CORE
Metadata, citation and similar papers at core.ac.uk
Provided by Research Repository

Intercultural Communication and Cultural Intelligence in the Workplace

By

Susanne Martins

B. Soc. Sc., Grad. Dip. Ed. Studies

This thesis is presented for the award

MASTER OF EDUCATION (RESEARCH)

of

Murdoch University

2013

DECLARATION

I declare that this dissertation is my own account of my research and has not been previously submitted, in whole or in part, for assessment at any tertiary institution.

Susanne Eva Martins

Canning Vale, Western Australia

ACKNOWLEDGEMENTS

Although only a single name appears as the researcher and author of this work, its completion would not have been possible without the assistance and support of others. During the past eighteen months, I have been fortunate to have received supervision from two fabulous, meticulous and professional supervisors, Dr. Laura Perry and Emeritus Professor Jan Currie who are excellent academics in the School of Education.

Laura and Jan took it in turns to ask the hard questions and they also helped me turn my thoughts from a jumble into something that sounded eloquent and tangible so I could translate thoughts into words. In spite of the pressures of their own workloads, Laura and Jan always had time for me and treated me with respect. Laura helped me particularly by breaking down things that seemed complex into simple structures that always sounded and read much better. Jan kept me on my toes, especially in relation to my grammar and had a lot of patience when editing my work. I also applaud Jan, who became an activist when my ethics research approval took too long from the university and she formally questioned the process for future students. Laura and Jan, words are not enough to express my gratitude for helping me complete this thesis. I am grateful to Paul Snider whose thesis was a roadmap for my study and David Livermore for helping me understand the concept of cultural intelligence. I also express gratitude to Professor Simone Volet, who initially met with me when I was deciding on whether to complete a Masters in Research or Coursework and set me on a path of choosing intercultural studies.

Thanks are also extended to the hospital where this research was conducted and especially to the Director of Mission, Colin Keogh, whose support made this research possible. I must acknowledge Goretta de Jesus who ensured my ethics application at the hospital went through smoothly and quickly even though I was traveling at the time. I would also like to thank

Jamie Atherton who encouraged me initially to do a study based on hospital workers and has always kept an interest in my research. To all the questionnaire group and interviewees, I express my gratitude for completing the surveys and answering all the questions, as this research study would not have happened without your assistance and honesty.

A special acknowledgement now goes to my family (Joan, Gladstone and Jade) and friends who have been a wonderful support to me. I would also like to recognise my friends whose encouragement was appreciated, Pina Naro, Dorina Martelli, Sylvia Dyer, Jill Robert, Prue Brown, Francis, Sylvia and Jacqueline Lobo and Ruth Wei (who was a great help to me in understanding SPSS). The unconditional support I received from these close friends helped me to get through the times when I questioned my sanity for taking on this work. My spiritual wellbeing was aided by a host of heavenly beings and an earth angel, Kathy Daniel. This thesis is dedicated to all of you.

ABSTRACT

In today's increasingly intercultural workplace setting, an individual's ability to function effectively in culturally diverse situations is paramount for the success of the organisation. The main purpose of this study is to examine and understand the intercultural communication between Australian hospital workers (nurse managers, nurses and Patient Care Assistants and volunteers) through the theoretical lens of Cultural Intelligence (CQ).

A mixed method approach was employed to collect data from multiple sources including the use of questionnaires and interviews. Items for the questionnaires and interviews were drawn from the literature on cultural intelligence. The questionnaire included 20 Likert scale items which were developed by the Centre for Cultural Intelligence based in the United States and Singapore. In addition there were six Likert scale items developed by the researcher on intercultural experiences to gauge satisfaction levels in interactions. Another seven Likert scale items were drawn from the Ali Individualism Scale to understand how culture type influenced CQ and intercultural interactions. The interview included six open-ended questions related to cultural intelligence, English language proficiency and a critical incident scenario. The interviews were used to provide detail on the cultural intelligence questionnaire statements.

A Western Australian private hospital was selected for the study where 400 questionnaires were distributed. Out of these 157 returned questionnaires, 15 voluntary interviewees were chosen based on their job roles and culture type to be interviewed.

The study found that overall the hospital workers had a high level of cultural intelligence. There were two cultural intelligence factors that were low: Cognitive CQ, involving knowledge of other cultures, and Behavioural CQ, involving the ability to provide the appropriate cultural response during intercultural interactions. The study found that those with higher levels of CQ

enjoyed meeting people of different cultures and had more satisfactory relationships. Those with lower levels of CQ seemed to have more challenging intercultural interactions.

This thesis concluded by recommending that the hospital provide intercultural awareness training to all staff and some form of technical training relating to introduction of common terms used in a hospital setting for employees who have lower levels of English proficiency. It was also recommended that the hospital include CQ as part of their Human Resources systems, such as recruitment, appraisals and competency assessments.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS III

ABSTRACT V

TABLE OF CONTENTS VII

CHAPTER 1 1

- RATIONALE FOR CURRENT STUDY 2
- CURRENT STUDY BRIEFLY DESCRIBED 4
  - Culture Type 5
  - Individualism-Collectivism 5
- OUTLINE OF THESIS 6

CHAPTER 2 9

- CULTURE AND INTERCULTURAL COMPETENCE 11
- THEORETICAL FRAMEWORKS 15
  - BASIC Model of Intercultural Competence 16
  - Cultural Intelligence 18
  - Intercultural Sensitivity 21
  - Critiques of Cultural Intelligence 23
  - Intercultural Communication Theories 25
- EMPIRICAL RESEARCH 30
- CONCLUSION 39

CHAPTER 3 41

- METHODOLOGICAL APPROACH 41
- RESEARCH DESIGN 44
  - Research Site 44
  - Recruitment Process and Participants 47
  - Data Collection 50
  - Pilot Study 51
  - Interview Process 52
  - Critical Incidents 53
  - Data Recording and Storage 54
  - Data Analysis 54
- VALIDATION OF SCALES 55
- RIGOUR 57

RISKS & ETHICS 58
REPORTING 59
CONCLUSION 59
CHAPTER 4 60
QUANTITATIVE PROCESS 60
RESULTS FROM THE QUESTIONNAIRE RESPONDENT DEMOGRAPHIC DATA 61
RESULTS FROM THE CQ 20-ITEM SCALE 67
Percentage of Participants with High and Low CQ Scores 73
RELATIONSHIPS BETWEEN THE FOUR CQ FACTORS 76
Checking the Assumptions 76
Assessing the Size and Direction of the CQ Factor Relationships 77
GROUP DIFFERENCES IN CQ AND SATISFACTION SCORES 80
Differences in CQ Scores and Satisfaction Scores between Job Roles 80
Differences in Group Mean Scores 88
Differences in CQ and Satisfaction Scores of Australians and Migrants 94
SUMMARY OF OVERALL QUANTITATIVE FINDINGS 99
CHAPTER 5 100
REVIEW OF THE QUALITATIVE FINDINGS 100
INTERVIEWEE COMMENTS ON THE FOUR FACTORS OF CQ 101
Metacognition 101
Cognitive CQ 105
Motivation CQ 112
Behavioural CQ 119
The Importance of Language 124
INTERCULTURAL RELATIONSHIPS BETWEEN CULTURAL GROUPS AND JOB ROLES 130
Ease of Working with Nurses & PCAs from a Western Background 131
Ease of Working and Interacting with non-Western Nurses and PCAs 132
Easy to Interact with Managers 135
Treated with Respect by Managers 136
Treated with Respect by Nurses & PCAs from a Western Background 137
SUMMARY OF OVERALL QUALITATIVE FINDINGS 138
CHAPTER 6 140
DISCUSSION OF MAIN FINDINGS 140
Differences in CQ and Satisfaction Scores 140
GROUP DIFFERENCES IN CQ AND SATISFACTION SCORES 147

English Language Issues 148
Contributions and Implications 150
Recommendations for Organisations 153
Summary of Recommendations 155
Limitations 155
Future Directions 157
Directions for Further Study 157
Conclusion 158
REFERENCES 160

APPENDICES

Appendix A: Information Flyer 173
Appendix B : Information Letter 174
Appendix C: Questionnaire 175
Appendix D: Consent Form and Interview Questions 178
Appendix E: Codebook 180

LIST OF TABLES

Table 2.1: individualism Scores (IDV) of Selected Countries 13
Table 2.2: BASIC dimensions of intercultural competence 18
Table 3.1: Hospital Group Staffing Levels in Australia 46
Table 3.2: Components of Population Change Australia 47
Table 3.3: Interview Participant Group 48
Table 3.4: Summary of demographic and interview dates of Individualist 49
Table 3.5: Summary of demographic and interview dates with Collectivist 49
Table 4.1: Demographic Composition of Questionnaire Participants 63
Table 4.2: Education Profile: Job Roles 64
Table 4.3: Questionnaire Participants' Country of Origin 65
Table 4.4: Country of Origin Numbers and Percentages AUSTRALIAN/OVERSEAS 67
Table 4.5: Country of Origin Numbers and Percentages COLLECTIVIST/INDIVIDUALIST 67
Table 4.6: CQ 20-item Scale 69
Table 4.7: Percentage of Respondents with high and low CQ scores 74
Table 4.8: Outlier Analysis of the Four Factors of CQ, Satisfaction and Individualism 77
Table 4.9: Descriptive Statistics Comparison of Job Roles 82
Table 4.10: Descriptive Statistics of Individualist and Collectivist 89

Table 4.11: Descriptive Statistics of Australian and Overseas Born Questionnaire 96
Table 4.12: Satisfaction Items 98
Table 5.2: Number of Interviewees' Metacognitive Comments 101
Table 5.3: Number of Interviewees' Cognitive Comments...106
Table 5.4: Number of Interviewees' Motivation Comments 113
Table 5.5: Number of Interviewees' Behavioral Comments 120
Table 5.6: Challenges of Language 124
Table 5.7 : Importance of English 128
Table 5.8: Intercultural Experiences of Cultural Groups and Job Roles 130
Table 6.1: Comparison of CQ Scores from Singapore and Australia 143

LIST OF FIGURES

Figure 2.1: Elements of cultural intelligence 21
Figure 2.2: Model of development intercultural sensitivity 22
Figure 2.3: Model of relationship between intelligences 25

Chapter 1

INTRODUCTION

My interest in this research topic, *Intercultural Communication and Cultural Intelligence in the Workplace,* originated from my experience as a migrant who had to navigate new pathways of viewing the world and communicating so that my voice could be heard within the Australian work environment. I was born in India and migrated to Australia in 1974 when I was 11 years old and I commenced my Australian education in grade six.

When I first started working in Australia, people would ask me questions, such as: Did I speak English when I was growing up? Did I wear saris as my regular mode of dress? They asked these questions because I am of Anglo-Indian descent and perhaps there is a stereotype associated with Indian women. I used to get offended as I was brought up in the British tradition, speaking English as my first language, being Westernised in many of my beliefs and customs as my mother was of English heritage. Yet it astounded me that people would assume that simply because I was from India, my education and particularly my grasp of English was lacking in some way. I felt that this mindset of some of my colleagues separated us in some way and suggested to me that they lacked intercultural awareness and intercultural sensitivity. Thus, in my early working years I searched for people from a similar culture as mine to befriend.

As the years progressed I began to feel more integrated into the Australian community. Yet, I still see that intercultural differences can damage social relationships between colleagues, managers and peers. These differences if they are not addressed through intercultural awareness training may have severe consequences in a workplace, including breakdowns in communication, decreased productivity, morale problems and extensive sick leave.

Through my working career I have seen many migrant colleagues who have felt isolated or anxious and uncertain about their place in the work group. This has caused them to take stress leave or make high error rates because they are afraid to sound incompetent by asking for clarity in what they are supposed to do. An example is a young woman Jane (a fictitious name) of Asian descent who worked in a financial institution with me. Jane worked in the documentation and settlements area, a department that had a high proportion of migrant women. Jane felt that her prospects for professional development were minimal and that profiling of job roles by the human resources department potentially segregated migrant women into back office administrative roles with little prospect for promotion. To apply for another role, such as in credit or sales, one needed experience. As she was part of the back office documentation area that also looked after all the settlements and incoming money transactions of the company, Jane was advised she was too valuable to be given time for professional development. Another important aspect Jane brought up was that in the credit and sales areas, there were mostly white Anglo-Saxon males and a few Anglo-Saxon females. Jane tried a few times to break into different roles and was always rejected on the basis of her being needed in her area. After six months, Jane applied for stress leave and while on leave found another job at another financial institution in the credit area. It was fairly clear that the financial institution had a definite divide between gender, culture and workplace roles.

Rationale for Current Study

In today's knowledge-intensive economy and multicultural working situations, an organisation's employees play an increasingly strategic role in helping it to achieve its competitive advantage. Cultural Intelligence (CQ) can be a critical capability that augments employee, manager, and organisational effectiveness in intercultural interactions (Earley, Ang &

Tan, 2006). CQ is an individual's ability to function at an optimum level in situations where there is cultural diversity (Ang & Van Dyne, 2008). As Triandis notes, those who have high CQ have both verbal and non–verbal skills that enhance intercultural interactions (Triandis, 1995a). In 2004, I was working on a merger and acquisition between two very different organisational cultures in the financial sector. One organisation had a strong equal opportunity human resources ethos while the other smaller organisation had a low equal opportunity ethos in practice. In the latter organisation, people were segregated through the recruitment process into classified groups which they found hard to leave. Many of the workers in the back office documentation area were women from Asian or Eastern European countries while the managers and supervisors were mainly Australian-born of Northern European descent. The hierarchic levels became more elitist and discriminatory with some roles only occupied by Anglo-Saxon males. It was at this point when I was brought into the organisation as part of the merger that I saw these practices openly being practiced, especially since there was no union involvement.

The young migrant workers in the back office clerical roles had no one to talk to about their concerns. The lack of communication between cultural groups was wide. As part of the Group Human Resources Team, my colleagues and I assisted in introducing a communication module within the training framework as part of succession planning. Yet we needed more. This became evident later when the two organisation cultures became enmeshed and the people from the acquisitioned financial institution could see the disparities in treatment and communication mechanisms between the two organisations. This is when I knew that I had to explore ways in which people could grow, develop and empower themselves so they could communicate as equals in whatever contextual setting they were in.

Current Study Briefly Described

My research aim was to *examine and understand the intercultural communication between workers (nurse managers, nurses and Patient Care Assistants and volunteers*[1]*) in an Australian hospital setting, through the theoretical lens of Cultural Intelligence (CQ).* Intercultural communication and CQ are defined in detail in chapter two. Below are the four research questions that have guided my research study.

1. How do Nurses and Patient Care Assistants (PCAs) experience intercultural encounters at the hospital?
2. How do Nurse Managers experience intercultural encounters at the hospital?
3. What is the CQ of these participants and how is it related to their experiences?
4. How is culture type related to CQ and intercultural experiences?

I focused on four aspects of intercultural interactions in my study. First, I explored the hierarchical relationships (job roles) between the nurse managers, nurses and Patient Care Assistants (PCAs) who interacted with each other on a daily basis in a patient care capacity and how they experienced intercultural interactions. The nurse managers are the administrative personnel on each ward and they manage the nurses and the PCAs. During an actual shift on the floor, the senior nurse is in charge of the other nurses and the PCAs. Second, I examined the CQ of the questionnaire group using the Cultural Intelligence Survey (CQS), previously developed and validated by Ang, Van Dyne and Koh (2008). A subset of this questionnaire group was interviewed to clarify and provide the context for the questionnaire items. Third, I examined the extent of the disparate worldviews of the nurse managers, nurses and PCAs from individualistic and collectivist cultures as defined by Hofstede (1980), as experienced through their intercultural

[1] A small number of volunteers were included as questionnaire group in the study but none were interviewed

encounters. I used the CQ 20-item scale questionnaire and interviews to understand how CQ impacted on intercultural interactions.

Culture Type

Cultural differences can be manifested in different value systems and communication styles. Cultural distance – the degree to which cultures are different from each other – can make intercultural communication especially problematic. This may be a factor in any intercultural conflict situation (Bernstein, 1983; Hofstede, 1983) experienced within the work setting. The CQ framework suggests that culturally competent individuals are able to cope with differences when communicating with people from different cultures (Ang & Van Dyne, 2008). It is plausible, however, that individuals may have interpreted and responded to the CQ survey differently, depending on their cultural background. One of the aims of this study, therefore, was to examine whether culture type mediated the relationship between CQ and intercultural experiences.

Individualism-Collectivism

Cultural values result in different interaction norms that individuals use to guide behaviour (Thomas, 2006). Different dimensions of socio-cultural variability have been used extensively in intercultural research. Directly relevant to this study is the value dimension of individualism–collectivism (Hofstede, 1980), frequently "isolated by theorists across disciplines to explain similarities and differences in behaviour" (Gudykunst & Matsumoto, 1996, p. 51) and considered a prominent framework for explaining cultural differences in intercultural communication (Gudykunst & Ting-Toomey, 1988).

Individualism–Collectivism influences the way people define themselves in relation to others (Ward, Bochner & Furnham, 2001). The core distinction seems to be whether people

define themselves in terms of their relationships, as “independent or interdependent selves” (Markus & Kitayama, 1991 p. 13). For example, individualists may describe themselves in relation to their personal characteristics by saying, “I am impatient.” Collectivists, on the other hand, may describe themselves in relation to their group by saying, “It is important for us to be patient” (Markus & Kitayama, 1991 p. 13). In individualistic cultures people are orientated to the fulfillment of their own goals and aspirations first, even at the cost of group objectives. In contrast, people from collectivist cultures are expected to sacrifice their personal objectives for the good of the group (Hofstede, 1980, 1991, Triandis, 1989). When the two value polarities meet, people may encounter different attitudes, values and behaviours which are expressed distinctively in relation to their communication styles. The main aim of this study was to examine in what ways individualism–collectivism affected intercultural encounters. This is discussed further in chapter two and addressed in the final chapter.

Outline of Thesis

The current study began by reviewing the literature to gain an understanding of other studies that explored the intercultural experiences in work settings. More specifically, it reflected on the intercultural experiences of the hospital workers (nurse managers, nurses and PCAs) and imagined how CQ might have an impact on these experiences.

Chapter 2, Literature Review, examines conceptualisations and empirical findings of culture and intercultural communication. As many organisations in Australia are employing more individuals from diverse cultural backgrounds, interaction among workers may increase uncertainty about how to behave and anxiety about the right way to approach situations, which may result in conflict and poor decisions. Successful intercultural working relationships require CQ (Earley & Ang, 2003). As Earley and Ang (2003) also point out, cultural competency

requires cognitive, affective and behavioural skills. One way of doing this is through being consciously aware that there are differences between people of different cultures, asking clarifying questions about other cultures' practices and being able to communicate in a culturally appropriate way. This chapter reviews intercultural communication theories related to social perception, uncertainty reduction, culture distance, language competence and social categorisation. It also examines empirical findings related to some predictors of CQ, such as cultural judgment, decision-making and cultural adaptation and the interrelationships between the CQ factors.

Chapter 3, Methodology, is divided into several sections: Methodological Approach, Research Design, Validation of Scales, Rigour and Ethical Issues. In this chapter I describe the mixed study research design adopted to capture the multiple perspectives and realities of people from different cultures in one workplace setting. The data collection methods consisted of a questionnaire survey which was distributed to 400 hospital workers and completed by 157 participants from the questionnaire group. It was followed by interviews from 15 voluntary interviewees who had completed the survey. There were three segments to the Likert type scale questionnaire used in this research: the CQ 20-Item self-report survey (CQS) measured CQ; six additional items were added in the same format as the CQS to measure intercultural experiences related to ease of intercultural interactions, being valued and respected (also called satisfaction levels); and the Ali Individualism Scale (AIS) measured the cultural variable of individualism (Ali, 1988). These scales are discussed in detail as part of the validation of scales process in chapter three. The last section of this chapter discusses the thematic nature of the data analysis and ethical issues associated with the methods of data collection.

Chapter 4, Quantitative Findings, reports the findings of the descriptive and inferential statistical analysis. These findings include the results from the CQS, descriptive statistics related to the four factors of CQ, participants' intercultural experiences (satisfaction), and their responses on the individualism scale. I used independent-samples t-tests to explore differences in CQ and satisfaction scores between participant groups (nurse managers, nurses and PCAs, as well as culture types). Next, through Pearson and Spearman rho correlations, I assessed the strength of the relationship between the CQ, satisfaction and individualism variables.

Chapter 5, Qualitative Findings, reports the intercultural interactions among the hospital workers through interviews that I conducted with nurse managers, nurses and PCAs. The interview questions were created to support the CQS so that the interviewees' answers would elaborate on the items in the questionnaire. The interviewees were further categorised into sub-groups, using Hofstede's (1980) individualism–collectivism index based on their country of birth. This enabled me to explore how culture type influenced intercultural interactions and how these experiences were then related to the questionnaire participants' CQ scores.

Chapter 6, Discussion and Conclusion, discusses the major findings of the quantitative and qualitative data analysis and shows how the qualitative data gathered from the interviews extended the quantitative data. It also explores the implications of CQ for intercultural interactions within the hospital workplace. Recommendations are made for the hospital to utilise CQ as part of its human resource processes and provide intercultural awareness training for employees. It ends with some limitations of the study and future directions for research in this area.

Chapter 2

REVIEW OF THE LITERATURE

POSITIONING CULTURAL INTELLIGENCE IN THE WORKPLACE

The 21st century has tested us with its challenge of globalization. The geographic, political, economic and socio-cultural landscapes have become porous as globalisation has increased the permeability of physical borders, cultural norms and assumptions (Earley & Ang, 2003). Our daily interactions in this globalised world are affected by cultural differences. These cultural differences can be challenging because there are people interacting with each other who come from culturally diverse backgrounds and have different values, traditions and ideologies. Large organisations employ people from diverse backgrounds and are vulnerable (low morale, stress leave) as these cultural differences may cause intercultural misunderstandings and conflict in the workplace. The focus of this study is to understand hospital workers' ability to communicate competently with people of other cultures as measured by the theoretical model of "Cultural Intelligence" or Cultural Quotient (CQ) (Earley, Ang & Tan, 2006, p.1).

Intercultural competence – the ability to competently interact and communicate with people from different cultural backgrounds – runs much more deeply than just discovering new foods, languages and currencies. It strikes right at the core of our convictions and beliefs. Like many people, I grew up with a shielded view of the world. My family's social networks revolved around people like us (Westernised Anglo-Indians). We associated with people who had the same beliefs, values, and political orientations as we did. As I started to encounter people who had different viewpoints to mine, I became more aware that perhaps there were different versions of reality to the ones I had experienced growing up. The more I encountered

cultural diversity in the world, the more I questioned how I arrived at my viewpoints (Livermore, 2011).

CQ is a conceptual framework that includes a series of strategies that can enable us to more appropriately and effectively engage with people from different cultural backgrounds. Intercultural success and competence is primarily dependent on our CQ (Livermore, 2011). This study is about understanding our intercultural communication experiences (so as to be interculturally competent) and its link to CQ. It is also about understanding to what extent we possess the abilities needed to be successful in this intercultural mosaic. This review of literature discusses CQ's implications for communication interactions within a hospital setting with culturally diverse staff.

