settings; and
- an analysis of other cultural groups using the Cultural Intelligence Questionnaire for further refinement as a global assessment tool.

5.6 CLOSING REMARKS ON THE CONTRIBUTION MADE BY THE STUDY

The purpose of any research project is to make a contribution to the field, and if no contribution is made, there is no sense in doing a project. This study contributes particularly to the fields of cross-cultural research and diversity management in various ways.

A very important question that was raised by this study was related to the existence of a concept such as "Cultural Intelligence".



The results obtained from the survey questionnaire confirmed the existence of the concept and established its generalisability across different countries and cultures.

Furthermore, the survey questionnaire that was developed in this study will prove useful in determining the levels of Cultural Intelligence of managers in different organisational settings. This instrument will prove to be a valuable selection tool in the process of employing global managers, and will also provide insight into the developmental needs of managers in multi-cultural settings.

Through this study, greater insight was gained into a relatively new concept in the field, and a valuable contribution was made in establishing the credibility of the concept. The results from the qualitative analysis of this study also provided very useful information with regard to the training needs of managers who work in multi-cultural settings. By refining these needs, valuable and relevant training programmes can be developed that address the needs of and challenges faced by managers in a globalised workplace.

It is of the utmost importance to realise that all people are unique and different, and that those differences are also relevant to intercultural interaction. When people try to think globally and act locally, culture plays an essential role. The results of this study will help to promote awareness of the need to be culturally relevant within organisations, and provide organisations and individuals with valuable insight into how they can increase the success of intercultural interactions, as well as raise awareness of the need for such sensitivity.



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APPENDIX A CULTURAL INTELLIGENCE QUESTIONNAIRE – VERSION USED IN SOUTH AFRICA



APPENDIX B CULTURAL INTELLIGENCE QUESTIONNAIRE – VERSION USED IN THE NETHERLANDS



Dear Respondent,

The concept of "cultural intelligence" in a South African context is believed to be of utmost importance, due to our cultural diversity. It is also seen as a success factor for doing global business.

This is part of an assignment, in "Managing and Leading People" for enrolled MBA students at the University of Pretoria, under the guidance of Dr Yvonne du Plessis.

The aim of this questionnaire is to indicate the level of "Cultural Intelligence" of people in a managerial or supervisory capacity. In completing this questionnaire you are contributing to the body of knowledge in organisational behaviour, hence it is not a questionnaire to indicate your competence or intellect.

Please **complete all the sections** in the questionnaire to the best of your ability, which is anonymous. Then hand your completed questionnaire to the respective MBA candidate on the date negotiated.

We thank you for your valuable time and willingness to participate.



Section A: Biographical information

Please provide the following information about yourself by marking block with the relevant answer.

1. Age					
25 years or less (01)	26 - 30 years (02)	31 - 35 years	(03)	36-40 years	(04)
41 - 45 years (05	46-50 years (06)	51-55 years	(07)	Over 55 years	(08)
2. Gender	Male (01)	Female	(02)		
3. The economic sector	or in which you are w	orking:			
(Mark with an x in the op	oen block next to the a	opropriate econoi	mic sec	tor. <u>Mark one sec</u>	ctor only)
Primary sector					
Agriculture, fores	stry and fishing				(01)
Mining and quar	rying				(02)
Secondary sector					·
Manufacturing					(03)
Electricity, gas a	nd water				(04)
Construction (co	ntractors)				(05)
Tertiary sector				·	
Wholesale and r	etail trade, catering and	d accommodation	1		(06)
Transport, storaç	ge and communication				(07)
Financial interme	ediation, insurance, rea	l estate and busi	ness se	ervices	(08)
Community, soci	al and personal service	es			(09)
General government s	ervices				(10)
Other (please specify	in the space below)				(11)
				1	
Other producers (please	se specify in the spac	e below)			(12)
				,	
					•