This chapter commences by conceptualising culture and intercultural competence. As Triandis (1995a) suggests, culture is a crucial variable to consider when interpreting behaviour because culture can determine individuals' perceptions of their environment and this cultural aspect must be taken into consideration in any communication exchange. Frameworks reviewed in the chapter include theories about intercultural competence and intercultural sensitivity, a component of intercultural competence. The aim of this study is to understand how the cultural values of the hospital workers (nurse managers, nurses, and PCAs) influence the way they communicate as measured by the CQ Scale (CQS). Horn (1979) states, "measurement of intelligence must reflect cultural values" (p. 193). I will also discuss communication theories that act as barriers in achieving intercultural competence. These are: Uncertainty Reduction Theory, Culture Distance Theory, Language Competence and Social Categorization Theory. Finally, I examine empirical research relating to intercultural competence.

Culture and Intercultural Competence

It is important to define culture because the underpinning beliefs and value systems shared by a particular cultural group shape their expectations about behavior during an intercultural interaction. The complexity of culture is reflected in its different definitions and interpretations. From a cognitive perspective, Hofstede (1980) defines culture as "the collective programming of the mind which distinguishes the members of one human group from another" (p.25). Another definition of culture is a "historically transmitted system of symbols, meanings and norms" (Kim & Gudykunst, 1988, p.102).

Triandis (2000a) defines the subjective dimension of culture as, "a shared meaning system, found among those who speak a particular language dialect, during a specific historic period, and in a definable geographic region" (p.146). It is noteworthy to remember that culture is regarded as something that individuals live within and interact with rather than some abstract object to be observed. This means they are not victims or passive recipients of their culture but co-creators of culture (Segall, Lonner & Berry, 1998). Therefore culture is not given to an individual but created daily through social interactions between individuals and their environment.

Culture is learned from people we interact with, such as our parents, friends and teachers, and is taught by the explanations we receive from the people and events surrounding us from the time of our birth. It is also a shared set of interpretations that exist in the minds of people. These interpretations are then transmitted by symbols which have a collective meaning in the minds of a particular group of people in a specific culture. The shared symbols are what form the basis of culture and are representative ideas about the beliefs, norms, values and social practices of its

members (Lustig & Koester, 2010). Hofstede (1980) calls it the “collective programming of the mind,” which creates distance between groups with opposing values (p. 25).

Cultural differences are created and then maintained by complex factors that are deeply entrenched within individual’s psyches (Lustig & Koester, 2010). Cultural differences are perpetuated by organisational networks and social institutions which structure activities for individuals within the society. These institutions include “government, education, religion, work, professional and social organisations” that bind people to one another and create cultural bonds (Lustig & Koester, 2010, p. 41). The degree of freedom allowed by these organisational networks may influence the roles people play in their cultural groups. These roles further develop the systemic behavioural characteristics of collaboration or competitiveness within a society, which may contribute to some cultures having a more individualistic or collectivist orientation (Lustig & Koester, 2010).

The genesis of individualism–collectivism value categorisation is associated with Hofstede’s (1980) seminal research which identified four cultural dimensions (individualism–collectivism, uncertainty avoidance, power distance, and masculinity) through statistical factor analysis among a sample of 116,000 IBM employees in 40 countries. Hofstede (1991) defined individualism as a trait in societies where people are expected to have a focused emphasis on themselves and their immediate nuclear family. Collectivism, in contrast, was defined as a characteristic in societies where people belonged to cohesive in-groups, which supported each other for the duration of their lifetime in exchange for friendship and extended filial loyalty. Hofstede’s (1980) measures explicitly reflected the dominant values of the countries he surveyed and the major contribution of his research was to demonstrate that the nature of the individual–group relationship differed according to the culture in which it occurred. Table 2.1

below presents Hofstede's Individualism scores by countries, ranking from high individualism to low individualism. For the purposes of this research, the countries listed in Table 2.1 are those typically representing hospital workers in Australia. Cultures with high individualism scores have a high allegiance to the self while cultures which have low individualism scores have a high allegiance to the group (See Table 2.1).

Table 2.1 *Individualism Scores (IDV) of Selected Countries*

Country	*IDV Country Scores*
Australia	90
United Kingdom	89
New Zealand	79
Ireland	70
India	48
Malaysia (SEA)	26
Singapore (SEA)	20
Indonesia (SEA)	14

Note. Individualism scores of selected countries. Adapted from *Culture's Consequences: International Differences in Work-Related Values* (p. 222), by G. Hofstede, 1980, Beverley Hills, CA: Sage. Copyright 2007 by the National Academy of Sciences. Adapted with permission.
Note. SEA is South East Asia.

Hofstede's (1980) work is still used by scholars as the benchmark for cultural studies and in particular the Country Individualism Scores provide a guideline of how people in different cultures behave based on systemic differences in their values (Oyserman, Kemmelmeier & Coon, 2002). Hofstede's (1980) model has been criticised, however, for being overly simplistic. Ellesworth (1994) and Wink (1997) argue that dividing cultures into the four dimensions risks creating stereotypes. Another factor which diminishes his findings is that the former "Eastern Block" Communist countries were not part of the research (Snider, 2003). These examples acknowledge that Hofstede's generalisations apply to countries and not people, therefore implying that individualism and collectivism can co-exist in an environment as they are also influenced contextually, rather than suggesting that all members of a society behave in a predictable manner (Snider, 2003).

Another factor which differentiates cultures consists of verbal and non–verbal communication systems that cultures develop to convey shared meanings and interpretations, also known as interpersonal communication patterns (Lustig & Koester, 2010). When there are degrees of difference that transpire among people of different cultures in their interpersonal communication patterns, this is defined as intercultural communication (Lustig & Koester, 2010). The greater the degree to which the individuals differ in their cultural norms, values and practices, the more intercultural their communication (Lustig & Koester, 2010). To diminish these differences and create mutual understanding, it is important that our words match the body language being displayed as these are observable behaviours especially when we first meet someone from a different culture. These words, gestures, and actions are the first impressions that are perceived (Earley, Ang & Tan, 2006). To deal appropriately and effectively with cultural differences, one must be able to communicate competently, and use one's knowledge, motivation and skills to become interculturally competent (Lustig & Koester, 2010).

Intercultural Competence is the ability to "think and act in interculturally appropriate ways" (Hammer, Bennett & Wiseman, 2003, p.422). Ruben (1976) conducted a study which identified seven behavioural dimensions or skills that postulated the notion that most cultures can use these behaviours to make judgments of competence about themselves or others. For example, even though the communication skills of respect or empathy may transcend cultural boundaries, the way they are expressed behaviourally and interpreted may vary substantially between cultural groups. Results obtained from Ruben's (1976) study suggested that communication skills were significant predictors of intercultural competence. Cultural competence refers to appropriate and effective communication and behaviour in intercultural

situations (Deardoff, 2009). Utilising Ruben's (1976) seven behavioural skills framework as a baseline Koester and Olebe (1988) developed the "Behavioural Assessment Scale for Intercultural Competence (BASIC)" and added an additional skill of *Relational Role Behaviour* (as cited in Lustig & Koester, 2010, p. 72). Koester and Olebe (1988) suggest that each of the BASIC skills (Refer Table 2.2) contribute to the achievement of intercultural competence.

Theoretical Frameworks

Intercultural research can largely be traced back to the 1970s (Hammer, Gudykunst & Wiseman, 1978; Ruben, 1976; Ruben & Kealey, 1979; Abe & Wiseman, 1983; Wiseman & Abe, 1984; Gudykunst & Hammer, 1984; Koester & Olebe, 1988; Martin & Hammer, 1989). From the 1990s to the present there have been quite a few conceptual models in the intercultural sphere such as, *cultural intelligence, intercultural sensitivity, intercultural effectiveness, intercultural adaptation* and *intercultural competence* (Earley & Ang, 2003; Ang & Van Dyne, 2008; Bennett, 1993; Byram, 1997; Byram, Nichols & Stevens, 2001; Milhouse, 1993; Prechtl & Lund, 2007; Ting-Toomey & Kurogi, 1998; Ruben, 1976). Many of these models address cognition and skills but ignore the aspect of motivation (Spitzberg & Cupach, 1984). Motivation provides the energy and drive to adapt to culturally diverse situations in intercultural interactions. In the late 1990s and early 2000s researchers from the fields of communication and social psychology started to focus more on relational contexts and their role in intercultural interactions (Chen, 2002; Collier, 1996). These studies dealt more with relationship development and early intercultural interactions with students or expatriates in foreign countries rather than on-going intercultural interactions within a domestic work environment.

One model which I have chosen that deals with attributes that enable an individual to be more effective and competent in frequent and diverse intercultural interactions is Cultural Intelligence (CQ) (Thomas, et al., 2008). I have chosen CQ as the theoretical framework for this study as it focuses on an individual's ability to grasp and reason correctly when faced with culturally diverse situations. The CQ framework is appropriate for this study as it encompasses multiple intelligences such as metacognition, cognition, motivation and behaviour to functionally operate in culturally diverse settings. A difference between the BASIC model and the CQ framework is the latter includes metacognitive intelligence, which is the ability to consciously strategise during intercultural interactions and then apply the appropriate response or action (Ang & Van Dyne, 2008). The BASIC model provides a guide for intercultural competence which includes the skills of respect and interaction management. I have included these aspects as six additional questionnaire items. In the section below, I discuss the BASIC and CQ frameworks because they build on each other and provide a guide to the skills an individual needs to develop their intercultural competence and have satisfying intercultural interactions.

BASIC Model of Intercultural Competence

In the BASIC model the first skill of *Display of Respect* is a culture-general concept, yet there are specific ways in which respect is shown or received dependent on a person's culture. The second skill, *Orientation to Knowledge,* is demonstrated when an individual's words and actions show that all experiences and interpretations of these experiences are personalised according to each culture (for example, saying I found it difficult to travel around New York) rather than a broad generalization of these experiences (saying New Yorkers are crazy for living there). The third skill of *Empathy* is to behave as though one understands what another

person is thinking, feeling and experiencing. Empathetic behaviour includes using words that identify what people are going through at the time and non-verbal communication that acknowledges the other person's feelings. If one does not show any empathy, Koester and Olebe (1988) argue that one will not be perceived as interculturally competent. The fourth skill of *Interaction Management* refers to the ability to start or complete a discussion where everyone gets an opportunity to contribute to the interaction appropriately. The fifth skill is focused on work related purposes, namely *Task-related Role Behaviours*. It is about contributing to group problem-solving activities, while recognizing that tasks can be accomplished in a variety of ways and may be linked to underlying cultural patterns. The sixth skill is about building and maintaining personal relationships with other group members through *Relational Role Behaviours*. It is about helping to increase the feelings of participation and harmony within the group. The seventh skill concerns *Tolerance for Ambiguity*. It refers to the way we respond to novel and unpredictable intercultural interactions. Some people may welcome and be very comfortable with new cultures being introduced into their environment, while others may feel anger, hostility or simply withdraw from these new experiences. Lastly the eighth skill is *Interaction Posture* is about being non-judgmental in intercultural interactions. It is about using descriptive terms in discussions rather than a value based interpretation or judgment.

Table 2.2 *BASIC dimensions of intercultural competence*

Behavioural / Skill Dimension	Communication Competence
Display of respect	Ability to show respect and positive regard for another
Orientation to Knowledge	Terms people use to explain the world around them
Empathy	Capacity to understand the world as others do
Interaction Management	Skill in regulating conversations
Task Role Behaviour	Behaviours related to group-solving activities, fact finding
Relational Role Behaviour	Behaviours associated with interpersonal harmony and mediation
Interaction Posture	Ability to respond to others descriptively, non-evaluatively
Tolerance for Ambiguity	Reacting to ambiguity without anxiety or stress

Note. BASIC model of intercultural competence. Reprinted from *Intercultural Competence: Interpersonal Communication across Cultures* (p. 72), by M.W. Lustig and J. Koester, 2010, Boston, MA: Allyn & Bacon. Copyright 2007 by the National Academy of Sciences. Reprinted with permission.

Cultural Intelligence

CQ has been defined as an "individual's capability to function and manage in culturally diverse settings" (Ang, et al., 2007, p. 337). Another definition of CQ is a "multifaceted competency consisting of cultural *knowledge*, the practice of *mindfulness*, and the repertoire of *behavioral skills"* (Thomas & Inkson, 2004, p. 182). CQ differentiates itself from other more broad domains of individual differences such as personality traits that concentrate on what a person does in different contexts and over time (Costa & McCrae, 1992) and general mental ability (IQ), which focuses on cognitive abilities that are not specific to any situation (Ang & Van Dyne, 2008). The basic idea that people have different facets of intelligence dates back to the 1900s in the field of psychology. What is contested among scholars in the field is what forms these different facets take and how they are acquired (Earley, Ang & Tan, 2006). Specific to CQ is that it is contained within the cultural context and is the only capability which includes the four intelligence dimensions of metacognition, cognition, motivation and behaviour. These four dimensions are measured by an instrument called the CQ Scale (CQS) (Ang & Van Dyne, 2008).

CQ is a form of intelligence and is a relatively new theoretical construct, presented to the academic world in 2003, and embedded explicitly in the contemporary theories of multiple intelligences (Alon & Higgins, 2005, Ang & Van Dyne, 2008, Earley & Ang, 2003). CQ has been proposed as a predictor of intercultural success (Earley & Ang, 2003, Livermore, 2011) because it calls for a focused approach (Janssens & Brett, 2006) where high CQ enables more creative and synergistic solutions which are respectful of cultural differences. As a multidimensional construct, CQ is based on the theoretical framework of Sternberg and Detterman (1986) who conceptualised four "loci" of intelligence within an individual – metacognition, cognition, motivation and behaviour (Ang et al., 2007). The CQ model includes these four dimensions.

Metacognitive intelligence is how an individual makes sense of culturally diverse experiences (Ang & Van Dyne, 2008, p. 5). It occurs when people use their mental processes to acquire and understand one's existing cultural knowledge, strategize before intercultural encounters, question cultural assumptions and adjust their mental representations when actual experiences differ from expectations (Ang & Van Dyne, 2008). *Cognitive intelligence* refers to an individual's knowledge about how cultures are similar or different (Ang & Van Dyne, 2008, p. 5). It is knowledge about a culture's social norms, values and practices acquired from academic and personal experiences and socio-linguistic knowledge about the rules of expressing the verbal and non-verbal target language. Finally it is knowledge of the self that is entrenched in the cultural milieu of the environment (Ang & Van Dyne, 2008). *Motivational intelligence* refers to the mental capacity to direct and sustain energy towards interacting effectively with people of different cultures (Ang & Van Dyne, 2008, p. 6). Motivation CQ also includes an individual's sense of confidence which allows them to function effectively in

diverse cultural settings (Ang et al., 2007). *Behavioural intelligence* signals the ability to reflect situationally appropriate behaviours (meeting contextual and relational standards) when interacting with people of different cultures (Ang & Van Dyne, 2008, p. 6). This is based on verbal and non–verbal socio-linguistic forms such as exhibiting appropriate words, tones, gestures and facial expressions, centered on the cultural values (which is a fusion of the cultures of the speaker and the listener) of the specific situation (Ward et al., 2001).

CQ is an evidence-based model for research in cultural diversity in international work as most of the empirical studies have been conducted on managers in expatriate overseas assignments or on multinational teams in overseas locations where diverse cultural groups work together. A key strength of the CQ concept is that it is research-based and is an overarching framework that synthesizes the empirical research and perspectives on intercultural leadership and diversity, tested across samples, times, and cultures (Livermore, 2011). CQ, which is similar to other forms of multiple intelligence, exists on a continuum and across time and helps individuals function effectively in intercultural situations. Development in this area may be slow and there is unlikely to be any major shifts in the dimensions of CQ within short time frames. Any developmental interventions, such as intercultural training initiatives, overseas assignments or exposure to other cultures over a long period of time, may have an impact on the rate of growth in the dimensions. The development in the levels though is an iterative learning experience as opposed to a linear process. It requires a person to strategize metacognitively about the intercultural interaction they are about to engage in, then access their base level of cultural knowledge, be motivated by the encounter and then translate their cultural knowledge into behavioural capability (Earley & Ang, 2003, p. 23) (Figure, 2.1). Cultural knowledge can be learned from intercultural social interactions which involves paying

attention to and appreciating the cultural differences (by being culturally sensitive) between oneself and others (Thomas, et al., 2008). In the following section, I discuss intercultural sensitivity and how it is an important facet of CQ. Intercultural sensitivity is an important element of CQ because it provides a basis for understanding another individual's cultural frame of reference.

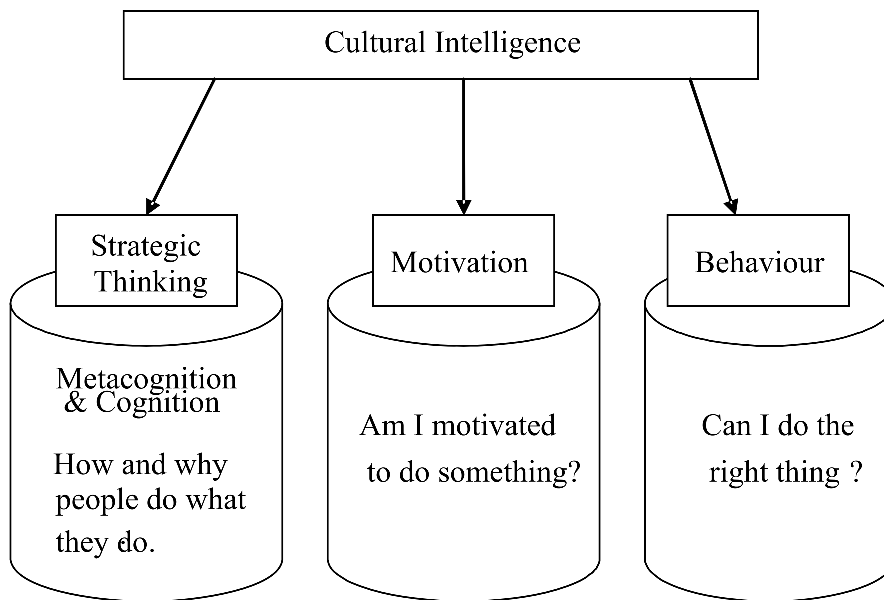

Figure 2.1. Elements of Cultural Intelligence. Reprinted from *Cultural Intelligence: An Analysis of Individual Interactions across Cultures* (p. 23), by P.C. Earley and S. Ang, 2003, Palo Alto, California: Stanford University Press. Copyright 2003 by the Stanford University Press. Reprinted with permission.

Intercultural Sensitivity

There are many overlapping concepts related to intercultural competence. One popular model is Intercultural Sensitivity (IS) (Bennett, 1993, Hammer, Bennett & Wiseman, 2003). I discuss IS because it provides a framework for conceptualising individual "orientation toward cultural difference" (Hammer, Bennett & Wiseman, 2003, p. 421). I will use the term IS to refer to an individual's ability to experience and distinguish cultural differences through the lens of the Developmental Model of Intercultural Sensitivity (DMIS) (Bennett, 1993), that comprises six stages from ethnocentrism to ethnorelativism. Ethnocentrism refers to the way a person evaluates

their intercultural interactions based on the standards of their own culture. Ethnorelativism in contrast is where a person evaluates their interactions relative to their own and other cultures (Hofstede & Hofstede, 2005). The underlying assumption of the DMIS is that as an individual's experience of intercultural sensitivity increases along the continuum, so does the potential to become more culturally competent because the individual is able to view the interaction from their own cultural perspective and the other person's cultural perspective (Hammer, Bennett & Wiseman, 2003, p. 424). Bennett's (1993) DMIS expresses six experiences of difference (See Figure 2.2). The first stage is denial of difference. This is the inability to construe cultural difference, indicated by well-meant but ignorant stereotyping. The second stage is defense against difference. This is when individuals recognise cultural differences but negatively evaluate the variations in culture. This stage is typically characterised by dualistic "us vs. them" thinking which can lead to the formation of in-groups and out-groups. The third stage is minimisation of difference. At this point there is a recognition and acceptance of superficial cultural differences, such as eating and religious customs. Yet, the individual also holds the belief that all humans are similar to each other, defined in more ethnocentric terms. The fourth stage is about acceptance of differences. At this point there is a shift to ethnorelativism. Now the individual recognises and appreciates cultural differences in behaviours and values. The fifth stage is about adaptation to difference. Here the individual's frame of reference starts to shift. There is an effective use of empathy, with a willingness to understand and be understood across cultural boundaries. It is the development of interaction skills that enables intercultural communication. The final stage is the integration of difference. It is the internalisation of multicultural frames of reference (Bennett, 1993).

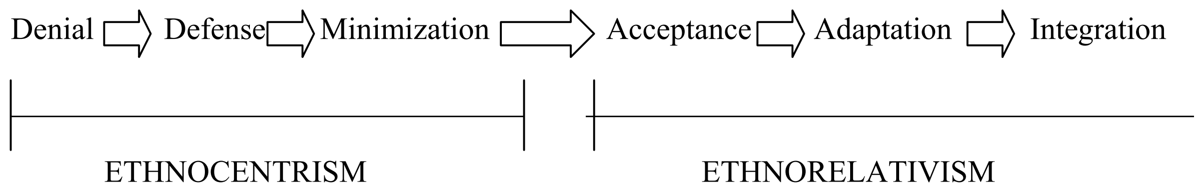

Figure 2.2. Model of Development of Intercultural Sensitivity. Reprinted from "Measuring Intercultural Sensitivity: The Intercultural Development Inventory," by M.R. Hammer, M.J. Bennett, and R. Wiseman, R, 2003, *International Journal of Intercultural Relations, 27,* p. 424. Copyright 2003 by Pergamon. Reprinted with permission.

The main difference between IS and CQ is that IS is perceived as contextual and variable within a person. It is a process that needs to be refined and honed for each encounter. CQ, in contrast, is seen as an aspect of a multi-dimensional perspective of intelligence – a skill or development tool (Ang & Van Dyne, 2008). IS is a facet of CQ as it can be mapped to the behavioural dimension of CQ. In essence a person with high CQ is typically interculturally sensitive to the cultural cues which are being transmitted during an intercultural encounter. IS is relevant to this study because as a process it allows the researcher to observe and assess the interviewees' responses in relation to the way they construe cultural differences. Their responses may then be correlated to the CQS to detect emerging patterns.

Critiques of Cultural Intelligence

One of the issues or criticisms in the field of intelligence is the lack of integration between related intelligence constructs such as Social Intelligence (SI), Emotional Intelligence (EI) and Cultural Intelligence (CQ). Thorndike (1936) proposed the initial idea of SI as a single concept that was later divided into two personal intelligences: interpersonal (knowledge and ability to read other's moods and mental states) and intrapersonal (knowledge and ability to read one's own moods and mental states) (Gardner, 2002; Wong & Law, 2002; Crowne, 2009). SI is defined as the "ability to interact effectively with others" (Crowne, 2009, p. 149) and in an appropriate way to achieve a desired goal (Bjorkqvist, 2007). SI is similar to CQ in that it is

embedded in the multiple intelligence domain and accesses the dimensions of knowledge, skill and behaviour for effective interactions. It differs from CQ, however, in that it does not include motivation to learn about other cultures; moreover, SI is not specifically about culture.

The construct of Emotional Intelligence is a subset of SI (Salovey & Mayer, 1990). EI is defined as the "ability to perceive and express emotions accurately and adaptively" (Salovey & Pizarro, 2003, p. 263) in oneself and others and then to use this emotional knowledge (verbal and non-verbal cues) to assess a situation and act appropriately. The construct seems very similar to SI and even CQ; however, there are differences which I will further elaborate. SI is an umbrella term which includes all aspects of EI (Crowne, 2009). This means SI focuses on the perception and interpretation of social cues, including emotional cues that are specific to the culture in which they were developed (Thomas et al., 2008). A study by Matsuo (2004) substantiated an interesting relationship between SI and EI by demonstrating that both of these intelligence skills are processed in the same area of the brain. Further, another study by Walpole, Isaac and Reynders (2008) indicated that individuals deficient in EI skills also had social difficulties. Importantly, however, although there are similarities between the constructs, EI does not include all aspects of SI. A person with high EI may be able to discern their own or someone else's emotional cues but they may not be good at interacting and making conversation with another person.

SI is considered to be a distinct construct which encompasses EI and CQ. SI requires the ability to "understand and manage people" (Thorndike & Stein, 1937), the skill to enable people to get along with others and act appropriately in social interactions (Crowne, 2009). It may be argued that SI potentially incorporates EI and CQ because aspects of these intelligences are required for successful social interactions in a globalised world (Crowne,

2009). Although SI and EI share some concepts with CQ (See Figure 2.3), it is also argued by some scholars (Brislin, Worthley & Macnab, 2006) that SI and EI are culture specific and may not carry over to other cultures. CQ distinguishes itself from SI and EI as it is a unique construction of interacting abilities that can be applied to diverse cultural contexts. In summary, even though there are overlapping characteristics between the three constructs, they have distinctive functions and therefore are useful for their different purposes. In this research I have chosen CQ as the medium that connects the intercultural experiences of the hospital workers.

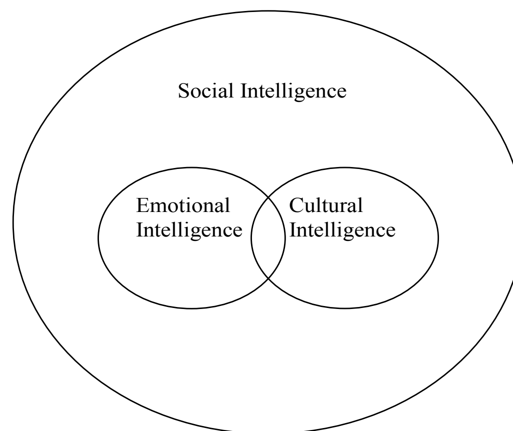

Figure 2.3. Model of relationship between social intelligence, cultural intelligence and emotional intelligence. Reprinted from "The Relationship among Social Intelligence, Emotional Intelligence and Cultural Intelligence," by K.A. Crowne, 2009, *Organizational Management Journal, 6,* p.157. Copyright 2009 by Eastern Academy of Management. Reprinted with permission.

Intercultural Communication Theories

Research studies in international work in diverse areas such as international management (Adler, 1981), overseas effectiveness (Brislin, 1981; Kealey & Ruben, 1983), overseas expatriate adjustment (Aycan, 1997) and international study abroad (Klineberg & Hull, 1979) have all identified that intercultural competence is important if individuals want to increase their understanding of other cultures and develop relationships across cultures. A critical component of increasing understanding and improving intercultural relations is having good

communication skills (Hammer, Bennett & Wiseman, 2003). There are many labels in which the study of communication and culture intersect. Some concepts or labels which have been discussed by different researchers include intracultural communication (interactions between culturally similar people), cross-cultural communication (comparison of interactions among people of the same culture to those of a different culture), international communication (interactions among people from different nations, especially when one has been in a host country for a few years and then returns to the home country), interracial communication (differences in communication between ethnic group members who are all part of a nation-state) and interethnic communication (interactions between people of an ethnic group who are part of the same nation but live in specific geographic areas) (Lustig & Koester, 2010). Intercultural communication differs from the previously mentioned concepts as it relates to people of different cultures interacting with each other on a frequent basis with mutual understanding and respect of each other's cultural values, norms and beliefs (Lustig & Koester, 2010).

Even though it is important to understand the differences in the key concepts of communication, this study will focus on the concept of intercultural communication interactions. One of the challenges in explaining intercultural communication is that there is no original theory and hence we have to look at existing theories on communication and extend it to intercultural interactions (Asante & Gudykunst, 1989). This research study will focus on four communication theories, in chronological order, that will be reviewed and extended to the field of intercultural interactions. These communication theories explain the difficulties of intercultural communication and the construct of CQ provides the ability to overcome these challenges to be able to become interculturally competent.

Uncertainty Reduction Theory

An area that has generated considerable research and theoretical extensions into the intercultural milieu is Uncertainty Reduction Theory (Berger & Calabrese, 1975). According to Berger and Calabrese (1975), the primary function of interpersonal communication is to reduce uncertainty. When people meet each other as strangers, they want to know how the other person will behave as they are uncertain about this aspect. This becomes amplified when people are in an intercultural communication encounter as there may be the added element of disparate worldviews. The basic premise of the theory is that effective communication emerges from managing uncertainty and anxiety. Berger and Calabrese (1975) posited seven axioms and 21 theorems specifying the interrelationship between uncertainty, degree of intimacy in communication content, reciprocity, similarity, verbal and non–verbal communication. Berger (1979) suggested three strategies for reducing uncertainty: passive strategies that rely on inconspicuous observation of others (metacognitive CQ); active strategies that involve obtaining information about others indirectly (cognitive CQ); and interactive strategies that initiate direct communication interaction with others (behavioural CQ).

Intercultural research has found that Uncertainty Reduction Theory is useful in explaining communication between people of different cultures (Gudykunst, Chua & Gray, 1987; Gudykunst, 1988). Gudykunst (1988) argues that intercultural communication is a salient factor in reducing uncertainty (cognitive) and anxiety (affective behavioural process), which in turn influences intergroup/interpersonal adaptation and effectiveness (Asante & Gudykunst, 1989). When uncertainty and anxiety levels are high in a person involved in an intercultural interaction, it may lead to stress and tension due to misunderstandings of points of view, which may then give rise to conflict situations.

Culture Distance Theory

Theories on intercultural communication indicate that social contact between culturally different individuals can be difficult and often stressful (Ward et al., 2001). This stress is amplified if interactants are uncertain or anxious. Culture Distance Theory (Deaux, 1976) predicts that the greater the cultural gulf between individuals, the more problems they may experience. Dimensions of cultural variability such as individualism–collectivism, power distance and uncertainty avoidance, influence the underlying social structures and norms of a situation, and in turn these social structures and norms influence how one should or should not behave (Gudykunst & Ting-Toomey, 1988). When the cultural distance between the two interactants is large, individuals may employ stereotypes as shortcuts to explain behaviours perceived as being displayed by others who are different to them (Ang & Van Dyne, 2008). CQ studies have found that as culture distance increases, so does uncertainty and individuals will rely on abstract thinking to guide their judgment and decision-making processes. Those individuals who possess high metacognitive and cognitive CQ may apply cultural knowledge to the intercultural interaction, moderating the impact of culture distance.

Language Competence

Language (verbal and non-verbal forms) is often taken for granted in our lives. It is usually when people try to speak another language in which they are not competent that they realise the importance of language in the communication context. Language acquisition is important for high CQ and increasingly vital for effective intercultural interaction. Learning a host language (in Australia it is English) relies on the intrinsic motivation of the new learner to fit into the host culture group. For a host member the challenge is to try and accommodate another language speaker and further develop their intercultural communication skills. In

professional communication the accepted principle is "to accommodate toward the practices of other cultures whenever feasible" (Scott, 2004, p. 161). Empirical research has observed that individuals with high CQ and higher language proficiency levels simplify their usage to match the level of the less proficient interlocutor for ease in understanding (Babcock & Du-Babcock, 2001). CQ research suggests that an individual's aptitude for learning new actions, inclusive of language, is needed in a new culture (Earley, Ang & Tan, 2006). If individuals are less competent in their host language acquisition, they may tend to take a less active role and contribute fewer ideas in intercultural interactions as per the example below (Du-Babcock, 1999). It may also lead to isolating and categorising people creating an "us vs. them" divide as illustrated below. The main aim is for people to increase their CQ so that they recognize that language interaction not only involves knowing English (used in Australia) but also being cognizant of others' proficiency and usage of the language (Ang & Van Dyne, 2008).

> *For the first time I fully understood what an isolating factor language can be. My own identity and ability to integrate into Brazil were founded in language and my capacity to communicate. I found a surprising side of me, so timid that it hamstrung my ability to interact. No one who knew me at home would ever guess I knew how to be shy, but here I had often frozen in embarrassment, swallowing words I could speak perfectly well moments before, creating a lonely cocoon of my own silence.*
> (Eliza Bonner, as cited in Lustig & Koester, 2010, p. 167)

Social Categorisation Theory

Social Categorisation Theory (SCT) (Tajfel, 1981) builds on Culture Distance Theory and Hofstede's (1980) research to explain the consequences of stress of many intercultural relationships (Abrams & Hogg, 1990). SCT highlights the tendency for individuals to classify and stereotype others (Stephen, 1977) through uneven attribution bias creating an "out-group co-variation effect" of negative stereotypes (Leyens, Yzerbyt, & Schadron, 1994, p. 162). Many diversity studies have used SCT to explain how culturally diverse groups experience

lower cohesion (Smith, Smith, Olian, Sims, O'Bannon &Scully, 1994), more discord (Pelled, Eisenhardt & Xin, 1999) and lower performance levels (Pelled, 1996). The classifying of in-groups and out-groups tend to lead to negative behaviours towards the latter that disturb the team's operations (Ang & Van Dyne, 2008). Examples that came out of this study of negative behaviours are statements such as, "those foreign Patient Care Assistants (PCAs) don't understand anything" and "those Aussie PCAs talk all the time."

Some individuals may have a tendency to be ethnocentric in their outlook and defensive about the differences they perceive between themselves and someone from another culture and negatively evaluate an intercultural interaction. Examples of SCT can be found in the workplace setting of this study. Muslim nurses and PCAs need to have frequent breaks to pray, which can cause others to make negative group evaluations of them when they cannot be found during a busy shift. Another example may be nurses and PCAs from a non-Western background who have strong accents and intonations which make it hard to understand what they are saying unless one pays attention closely. In a fast paced work environment like a hospital, sometimes slowing down on a busy day can be difficult and at these times people get stressed and may tend to negatively classify the non-Western worker as difficult or hard to work with.

Empirical Research

Intercultural communication generally involves face-to-face communication between people from different cultures (Gudykunst & Mody, 2002). Major areas of research in the intercultural field have generally focused on the cross-cultural communication (comparison of communication across cultures) experiences of expatriate managers in multinational organisations (Ones & Viswesvaran, 1997), cross-cultural adaptation (Ruben & Kealey, 1979)

and conflict negotiation (Ting-Toomey & Oetzel, 2001). In the rest of this section I will discuss our empirical knowledge about intercultural competence. I will review studies that focus on the rationale for intercultural competence, ways to improve intercultural competence, the difficulties in intercultural interactions (individualism–collectivism, anxiety and uncertainty), and individual characteristics and skills that influence intercultural competence. I then review three studies that examine how the CQ components relate to one another and how CQ acts as a predictor of another variable.

Studies about the rationale for intercultural competence

Overseas experience is viewed as a rationale for gaining intercultural competence (Abrams, 1979; Adler, 1975). Two case studies (Nestlé and Colgate-Palmolive) have examined managerial experiences in multinational organisations and the interpersonal communication between their expatriate managers and staff in foreign countries. The multinational corporation Nestlé conducted an intercultural communications exercise in 1998 when it tried to disseminate its new leadership and general principles paradigm across all its worldwide offices (Jacob, 2003). Nestlé discovered how difficult it was to have a one size fits all approach and had to customize its communications in local offices by incorporating local norms and conventions. This meant that the Nestlé managers from different culture types had preconceived notions about each other's values and communication styles. To increase understanding and intercultural sensitivity of other cultural values, norms and practices, Nestlé's introduced a credo which valued intercultural competence which the company introduced through their recruitment process and their learning and development programs. Another study conducted in 2007 at Colgate-Palmolive was introduced to see how cultural understanding and a global mindset permeates the way the management staff and employees who are from diverse cultures think and interact

(Solomon & Schell, 2009). The findings concluded that sending managers on overseas assignments helped them gain cultural wisdom (understanding of local customs and acting in culturally appropriate ways). The company also discovered that the international assignees had to first learn and then change their communication styles to those of the host country.

Studies that show how intercultural competence can be developed

As a strategy to develop intercultural competency, a study was conducted by a lecturer in a USA nursing college involving undergraduate and graduate midwifery students. The course was designed to increase the students' cultural awareness, cultural sensitivity and their cultural competency, through course curriculum in a classroom setting and an added element of cultural immersion in a collectivist culture with different cultural values (a rural hospital in Honduras) (Wood & Atkins, 2006). In a live case study the USA nursing students watched the delivery and subsequent resuscitation of a Honduran infant. After the birth, the infant needed to be resuscitated immediately; however, the Honduran doctors and nurses had already left the room and did not return until they saw the severity of the infant and then proceeded with the medical requirements to save the infant's life. The USA students did not understand the Honduran cultural worldview, which is about accepting the fate of the infant. They made judgments about the lack of empathy and care by the Honduran medical staff from an ethnocentric viewpoint. What the USA students discovered was that they needed to learn more about other cultures and respect their practices in order to become interculturally competent (Woods & Atkins, 2006).

Studies about the barriers to developing intercultural competence

Culture distance can act as a barrier to effective intercultural communication. Hofstede's (1980) study of the cultural values of IBM employees highlighted cross-cultural differences in the dominant values (individualism–collectivism, power distance, ambiguity and masculinity–

femininity) of the countries rather than individuals. Studies that have independently measured individualism–collectivism have found "reasonable correspondence" (Ward, et al., 2001, p.12) between values of individuals and Hofstede's (1980) country rankings (Triandis, McCusker & Hui, 1990; Bochner, 1994). An example that highlights the different approaches to conflict is reflected in the critical incidents case studies conducted by Sorti (1994). One employee, of Middle Eastern origin, was provided feedback which included his strengths and weaknesses (a Western process of providing feedback) by his American manager. The employee was deeply offended because in his country, shame and loss of face are to be avoided at all times. Negative feedback for Middle-Easterners is indirect and very discreet. The manager had no idea what happened and was also very annoyed at the employee because he thought that he was being very helpful and was trying to motivate his employee to do better. Lack of cultural knowledge, motivation to learn about the culture, sensitivity and communications skills can be a barrier to intercultural competence.

Lack of knowledge of cultures, their values, beliefs, languages and customs can often lead to stressful interpersonal communications between people of different cultures, which in turn can cause uncertainty and anxiety in intercultural interactions. To test aspects of intercultural communication theories, Gudykunst and Nishida (2001) investigated uncertainty avoidance and anxiety in two separate studies. The design of these studies involved two separate cultures (American and Japanese) and two relationship types (strangers and friends). Both studies concluded that there was a greater influence of anxiety in comparison to uncertainty avoidance in perceived effectiveness of the communication exchange from the Japanese culture. These findings were interpreted relative to the attributes of Japanese culture (collectivist) arguing that people experienced higher anxiety levels with other people in a culture which had high levels of

uncertainty avoidance. Gudykunst and Nishida (2001) also found that uncertainty reduction strategies were found to be different across cultures. For instance, American students (individualist culture) were found to prefer interactive strategies, while the Japanese students (collectivist culture) preferred passive strategies to reduce uncertainty in their intercultural communication interactions (Gudykunst & Nishida, 1984; 2001). This lack of convergence between the communication styles may lead to a breakdown in intercultural communication.

Studies that examine cultural factors (individualism–collectivism) that influence intercultural communication

Differences in culture may cause conflict and stress in intercultural interactions. The cultural taxonomies such as individualism–collectivism offer lenses through which cultural variations may be understood. A study conducted by Oetzel, Ting-Toomey, Masumoto, Yokochi, Pan, Takai, & Wilcox (2001) across four countries (China, Germany, Japan and the United States), showed that members of a workforce with diverse cultural backgrounds bring to the workplace different conflict resolving behaviours that directly influence the outcomes of conflicts. The research concluded that the primary orientation factors of individualism–collectivism, power distance, saving–losing face concerns and situational factors of in-out group boundaries influence conflict process factors. The findings indicated that individuals from collectivist countries like China use more obliging conflict resolution styles compared to the US (dominating style) and Japanese (integrating style). Even though the conflict resolution styles may be different as these are based on behavioural patterns, Morisaki and Gudykunst (1994) highlighted in their research the similarities in culture related to social face. They described “two types of social face in Japanese culture; *mentsu* and *taimen*. *Mentsu* is similar to the concept of *mien-tzu* in Chinese culture while *taimen* refers to the appearance one presents to others (p. 50). A

construct Oetzel, Garcia and Ting-Toomey (2008) deem more appropriate for studies involving intercultural competence

Oetzel and Associates' (2001) study also found that self-face is associated with individualistic dominating culture types and other-face is associated with integrating, obliging and avoiding type of behaviours, and that the greater the power distance the more frequent out-group conflicts occurred. These studies have been conducted with expatriates, sojourners and overseas workers in foreign countries and have focused on values and culture types in relation to intercultural encounters.

Studies that examine individual attributes and skills that influence intercultural communication competence

There have been few studies conducted in the healthcare field. One study examined the individual attributes and communication skills required of medical providers in providing patient care (Gibson & Zhong, 2005). There were 45 medical providers and 91 patients surveyed from diverse cultures in the USA. The study focused on the specific characteristics of empathy, experiences related to living in different cultures and the ability to speak a second language. Patients considered empathy to be the key component in intercultural communication competence. This finding supports the research of Gudykunst (1993) that individuals high in empathy are also interculturally competent communicators. The research findings also revealed that the medical providers who had spent three months or more abroad had more knowledge of their own culture and other cultures, which enabled them to communicate more appropriately and effectively with patients from other cultures. The final finding in this study identified medical providers who were bilingual (not necessarily fluent in the second language) and thus were able to display the appropriate communicative behaviours for individual ethnic groups and this was an important element of intercultural competence (Gibson & Zhong, 2005).

At present there are no studies in the intercultural competence field in relation to intercultural communication between healthcare workers within a domestic hospital work setting, using the framework of CQ. Little is known about the barriers that exacerbate tensions and conflict between patient servicing healthcare workers of different cultures in a culturally diverse workplace.

Studies about the components of CQ and how they relate to each other

In culturally diverse work environments it is difficult to gain in-depth knowledge of all cultures. People with high CQ will counterbalance this lack of cultural knowledge by using their metacognitive CQ to distance themselves from their own "frame of reference" (Ang & Van Dyne, 2008) and use their judgment skills in a cultural context (p. 369). This means the person has to be open to new perspectives and then act appropriately. CQ requires a move from traditional ethnocentric ways of communicating to become "virtual communicators" (Ang & Van Dyne, 2008) who are respectful of other cultures (p. 370). The Cultural Intelligence Survey (CQS) was developed and validated by the Cultural Intelligence Centre in Singapore and the USA (Ang, Van Dyne & Koh, 2008). Three studies tested substantive predictions of CQ dimensions and found that metacognitive CQ was related to performance on a cultural judgment and decision-making task; motivational and behavioural CQ was linked to general adjustment; and the four dimensions of CQ (metacognition, cognition, motivation and behaviour) explained variance in general judgment and task performance over and above that accounted for by a test of cognitive ability (Ang, et al., 2007; Oolders, Chernyshenko & Stark, 2008). This pattern of results supported contentions that cognitive capabilities such as questioning assumptions, adjusting mental models and rich cultural knowledge are important for making accurate judgments and decisions when situations involve cultural diversity (Ang et al., 2007).

Studies about CQ's ability to predict some other variable

Being culturally intelligent when working with people from diverse cultures requires "mindfulness", a bridging process between knowledge and behavioural ability (Thomas, 2006). This enables the person with high CQ to communicate in a culturally sensitive manner, make judgment calls and exhibit appropriate behaviours and take decisive action relevant to the situation (Ang & Van Dyne, 2008). In a series of studies that spanned two continents, Ang and associates (2007) sought to test two hypotheses. Hypothesis One posited that metacognitive and cognitive CQ are predictors of cultural judgment and decision-making (CJDM) given that CJDM emphasises analytical abilities. Hypothesis Two posited that motivation and behavioural CQ are predictors of cultural adaptation. Motivation CQ related positively to cultural adaptation because Ang and associates (2007) suggest that perhaps people with high CQ in this dimension have an intrinsic interest in other cultures. The deductive analyses also argued that cultural adaptation was about people wanting to fit in and therefore positively related to Behavioural CQ, where individuals adjust their behaviour appropriately in culturally diverse situations.

The above study included two samples of undergraduate students (n=235 Midwestern USA students with international experiences, almost half (45%) were female, average age 22 years; and n=358 Singaporean students with international experiences, a large (76%) female group, average age 19 years). In the USA sample, Ang and associates (2007) assessed CJDM with five cross-cultural decision making scenarios, using the cultural value dimensions of collectivism, power distance, masculinity, and context communication. In the Singapore sample, students analysed a cross cultural case and described their strategies for resolving the issue. In the case study scenario intercultural adaptation was assessed with three items: first, how well students had adjusted to their situation by socialising with people; second, their daily interactions with people;

third, how they were getting along with people. The researchers conducted confirmatory factor analysis at the item level. The results of study one for both samples supported Hypothesis One that metacognitive and cognitive CQ are predictors of CJDM and Hypothesis Two that motivation and behavioural CQ are predictors of cultural adaptation (Ang, et al., 2007).

Task performance is a function of knowledge, motivation, skills and ability directed at fulfilling job responsibilities (Campbell, 1999). In their second study about an executive development program (98 international managers holding jobs with international scope) in Singapore, Ang and associates (2007) sought to triangulate findings with their previous study described in the above paragraph. They proposed a third hypothesis, that all four dimensions of CQ were positively related to task performance. The researchers proposed a priori that individuals who had high metacognitive CQ would know when and how to apply their cultural knowledge, those high in cognitive CQ would have a more accurate understanding of job role expectations, high motivation would mean that individuals would direct their energy towards learning their role expectations and high behavioural CQ would mean individuals would use their communication skills to meet their role expectations. Hypothesis Three was measured by the CQS (Ang, et al., 2007). Study three was designed to triangulate findings from studies one and two to field settings. The goal was to produce similar patterns of results to strengthen the generalisability of findings. Results supported Hypothesis One and Two but Hypothesis Three was not supported. Despite arguing a priori for hypothesis three that all four dimensions of CQ predict positively to task performance, findings demonstrated that only metacognitive CQ and behavioural CQ predicted task performance (Ang et al., 2007, p. 362). Metacognitive CQ and cognitive CQ did not significantly relate to task performance; however, there has been no

research on whether CQ is related to other forms of performance, such as contextual or adaptive performance (Ang, et al., 2007, p. 362).