4. How long have you worked in this sector?					
Less than six months	(01)	Six months to two years	(02)	Two years to five years	(03)
Five years to ten years	(04)	Ten to fifteen years	(05)	Fifteen to twenty years	(06)
Twenty to twenty five years	(07)	Over twenty five years	(08)		
5. Highest qualification					
Secondary school	(01)	St 10 or equivalent	(02)	Post-school certificate/diploma	(03)
National Diploma/National Higher Diploma	(04)	Bachelor's degree or equivalent	(05)	Honours degree or equivalent	(06)
Master's degree or equivalent	(07)	Doctoral degree or equivalent	(08)		
6. Current organisations	al level				
Senior Management	(01)	Middle Management	(02)	Supervisory	(03)
7. Marital Status:					
Single	(01)	Married	(02)	Divorced	(03)
Widow/ widower	(04)	Co-habiting	(05)		
8. Home language: (Mar.	k one la	nguage only)			
Afrikaans	(01)	IsiZulu	(02)	Xitsonga	(03)
English	(04)	IsiNdebele	(05)	Setswana	(06)
IsiXhosa	(07)	Southern Sotho	(08)	Siswati	(09)
Tshivenda	(10)	Northern Sotho	(11)	Sign Language	(12)
Others: (Please specify he	ere)				(13)
9. How many languages can you speak: (Write the number in the space provided)					



10. Name the languages that you referred to in 9.							
			ı				
11. Have you ever visited countries outside the boarders of SA?	Yes	(01)	No	(02)			
12. If you answered "yes" in 11, please provide the names of the	countrie	s you visi	ited.				
12. If you answered "yes" in 11, please provide the names of the	countrie	s you visi	ited.				
12. If you answered "yes" in 11, please provide the names of the	countrie	s you visi	ited.				
12. If you answered "yes" in 11, please provide the names of the	countrie	s you visi	ited.				
12. If you answered "yes" in 11, please provide the names of the o	countrie	s you visi	ited.				
12. If you answered "yes" in 11, please provide the names of the o	countrie	s you visi	ited.				
12. If you answered "yes" in 11, please provide the names of the o	countrie	s you visi	ited.				

Section B: Cultural Intelligence

In the following questions, you will be asked to indicate the extent to which the statements apply to you. You should answer by marking a block for either "Never", "Seldom", "Sometimes", "Often" or "Always". If you are unsure of the question meaning, or your response, please mark "Unsure".

		Never	Seldom	Sometimes	Often	Always	Unsure
1.	I believe that one should change one's behaviour in accordance to the people you are dealing with in that specific situation.						
2.	I find it difficult to act towards co-workers that are from other cultures.						
3.	When having to reprimand an employee from a different culture, I find it uncomfortable and am not sure how to act.						
4.	When I speak to people from another culture, I plan what to say beforehand.						



	Never	Seldom	Sometimes	Often	Always	Unsure
5. When someone introduces me to a person from another culture, I would treat him/her as any other person from my own culture.						
6. It is important to me that other people understand my behaviour						
7. I am afraid that I will loose my own culture if I learn a lot about other cultures.						
8. I catch myself referring to other cultures as "their/them/they".						
 When dealing with people from different cultures, I will take their particular cultural preference into consideration when deciding what to wear. 						
10. I change my behaviour (i.e. body language and speech) when I interact with someone from a different culture.						
11. When an employee from another culture comes to me with a problem at work, I take that person's culture into account.						
12. I find it easy to change my behaviour when I am in a culturally diverse situation.						
13. When I am assigned to a diverse work-group, I like to gain more information on the different cultures involved (i.e. customs, traditions and language).						
14. I find it a daunting task to manage diverse work-groups, as it is hard to get people to work together.						
15. While working in a group, I change my interaction style depending on the cultural background of the people in the group.						
16. I find it easy to interact with stakeholders from different cultures.						