There are gaps in our knowledge about the CQ framework. For example, many of the case studies conducted have used highly educated people, such as, students and global managers. We also did not know how well CQ predicts the presence or absence of intercultural communication conflict as the studies using the CQ framework in intercultural conflict case studies have mainly focused on the differences associated with cultural factors, such as individualism–collectivism.

Conclusion

This chapter presents a diverse range of concepts and arguments to interpret the deeper and interconnected nature of intercultural interactions through the theoretical lens of CQ. The material presented in this chapter has focused on the relationship between culture and intercultural communication and the attributes and stereotypes that impede effective intercultural interactions. Some theories and empirical research about intercultural communication, culture type and CQ are examined, highlighting that knowing the local culture, its language and being exposed to diverse cultural settings increases intercultural effectiveness. It also means that we must construct and interpret communication in a contextual light. This study has implications for healthcare workers as it measures aspects of intelligence not tapped by conventional methods and includes culture as a vital part of intelligence.

Empirical research about intercultural competence in the workplace has mainly examined expatriate global managers and global teams in cross-cultural interactions dealing with challenges emerging from intercultural interactions. It is likely, however, that global managers have advanced cognitive and communication skills that make them better able than other workers to negotiate intercultural encounters. Findings from these studies, therefore, may only

offer a limited understanding of the intercultural communication experiences of workers, especially those in subordinate positions. Little is also known about the ability of the CQ model to predict the degree and extent of intercultural communication conflict. There is limited knowledge about whether individuals who score higher on the CQS four factors are more likely to enjoy positive intercultural communication interactions. We also do not know how accurate the CQS is in predicting intercultural competence in stressful and fast-paced workplace settings, such as hospitals. What we do know is the people who are bilingual or multilingual should have a broad repertoire of behavioural skills that they can access to make people comfortable by exhibiting culturally appropriate verbal and non-verbal expressions (Ang & Van Dyne, 2008).

This study can contribute to our knowledge about intercultural communication by recognising that people move in stages when developing intercultural competence skills (Ang & Van Dyne, 2008). Howell (1982) suggests that we are all unconsciously competent in relation to our own culture, and generally unconsciously incompetent (we don't know what we don't know) when it comes to other cultures (excluding cultural experts). It is only through our intercultural experiences where we interact with people of different cultures and make our mistakes that we move forward to conscious incompetence. We then modify our behaviour and learn the norms and expectations of other cultures to become consciously competent (Howell, 1982). This study may reveal some of the potential barriers to intercultural communication effectiveness that healthcare workers experience in the hospital. It also investigates whether CQ can be used as a measurement of intercultural communication and intercultural competence in a hospital setting in Australia.

Chapter 3

METHODOLOGY

The purpose of this chapter is to describe the methodology used in this research study. The first section discusses the methodological approach of this study. The second section focuses on the research design and data collection methods. The third section describes the validation of scales, rigour and the ethical concerns that were addressed by the way the data was collected.

Methodological Approach

This research study was embedded in a 'naturalistic enquiry' epistemology (Guba & Lincoln, 1985) where interviewees were invited to share their experiences in a work setting. Along with the researcher, the interviewees gained some insights into the social meanings of their work life within the intercultural milieu of an Australian private hospital. The research explored the intercultural interactions between hospital workers in three different job roles from different culture types (individualist–collectivist) and the relationship between their intercultural experiences to CQ – "personal characteristics that relate to the capability to perform the behaviour of interest" (Ang & Van Dyne, 2008, p. 8). This study used a mixed methods methodological approach comprising quantitative (questionnaire) and qualitative (interview) data collection components. The research followed a deductive process (Walter, 2010, p. 67) as the analysis commenced from the theoretical perspectives of multiple intelligence (Sternberg & Detterman, 1979; Bennett, 1993; Ang et al., 2007; Ang & Van Dyne, 2008) and intercultural communication (Werner, 1959; Berger & Calabrese, 1975; Deaux, 1976; Giles & Byrne, 1982; Abrams & Hogg, 1990) and concluded with the practical application of learning and development solutions obtained from the research findings.

To analyse the quantitative findings I used descriptive and correlation statistics based on the data collected from the CQ 20-item Scale (CQS). The survey had a robust four factor structure for CQ. There was an additional six items related to satisfaction in intercultural interactions, and an additional seven items related to individualism based on the Ali Individualism Scale (AIS) (Ali, 1988). The AIS was used to measure the individualistic cultural traits of the questionnaire group and was based on the same 4 point Likert scaling system as the CQS. Utilising a survey as part of the data collection allowed me to explore the "nature and dimensionality of CQ" (Ang & Van Dyne, 2008, p. 35), intercultural interactions and cultural orientations.

To analyse the qualitative findings I used an interpretivist framework. Understanding is the main purpose of an interpretivist theoretical paradigm (McCotter, 2001), which is neither explanatory nor predictive. Rather, as Glesne and Peshkin point out, it is the act of making sense from social interactions, by describing and probing the "motivations, meanings, situations, and conditions of actions" (1992, p.19). In essence, interpretivists seek to understand the social constructions of reality (Schram, 2003) through their direct subjective experiences and those of others rather than through "abstract generalizations" (Glesne & Peshkin, 1992, p.19). From an interpretivist perspective our world is full of meaning (created through symbols and language) in which our actions take place on the basis of shared understandings and interpretations (Walter, 2010).

Interviews were used to capture unseen periphery information by listening to what the interviewees were thinking about a topic (Glesne & Peshkin, 1992). Many researchers who have used this method consider it to be an effective way of understanding interviewees' experiences. Interviews add depth and authenticity (Marshall & Rossman, 1989) to the study as the

interviewees and interviewer engage in two way dialogues, creating flexible and open communication exchanges. The purpose of these interviews was to gather in-depth, rich descriptions of interviewees' intercultural experiences in the workplace, to examine the ability of the amended CQS to explain the interviewees' intercultural experiences, and to examine the relationship between intercultural experiences and CQ.

As part of the interviews I asked the interviewees to describe a critical incident that involved an intercultural interaction scenario. The Critical Incident Technique (CIT) (Flanagan, 1954) was designed to describe effective and ineffective behaviours in a workplace setting. For this research it served as a mechanism to support the exploration of intercultural interactions between hospital workers. It was also chosen as another qualitative method designed to elicit multiple interpretations and perspectives about intercultural encounters in the workplace. CIT is based on the premise that a specific event that is “sufficiently complete in itself” can provide information for researchers to make inferences and predictions about the person and the action (Flanagan, 1954, p. 327). The CIT has been utilised successfully by researchers to develop skills for reflection and or critical thinking. For example, the CIT was utilised as an indicator of leadership in the case studies of Executive Leadership in Academic Medicine (ELAM) Program for Women (McDade, Sloma-Williams, 2006) and more locally Curtin University midwifery students use a CIT amended process developed by David Tripp (1993) to work through events which occur in clinical practice (Burgum & Bridge, 1997). This is an important data collection method as it assists the researcher to gain insights from different perspectives and also helps the interviewees to critically reflect on what has occurred in the incident through a new lens.

Research Design

Research Site

The research site chosen for this study was an Australian private hospital. I work at the hospital as a casual PCA on one of the general wards. There are eight general wards and three specialist departments (Emergency, Day Procedure Unit and Theatre) that have direct involvement in patient care and whose staff were given the opportunity to voluntarily participate in the study. Within a mixed methods design, context becomes the framework for exploration, providing the contextual signs for interpreting the intercultural interactions of the interviewees from multiple perspectives (Patton, 2002). This is consistent with the interpretivist approach which usually calls for the investigation of social phenomena in their natural environments.

The contextual setting for this research is a hospital which is part of a larger group of hospitals that follows a Catholic tradition and has universal values of hospitality, compassion, respect, justice and excellence. This hospital is part of a not-for-profit group which means the profit goes back into providing services for the hospital and the community. In contrast a public hospital's Board of Directors is accountable to the government. The hospital also provides well-being programs and learning and development opportunities to assist its staff to develop their skills and attitudes toward patients that the mission aims to achieve.

Learning and development programs for all staff commence with induction. This typically follows a meet and greet format involving the different departments in the hospital and training on infection control, health and safety. Nursing staff have additional technical training, such as, pain control techniques, and then all staff members have a practical demonstration module customized by job function. The well-being programs include short courses available at a retreat house organised by the hospital pastoral care area and other short professional

development courses which include communication skills, project management, team leadership and coaching. Currently there appears to be no cultural training programs in the hospital. The hospital has also partnered with TAFE to provide a Diploma of Nursing for enrolled nurses and a Certificate 111 in Health Services for PCAs. This is a strategic plan to avoid predicted shortages in workforce staff and decrease the need to employ agency staff to backfill vacant positions. The last overseas recruitment drive at this hospital was in 2009-2010 for nurses and PCAs from Africa who are in Australia on special temporary work visas provided by the Department of Immigration.

The hospital is comprised of many different job roles.   I chose three roles which include nurse managers, nurses and PCAs as these are the roles I am most familiar with and they are also directly involved in patient care. The intercultural communication interaction styles of these nursing staff have a direct impact on each other and on patient care. These are critical roles in the hospital. There are approximately 604 doctors in this hospital and most of the doctors (95%) are private visiting specialists and therefore have little time to consult with the patients. It would have been very hard to co-ordinate times to meet with doctors and compete with their patient visiting schedule.

Below is the staffing profile of the hospital setting where the research study was conducted and its sister hospitals which form part of an Australia wide group (See Table 3.1). The Australia wide hospital group consists of 11 hospitals and other service facilities which are situated in Western Australia, Melbourne and Sydney. The hospital where this research was conducted has approximately 20% of the staffing levels in each category of the total numbers and similar representation across job functions (Hospital Group Annual Report 2008/2009). In

2012, there were 43 % nursing, 20% administration staff and 23 % PCAs (Hospital Group Annual Report 2012).

Table 3.1 *Hospital Group Staffing Levels in Australia (2008-2009)*

	2005	2006	2007	2008	2009
Group Total	6563	6699	7063	8411	8887
Hospital Staff	5139	5327	5668	6617	7027
Nursing Staff	2915	3042	3180	3579	3807
PCAs	1175	1242	1325	1555	1625
Administration	1311	1304	1395	1959	2053

Source. St. John of God Group Annual Report 2008-2009

In 2006 there were 219,788 people working as nurses in Australia of which a large majority (91%) were female, some (27%) were born overseas and few (5%) (10,995) were recent migrant arrivals (Australian Bureau of Statistics, 2006). The proportion of nurses from different countries is difficult to monitor (the data categorises a large group as "other") because there are different entry routes for permanent and temporary migrants. What is known is that the traditional sources of migrant nurses are from the United Kingdom, New Zealand, Ireland and a supplementary source from Asia and Africa (Parker & McMillan, 2007). In 2006 the sources of the migrant nurses' country of birth was from the United Kingdom (25%), New Zealand (12%), Philippines (7%), South Africa (7%), India (6%), Ireland (3%) and other (40%) (ABS, 2008). The Labour Mobility Survey for 2000 (National Review of Nursing Education, 2002) projected replacement needs in nursing for the 2002-2006 period at 103,000 (8%) nursing workers. It expected projections to be similar or perhaps even higher (10%) in a further five years, which would double the figure to approximately 206,000 nursing workers required by 2011. Australia's population increases as a result of natural increase and overseas migration each year. In 2008-2009 migrants represented a high proportion (65%) of Australia's population growth, which was a record high at 298,000. Western Australia had the highest proportion of this growth with

45,200 migrants (ABS, 2008, p. 12). (See Table 3.2). The national projected needs in nursing for Australia are in proportion to the inflow of migrants. To cope with these high figures, this hospital group has a proactive workforce planning strategy which uses partner relationships with educational facilities to create a recruitment pool of graduates, then fills vacancies with local recruits and finally recruits from the pool of overseas migrants.

Table 3.2 *Components of Population Change (a), Australia – Numbers and Growth Rates*

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Population (000s)	89.5	81.2	58.0	17.3	45.2	2.1	1.9	3.7	298.9
O/Seas Migration	29.9	27.2	19.4	5.8	15.1	0.7	0.6	1.2	100.0
Annual Growth in Migration (%)	1.28	1.52	1.35	1.08	2.08	0.43	0.85	1.06	1.39

Source: ABS (2008-2009). 3412.0

Recruitment Process and Interviewees

An initial meeting was held with the Director of Missions (who is in charge of research studies) at this Australian private hospital with a view to gaining consent from the hospital Ethics Committee to conduct this research. Ethics permission was also required and given by the university (Permit 2010/236). After ethics consent, the next step commenced with the Director of Mission introducing the researcher to the general ward nurse managers who had direct contact with the staff interviewees in the hospital to explain the study and the data collection processes. The nurse managers were requested to discuss the study and hand out the information flyer (Appendix A); the information letter (Appendix B); the anonymous questionnaire (Appendix C); and a reply envelope at their discretion to any nurse, and PCA on their wards or departments. The information flyer, which had the process details of the research study, was also posted in their lunch rooms.

Four hundred questionnaires were distributed and 157 were returned, yielding a moderate response rate (39%). The survey group was asked on the anonymous questionnaire if they would like to participate in an interview and if they answered "*yes*," they were asked to provide their telephone details. The information letter explained the voluntary status of their participation, their rights to terminate participation and that all data would be securely stored for at least five years before the forms would be shredded.

From those volunteer participants (30) who agreed to be interviewed, an opportunistic selection of 15 interviewees was then contacted (See Table 3.3). Interviewees were selected to provide a range of job roles (nurse managers, nurses and PCAs), similar gender balance (80% female, 20% male) as the hospital population and different countries of origin. Some of the interviewees were from English speaking, Anglo-Saxon countries, while others were migrants whose maternal language was not English. There were three Western nurse managers, three nurses and three PCAs categorised from Hofstede's (1980) list of individualist countries and four nurses and three PCAs from collectivist countries who completed the CQS and attended an in-depth interview. It is believed the group size (See Table 3.3) has been appropriate for this study and provides enough data to answer the study's research questions.

Table 3.3 *Interview Interviewee Group*

	Nurse Managers	Nurses	PCAs
Individualist Culture Type Australian / NZ / UK / Canadian	3	3	3
Collectivist Culture Type Indian / African / Philippines / Singaporean / Malaysian	0	3	3

All employees at the hospital speak English. The nurses have to pass an International English Language (IEL) test administered by the nursing federation before becoming registered

and the PCAs are expected to understand and speak English at an acceptable level which is discerned at the recruitment interview stage by the hospital. The recruiter determines if a potential PCA can understand what is required of the role and is able to answer the interview questions which provide them with enough information to make a decision about hiring the person for the role.

The interviewees' country of birth, gender, age, education level, job role and interview date in 2011 are presented in Tables 3.4 (individualist culture type) and 3.5 (collectivist culture type). As these tables indicate, the interviewees' gender balance (four males, twelve females) was similar to the gender profile of the hospital group (1448 male, 7439 female) which is an 84 percent female to 16 percent male ratio. The average age of the interviewees was 46 years.

Table 3.4 *Demographic and interview dates of Individualist culture type interviewees*

Interviewee ID	Interview	Country of Birth	Gender	Education	Job Role
237	3 Mar 11	Australia	F	Bachelor Degree	Nurse Manager
91	9 Mar 11	U.K.	M	Bachelor Degree	Nurse Manager
201	16 Mar 11	Ireland	F	Graduate Certificate	Nurse Manager
292	16 Mar 11	New Zealand	F	Bachelor Degree	Nurse
75	16 Mar 11	South Africa	F	Bachelor Degree	Nurse
188	29 Mar 11	Canada	F	Bachelor Degree	Nurse
309	29 Mar 11	Australia	F	Secondary	PCA
292	24 Mar 11	Scotland	F	Secondary	PCA
262	28 Mar 11	Malta	M	Secondary	PCA

Table 3.5 *Demographic and interview dates with Collectivist culture type interviewees*

Interviewee ID	Interview	Country of Birth	Gender	Education	Job Role
240	11 Mar 11	Singapore	F	Bachelor Degree	Nurse
227	24 Mar 11	Singapore	M	Post Graduate	Nurse
230	28 Mar 11	India	F	Bachelor Degree	Nurse
242	10 Mar 11	Philippines	F	Secondary	PCA
300	16 Mar 11	Congo	M	Bachelor Degree	PCA
330	28 Mar 11	Malaysia	F	Certificate	PCA

Data Collection

As stated previously the study employed a mixed methods research design. The quantitative portion included a questionnaire while the qualitative portion included individual interviews. The questionnaire had four sections. The first section gathered demographic information that included employment background and current position, educational history and country of birth (which may also provide insights into English language competency), and year of migration (to understand cultural adaptation).

The second section was an amended CQS 4-point Likert-scale questionnaire of 20-items that measured four separate dimensions of cultural intelligence (Ang & Van Dyne, 2008). The four factors of CQ measured were: (1) Metacognitive CQ, which had four statements drawing on the works of educational and cognitive psychology (O'Neil & Abedi, 1996, Pintrich & De-Groot, 1990); (2) Cognitive CQ consisted of six statements which were collated from the cultural knowledge domains identified by Triandis (1994) and the Human Relations Area by Murdock (1987); (3) Motivational CQ comprised five statements which measured intrinsic satisfaction (Deci & Ryan, 1985) and self-efficacy in intercultural settings (Bandura, 2002); (4) Behavioural CQ consisted of five statements which were based largely on intercultural communication research into verbal and non-verbal flexibility (Gudykunst & Ting-Toomey, 1988, Hall, 1959). I amended the CQ 20-item scale by adding explanations in parenthesis on some questions to explain the more complex statement structure after discovering that three pilot interviewees had difficulty in responding to these questions during the pilot stage.

In the third section six additional questions were added using the same Likert scale as the CQS 20-item self-report survey to gather information about interviewees' intercultural experiences (satisfaction) at the hospital. Internal consistency standards (reliability) were met as

the Cronbach Alpha in this study was .88 (minimum standard is .70) (Nunnally, 1978) and face validity (Trochim, 2012) was used to reflect the reality of the construct. The six additional intercultural experiences (satisfaction) questions were developed to measure satisfaction levels of the hospital workers in their intercultural work interactions. Face validity was supported on page 78 in the positive correlation between increased cultural intelligence and increased satisfaction levels; r_s=0.34, $p < 0.001$, two-tailed, n=157. Specifically for this research the satisfaction items were used as supporting statements to the CQS to demonstrate aspects of behaviour related to intercultural interactions. The fourth section included the seven item Ali Individualism Scale (AIS) to determine each interviewee's culture type (Ali, 1988). The AIS was constructed to measure Individualism in the Middle East. "Cronbach's reliability coefficient for the AIS was 0.79" (Ali, 1988, p. 578) and "all items correlate positively to one another and have high mean concentrations, indicative of being appropriate items" (Ali, 1988, p. 578). The Cronbach Alpha for this study was 0.71 that was just higher than the minimum deemed acceptable for this type of study. The Ali Individualism Scale was used to verify if interviewees from individualistic and collectivistic countries responded with the corresponding individualism–collectivism values.

Pilot Study

The pilot study sought to establish content validity and usability of the research instruments. The interviewees in the pilot study were selected from each job classification and from individualist and collectivist backgrounds. The pilot group consisted of: one nurse manager (Australian), one nurse (U.K) and one PCA (Malaysian). I introduced myself as the researcher, identified my university affiliation and explained the purpose of the study. The contents of the research instruments were summarised orally and then each interviewee (after reading and completing each instrument where required) provided their feedback.

The pilot study found the following. Firstly, the language in the information flyer needed to use simpler words and it was styled as a newsletter as it is a common form for disseminating information in the hospital. Secondly, the information letter was self-explanatory and required no further editing. Third, the questionnaire required some editing. So as not to alter the validated CQS 20-item self-report, five terms were expanded on in parenthesis within or next to the statements, such as, "I know the legal systems of other cultures" (e.g. Bali has a death penalty for drug smuggling). I amended the instruments as per the pilot interviewees' suggestions and requested each pilot interviewee to review the changes. The interviewees found adding explanations to the statements assisted them in their understanding. There were no more changes required. I acknowledge that using a well-known example may make it easier for questionnaire group to agree with the statement. As this statement was one of six others to measure cognitive CQ, it was analysed in chapter four in conjunction with the other statements to determine if there was a trend to respond positively to it at a higher rate. The interview questions were also trialed in a pilot with interviewees that advised no editing of questions was required. I merely added more probes depending on the individuals who were interviewed. The initial time for interviewing was increased from 30 minutes to 45 minutes.

Interview Process

The voluntary interviewees who agreed to be interviewed were contacted to arrange the time and location of the interview. There are different shifts in the hospital and I mostly work on a morning shift so there were staff members on the ward I worked on and on the other wards that I did not know or come into contact with. I did not interview individuals with whom I socialised or worked closely during shifts. This was to ensure that there was no bias in the responses from the interviewees or any assumptions on my part as the researcher because I knew the

interviewees and the details of their working lives. Those interviewed were requested to sign another consent form (Appendix D) for the interview procedure. The interviews were semi-structured and comprised two sections (Appendix D). In the first section, interviewees were asked questions relating to the four dimensions of CQ. In the second section, interviewees were asked to provide a critical incident about their intercultural experiences in the hospital.

There are strengths and challenges in all methods that need to be considered. In the case of in-depth interviews, there is more chance of teasing out the complexities of a situation. Conversation flows backwards and forwards with flexibility and the interview has a finite time frame (Walter, 2010). They can also have their limitations. The in-depth interviews tend to perhaps be geared towards small sample sizes. The information gathered may be subjective and therefore reliant on the accuracy of information from the interviewee (Walter, 2010). Therefore it is important to have gathered other perspectives through different data collection methods, such as questionnaires and critical incidents.

Critical Incidents

As mentioned previously as part of the interview process interviewees were invited to discuss an actual critical incident but this was not obligatory. All interviewees shared a critical incident scenario even though I had a hypothetical one available if they felt unable to share their experiences. The Critical Incident was a means to allow the interviewees an avenue to describe an intercultural incident they were part of or witnessed and in discussing it, critically reflect on aspects of it which they may not have considered at that point in time. Tripp (1993) states that the aim of discussing these incidents is to develop professional judgment through analysis of them. Even though the interviewees were not required to analyse their incidents by recounting them, they had an opportunity to critically reflect on them.

Data Recording and Storage

The interviews were audio recorded and fully transcribed. Individuals were not identifiable by name as they were given allocated numeric numbers for the questionnaire and this same code was used to identify the interviewee. The reason for this was so the questionnaire and interview responses could be analysed together at a later date. All interviewees were provided a copy of their interview transcripts and had the opportunity to edit any sections they felt were inaccurate or they would not like to have published. The questionnaires, consent forms, and interview transcripts were stored in a lockable filing cabinet in the principal supervisor's office on campus. This data will be kept for five years, after which it will be destroyed.

Data Analysis

As mentioned previously, the CQS uses an amended 4-point Likert-scale questionnaire of 20 items that measures four separate dimensions of CQ (metacognitive, cognitive, motivation and behavioural). An additional six questions were added about interviewees' intercultural experiences in the hospital and then seven other questions were related to culture type (individualist/collectivist). The CQS was scored using the Statistical Package for the Social Sciences (SPSS18), enabling an examination of the relationships and patterns between the interviewees' background and demographic information (e.g. culture type, education, and work role/title) and their CQ score. The item responses for each dimension were added up to get a total score for each CQ dimension. A high score indicated high cultural intelligence for that dimension. All four dimension scores were averaged to obtain an overall CQ score. Descriptive statistics was used to analyse the frequency distributions and check for outliers and missing data. Correlation was used to explore the relationship between the CQ, satisfaction and individualism variables. Independent-samples t-tests and ANOVAs were used to compare group means. After

the quantitative data was collected the interviews were conducted, then transcribed, analysed within each individual transcript and across transcripts for cross-interviewee thematic analysis comparison (Walter, 2010). The texts were coded and categorised by looking for emerging themes or patterns in what was stated or not stated. I developed a codebook system (Appendix E) based on the items in the questionnaire to explain the categories with the aim of providing 'inter-coder reliability' (Walter, 2010, p. 327).

Validation of Scales

The CQ Scale (CQS) is distinct from other intercultural competency scales (ICS) (Ang & Van Dyne, 2008). These various intercultural competency scales were assessed by the creators of the CQS in the initial developmental stages. These ICS were empirically found to lack a consistent theoretical foundation, frequently mixing ability and personality traits. The CQS, by contrast, is firmly grounded in the capability domain, which means it does not mix ability and personality measures in the same scale and is specifically situated in a cultural context (Ang & Van Dyne, 2008). Ang and Van Dyne (2008) undertook a comprehensive review of eleven different intercultural competency scales and compared them to the CQS. Of these intercultural competence scales, two scales had no overlap with the CQS as they focused on personality, attitudes and values. The other nine scales included capability aspects similar to the CQS, yet they only contained singular dimensional capabilities, such as cognition ("Culture Shock Inventory", "Culture General Assimilator", "Global Awareness Profile Test", "Multi-Cultural Awareness-Knowledge Skills Inventory", "Socio-Cultural Adaptation Scale") (Ang & Van Dyne, 2008, p. 9). This research study used the CQS as the medium to explore and understand the interviewees' intercultural experiences also called satisfaction.

The CQS, developed as a result of six different studies, provided a concise and valid four factor structure for this study. It has proved to be stable across samples and across countries (Ang & Van Dyne, 2008, p. 34). From a theoretical perspective, based on the six studies (sample size of 1564 students from international backgrounds, minimum of two years current work experience, average age 20), Ang and Van Dyne (2008) assessed the CQS to be reliable and valid as a CQ measure. The CQS Cronbach reliability coefficient in this study was .89. Three studies were completed in Singapore with questionnaire group from different cultural backgrounds. Study One was conducted in Singapore with 576 international students who completed a comprehensive series of specification searches to develop the CQS with the strongest psychometric properties. These were ascertained as the four dimensions of metacognition, cognition, motivation and behaviour (Ang & Van Dyne, 2008). Study Two also conducted in Singapore with 447 international students, looked at the generalisability across samples. The students again completed the CQS and through "Structural Equation Modeling" (SEM) analysis demonstrated a good fit between the data and the CQS (Ang & Van Dyne, 2008, p. 18). Study Three comprised 204 students from Study Two who examined the longitudinal measurement invariance of the CQS across time. Results provided evidence of malleability and "test-retest reliability" and this supported Early and Ang's (2003) conceptualisation that CQ may change over time based on contextual situations, such as, training, cultural exposure and other experiences.

Study Four was conducted in the USA with a sample of 337 undergraduate students at a Midwestern university and concluded that the CQS was stable across countries (Ang & Van Dyne, 2008). The researchers then compared data from this study (USA) and Study Two (Singapore). Multiple group tests were also conducted and demonstrated that the same four

factor model holds across countries. Study Five applied “Multi Trial and Multi Method techniques” (MTMM) (Ang & Van Dyne, 2008, p. 26) to assess discriminant and convergent validity, using various methods (self-ratings and peer ratings) to examine generalisability across methods. Data was drawn from 142 executives from a MBA program in the USA. The findings supported their validity assessments. Study Six used secondary analysis of the previous five studies and demonstrated that CQS had incremental validity in predicting adjustment and mental well-being, cultural judgment and decision making (CJDM). Results for CJDM show that “metacognitive CQ ($\beta = 0.16$, $\rho<0.01$) and cognitive CQ ($\beta = 0.11$, $\rho<0.05$)” increased explained variance over other intelligence constructs (Ang & Van Dyne, 2008, p.34) and “motivational CQ ($\beta = 0.11$, $\rho<0.05$) and behavioural CQ ($\beta = 0.10$, $\rho<0.05$)” increased explained variance in mental well-being above other intelligence constructs (Ang & Van Dyne, 2008, p. 34). The studies also concluded that chronological and methodical scale development processes provided strong evidence that CQS has a clear, robust and meaningful four dimensional structure.

Rigour

One of the main concerns in qualitative research is the question of rigour. It is argued that the reader must be able to audit the “events, influences and actions” of the researcher (Koch, 1994, p. 976). This research utilised “triangulation” to ensure rigour by applying multiple methods of data collection (findings from previous CQ studies, respondent questionnaire and interviews) (McCotter, 2001, p.12, Lather, 1991, p. 66) as a source that contributed to the reliability of the research process (Koch, 1994). It was also a way to ensure that new insights were considered and differences were observed through the auditing process by my supervisors. It also provides other people who may be interested in this research an auditing trail. The various methods of data collected assisted me to draw more valid conclusions.

Risks & Ethics

Participation in this study was voluntary. This helped to minimise risks to workplace relationships. Interviewees were assured that the questionnaires were anonymous and only aggregate data would be reported. They were also assured that the interview data was confidential and that all reported findings would use pseudonyms. Dependency issues have been minimized since I have no authority over any of the potential interviewees. There has been no apparent conflict of interest, as I have not interviewed anyone I know closely from any of the wards or specialist areas.

I collected standard demographic details (age, gender, country of birth, education, employment status) and therefore had to assure interviewees that their data would be stored appropriately and used confidentially. As a casual PCA at the study site, I was also mindful that I was a co-worker of the interviewees and they were sharing their private experiences with me. The hospital Human Resources area was available as a facility if there were to be any distressing moments during the interview; however, the interviewees had no distressing moments during the interviews. I come from a culturally mixed heritage that straddles both of the culture types (individualistic and collectivistic) of the interviewees. This was a benefit as the interviewees felt comfortable sharing their experiences because they were doing it voluntarily and did not see me as a cultural outsider. This worked for the Australian-born as well as the non-Australians.

It was anticipated that nurses and PCAs may have been wary of sharing negative experiences if they perceived any repercussions for being honest. This was addressed by assuring the interviewees that all interview responses would remain confidential with me and my

postgraduate supervisors, that the questionnaire data would remain anonymous and that pseudonyms would be used for actual names when including any interview quotes.

Reporting

To provide feedback to the interviewees and to hospital staff, a newsletter style summary of the study's findings along with recommendations regarding learning and development solutions was provided to the hospital Director and interviewees. A copy of this thesis will also be given to the hospital once it has been examined.

Conclusion

The purpose of this chapter was to describe the methodological approach in relation to understanding the intercultural interactions in the situated context of an Australian hospital. No patients were involved in this study. Through the questionnaire, this study explored the relationship between CQ and demographic background factors, such as education, employment and ethnicity. Relationships between interviewees' intercultural experiences and CQ were then explored through the interview process.

Chapter 4

FINDINGS

INTERCULTURAL INTERACTIONS AMONG HOSPITAL WORKERS USING QUANTITATIVE DATA

The goal of this chapter is to present the findings from the quantitative data analysis. The quantitative findings are detailed in relation to the demographic, CQ, satisfaction and individualism information collected from the questionnaires. Statistical analysis was then used to evaluate the results.

Quantitative Process

The quantitative data comprised a questionnaire that was administered to 11 nurse managers, 100 nurses, and 46 PCAs. The questionnaire included the CQ 20-item Scale (CQS) (Ang & Van Dyne, 2008) and the Ali Individualism Scale (AIS) (Ali, 1988), both of which have been validated in previous studies by the developers of the scales. I also added six extra Satisfaction items to the Likert type questionnaire about experiences related to respect and ease of intercultural interactions in the hospital setting. The original CQS and AIS Scales were based on agree and disagree response choices centred around a neutral option. By contrast, the scoring system in this study is a result of a decision by the researcher to reduce it to a 4-point Likert scale without a neutral option. Empirical methodology researchers find that reducing the scale dimensions has minimal impact on the yield results from statistical parametric tests (Norman, 2010). The neutral choice is problematic for statistical analysis of data as each Likert scale point is usually weighted. As the midpoint, the neutral choice can tilt the scale in a favourable direction as it often has a higher value than the “strongly disagree” response. Therefore statistical

researchers advocate that neutral responses can adversely affect conclusions (Snider, 2009, p. 46).

Before commencing the analyses, I checked the data to ensure that it was normally distributed. I conducted a Normal Q-Q Plot for each of the four CQ factors and the total CQ plus the satisfaction factor and they had reasonably straight lines of clustered values, suggesting normal distributions. I then checked the outliers for genuineness. The trimmed mean was similar to the mean value for all six plots. I therefore retained the outliers in the data file.

Next I analysed the questionnaire data to determine the participants' total CQ score as well as their score on each of the four CQ factors. I then examined differences between groups of participants based on job title (nurse, patient care assistant or nurse manager), immigrant status (born in Australia vs. born overseas), and cultural orientation (collectivist vs. individualistic). Finally, I examined relationships among variables. These analyses included: 1) how the four CQ factors were interrelated; and 2) which participants' background variables explained variations in CQ scores and in satisfactory intercultural experiences in the workplace.

Results from the Questionnaire Respondent Demographic Data

I distributed 400 questionnaires (40 (10%) NM, 240 (60%) Nurses and 120 (30%) PCAs) and received back 157 (11(7%) Managers, 100 (64%) Nurses and 46 (29%) PCAs) completed questionnaires, which is a moderate response rate (39%). The questionnaire response rate was proportionate to the distribution and should negate possible bias response. Eight males (5%) and 149 females (95%) completed the questionnaire, and the average age was 46 years. The job status percentage of full time (54%) to part time (43%) was quite balanced. The average year of migration of the questionnaire group was 2002, which meant that many of the overseas born

participants have lived in Australia for nearly a decade. Eighty-eight participants were born in Australia and 69 were born overseas. A large number (68%) of the overseas-born participants were previously engaged in some form of employment before migrating to Australia (See Table 4.1).

Table 4.1 *Demographic Composition of Participant Group*

Demographic Details	Number	Percent
Survey Questionnaires	400	100
Questionnaire Participants	157	39
Western Questionnaire group (Individualists)	129	83
Non-Western Questionnaire group (Collectivists)	28	17
Australian Born	88	56
Overseas Born	69	44
Male Questionnaire group	8	5
Female Questionnaire group	149	95
Nurse Managers Questionnaire group	11	7
Nurses Questionnaire group	100	64
PCA & PCA Volunteers Questionnaire group	46	29
Average Migrant Respondent duration in Australia	9	
Average Age of Questionnaire group	46	
Job Status Full-Time	67	43
Job Status Part-Time	85	54

In terms of educational qualifications, many of the participants (*n*=93, 60%) had tertiary or higher postgraduate education qualifications, while fewer (*n*=64, 40%) had secondary certificates or vocational diplomas. The nurse managers (*n*=8, 73%) had degrees and postgraduate qualifications, while some (*n*=3, 27%) had nursing college diplomas. These educational qualifications and percentages were very similar for the nurses. The PCAs had reversed education levels with a large majority (*n*=33, 73%) having secondary certificates and vocational diplomas and a few (*n*=13, 27%) with degrees and tertiary qualifications (See Table 4.2). These educational levels are consistent with nursing job requirements.

Table 4.2 *Education Profile of Nurse Managers (NM), Nurses (N) and PCAs (number and percentage)*

Education	NM	N	PCA	Total
Secondary	0 (0%)	8 (8%)	21 (46%)	29 (18%)
Certificate	0 (0%)	5 (5%)	9 (20%)	14 (9%)
Diploma	3 (27%)	15 (15%)	3 (7%)	21 (13%)
Bachelor	5 (46%)	33 (33%)	8 (17%)	46 (29%)
Graduate Certificate	0 (0%)	13 (13%)	0 (0%)	13 (8%)
Graduate Diploma	0 (0%)	10 (10%)	1 (2%)	11 (7%)
Post Graduate	3 (27%)	13 (13%)	4 (9%)	20 (13%)
Other	0 (0%)	3 (3%)	0 (0%)	3 (2%)
Total	11 (100%)	100 (100%)	46 (100%)	157 (100%)

A large majority (82%, *n*=129) of the participants came from individualistic countries of origin, while a few (18%, *n*=28) came from collectivistic countries (See Table 4.3). These two cultural categories are based on Hofstede's (1980) country individualism scores. All participants whose Hofstede individualism country scores were low (below 50%) were considered to be from collectivist cultures (referred to as non-Western in this study) and those with high individualism scores (above 50%) were taken to originate from individualistic cultures (referred to as Western in this study).

Hofstede (1980) categorised some countries that are relevant to this research study as individualistic and these include: Australia, New Zealand, United Kingdome, Ireland, Italy, Switzerland and South Africa (p. 232). As South Africa was under apartheid at the time of Hofstede's research, he only had access to the Anglo-Saxon IBM employees. I acknowledge that some of the South African participants in my study may be non-Anglo-Saxon (See note below Table 4.3); however, I have retained Hofstede's categorisation. Canada was placed in the individualism category because it is considered a Western country similar in values to Australia

and the U.K. All the non-Western countries (except China and Russia) in Table 4.3 are considered less individualistic by Hofstede (1980). Hofstede (1980) was unable to categorise China in his original study, Russia and the Democratic Republic of Congo as they were closed to foreigners during the time of his research. I placed China in the same category as Japan as they share a similar cultural heritage. This categorisation was supported by Oetzel and Ting-Toomey (2003) in their research categorisation on face negotiation. They explained that Individualism-Collectivism was one of the key cultural variables of face-negotiation theory. Their research project examined four national cultures: China, Germany, Japan, and the United States and they stated that "Hofstede's (1991) study of national cultures revealed the following information about these four cultures under study: (a) China (Hong Kong) is classified as collectivistic; (b) Germany is classified as moderately individualistic; (c) Japan is classified as moderately collectivistic; and (d) the United States is classified as individualistic" (Oetzel & Ting-Toomey, 2003, p. 602).

I placed Russia in the same category as Yugoslavia because they were both Eastern Block countries and perhaps share similar cultural values and practices. I placed the Democratic Republic of Congo in the same category as other African countries in his study.

Table 4.3 *Questionnaire Participants' Country of Origin Composition*

Western (Individualist) n = 129	Non-Western (Collectivist) n = 28
Australia / New Zealand (90)	Singapore / Thailand / Malaysia / Philippines (21)
United Kingdom / Canada (27)	China / Russia (3)
Italy / Switzerland (2)	Hong Kong (1)
South Africa (10)	Africa (1)
	India (2)

Note. Individualist – Collectivist groupings *(n=157*) based on Hofstede's Individualist country ratings. Adapted from *Culture's Consequences: International Differences in Work-Related Values* (p.222), by G. Hofstede, 1980, Beverley Hills, CA: Sage. Copyright 2007 by the National Academy of Sciences. Adapted with permission.
Note. 8 out of 10 South African participants were of British or Dutch heritage.

All but one of the nurse managers were born in individualist (Western) countries, with a little over half (55%) who were born in Australia as listed in Table 4.4. A large majority (84%) of nurse participants were originally from individualist countries and about half (54%) of these nurses were born in Australia (See Table 4.4). A few (16%) of the nurses were born in collectivist (non-Western) countries. Many (76%) of the PCAs were born in individualistic countries, with the majority (61%) being born in Australia. About a quarter (24%) of the PCAs were born in collectivist countries (See Table 4.5).

Table 4.4 *Country of Origin Numbers and Percentages*

Country of Origin	Nurse Managers	Nurses	PCAs
	n=11	*n*=100	*n*=46
Born in Australia	6 (55%)	54 (54%)	28 (61%)
Born Overseas	5 (45%)	46 (46%)	18 (39%)

Table 4.5 *Country of Origin Numbers and Percentages*

Country of Origin	Nurse Managers	Nurses	PCAs
	n=11	*n*=100	*n*=46
Individualist Country of Birth	10 (91%)	84 (84%)	35 (76%)
Collectivist Country of Birth	1 (9%)	16(16%)	11 (24%)

Results from the CQ 20-item Scale

I calculated descriptive statistics for each item on the CQS, as listed in Table 4.6. The scale includes four factors of cultural intelligence: metacognition (MC), cognition (C), motivation (M) and behavioural (B) aspects of cultural intelligence. In addition to the 20 items of the CQ scale, I added another six items that measured participants' satisfaction with their intercultural experiences (referred to as Satisfaction in this thesis) in the workplace. These items are abbreviated as IE (intercultural experience). Finally, I included the AIS scale (Ali, 1988) that measured individualism traits. Participants indicated their level of agreement with each item on the 4-point Likert-type scale ranging from 1 (strongly disagree), 2 (disagree), 3 (agree), to 4 (strongly agree). The mean and standard deviation (SD) scores were obtained by aggregating individual scores for each item on the scale. In describing the descriptive results and to simplify for reporting purposes, I have combined the percentages of agree and strongly agree and disagree

and strongly disagree. I have also used ‘agreed’ to represent agree and strongly agree and ‘disagree’ to represent disagree and strongly disagree in the content of this chapter (See Tables, 4.9, 4.10 & 4.11).

Table 4.6 below shows the mean and standard deviation for each item on the questionnaire that are presented clearly to show the degree to which individual’s “agreed” or “disagreed” with the statement. In the following paragraphs I highlight the main findings from the table.

Table 4.6

CQ 20-item Scale and Intercultural Experiences Mean and Standard Deviation Scores

	Questionnaire Item	SA%	A%	D%	SD%	Mean (Std.D)
Metacognitive CQ						**3.07 (.504)**
MC1	I am conscious of the cultural knowledge I use when interacting with culturally different people	29	65	3	2	3.22 (.595)
MC2	I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me	19	71	8	2	3.08 (.583)
MC3	I am conscious of the cultural knowledge I apply to interactions with people from different cultures	19	75	5	2	3.10 (.545)
MC4	I check the accuracy of my cultural knowledge as I interact with people from different cultures	16	61	22	1	2.91 (.654)
Cognitive CQ						**2.34 (.512)**
C1	I know the legal systems of other cultures (e.g. Bali has death penalty for drug smuggling)	2	33	59	6	2.31 (.617)
C2	I know the rules (e.g. vocabulary, grammar) of other languages	2.	22	65	10	2.17 (.632)
C3	I know the cultural values and religious beliefs of other cultures	4	46	45	4	2.51 (.657)
C4	I know the marriage systems of other cultures	2	31	59	8	2.27 (.634)
C5	I know the arts and crafts of other cultures	2	34	57	6	2.34 (.626)
C6	I know the rules for expressing non-verbal behaviours (e.g. eye contact) in other cultures	6	39	49	6	2.45 (.693)
Motivational CQ						**3.01 (.431**
M1	I enjoy interacting with people from different cultures	33	65	1	1	3.31 (.527)
M2	I am confident that I can socialize with locals in a culture that is unfamiliar to me	19	70	10	1	3.08 (.561)
M3	I am sure I can deal with the stresses of adjusting to a culture that is new to me	15	71	14	0	3.01 (.537)
M4	I enjoy living in cultures that are unfamiliar to me	10	59	30	1	2.78 (.636)
M5	I am confident that I can get accustomed to the working conditions in a different culture	9	73	18	0	2.90 (.516)
Behavioral CQ						**2.76 (.562)**
B1	I change my verbal behavior (e.g. accent, tone) when communicating with someone from a different culture	11	50	31	8	2.64 (.776)
B2	I use pause and silence differently to suit different intercultural situations	10	55	30	5	2.70 (.583)
B3	I vary the rate of my speaking when an intercultural situation requires it	15	70	14	1	2.98 (.583)
B4	I change my non-verbal behaviour (e.g. eye contact) when an intercultural situation requires it	11	62	24	3	2.82 (.649)
B5	I alter my facial expressions when an intercultural situation requires it	8	54	34	3	2.68 (.672)
Total Four Factor CQ						**2.76 (.364)**

Note. (*n=157).*
Note. Examples in parenthesis have been added by the researcher to assist with general understanding of the statement.
Note. Intercultural Experiences statements were created by the student researcher.
Note. Percentage numbers of questionnaire group may exceed 100 due to rounding for the scoring: Strongly Agree (SA); Agree (A); Disagree (D) Strongly Disagree (SD); Standard Deviation (Std.D)
Adapted from *Handbook of Cultural Intelligence: Theory, Measurement, and Applications* (p.20), by S. Ang and L Van Dyne, 2008, Armonk, New York: M.E. Sharpe.
Copyright 2008 by the M.E. Sharpe Inc. Adapted with permission

Table 4.6 Continued

Intercultural Experiences and Ali Individualism Scale Mean and Standard Deviation Scores

Questionnaire Item		SA%	A%	D%	SD%	Mean (Std.D)
Intercultural Experiences (Satisfaction)						**3.20 (.461)**
IE1	I find it easy to work with nurses & PCAs from a Western background	36	60	4	1	3.31 (.574)
IE2	I find it easy to work with nurses & PCAs from a non-Western background	22	67	11	1	3.10 (.586)
IE3	I find it easy to interact with my managers	29	63	7	1	3.19 (.611)
IE4	I am treated with respect by nurses & PCAs from a Western background	27	66	6	1	3.20 (.563)
IE5	I am treated with respect by nurses & PCAs from a non-Western background	26	70	3	1	3.22 (.523)
IE6	I am treated with respect by managers	29	65	4	2	3.20 (.607)
Individualism						**3.01 (.392)**
IND1	One should be proud of one's own achievements and accomplishments	61	38	1	1	3.59 (.542)
IND2	Individual incentives and rewards should be given priority over group incentives and rewards	16	39	43	3	2.68 (.768)
IND3	One's loyalty should be first and foremost to oneself and one's family	34	57	8	1	3.25 (.627)
IND4	Individuals are the best judge of their own best interests	17	63	19	1	2.96 (.639)
IND5	Giving personal orders may hurt an individual's feelings and dignity	11	62	27	1	2.83 (.612)
IND6	To be successful one has to rely on oneself	15	49	33	3	2.77 (.733)
IND7	Loyalty to one's superior is necessary for an organization to survive	17	67	15	1	2.99 (.610)

Note. (*n=157).*
Note. Examples in parenthesis have been added by the researcher to assist with general understanding of the statement.
Note. Intercultural Experiences statements were created by the student researcher.
Note. Percentages may exceed 100 due to rounding for the scoring: Strongly Agree (SA); Agree (A); Disagree (D) Strongly Disagree (SD); Standard Deviation (Std.D)
Adapted from *Handbook of Cultural Intelligence: Theory, Measurement, and Applications* (p.20), by S. Ang and L Van Dyne, 2008, Armonk, New York: M.E. Sharpe. Copyright 2008 by the M.E. Sharpe Inc. Adapted with permission
Adapted from Scaling an Islamic work ethic. *Journal of Social Psychology, 128*, 575-583, by A.J. Ali. Copyright 1988. Adapted with permission.