	Never	Seldom	Sometimes	Often	Always	Unsure
17. I would like to learn more about dealing with people from different cultures.						
18. I will not abandon the customs and traditions of my own culture when I am in interaction with people from other cultures.						
19. When having to praise an employee from a different culture, I find it uncomfortable and am not sure how to act.						
20. Cultural diversity in teams hinders the project/work goal attainment.						
21. When interacting with a person from another culture, I make sure that I do not offend them through my body language and gestures.						
22. I find it difficult to deal with people from different cultures						
23. It is important for me to plan in advance when I have to interact with people from other cultures						
24. I am indifferent if my actions may offend persons from other cultures, it is my roots and they should adapt to me.						
25. When a sub-ordinate from a different culture than my own does something wrong, I find myself thinking: "This is typical behaviour for people from this culture"						
26. I think about my views of other cultures.						
27. When I work with a multicultural group, I sometimes forget that they are different from me						
28. When I am at a function with people from different backgrounds, I seek interaction with people from different cultures.						

	Never	Seldom	Sometimes	Often	Always	Unsure
29. When I am part of a multi-cultural work team I feel left out						
30. I think culture should be left at home; we cannot be productive employees if we expect our co-workers to understand our differing cultures.						
31. I am knowledgeable when it comes to coping in a multicultural work- environment						
32. In a conversation with people from various cultures, I am aware of the differences between us						
33. When having to select people for a vacancy in my organisation, I will take the cultural background of the person into consideration						
34. I find it challenging to manage diverse work groups as it requires me to learn more about different cultures.						
35. I think, my views of other cultures will change if I learn more about them.						
36. I believe that controlling verbal and nonverbal behaviour are important aspects of intercultural communication.						

37. How much of your spare time do you s Africa?	spent to l	earn about the different cultures in South
a. All of my spare time		
b. A lot of my spare time		
c. Some of my spare time		
d. Little of my spare time		
e. None of my spare time		



Write your answer to question 38 – 43 in the spaces provided.

38. An employee from another culture invites you for dinner and you know that the food may be different to what you are used to. What do you do?
39. My most exhilarating moment in having to deal with people from different cultures was:
40. My most embarrassing moment in having to deal with people from different cultures was:



42. Are you actively trying to learn about other cultures? How?
42. Are you actively trying to learn about other cultures: now:
43. In having to deal with people from different cultures I would like to have answers on
the following:



Section C: Evaluation of the Questionnaire

The following questions ask you about the questionnaire. Please review your experience in completing this questionnaire while answering the following questions.

1.	Indicate which questions you viewed as unnecessary by writing the section as well as the question number in the space provided.
2.	Did you experience problems understanding any of the questions? If, yes, please indicate which questions by writing the section and the question number in the space provided.
3.	Do you have any comments with regard to the questions asked, questionnaire layout, or your experience completing it?

Thank you very much for your time!



STOPPEN

CULTURAL INTELLIGENCE QUESTIONNAIRE

Dear Respondent,

We are exploring the concept of Cultural Intelligence by comparing groups of managers in the Netherlands and in South Africa.

We need your help in our attempt to understand this concept better.

As such, we ask that you complete the following questionnaire.

Your answers will be confidential and your participation anonymous.

Please answer honestly.

The last page of this questionnaire will ask your views on the questionnaire and its content.

We would appreciate your inputs to further the development of this questionnaire.

Should you have any queries regarding the questionnaire, please feel free to contact Riana van den Bergh at the Faculty of Economics and Business Administration, Vrije Universiteit Amsterdam:

E-Mail: rbergh@feweb.vu.nl OR ri@tuks.co.za

Click on "Verder" to continue to the next screen.

SECTION A: BIOGRAPHICAL INFORMATION

Please provide the following information about yourself by selecting the block with the relevant answer.