Metacognitive CQ (MC CQ) refers to one's conscious cultural awareness during an intercultural interaction. Of the four factors, metacognition had the highest mean, at M=3.07. Of the four items that comprise this factor, MC1 (*conscious awareness*) had the highest mean M=3.22, SD= .595, and MC4 (*cultural knowledge accuracy*) had the lowest mean M=2.91, SD= .654. The standard deviation scores for MC1 to MC3 were very similar; however there was a larger spread for item MC4. Items in the MC CQ factor that had very high agree responses were MC1 (94%), MC2 (90%) and MC3 (93%), all of which are about conscious awareness and adjustment of cultural knowledge during intercultural encounters. MC4, about *checking the accuracy of one's cultural knowledge*, had the lowest agreement rate (77%).

Cognitive CQ (CO CQ) results refer to one's knowledge of conventions, practices, rules and norms of different cultural societies. This factor of the CQ scale had six items. The overall mean for this factor was M=2.34, the lowest of the four factors. The scores ranged from a mean for item C2 (*I know the rules (e.g. vocabulary, grammar of other languages,* M=2.17, SD = .632) to M=2.51, SD = .657 for item C3 (*I know the cultural values and religious beliefs of other cultures)*. The overall low mean reflects a lower CQ for this dimension.

Those with high motivational CQ (M CQ) direct their energy and focus toward intercultural situations based on their level of intrinsic interest. The mean of this motivational CQ dimension (M=3.01, SD =.431) is similar to the mean of metacognitive CQ (M =3.07, SD =.504). M CQ had the second highest overall mean. The factor comprised five items. Item M1 (related to *interacting with people of different cultures*, M = 3.31, SD =.527) had the highest mean with the majority (98%) of participants agreeing that they enjoyed intercultural interactions. Items M4 (related to *enjoyment of living in unfamiliar cultures*, M = 2.78, SD = .636) and item M5 (about being *confident in getting accustomed to the working conditions in different cultures,* M= 2.90, SD = .516) had the lowest means within this dimension.

Behavioral CQ (B CQ) is about exhibiting appropriate behavioural cues during intercultural encounters. B CQ mean scores ranged from the lowest for item B1 (*I change my verbal behavior (e.g. accent, tone)* M = 2.64, SD = .776), to the highest for item B3 (*I vary the rate of my speaking* M=2.98, SD = .583). Most participants (85%) agreed that they varied the speed of their conversation during an intercultural exchange. Items B1 (*changing verbal behavior,* M = 2.64, SD =.776), B2 (*using pause and silence,* M = 2.70, SD =.720) and B5 (*changing facial expressions,* M = 2.68, SD = .672) were in a close grouping of the lower range of mean scores, however the SD variance spread for B1 was larger than any of the other items in this factor. Mean scores for items B3 (*I vary the rate of my speaking,* M= 2.98, SD=.583) and B4 (*I change my non-verbal behaviour,* M =2.82, SD =.649) were higher compared to other items in this dimension.

Overall results for the four factors of CQ show that participants scored highest on the metacognitive dimension (M=3.07), followed by the motivational dimension (M=3.01). The third highest dimension was behavioural CQ (M=2.76) followed by the cognitive dimension (M=2.34). The item with the highest mean score was item M1 from the motivation dimension, (M=3.31, SD=.527) about *enjoying intercultural interactions.* Other items in the motivation dimension which had a high average score were M2 (*confidence in socialising with other cultures*, M=3.08, SD=.561) and M3 (*confidence in handling the stresses of cultural adjustment*, M=3.01, SD=.537). The second, third and fourth highest mean scores were all from the metacognitive dimension: Item MC1 (*conscious use of cultural knowledge,* M=3.22, SD=.595); MC3 (*application of cultural knowledg*e, M=3.10, SD= .545); and MC2 (*adjustment of cultural knowledge,* M=3.08, SD= .583). Five items with the lowest mean scores were all in the cognitive dimension. They were items C2 (*knowledge of cultural language rules*, M=2.17, SD=.632); C4 (*knowledge of cultural marriage systems,* M=2.27, SD=.634); C1 (*knowledge of cultural legal*

systems, M= 2.31, SD=.617); C5 (*knowledge of arts and crafts of other cultures,* M=2.34, SD=.626) and C6 (*knowledge of rules of expressing non-verbal behaviours*, M=2.45, SD= .693).

Six items about satisfaction with intercultural experiences in the workplace were added as separate items similar to the CQS. As shown in Table 4.6, the mean scores for items in this dimension were all in the high range from M=3.31, SD=. 574, for item IE1 about the *ease in working with nurses & PCAs from a Western background* and M=3.10, SD=.586, for item IE2 about the *ease in working with nurses and PCAs from a non-Western background*. The overall mean score for satisfaction in Intercultural Experiences was M=3.20, SD=.461, that suggests that many of the participants were satisfied with their intercultural experiences in the workplace. Item IE2 about the *ease of working with nurses and PCAs from non-Western backgrounds* had the highest percentage of disagreement (12%), suggesting there may be an underlying source of dissatisfaction between colleagues of different culture types for a minority of the participants. Of these 12%, those who were dissatisfied were mainly (44%) nurse managers and (50%) nurses, mostly (66%) born in Australia and having tertiary qualifications (72%) or nursing diplomas (22%).

Percentage of Questionnaire Participants with High and Low CQ Scores

Individual questionnaire scores were added to obtain a total score for each CQ factor and then averaged to get a mean factor score. A total CQ score was calculated for each respondent by averaging the mean scores of the four factors to get a total CQ mean score. This method was used by the developers of the CQ 20-item scale (Ang & Van Dyne, 2008). The questionnaire scores were also categorised into groups to differentiate between those with greater and lower CQs. From my correspondence with Dr Van Dyne from the Centre for CQ Research, it was recommended not to focus on interpreting scores as low-moderate-high for academic purposes. However, it is a practice used in workplace consultancy. As this research may be used later to develop training recommendations within the hospital setting, I have incorporated the categories into this study.

Table 4.7 *Percentage of Questionnaire Participants with High and Low CQ Scores*

CQ Factor	Very High CQ (3.21 to 4)	High CQ (2.5 to 3.20)	Low CQ (1.71 to 2.49)	Very Low CQ (1 to 1.70)
Metacognition	34%	**61%**	3%	2%
Cognition	2%	41%	**49%**	8%
Motivation	20%	**70%**	9%	1%
Behavioural	11%	**60%**	26%	3%
Total CQ	11%	**72%**	16%	1%
Satisfaction	15%	**66%**	16%	3%

Categorising the mean scores (See Table 4.7) enabled me to gauge whether participants were in a high or low CQ group. Research textbooks do not provide guidelines on how to categorise participants based on their summated scales. However, there are scales that have been grouped, such as the Braden Scale that predicts pressure sore risk in nursing (Bergstrom, Braden, Laguzza, 1987) that was used as an example for the categorising of this scale. There are many ways of categorising scales from quartile, deciles, median splits or looking at median percentages in the frequencies (Schwarzer, 2011). I used a quartile split taking account of the highest possible raw score of 80 for a participant and the lowest possible score of 20. These raw scores were then turned into their summated scale scores to form the categories of very high, high, low and very low CQ groups (See Table 4.7).

Individual case results of the mean scores for the four CQ factors revealed that metacognitive CQ (95%) and motivation CQ (90%) had the highest percentage of participants with very high and high mean CQ scores. The highest percentage of participants with the lowest CQ mean scores was in the cognitive CQ factor (57%). Total CQ mean scores revealed that a few (11%) participants were in the very high CQ group, a majority (72%) were in the high CQ group, some (16%) were in the low CQ group, with the remaining few (1%) in the very low CQ

group. The satisfaction factor also had a high percentage of questionnaire respondents (81%) with the very high and high scores (See Table 4.7).

High and Low CQ Patterns: Case Analysis

Five participants had total CQ mean scores less than 2.00. Descriptive analysis was conducted to determine whether they shared any characteristics. The average age of the low CQ scorers was 58, which was above the mean age of the sample group of 46. The average number of years in Australia was 40 years, with four of the questionnaire group being born in Australia (*n*=3) or the United Kingdom (*n*=1), and one born in the Philippines. Four of the low CQ scorers were PCAs who had secondary certificates and one nurse who had a nursing degree from the U.K. The lowest mean scores were in the CQ factors of metacognition (M=1.50), behaviour (M=1.52) and cognition (M=1.77), which equated to a total CQ mean score for all four factors (M=1.74).

The ten highest scoring participants had total CQ mean scores that ranged between M=3.35 to M=4.00, placing them in the highest and high CQ groups. These 10 participants comprised seven nurses (70%), two volunteer PCAs (20%) and one paid PCA (10%). The average age of the 10 high scorers was 46, consistent with the sample group. The average number of years in Australia was 28 years, with many (80%) being born in Australia and the United Kingdom. Seven of the 10 high scorers had degrees while three PCAs had secondary school certificates. The highest CQ scores were in the factors, metacognition (M=3.82), behaviour (M=3.80) and motivation (M=3.70), which equated to a total CQ mean score for all four factors (M=3.54).

Most of the low CQ scorers were from the PCA group who were born in individualist cultures, with a secondary high school education, while the majority of the high scorers were nurses, with a degree education, who were also born in individualist cultures.

Relationships between the Four CQ Factors

To assess if there was a relationship between the four CQ factors and the satisfaction factor I used correlation analysis, specifically Pearson Correlation and Spearman's rho. These correlations are used to determine the strength of a relationship between two continuous variables. A positive correlation indicates that as one variable increases, the other one also does the same. A negative correlation indicates that as one variable increases, the other one decreases (Pallant, 2007).

Checking the Assumptions

Statistical researchers since the 1930s have argued that parametric tests such as ANOVAs and t tests are robust (increase in chance of erroneous conclusion) regarding non-normality and skewness of frequencies (Norman, 2010). The Central Limit Theory highlights that for sample sizes above five or 10, the mean scores are understood to be normally distributed regardless of data distribution. Empirical studies on robustness (Pearson, 1931 and Boneau, 1960) of parametric methods that measure differences in mean scores present a case for sample sizes greater than five to not require assumptions of normality to be conducted as parametric tests like ANOVAs and t tests are robust to skewness and non normality (Norman, 2010). Pearson Correlations are also robust to skewness and non normality (Havlicek & Peterson, 1976). If the Spearman's correlations provide similar results as the Pearson correlations, then they can also be assumed to be robust. These conditions were met in this study. Outliers should be checked for genuineness as suggested by Pallant (2007, p. 59). One way to determine if outliers are legitimate is to verify whether the five percent trimmed mean and mean value are similar (See Table 4.8). The degree of difference determines whether the outliers are having an influence on the mean. If these scores are similar, then Pallant (2007) claims these outlier scores can be retained in the data file.

Table 4.8 *Outlier Analysis of the Four Factors of CQ, Satisfaction and Individualism*

Variable	*Mean Value*	5% Trimmed Mean
Metacognitive CQ	3.07	3.09
Cognitive CQ	2.34	2.34
Motivation CQ	3.01	3.01
Behavioural CQ	2.76	2.76
Total CQ	2.76	2.76
Satisfaction	3.20	3.21
Individualism	3.01	3.00

Assessing the Size and Direction of the CQ Factor Relationships

To assess the size and direction of the relationship between the four factors of the CQ scale, I used correlation analysis to describe the direction and strength of the linear relationship between the CQ variables. Linear distribution of scores used Pearson correlation coefficient (r) and non-linear distribution of scores used a bivariate Spearman's rho correlation coefficient (r_s) to determine the direction of the relationship between the variables. The guidelines for interpreting the strength of the relationship between two variables (effect size) are as follows: small = 0.10 to 0.29, moderate = 0.30 to 0.49 and large = 0.50 to 1.0 (Pallant, 2007, p. 132). These effect sizes have also been used as a baseline to explain the differences in percentages and mean scores in the descriptive statistics. Positive correlations meant that high scores on one variable were associated with corresponding high scores on the other. Negative correlations meant a high score on one variable was associated with a low score on the other variable.

Spearman's rho (r_s) was calculated to measure the extent to which the four CQ factors were correlated with each other. There were moderate positive correlations, listed in order of strength, between the following CQ factors: motivation CQ and behavioural CQ, r_s =0.44, $p < 0.001$, two-tailed, n=157; metacognitive CQ and behavioural CQ, r_s =0.43, $p < 0.001$, two-tailed, n=157; and metacognitive CQ and motivation CQ, r_s =0.36, $p < 0.001$, two-tailed, n=157. There were small

positive correlations between metacognitive CQ and cognitive CQ, r_s =0.27. $p < 0.001$, two-tailed, n=157; cognitive CQ and motivation CQ, r_s =0.24, $p < 0.001$, two-tailed, n=157; and cognitive CQ and behavioural CQ, r_s =0.22, $p < 0.001$, two-tailed, n=157.

Next I assessed correlations between total CQ and other variables. There was a moderate positive relationship between total CQ and participants' satisfaction, r_s =0.34, $p < 0.001$, two-tailed, n=157. No correlation was found between total CQ and individualism, r_s =0.09, $p < 0.001$, two-tailed, n=157. There were small negative correlations between age and total CQ, r (155) = -0.18, $p > 0.05$ indicating that as age increased total CQ lowered.. A possible consideration is that age may be masking a weak relationship between CQ and education. Almost half the questionnaire participants (48%) below the age of 60 had a degree or post graduate qualification, while 52% of the participants over the age of 60 had lower levels of educational qualifications at high school or diploma level.

Finally, I examined (using Pearson's correlation) the direction and strength in the relationship between age, education, satisfaction and individualism. There was a small negative relationship between age and satisfaction, r (155) = -0.09, $p > 0.05$. Age and individualism showed a small positive correlation with a small value size between the two variables, r (155) = 0.11, $p > 0.05$. Education and satisfaction showed a small positive correlation with a small value size, r (155) = 0.15, $p > 0.05$. Education and individualism revealed a small negative correlation, r (155) = -0.19, $p > 0.05$.

In summary the bi-variate relationships between the four factors of CQ revealed a positive direction for all factors. The moderately strong positive relationships have been ordered in accordance with their strength of relationship. Motivation CQ was positively related to behavioural CQ indicating that more willingness to engage with people from other cultures was associated with more culturally appropriate behaviours being displayed. The second strongest relationship was

between metacognitive CQ and behavioural CQ. The more conscious cultural awareness being displayed the more appropriate behaviours were likely to be displayed. The third strongest relationship was between metacognitive CQ and motivation CQ. This relationship indicated that more conscious cultural awareness was associated with more willingness to engage in intercultural interactions. The fourth strongest relationship was between total CQ and satisfaction, with higher CQ levels associated with higher satisfaction levels between colleagues.

Weaker positive relationships were also found, listed as follows in order of strength. In the first relationship, higher education levels were associated with higher satisfaction levels. In the second relationship more cultural awareness (metacognitive CQ) was associated weakly with acquiring more cultural knowledge (cognitive CQ). Thirdly, the more cultural knowledge one gained (cognitive CQ) was associated with more willingness (motivation CQ) to engage in intercultural interactions. Fourthly, the more cultural knowledge one gained (cognitive CQ) the more culturally appropriate behaviours were likely to be displayed. There was also a negative small weak relationship between total CQ and age, indicating that higher total CQ scores were associated with lower age groups. One explanation may be because younger people world-wide have been exposed to globalisation and multiculturalism from an early age.

Group Differences in CQ and Satisfaction Scores

I was interested in examining whether some groups of participants (e.g., participants with different job roles, culture types or migration statuses) had differences in CQ scores. To examine these group differences, I used a one-way ANOVA and the independent-samples t-test. The ANOVA addressed question one and t-tests addressed questions two and three:

1. Did CQ and intercultural satisfaction scores vary by role (nurse managers, nurses and PCAs)?

2. Did CQ and intercultural satisfaction scores differ by cultural orientation (individualist and collectivist)?
3. Did CQ and intercultural satisfaction scores differ by migrant status (overseas and Australian born)?

First, I checked the descriptive information (number, mean and SD scores) of the groups I was testing. Next, I ensured that Levene's test for equality of variances for the groups was the same. The ANOVA test was not sensitive to inequalities of variances, however the t-tests were. If the Significance (Sig.) value was larger than 0.05 ($p > 0.05$) then the t-value that SPSS provided "*equal variances assumed*" was used. If the variances were dissimilar and the Sig. value was less than or equal to 0.05 ($p < 0.05$) then the t-value that SPSS provided "*equal variances not assumed",* also called Welch's test, was used. The next stage required me to assess the differences between the groups. If the value in the Sig. (2-tailed) column was equal to or less than 0.05, this indicated that there was a statistically significant difference between the mean scores between the groups. If the value was above 0.05, there was no significant difference. Finally, I checked for the effect size of the ANOVA and t-tests. Effect size is related to the magnitude of the differences or "strength of association" between the groups' mean values and is commonly represented by Cohen's d or eta squared (Pallant 2007, p. 207). I used both in this study. The guidelines for interpreting Cohen's effect size are $d = 0.20$ is small, $d = 0.50$ is medium and $d = 0.80$ is large (Allen & Bennett, 2010, p. 56). Cohen classifies eta squared 0.01 as a small effect, 0.06 as a medium effect and 0.14 as a large effect (Pallant, 2007, p. 247).

Differences in CQ Scores and Satisfaction Scores between Job Roles

A one-way between groups analysis of variance (ANOVA) was used to investigate whether the CQ scores and satisfaction scores varied by hierarchical groups (nurse managers, nurses and PCAs). Assumptions of normality were supported by the visual indicators. Levene's equality of

variances test was not significant (p <0.05) for all four factors of CQ and intercultural satisfaction:

MC CQ, $F(2,154) = 0.76$, $p=0.47$;

C CQ, $F(2,154) = 5.22$, $p=0.06$;

M CQ, $F(2,154) = 0.64$, $p=0.51$;

B CQ, $F(2,154) = 0.66$, $p=0.52$;

Total CQ, $F(2,154) = 1.43$, $p=0.24$;

Satisfaction, $F(2,154) = 0.32$, $p=0.73$.

The ANOVA was used to indicate whether there were significant differences in the mean scores of the CQ and satisfaction variables across the three hierarchical groups (job roles):

MC CQ, $F(2,154) = 2.67$, $p=0.07$,

C CQ, $F(2,154) = 0.63$, $p=0.53$,

M CQ, $F(2,154) = 0.39$, $p=0.07$,

B CQ, $F(2,154) = 2.35$, $p=0.10$,

Total CQ, $F(2,154) = 1.67$, $p=0.19$,

Satisfaction, $F(2,154) = 1.62$, $p=0.20$.

There were no statistical differences indicated by the ANOVA and therefore no post-hoc tests were required. The differences (effect size) of the mean scores of the groups was a small (3%) variance in CQ which is related to differences in hierarchical groups (eta squared for MC CQ= 0.03, C CQ= 0.01, M CQ= 0.00, B CQ= 0.03, total CQ = 0.02 and satisfaction = 0.02)

Table 4.9 *Descriptive Statistics Comparison of Job Roles*

	Nurse Managers (*n*=11)			Nurses (*n*=100)			PCAs (*n*=46)		
	SA/A (%)	SD/D (%)	Mean (SD)	SA/A (%)	SD/D (%)	Mean (SD)	SA/A (%)	SD/D (%)	Mean (SD)
Metacognitive			**3.14 (.323)**			**3.14 (.461)**			**2.94 (.473)**
MC1	100	0	3.27 (.467)	98	2	3.30 (.541)	87	13	3.04 (.698)
MC2	100	0	3.27 (.467)	94	6	3.15 (.539)	81	19	2.87 (.653)
MC3	100	0	3.09 (.302)	94	6	3.15 (.520)	89	11	3.00 (.632)
MC4	82	18	2.91 (.539)	77	23	2.95 (.642)	74	26	2.83 (.709)
Cognition			**2.18 (.302)**			**2.36 (.462)**			**2.33 (.437)**
C1	9	91	2.09 (.302)	37	63	2.33 (.604)	40	60	2.30 (.695)
C2	19	81	2.18 (.405)	23	77	2.16 (.598)	31	69	2.20 (.749)
C3	19	81	2.18 (.405)	56	44	2.55 (.609)	51	49	2.50 (.782)
C4	9	91	2.09 (.302)	34	66	2.26 (.613)	40	60	2.33 (.732)
C5	19	81	2.18 (.405)	40	60	2.37 (.597)	38	62	2.30 (.726)
C6	37	63	2.36 (.505)	51	49	2.51 (.689)	37	63	2.35 (.737)
Motivation			**3.07 (.337)**			**3.03 (.429)**			**2.97 (.453)**
M1	100	0	3.36 (.505)	99	1	3.31 (.526)	96	4	3.28 (.544)
M2	100	0	3.27 (.467)	90	10	3.10 (.577)	85	15	2.98 (.537)
M3	91	9	3.00 (.447)	85	15	3.02 (.568)	87	13	2.98 (.494)
M4	82	18	2.82 (.751)	70	30	2.79 (.624)	63	37	2.74 (.648)
M5	82	18	2.91 (.539)	83	17	2.92 (.506)	80	20	2.87 (.542)
Behaviour			**2.84 (.488)**			**2.83 (.543)**			**2.57 (.516)**
B1	73	27	2.91 (.701)	67	33	2.71 (.782)	45	55	2.21 (.750)
B2	64	36	2.73 (.647)	70	30	2.78 (.705	54	46	2.52 (.752)
B3	82	18	2.91 (.539)	89	11	3.04 (.549	76	24	2.87 (.653)
B4	73	27	2.82 (.603)	79	21	2.89 (.618)	61	39	2.65 (.706)
B5	73	27	2.82 (.603)	65	35	2.70 (.659)	55	45	2.59 (.717)
Total CQ			**2.76 (.234)**			**2.80 (.336)**			**2.67 (.373)**
Satisfaction			**3.43 (.449)**			**3.19 (.458)**			**3.00 (.460)**
IE1	100	0	3.45 (.522)	96	4	3.32 (.584)	93	7	3.24 (.565)
IE2	100	0	3.45 (.522)	85	15	3.05 (.626)	93	7	3.11 (.482)
IE3	92	8	3.36 (.674)	92	8	3.19 (.598)	91	9	3.15 (.631)
IE4	100	0	3.55 (.522)	96	4	3.20 (.532)	87	13	3.13 (.619)
IE5	100	0	3.55 (.522)	95	5	3.17 (.573)	98	2	3.24 (.480)
IE6	92	8	3.27 (.905)	94	6	3.23 (.584)	94	6	2.13 (.582)
Individualism			**3.10 (.350)**			**2.98 (.374)**			**3.10 (.363)**
IND1	100	0	3.91 (.302)	99	1	3.59 (.552)	97	3	3.52 (.547)
IND2	36	64	2.45 (.688)	51	49	2.62 (.789)	58	42	2.87 (.718)
IND3	100	0	3.45 (.522)	90	10	3.46 (.661)	91	9	3.47 (.570)
IND4	82	18	3.00 (.632)	77	23	2.89 (.650)	87	13	3.11 (.605)
IND5	91	9	3.00 (.447)	69	31	2.79 (.640)	76	24	2.87 (.582)
IND6	63	37	2.91 (.831)	67	33	2.78 (.629)	59	41	2.72 (.911)
IND7	82	18	3.00 (.632)	83	17	2.93 (.555)	85	15	3.11 (.706)

The main standout points in the descriptive statistics (See Table 4.9) indicated that item MC1 had high mean scores across all three groups with all the nurse managers (100%, M=3.27, SD=.467), most of the nurses (98%, M=3.30, SD=.541) and a majority of PCAs (87%, M=.04, SD=.698) agreeing that they were *conscious of the cultural knowledge used in intercultural interactions*. The nurse managers (100%, M=3.27, SD=.467) and nurses (94%, M=3.15, SD=.539) *adjusted their cultural knowledge* (MC2) and were similarly *conscious of their cultural knowledge application* (MC3) during intercultural exchanges. The PCAs had slightly lower scores for MC2 (81%, M=2.87, SD=.653) and MC3 (89%, M=3.00, SD=.632). This may be because 60% of the PCAs were born in Australia and may have had limited exposure to other cultures and therefore some of them may not think to adjust their cultural knowledge. MC4 related to *checking the accuracy of one's cultural knowledge* and had the lowest percentages and mean scores agreeing with the statement across the three groups; nurse managers (82%, M=2.91, SD=.539), nurses (77%, M=2.95, SD=.642) and PCAs (74%, M=2.83, SD=.709).

The mean scores and percentages in the cognition factor were low in comparison to all the other CQ factors. Items C1, C2, C4 and C5 has similar percentages between 20% and 30% and mean scores between M=2.09 and M=2.37 across the three groups. These items related to specific knowledge of the legal systems, values, practices and marriage customs of other cultures. Some nurse managers (19%, M=2.18, SD=.405), and more than half of the nurses (56%, M=2.55. SD=.609) and PCAs (51%, M=2.50, SD=.782) agreed with item C3 that they knew the *cultural values and beliefs of other cultures*. Only some (37%) of the nurse managers (M=2.36, SD=.505) and PCAs (M=2.35, SD=.737) agreed that they knew the *non–verbal expressions of other cultures* for item C6, however, more than half the nurses (51%, M=2.51, SD=.689) agreed with the statement. This may be because the nurses, more than the nurse managers and PCAs, deal directly with patients and their specific requirements during a shift.

There was unanimous agreement with the nurse managers (100%, M=3.36, SD=.505), the nurses (99%, M=3.31, SD=.526) and the PCAs (96%, M=3.28. SD=.544), for item M1 related to *enjoyment of interacting with different cultures*. There were two other standouts in the motivation factor. M4 related to *enjoying living in unfamiliar cultures* where 82% of the nurse managers (M=2.82, SD=.751), 70% of the nurses (M=2.79, SD=.624) and 63% of the PCAs (M=2.74, SD=.648) agreed with the statement. This may also be related to the demographics of each group as 55% of the nurse managers, 48% of the nurses and 40% of PCAs were born overseas and therefore have experienced living in another culture. Item M5 related to *getting used to the working conditions in other cultures* also showed lower percentages and mean scores with 80% (M=2.87, SD=.542) to 83% (M=2.92, SD=.506) agreeing with the statement between the three groups.

In the behavioural factor, most of the percentages and mean scores were low in comparison to the MC CQ factor and M CQ factor. The highest percentage of agreement with the nurse managers (82%, M=2.91, SD=.539), nurses (89%, M=3.04, SD=.549) and PCAs (76%, M=2.87, SD=.653) in the behavioural factor was for item B3 related to *varying the rate of speech* during intercultural exchanges. The lowest percentage of mean scores and agreed percentages was in the PCA group for item B1 related to *changing verbal behaviour* (M=2.21, SD=.750) where only 45% agreed with the statement. Item B2 related to *using pause and silence* and all three groups had low percentages that agreed with the statement and low mean scores: nurse managers (64%, M=2.73, SD=.647), nurses (70%, M=2.78, SD=.705) and PCAs (54%, M=2.52, SD=.752). Item B4 was about *changing non-verbal behaviour* (M=2.65, SD=.706) and many (61%) PCAs agreed with this statement. Item B5 related to *changing facial expressions during intercultural interaction* (M=2.59, SD=.717) and just over half (55%) the PCAs agreed with the statement. Most of the statements in the behavioural CQ factor highlighted that the percentages of

participants that agreed with the CQ statements and mean scores of all three groups were lower than the metacognitive and motivation CQ factors; however the lowest scores were from the PCA group. This may mean that the nurse managers and nurses may have more exposure to different experiences during their clinical patient rounds and may be exposed to people of other cultures and their requirements more than the PCAs. Another explanation may be that fewer PCAs have lived overseas and therefore may not possess the skills required to change their behaviour in culturally diverse situations.

Overall the lowest CQ mean scores across the three job roles were in the cognition CQ factor item 1. A few (9%) of the nurse managers (M=2.09, SD=.302), some (37%) of the nurses (M=2.33, SD=.604) and some (40%) of the PCAs (M=2.30, SD=.695) agreed that their *knowledge of the legal systems* of other cultures was low, with similar scores for knowledge of the marriage systems. The highest overall CQ mean scores across the job roles was the motivation CQ factor where there was unanimous agreement related to *enjoying interacting with other cultures.* All (100%) the nurse managers (M=3.36, SD=.505), nearly all (99%) of the nurses (M=3.31, SD=.526) and a majority (96%) of the PCAs (M=3.28, SD=.544) agreed with the statement. The overall Total CQ mean scores from highest to lowest across the three job roles, nurses (M=2.80, SD=.336), nurse managers (M=2.76, SD=.234) and PCAs (M=2.67, SD=.373), indicated that the variance was slight with only a 12 point difference between the highest and lowest mean.

In relation to satisfaction levels the highest percentages were for item IE5 related to *being treated with respect by nurses and PCAs from a non-Western background*. All the nurse managers (M=3.55, SD=.522), most (95%) of the nurses (M=3.17, SD=.573) and almost all (98%) of the PCAs (M=3.24, SD=.480) agreed with this statement. Item IE1, *ease of working with nurses & PCAs from a Western background* also scored high mean scores from the all the

nurse managers (M=3.45, SD=.522), nurses (96%, M=3.32, SD=.584) and PCAs (93%, M=3.24, SD=.565). In contrast item IE2 (M= 3.11, SD=.480) about the *ease of working with nurses & PCAs from a non-Western background* scored high percentages who agreed with the statement from the nurse managers (100%, M= 3.45, SD=.522) and the PCAs (93%, M=3.11, SD=.482); however, the nurses' (85%, M=3.05, SD=.626) scores indicated there were some challenges in this area. Even though fewer nurses agreed with the statement, the mean scores of the nurses were not much lower than the PCAs, but there was a 40 point difference between the nurse managers' and nurses' mean scores. This may indicate that during shifts when nurses work together in pairs, there may be some issues in communication when nurses from different cultures are placed together for the shift. The overall Satisfaction mean scores across the job roles indicated that all (100%) of the nurse managers (M=3.43, SD=.449), most (93%) of the nurses (M=3.19, SD=.458) and most (92%) of the PCAs (M=3.00, SD=.460) agreed that they found their intercultural interactions with their colleagues regardless of cultural origin easygoing and respectful.

The Ali Individualism Scale indicated that item IND1 about being *proud of one's own achievements* had unanimous high percentages and mean scores highlighting the strength of agreement for this item, all the nurse managers (M= 3.91, SD=.302), almost all (99%) of the nurses (M= 3.59, SD=.552) and most (97%) of the PCAs (M= 3.52, SD=.547). Item IND2 related to *getting individual incentives rather than group incentives*. Some (36%) of the nurse managers (M= 2.45, SD= .688), half (51%) of the nurses (M= 2.62, SD=.789) and more than half (58%) of the PCAs (M= 2.87, SD=.718) agreed with this statement. The nurses and PCAs appeared to prefer individual incentives over group ones, while the nurse managers strongly preferred group incentives. Item IND3 related to *loyalty to the self before others*. The nurse managers (100%, M=3.45, SD=.522), nurses (90%, M=3.46, SD=.661) and PCAs (91%,

M=3.47, SD=.570) agreed with this statement and showed similar high mean scores. Item IND4 was about being the *best judge of one's own interests*. The PCAs had the highest percentage (87%) and mean score (M=3.11, SD=.605), followed by the nurse managers (82%, M=3.00, SD=.632) and nurses (77%, M=2.89, SD=.650). This variance in scores suggests that perhaps the PCAs and nurse managers may prefer to be included in decisions involving their interests, while the nurses may be more open to other people or groups assisting in decisions affecting their interests. The differences though were not that large. All the nurse managers (M=3.00, SD=.447) agreed with statement IND5 that *giving personal orders may hurt other feelings*. A large majority (76%) of PCAs (M=2.87, SD=.582) and (69%) nurses (M=2.79, SD=.640) also agreed with this statement. The scoring may be reflective of the function of the job roles. The nurse managers are usually engaged in administrative tasks, the nurses usually give the orders during a shift and the PCAs are the recipients of the orders. Another item that garnered less support was item IND6 related to *being successful one has to rely on oneself*. A lot (63%) of the nurse managers agreed (M= 2.91, SD= .831), many (67%) nurses agreed (M= 2.78, SD= .629) compared to some (59%) PCAs (M= 2.72, SD= .911). These differences were small. Item IND7 related to *loyalty to superiors is necessary for organisations to survive.* There were similar percentages across the three job roles agreeing with the statement IND7. The differences from high to low were in the mean scores: PCAs (85%, M=3.11, SD=.706), nurse managers (82%, M=3.00, SD=.632) and nurses (83%, M=2.93, SD=.555). This scoring highlighted perhaps the demand and supply of hospital workers. Nurses are in high demand at present and therefore this may reflect in their loyalty to the self rather than their superiors. The nurses may not be reliant on their superiors because of the high demand for their skills. Overall, the Ali Individualism Scale mean scores for the three job roles: nurse managers (M=3.10, SD=.350), PCAs (M=3.10, SD=.363) and nurses (M=2.98, SD=.374) highlighted that although all three groups were

individualistic, perhaps the nurses had a slightly less individualistic outlook than their colleagues.

Differences in Culture Type, Satisfaction and Individualism Mean Scores

An independent-samples t-test was conducted to compare the questionnaire CQ scores of the individualist group (*n* =129, M= 3.06, SD = .48) and collectivist group (*n* =28, M= 3.15, SD = .60). There was a small nine point difference in the mean scores of each group but there was a larger spread in variance of the SD scores of the collectivist group.

Levene's test was completed to indicate whether homogeneity of variance was met for the four CQ factors and satisfaction scores. Homogeneity of variance for the following factors was also met: MC CQ, F= 1.46, *p* =.23, Sig >.05; cognitive CQ, F= 0.23, *p* =0.63, Sig >0.05; motivation CQ, F= 0.004**,** *p* =0.95, Sig >0.05; behavioural CQ, F=2.670, *p* =0.10, Sig >0.05. Total CQ consisted of all four CQ factors, F=0.67, *p* =0.41, Sig >0.05. Satisfaction scores were assessed in the same way as the CQ scores, F=0.17, *p*=0.68, Sig >0.05.

Next, I conducted the t-tests for the cultural groups (individualist−collectivist) for the CQ factors and Satisfaction factor. The following t-tests for equal variances assumed were non-significant with small effect sizes: MC CQ, t(155) = -0.85, *p*=0.39, two-tailed, *d* =0.18; C CQ, t(155) = -1.069, *p*=0.29, two-tailed, *d* =0.20; M CQ, t(155) = 0.57, *p*=0.57, two-tailed, *d* =0.12; B CQ, t (155) = -0.68, *p*=0.49, two-tailed, *d* = 0.14; total CQ, t (155) = -0.78, *p*=0.44, two-tailed, *d* = 0.16; and satisfaction scores, t (155) =-0.305, *p*=0.76, two-tailed, *d* = 0.06.

Table 4.10 *Descriptive Statistics* of *Individualist and Collectivist (Cultural) Groups*

	Individualist (*n* = 129)			Collectivist (*n* = 28)		
	SA/A (%)	SD/D (%)	Mean (SD)	SA/A (%)	SD/D (%)	Mean (SD)
Metacognitive			**3.06 (.482)**			**3.15 (.602)**
MC1	95	5	3.20 (.564)	93	7	3.32 (.723)
MC2	89	11	3.05 (.577)	96	4	3.18 (.612)
MC3	93	7	3.08 (.509)	93	7	3.21 (.686)
MC4	76	24	2.91 (.638)	75	25	2.89 (.737)
Cognition			**2.32 (.487)**			**2.43 (.616)**
C1	35	65	2.30 (.607)	36	64	2.32 (.670)
C2	24	76	2.17 (.588)	28	72	2.18 (.819)
C3	49	51	2.49 (.639)	61	39	2.61 (.737)
C4	39	61	2.24 (.609)	39	61	2.39 (.737)
C5	36	64	2.31 (.584)	43	57	2.46 (.793)
C6	41	59	2.41 (.680)	64	36	2.64 (.731)
Motivation			**3.02 (.437)**			**2.97 (.409)**
M1	99	1	3.30 (.524)	97	3	3.32 (.548)
M2	90	10	3.09 (.559)	86	14	3.04 (.576)
M3	88	12	3.03 (.529)	79	21	2.89 (.567)
M4	71	29	2.80 (.630)	57	43	2.68 (.670)
M5	80	20	2.90 (.543)	90	10	2.93 (.378)
Behaviour			**2.75 (.586)**			**2.83 (.441)**
B1	60	40	2.61 (.794)	64	36	2.79 (.686)
B2	64	36	2.67 (.731)	68	32	2.82 (.670)
B3	84	16	2.98 (.599)	86	14	2.96 (.508)
B4	72	28	2.80 (.678)	82	18	2.89 (.497)
B5	62	38	2.67 (.698)	65	35	2.68 (.548)
Total CQ			**2.75 (.368)**			**2.81 (.345)**
Satisfaction			**3.20 (.471)**			**3.18 (.393)**
IE1	97	3	3.32 (.573)	93	7	3.25 (.585)
IE2	88	12	3.08 (.594)	93	7	3.18 (.548)
IE3	92	8	3.21 (.621)	89	11	3.11 (.567)
IE4	95	5	3.22 (.544)	85	14	3.14 (.651)
IE5	95	5	3.21 (.540)	100	0	3.25 (.441)
IE6	95	5	3.22 (.586)	89	11	3.14 (.705)
Individualism			**3.00 (.392)**			**3.06 (.393)**
IND1	99	1	3.60 (.551)	100	0	3.54 (.508)
IND2	50	50	2.61 (.774)	78	22	3.00 (.667)
IND3	71	29	3.26 (.641)	93	7	3.21 (.568)
IND4	80	20	2.93 (.627)	83	17	3.11 (.685)
IND5	76	24	2.83 (.575)	61	39	2.82 (.772)
IND6	65	35	2.78 (.707)	61	39	2.71 (.854)
IND7	83	17	2.98 (.618)	86	14	3.04 (.576)

The main items in the descriptive statistics (See Table 4.10) for MC CQ factor indicated similar high percentage scores for MC1 between individualist (I) (95%, M=3.20, SD=.564) and collectivist (C) (93%, M=3.32, SD= .723) participants in that they were *consciously aware of the cultural knowledge* they used in intercultural interactions. In the metacognition factor the largest proportion (about 25%) of those born in individualist and collectivist countries *did not check the accuracy of their cultural knowledge*.

The cognition factor mean scores were low for participants from individualist and collectivist countries. Participants originally from collectivist countries on average (45%) for items C1 to C6 agreed they had some knowledge of other cultural practices and beliefs. In comparison a lower average percentage (items C1 to C6) 37% of participants from individualist countries agreed they had cultural knowledge about other cultures. The main standouts were item C3 where more (61%, M= 2.61, SD=.737) of the collectivist participants stated *they knew the cultural practices and values of other cultures* compared to those from individualist countries (49%, M= 2.49, SD=.639. The collectivist group also had a higher percentage (64%) that agreed with item C6 that they knew the *rules of non-verbal behaviours of other cultures* compared to those from the individualist countries (41%).

Both groups were also motivated (M1) and enjoyed *interacting with other cultures* (I, 99%, M=3.30, SD=.524 and C, 97%, M=3.32, SD=.548). Another difference was revealed for item M4 related to *enjoying living in other cultures* with more (of the individualist participants (71%, M= 2.80, SD=.630) than the collectivist participants (57%, M= 2.68, SD=.670) agreeing with this statement. The overall motivation levels of both the individualist (M=3.02) and collectivist (M=2.97) groups were similarly high.

The overall behavioural CQ mean scores between the groups were similar for the nurse managers (M=2.84) and the nurses (M=2.83). The PCAs score was 26 points lower (M=2.57)

than the nurses' mean score. Overall for each item in the behavioural factor, the PCAs had the lowest mean scores. This may indicate that in conjunction with lower education levels and cognitive cultural knowledge, the PCAs may not be able to deal as effectively with the nurses in intercultural interactions.

The overall total CQ mean scores between the individualist and collectivist groups showed little difference between the means scores of both groups: I (M=2.75, SD=.368) and C (M=2.81, SD=.345). This supports the independent samples t tests that indicated that there was no statistical difference between the cultural groups.

On the Satisfaction scale, the individualist and collectivist groups had similar mean scores (I, M= 3.20, C, M= 3.18). Another item had minimal difference (less than 5%) was IE5 (I, M= 3.21, 95%, C, M=3.25, 100%) revealing that a few of the participants felt slightly less *respected by their colleagues from non-Western cultures*. Items that showed differences in the satisfaction factor mean scores and percentages (more than or equal to 5%) were: item IE1 (I, M= 3.32, 99% and C, M=3.25, 93%) about the *ease of working with colleagues from a Western background.* There were a higher percentage of participants from individualist backgrounds (in contrast to collectivist born migrants) that felt at ease working with people from Western ethnicities. Item IE2 (I, M= 3.08, 88%, C, M=3.18, 93%) related to *ease of working with colleagues from a non-Western background.* Again there was a higher percentage from collectivist cultures who found it easier to work with colleagues from similar cultural type backgrounds. Item IE3 (I, M=3.21, 92%, C, M=3.11, 89%) related to *ease of interaction with nurse managers* indicating that fewer collectivist nurses and PCAs found it easy to interact with their managers. Item IE5 (I, M= 3.21, 95%, C, M=3.25, 100%) was about being *treated with respect by colleagues from a Western background* where the majority agreed with the statement. Item IE5 revealed that migrants from individualist countries felt slightly less

respected by their colleagues from a similar culture than those from collectivist country of origins. Item IE6 related to being *treated with respect by managers*. A large majority of participants from individualist backgrounds felt they were treated more respectfully (I, M=3.22, 95%, C, M=3.14, 89%) than their counterparts from collectivist cultures. The overall Satisfaction mean scores for both groups were similar: I (M=3.20, SD=.471) and C (M=3.18, SD=.418).

Seven individualism statements in a similar Likert scale as the CQ 20-item scale were added to the survey. As mentioned in chapter three, these statements were part of the Ali Individualism Scale (Ali, 1988) and were meant to highlight individualistic traits of participants in the two culture type groups. In this study the cultural groups were categorised as individualistic–collectivistic in origin. The overall individualism mean scores between the individualist and collectivist groups were similar with only a six point difference (I, M=3.00, SD= .392, C, M=3.06, SD= .393). This negligible difference in mean scores between the two culture types may indicate that the participants from collectivitist countries who have acculturated or are still acculturating into the Australian society and have increased their education levels, may have decreased their collectivist traits as they absorb Western ideologies, therefore diminishing individualism differences between the culture groups.

Five of the seven individualism statements had similar mean scores for both groups. However, two statements stood out in their contrasts. Item IND2, related to *individual incentives being given priority over group incentives*. Half (50%) (M=2.61, SD=.774) of the participants who were born in individualist countries agreed with the statement, in comparison to a large majority (78%, M=3.00, SD=.667) from the collectivist group. This indicated that the individualist participants appeared less likely to emphasize individual incentives than their collectivist colleagues. Ali (1988) said that this item (IND2) was peculiar to the Arab Bedouin

ethos and not sanctioned in Islamic teaching. The second item which showed a difference between the two cultural groups was item IND3 related to *loyalty to the individual and their family* being the first consideration. Many (71%) of the individualist participants agreed (M=3.26, SD= .641) in contrast to more (93%, M=3.21, SD=.568) of the collectivist participants. The mean scores were similar. Another item that highlighted a difference in the mean scores of the two groups (individualist−collectivist) was item IND4 related to *individuals being the best judge of their own best interests* (I, M=2.93, SD= .627, C, M=3.11, SD= .685). This difference in percentages and mean scores for items IND2, IND3 and IND4 may be attributed to the long acculturation period (average 10 years migration) in Australia of the collectivist participants and length of exposure to individualist ideologies. These counter-intuitive findings could also suggest that the attitudes and values of individuals from collectivist and individualist countries are actually quite similar and that the distinction between "collectivist" and "individualist" cultures is less valid than in the past. Finally, the findings could be due to differences among individuals within culture types. It could be the case that individuals from collectivist countries who choose to migrate to Australia are less collectivist than their fellow citizens who choose to remain in the home country. Ali (1988) mentioned that as the scale on Islamic work ethic and individualism was a newly developed instrument that additional refinement and tests of the scales were necessary. They had only been tested by students from Arab countries who were studying in the United States and there was a need for a broader population to establish the instruments' validity. Therefore, some of the items may not be indicative of individualism in a broader population spanning various cultures.

Differences in CQ and Satisfaction scores between Australian and Overseas born Participants

An independent-samples t-test was conducted to compare the CQ scores of participants born in Australia (*n* =88, M= 2.70, SD = .336) and those born overseas (*n* =69, M= 2.84, SD = .385). There was a small 14 point difference in the mean scores of each group but there was little spread in variance of the SD scores. Visual inspection of Normal Q-Q Plots indicated that normality scores were not violated.

Levene's test for homogeneity of variance revealed the following results for each of the four factors of CQ. MC CQ indicated that homogeneity of variance was not met, F= 10.94, p = 0.00, Sig <.05. The following CQ factors indicated that homogeneity of variance was met: cognitive CQ, F= 2.34, p =0.13, Sig >0.05; motivation CQ, F= 3.17**,** p = 0.08, Sig >0.05; behavioural CQ, F=0.389, p =0.53, Sig >0.05; and total CQ (consisting of all four CQ factors) F=2.21, p =0.14, Sig >0.05. Satisfaction scores were assessed in the same way as the CQ scores, F=0.11, p =0.74, Sig >0.05.