_			
#	1	Age 20 ▼	
#	2	Gender	
TT	2		
		Female	
#	3	The economic sector in which you are working: (Mark one sector only)	
		Agriculture, Hunting and Forestry, Fishing	
		Mining and Quarrying	
		Manufacturing	
		Electricity, Gas and Water Supply	
		Construction	
		Wholesale and Retail Trade, Hotels and Restaurants	
		Transport, Storage and Communications	
		Financial Services, Real Estate, Renting and Business Activities	
		Education and Research, Health and Social Work	
		Public Administration	
		Other (Please Specify)	
#	4	How long have you worked in this sector(years)?	
<	TER	JG	

Click on "Verder" to continue to the next screen.



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CONTACT				STOPPEN
contine	E	BIOGF	RAPHICAL INFORMATION (CONTINUED)	
	#	5	Highest Qualification:	
			Lager voortgezet onderwijs: mavo, Ibo (lower secondary	education)
			Hoger voortgezet onderwijs: havo,vwo,mbo (higher secon education)	ndary
			Hoger beroeps onderwijs: hbo (higher vocational education	on)
			Wetenschappelijk onderwijs: wo (university education)	
			Wo+/ dr (post-graduate university education / PhD)	
	#	6	Current organisational level:	
			Senior Management	
			Middle Management	
			Supervisory	
			Professional/Business Service	
			Other (please specify)	
	#	7	Marital Status:	
			Single	
			Married	
			Divorced	
			Widow/Widower	
			Co-habiting	
	#	8	Native Language	
	#	9	How many languages can you speak?	
			1 🔻	

#	10	Name the languages that you referred to in 9.
		<u>^</u>
#	11	Have you ever visited countries outside The Netherlands for business purposes?
		Yes
		No No
L	12	If you answered "yes" in 11, please provide the names of the countries you visited in the last 3 years.
		▲
	13	What is your country of birth?
	14	Where was your mother born?
	15	Where was your father born?
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Click	on "T	erug" to return to the previous screen.



STOPPEN

SECTION B: CULTURAL INTELLIGENCE (PART 1)

In the following questions you will be asked to indicate the extent to which the statements apply to you. You should answer by marking a block for either "Never", "Seldom", "Sometimes", "Often" or "Always". If you are unsure of the question meaning, or your response, please mark "Unsure". Please keep in mind that the word culture encompasses different cultural and ethnic groupings within a country as well as culture accross different countries.

			Never	Soldom	Sometimes	Often	Always	Uncuro
#	1	I believe that one should change one's behaviour in accordance to the people you are dealing with in that specific situation.	C	C	C	C	C	C
#	2	I find it difficult to act towards co-workers that are from other cultures.	С	С	C		С	
#	3	When having to reprimand an employee from a different culture, I find it uncomfortable and am not sure how to act.	E	С		C	С	С
#	4	When I speak to people from another culture, I plan what to say beforehand.			C	C		
#	5	When someone introduces me to a person from another culture, I would treat him/her as any other person from my own culture.	C	C		Б	C	
#	6	It is important to me that other people understand my behaviour.	С	С	С	С	С	
#	7	I am afraid that I will loose my own culture if I	C	С	С	С	C	C

			n a lot about (ires.	other						
#	8	to ot	cch myself ref ther cultures ir/them/they	as						
#	# 9 When dealing with people from different cultures, I will take their particular cultural preference into consideration when deciding what to wear.			С	С	С	С	С	С	
#	# 10 I change my behaviour (i.e. body language and speech) when I interact with someone from a different culture.			ge and nteract			C			
< .	< TERUG									
Click	on "V	erder"	to continue to	the next so	creen.					
Click	on "T	erug" t	o return to the	e previous s	creen.					



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STOPPEN

							SIUF	
S	ECTI	ON B						
			Never	Seldom	Sometimes	Often	Always	Unsure
#	11	When an employee from another culture comes to me with a problem at work, I take that person's culture into account.	С	C	С	С	C	С
#	12	I find it easy to change my behaviour when I am in a culturally diverse situation	C	C	C	C	C	C
#	13	When I am assigned to a diverse work-group, I like to gain more information on the different cultures involved (i.e. customs, traditions and language).	С	С	C	C	С	С
#	14	I find it an intimidating task to manage diverse work-groups, as it is hard to get people to work together.		С	C	C	С	C
#	15	While working in a group, I change my interaction style depending on the cultural background of the people in the group.	С	С	С	С	С	С
#	16	I find it easy to interact with stakeholders from different cultures.	C	C	C	C	C	C
#	17	I would like to learn more about dealing with people from different cultures.	C	C	С	C	G	C
#	18	I will not abandon the customs and traditions of my own culture when I	C	C	С	C	C	C

		am in interaction with people from other cultures.							
#	19	When having to praise an employee from a different culture, I find it uncomfortable and am not sure how to act.	C	C				U	
#	# 20 Cultural Diversity in teams hinders the project/work goal attainment.				С		С	П	
< TERUG									
Click	Click on "Verder" to continue to the next screen.								
Click	Click on "Terug" to return to the previous screen.								



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STOPPEN

			Never	Seldom	Sometimes	Often	Always	Unsure
#	21	When interacting with a person from another culture, I make sure that I do not offend them through my body language and gestures.	С	С	C	С	C	С
#	22	I find it difficult to deal with people from different cultures.	С	С	C	C	С	C
#	23	It is important for me to plan in advance when I have to interact with people from other cultures.	C	C	C	C	C	C
#	24	I am indifferent if my actions may offend persons from other cultures, these are my roots and they should adapt to me.	C	C	С	C	C	С
#	25	When a sub-ordinate from a different Culture than my own does something wrong, I find myself thinking: "This is typical behaviour for people from this culture".	С	С	С	C	С	С
#	26	I think about my views of other cultures.	С	С	C	C	С	C
#	27	When I work with a multicultural group, I sometimes forget that they are different from me.	C	C	C	C	C	С





#	28	When I am at a function with people from different cultural backgrounds, I seek interaction with people from different cultures.	C	C	С		C			
#	29 When I am part of a multi-cultural work team I feel left out.		6	C			C	С		
#	# 30 I think culture should be left at home; we cannot be productive employees if we expect our coworkers to understand our differing cultures.			C	C	С	С	CI CI		
<	< TERUG									
Click	Click on "Verder" to continue to the next screen.									
Click	on "T	erua" to return to the previous	screen.							



CONTACT STOPPEN **Seldom Sometimes Often Always Unsure** Never # 31 I am knowledgeable 0 when it comes to coping in a multicultural workenvironment. # 32 In a conversation with people from various cultures, I am aware of the differences between # When having to select 33 people for a vacancy in my organisation, I will take the cultural background of the person into consideration. # 34 I find it exciting to manage diverse work groups as it requires me to learn more about different cultures. # 35 I think, my views of other cultures will change if I learn more about them. # I believe that controlling 36 verbal and nonverbal behaviour are important aspects of intercultural communication. < TERUG

Click on "Verder" to continue to the next screen.

STOPPEN

SECTION B, PART 2

Please Answer the following questions in the spaces provided.

37 How much of your spare time do you spend to learn about the different cultures in The Netherlands?

All of my spare time

An employee from another culture invites you for dinner and you know that the food may be different to what you are used to. What do you do?



My most exhilarating moment in having to deal with people from different cultures was:



40 My most embarrassing moment in having to deal with people from different cultures was:



< TERUG

Click on "Verder" to continue to the next screen.







STOPPEN

SECTION C: EVALUATION OF THE QUESTIONNAIRE

The following questions ask you about the questionnaire. Please review your experience in completing this questionnaire while answering the following questions.

1 Indicate which questions you viewed as unnecessary by writing the section as well as the question number in the space provided.



2 Did you experience problems understanding any of the questions? If yes, please indicate which questions by writing the section and the question number in the space provided.



< TERUG

Click on "Verder" to continue to the next screen.



STOPPEN

FINAL SCREEN

You have reached the end of the questionnaire.

Click on "Stoppen" to save your results and exit the questionnaire.

Click on "Terug" to review your answers.

Thank you very much for your time!

< TERUG