Next, I conducted the t-tests. For MC CQ Welch's t-test (equal means not assumed) was used and found to be statistically significant, t (155) = -2.68, p=0.01, two-tailed, eta squared = 0.04. There was also a significant difference in the MC CQ mean scores of the Australian born (M= 2.98, SD=.403) and overseas born (M= 3.20, SD=.589) groups but the magnitude of the difference (eta squared) was small with only four percent of the variance in MC CQ being explained by country of birth. The t-test for cognitive CQ for equal variances assumed was non-significant with a small effect size of two percent, t (155) = -1.75, p=0.18, two-tailed, eta squared =0.02. Motivation CQ, t-test for equal variances assumed was non-significant with a small effect size of one percent, t (155) = -1.36, p=0.18, two-tailed, eta squared =0.01. Behavioural CQ, t-test for equal variances assumed was non-significant with a small effect size

of one percent, t (155) = -1.129, p=0.26, two-tailed, eta squared = 0.01. The total CQ t-test for equal variances assumed was found to be statistically significant but with a small effect size of four percent variance in CQ being explained by country of birth, t(155) = -2.383, p=0.02, two-tailed, eta squared = 0.04. Satisfaction level t-test for equal variances assumed was non-significant, t (155) = 0.87, p=0.39, two-tailed, eta squared = 0.00. The Ali Individualism level t-test for equal variances assumed was non-significant, t (155) = -0.10, p=0.99, two-tailed, eta squared = 0.00.

Table 4.11 *Descriptive Statistics of Australian and Overseas Born Questionnaire*

	Australian Born n = 88			Overseas Born n = 69		
	SA/A (%)	SD/D (%)	Mean (SD)	SA/A (%)	SD/D (%)	Mean (SD)
Metacognitive			**2.98 (.403)**			**3.20 (.589)**
MC1	94	5	3.11 (.513)	96	4	3.36 (.664)
MC2	87	13	2.97 (.513)	94	5	3.22 (.639)
MC3	94	6	3.02 (.428)	92	8	3.20 (.655)
MC4	74	26	2.82 (.598)	80	20	3.03 (.707)
Cognition			**2.28 (.467)**			**2.42 (.557)**
C1	28	72	2.23 (.582)	44	56	2.41 (.649)
C2	18	82	2.15 (.537)	33	67	2.20 (.739)
C3	44	56	2.43 (.603)	59	41	2.61 (.712)
C4	28	72	2.23 (.552)	39	61	2.32 (.696)
C5	35	65	2.32 (.578)	39	61	2.36 (.685)
C6	34	66	2.31 (.575)	60	40	2.64 (.785)
Motivation			**2.97 (.395)**			**3.07 (.421)**
M1	99	1	3.25 (.461)	97	3	3.38 (.597)
M2	89	11	3.02 (.502)	90	10	3.14 (.625)
M3	87	13	2.98 (.479)	84	16	3.04 (.605)
M4	65	35	2.70 (.646)	74	26	2.87 (.616)
M5	82	18	2.91 (.517)	82	18	2.90 (.519)
Behaviour			**2.72 (.539)**			**2.82 (.591)**
B1	61	39	2.59 (.705)	62	38	2.71 (.859)
B2	66	34	2.69 (.684)	64	36	2.71 (.769)
B3	85	13	2.97 (.556)	84	16	3.00 (.618)
B4	68	32	2.73 (.656)	79	21	2.93 (.626)
B5	57	43	2.61 (.685)	70	30	2.75 (.651)
Total CQ			**2.70 (.336)**			**2.83 (.385)**
Satisfaction			**3.23 (.427)**			**3.16 (.501)**
IE1	98	2	3.35 (.526)	92	8	3.25 (.628)
IE2	86	14	3.05 (.575)	92	8	3.14 (.601)
IE3	94	6	3.24 (.547)	88	12	3.13 (.684)
IE4	97	3	3.26 (.491)	88	12	3.13 (.640)
IE5	96	4	3.26 (.514)	96	4	3.16 (.532)
IE6	95	5	3.22 (.513)	91	9	3.19 (.713)
Individualism			**3.01 (.377)**			**3.01 (.402)**
IND1	98	2	3.59 (.517)	98	2	3.59 (.577)
IND2	47	53	2.57 (.799)	65	35	2.83 (.706)
IND3	93	7	3.30 (.590)	88	12	3.19 (.670)
IND4	78	22	2.95 (.659)	83	17	2.97 (.618)
IND5	76	24	2.84 (.585)	68	32	2.81 (.648)
IND6	67	33	2.80 (.681)	61	39	2.74 (.798)
IND7	85	15	3.02 (.567)	81	19	2.94 (.662)

The descriptive statistics for the four CQ factors showed that that the overseas born participants had higher CQ for every item except for motivation CQ item M5 (*getting accustomed to the working conditions in a new culture*) where the means were similar. This may indicate that to all participants the prospect of moving to a new culture and then working in that culture may cause some level of anxiety.

The satisfaction levels of the Australian participants (M=3.23) was higher than those born overseas (M=3.16). There were three items in the satisfaction factor that stood out in the descriptive statistics (See Tables 4.11 & 4.12). For item IE2 a higher percentage of overseas born participants (92%, M=3.14, SD= .601)) found it *easier to work with their colleagues from non-Western backgrounds* in comparison to those from Australia (86%, M=3.05, SD= .575). The next item that stood out was item IE3 related to the *ease of interacting with managers*. A large majority (88%, M=3.24, SD= .547) of the overseas participants felt at ease interacting with their managers in comparison to those born in Australia (94%, M=3.24, SD= .547). The final item with a large difference was item four where a higher percentage of the Australian born participants (97%, M=3.26, SD=.426) felt *respected by the colleagues from Western backgrounds* in comparison to those born overseas (88%, M=3.13, SD= .640).

Table 4.12 *Satisfaction Items: Percentages of Australian and Overseas Born Participants*

Satisfaction Items	Australian Born Participants	Overseas Born Participants
IE1. Ease of working with Westerners	98%	92%
IE2. Ease of working with non-Westerners	86%	92%
IE3. Easy to interact with managers	94%	88%
IE4. Respected by colleagues from Western backgrounds	97%	88%
IE5. Respected by colleagues from non-Western backgrounds	96%	96%
IE6. Being treated with respect by managers	95%	91%

In the AIS (Ali, 1988), the Australian and overseas born participants had the same overall mean scores (M=3.01). Item IND1 which related to being *proud of individual achievements* with almost all (98%) the participants in both groups agreeing with the statement also had the same mean scores (M=3.59). There was a notable difference in percentages and mean scores for item IND2 about *individual incentives over group incentives*, less than half (47%) of the Australians agreed (M=, 2.57, SD= .799) in comparison to more than half (65%) the overseas-born participants (M= 2.83, SD=.706) which shows that some Australians may be less motivated by individual incentives in contrast to the overseas-born participants.

In summary the main findings about the group differences concluded that there were no statistical differences in the CQ and satisfaction scores between hierarchical job roles. The t-tests which compared the same scores between cultural groups (individualist and collectivist) also reported non-significant statistical differences. Finally, comparison of Australian and overseas born questionnaire group reported there was a statistical difference in the mean metacognitive CQ factor scores between the two groups but the strength of the difference was small. This indicated that the overseas-born participants were more conscious of the cultural knowledge they

used and applied during interactions and adjusted their cultural knowledge in intercultural situations than the Australian participants.

Summary of Overall Quantitative Findings

Overall, the participants had moderately high CQs and also experienced high satisfaction levels with their intercultural experiences in the workplace. In general, all participants reported high individualistic traits. The overall major quantitative findings are summarised below:

- The overall CQ of the participants high.
- There was a moderate positive correlation between CQ and satisfaction indicating that increased CQ levels are associated with increased satisfaction levels.
- Satisfaction levels of overseas born participants were lower than the Australian participants. There was minimal difference in the satisfaction levels between individualist−collectivist groups.
- There was no correlation between total CQ and individualism.
- There was no statistical difference between total CQ scores and job roles or between total CQ and cultural groups (individualism – collectivism) and (Australian born –overseas born).
- Of the four CQ factors, participants scored the highest on the metacognitive factor and the lowest on the cognitive factor.
- There was a positive relationship between motivation CQ and behavioural CQ, indicating that more openness towards meeting people of different cultures and experiencing other cultures was associated with more culturally appropriate behaviours being displayed during intercultural interactions.
- There was a positive relationship between metacognitive CQ and behavioural CQ.

Chapter 5

FINDINGS

INTERCULTURAL INTERACTIONS AMONG HOSPITAL WORKERS USING QUALITATIVE DATA

The goal of this chapter is to present the findings from the qualitative data analysis. I describe the interview process used to collect the data. The interview comments were categorised using the CQS and satisfaction statements as the coding schema to organise the data.

Review of the Qualitative Findings

This chapter reports the qualitative findings extrapolated from the responses of the 15 voluntary interviewees who agreed to be interviewed. The interview questions addressed topics related to the four factors of CQ (metacognition, cognition, motivation and behaviour) (Appendix D). Additional topics discussed (as part of the interview), were the importance of language and a descriptions of critical incident scenarios that have been included in the interviewee comments as part of the qualitative data. The interviews were designed to provide a rich supplement of detail to the statements in the CQ 20-item survey, however, not all statements in the CQS were covered in the interviews and I did not probe the interviewees on the specific CQ20 statements. The names of the interviewees have been fictionalised for privacy and have also been given an identification code for ease of data analysis. Those interviewees from Western cultures (nine) were given names of Mary and Bill and those interviewees from non-Western cultures (six) were named Barthi and Bing. Job roles (hierarchical groups) were also classified and abbreviated as follows: Western nurse manager

(WNM); Western Nurse (WN); non-Western Nurse (NWN); Western PCA (WPCA); non-Western PCA (NWPCA).

Interviewee Comments on the Four Factors of CQ

Metacognition

Comments related to the metacognition CQ factor involved the interviewees being questioned about the use and application of their cultural knowledge during intercultural interactions (See Table 5.2).

Table 5.2 *Number of Interviewees' Metacognitive Comments*

	MC1	*MC1*	*MC2*	*MC2*	*MC3*	*MC3*	*MC4*	*MC4*
	Using	Not Using	Adjust	Not adjust	Apply	Not apply	Accuracy	No Accuracy
W	3	4	5	0	0	0	0	0
NW	2	1	4	0	0	0	0	0
No Comment	0	5	0	6	0	0	0	15
Cumulative Total	**5**	**15**	**9**	**15**	**0**	**0**	**0**	**15**

Using Cultural Knowledge

Five interviewees (33%) provided comments reinforcing that they were consciously aware of the cultural knowledge they used in intercultural exchanges. Three were Western interviewees (one nurse and two PCAs) and two were non-Western interviewees (one nurse and one PCA)

Western Interviewees

I am conscious to a degree. I understand that everybody has got their way of doing things and they bring their culture with them but at the same time being as I am Canadian, when you move to a place you adapt your culture to a degree. We had a theatre where I was the only (excuse the expression) white person and everyone else was, Indian or Sri Lankan or Asian and there are definitely distinct communications. There are differences between each of them. I just know how everybody is. You know with the Asians depending how well you know them. For example if you know them for 10 years your interactions will be way different to when you first meet them. Mary2 (WN)

Yes, I think I do. I'm aware there are some cultures, like in our culture we would look you straight in the eye that they would find that rude, so I try and be aware of it. Mary4 (WPCA)

Yes, I definitely think about cultural differences. What you're initially trying to do is work out if they can understand you and you can understand them and then you go from there, so yes you do definitely think about it. Mary5 (WPCA)

Non-Western Interviewees

Yeah, definitely being from Singapore, It's a multicultural society, so you tend to be very aware of how you adapt yourself to different cultures over here. I'm more aware as an Asian they [Australians] are more open. Bing1 (NWN)

Yeah, I consider about the communication in my teamwork place with other people of different backgrounds, even though sometimes, I have some challenges. Bing2 (NWPCA)

Not Consciously Using Cultural Knowledge

Five interviewees (33%) stated they did not consciously think about the cultural knowledge they used during intercultural interactions. Four were from Western backgrounds (two nurse managers, one nurse and two PCAs). Bill2 felt that he knew his staff really well and therefore did not need to change his approach to his staff from different cultures. He was a personable and approachable person and felt his door was always open. Mary7 did not have many other cultures (outside of Western) therefore did not think about using cultural knowledge. Mary1 and Bill1 did not think about cultural knowledge during their intercultural interactions. Barthi2, a non-Western PCA was the same as Mary1 and Bill1.

Western Interviewees

I think if I know the person (I know my staff really well), I don't consciously change the way I approach them. I am a manager for every staff member, regardless of their culture. Bill2 (WNM)

Not as much as I should. I don't have many outside [referring to indigenous cultures such as Aboriginal, African] cultures within this department. It's not something I think I'd be particularly good at. Mary7 (WNM)

No I don't think about it. Probably not the way I speak to them. Mary1 (WN)

No, I don't really think about it. Bill1 (WPCA)

Non-Western Interviewee

No, I don't think about language or cultural knowledge. Barthi2 (NWPCA)

Five interviewees did not comment whether they consciously used or did not use their cultural knowledge during intercultural exchanges.

Adjusting Cultural Knowledge

Nine (60%) said they were conscious of cultural knowledge and adjusted it during intercultural interactions. These interviewees came from varied cultural backgrounds. There were five Western interviewees (one nurse manager, two nurses and two PCAs) and three non-Western interviewees (two nurses and one PCA). Mary2 was conscious that people from Asian cultures were quiet; nevertheless, she was aware that she often communicated in a brusque and straightforward manner. Mary3 felt the need to adjust her cultural knowledge through the different meanings attributed to words and phrases. Mary4 adjust her cultural knowledge with some cultures when their grasp of English was low. Mary5 adjusted her cultural knowledge once she asked questions of the other person. Mary6 gave an example of adjusting her cultural knowledge with Asian staff.

Western Interviewees

The Japanese, Malaysians, they are all quiet. They are not as obnoxious as I can be if that makes sense. I'm forthright and outgoing; it's how Canadians and Australians are. Asians, especially females, are withdrawn and don't communicate everything they want straight away, until they know you. I know that, so when I ask them for something, some of them can be quite rude. I know it's not them; it's just the way they are brought up. Mary2 (WN)

We have terminology which can be offensive to patients. Like "just now"…. They don't like it because it's not – "just now". It's a familiar terminology in my language, it just means - we'll be here shortly. I've had to change my terms to suit the culture here. Mary3 (WN)

Yes I think I do. I understand that it's usually when there is someone you need to talk to a bit clearer because you know they are not going to have as good language skills. Mary4 (WPCA)

Yes I definitely think about cultural differences. What you're initially trying to do is work out if they can understand you and you can understand them and then you go from there, so yes you do definitely think about it and make adjustments. Mary5 (WPCA)

Yes I am conscious of other cultures. I know my tone of voice can get lost on other cultures so I try and adjust. Mary6 (WNM)

Four non-Western interviewees (three nurses and one PCA) adjusted their cultural knowledge with their Western colleagues. Bing1 adjusted his cultural knowledge by being more open in conversing with his Western colleagues. He also described how he had to be aware that in Australia it was accepted for male nurses to look after female patients, a completely different cultural outlook to his experience in Singapore. Barthi1 was conscious there was a difference in cultural knowledge and found it challenging at times to understand the Western nurses. Barthi4 stated she was fair with everyone and adjusted her cultural knowledge based if she felt the other person did not understand what she was saying. Barthi2 found some of the Western nurses and PCAs to be very dominant and being from an Asian background, she felt anxious and angry at the same time, which then manifested itself in her non-verbal behaviour.

Non-Western Interviewees

In Singapore, mostly women are more conservative and some of the older persons might not be as worried about certain things. Over here, I'm more aware as an Asian the Westerners tend to be a bit more open. Where as for Chinese people, for example being a male nurse in Singapore we would not be allowed or preferred not to attend to the female patient unless it's very urgent but over here, it doesn't really matter. When I first came here, I was shocked and now I have to attend to the female patients and I do everything with the female patients. This is where it's different. Bing1 (NWN)

Yes, cultural knowledge matters, there is a multicultural work here. When mingling say with Aussies, we need to understand them. We don't really understand sometimes. The hospital should have a session where they inform and explain [about] other cultures. Barthi1 (NWN)

Yes I think about it [cultural knowledge]. For instance I am fair with people of all nationalities. I adjust in different ways. Barthi4 (MWN)

When I go to work, if I know who the person is, I don't mingle, I don't talk to them, I just work and work. I don't say anything because they have lots of instructions, this and that. I keep silent. It does sometimes annoy me. I show it to them I am angry, and that's the time when they talk to me I look at them straight. Barthi2 (NWPCA)

Six interviewees did not comment about adjusting their cultural knowledge during intercultural exchanges.

In summary, five interviewees (33%) seemed conscious of the cultural knowledge they used during their intercultural interactions. Most of these nurses and PCAs were from Western backgrounds. Five interviewees (of which four were from Western backgrounds) were not consciously aware of their use of cultural knowledge during their intercultural interactions. Eight interviewees (five Western and four non-Western interviewees) stated they adjusted their cultural knowledge when they felt the other person was not at the same level of understanding as they were. None of the interviewees stated explicitly that they applied their cultural knowledge but this was implied in their comments related to adjusting their cultural knowledge. It was noteworthy that none of the interviewees mentioned that they checked the accuracy of their information or verified if what they said or did during their intercultural interactions was correct.

Cognitive CQ

The cognitive factor of CQ comprises knowledge of other cultures (Ang & Van Dyne, 2008). Overall ten interviewees (seven Western – three nurses, three PCAs and one nurse manager) and three non-Western interviewees (one nurse and two PCAs) displayed their lack of knowledge about the rules of language of other cultures in their comments (See Table 5.3)

Table 5.3 *Number of Interviewees' Cognitive Comments*

	C1	*C1*	*C2*	*C2*	*C3*	*C3*	*C4 & C5*	*C4 & C5*	*C6*	*C6*
	Legal	No Legal	ROL	No ROL	Values & Beliefs	No Values & Beliefs	Marriage & Arts	No Marriage & Arts	Non-verbal	No non-verbal
W	0	0	0	7	7	0	0	0	2	0
NW	0	0	0	3	6	0	0	0	1	0
No Comment	0	0	0	5	0	2	0	0	0	12
Cumulative Total	**0**	**0**	**0**	**15**	**13**	**15**	**0**	**0**	**3**	**15**

Rules of other Languages (ROL)

There were ten interviewees (66%) who commented on the rules of language (seven Western and three non-Westerns). Four interviewees, Mary1, Mary3, Mary4, and Bill1, all commented that the problem of not understanding or being understood by their colleagues was the main challenge for them because there was a knowledge discrepancy in the grasp of the local language (English) by their non-Western colleague, that in turn made is difficult to communicate, especially since they did not understand the rules of other languages. Mary3 had a challenge relating to the pronunciation of certain words and the meaning of phrases that are different compared to her native language – Afrikaans.

Western Interviewees

Only time there is an issue is if there is a language barrier but I'm a daughter of expats. Mary1 (WN)

Sometimes I feel I'm not getting my words across. They look at me strange like the penny hasn't dropped and I get frustrated because I'm not getting my message across. Simple things like the drug Phenergen is pronounced (Finigan – South Africans) (Finurgen - Australians) so it's different. Mary3 (WN)

Sometimes though it can be frustrating but that's usually a language barrier. I try to demonstrate rather than talk. Mary4 ((WPCA)

Lack of being able to communicate is the only problem. Bill1 (WPCA)

Two Western interviewees from different job roles (one nurse and one PCA) also commented that they had observed their colleagues' lack of awareness about other cultures' verbal language cues. Mary2 stated that the South African nurses on her ward practiced exclusionary behaviour by speaking to each other in their native language in her presence. Mary5 discussed her experience of colleagues on her ward who did not like people from other non-Western cultures, especially those whose speech they could not understand. Again, this created exclusion and an unproductive work environment.

> *The South Africans' tone of voice and facial expressions don't match and I'll call them on it. It could be just me but that's my experience. Depends on how it's done. There are some South Africans who tend to speak their language between themselves in the tearoom or they will say something across the room to somebody in their own language and you think that was rude and I try to ignore it. Mary2 (WN)*

> *We don't see any difference in day-to-day life, but it can be difficult working with someone when a person doesn't like another culture. That's happened a few times here because some staff don't like them from another culture, they can't understand what they are talking about so that makes it difficult. Mary5 (WPCA)*

One Western nurse manager, Bill2, gave an example about one of his staff from India who was quiet during staff meetings, which he acknowledged was a cultural tendency, and therefore had to find an avenue for her and staff of a similar culture to express their views.

> *We just had a meeting with 11 nurses. One or two nurses didn't speak. One Indian nurse who is beautiful but didn't say a word in the whole meeting, yet she is very intelligent and a lovely nurse and I get lots of positive feedback. In another forum she may speak, but not in public. Lots of people there. Maybe the forum didn't suit but I can't change the forum to suit one individual either. To enable someone like her to speak up I have a monthly, formal team meeting, I go through the minutes, the changes on the ward, areas of focus, people leaving etc, I'm chair as I'm the manager and I go to each individual staff member and ask if they have something to add, and many say no, but they are waiting for the invitation. If I thought the topic was really important and I thought someone was a good advocate for it, I would speak to them in a private setting and then feed that forward. I think that sometimes people from other cultures are sensitive. Sensitivity and caregiver go together. For me personally, if I have got a performance issue, I'm not one manager that calls them into the office and quickly goes through things, I have to think about it, what are the issues, what's being done about it, I don't make cultural*

allowances. I am a manager for every staff member, regardless of their culture. Bill2 (WNM)

Non-Western Interviewees

Three interviewees expressed viewpoints on the differences in the rules of communication between different cultures. Bing1 (a non-Western nurse) talked about the Singaporean Asian reticence to talk about personal life with work colleagues. Bing2 (a non-Western PCA) discussed the difference between an autocratic cultural communication interchange compared to the freedom of conversation in Australia. Barthi2, a non-Western PCA, felt some Western PCAs and nurses were dictatorial in their tone and speech and she found their manner of speaking offensive.

Singaporeans' are friendly we just don't say a lot of things about our personal life. You have [an] intro session where you get to know the person better first, then start with the personal staff. Some of the Western colleagues, first or second time pretty much start telling you about family and sharing. It's very intriguing you open up to somebody first or second time you see them. You barely know me and you [are] telling me about your son and where he's working. Bing1 (NWN)

In my country when I was doing my work experience in one office of customs in the Congo, the one who was the controller, the boss, was just directing people what they have to do. You can't go against what the boss has said. I said in Australia, it is fantastic, you are free, you can express yourself to your boss, you can try and make them understand your failings and if they understand you they give you opportunities to decide, but in my example, please, please, you must obey, even if it is something out of your duties. It is complete obedience and some kind of dictatorship [in the Congo]. Bing2 (NWPCA)

Australians- they show off, don't want to be beaten, want to be the one, as if they are the supervisor but we are the same. First time I met them [Australians], I really feel bad before, but this time, I ignore them now. I don't care who they are. Barthi2 (NWPCA)

Five interviewees did not comment on the rules or communication issues of other languages.

Cultural Values and Religious Beliefs

Based on interviewee comments, cultural knowledge appeared to be gained experientially in the workplace rather than from academic sources or voluntary learning activity, such as reading about different cultures. There were thirteen interviewee comments (86%) that illustrated surface based knowledge (visual aspects) of different cultures. Seven were from Western backgrounds (two nurse managers, two nurses and three PCAs) (See Table 5.3).

Bill2 found through experience that he had more trouble with his British staff than with his non-Western staff. Mary7 found she had limited cultural knowledge except for when she was rostering Asians for days off at Chinese New Year. Mary1 discussed how she noticed the food and dietary requirements of patients from different cultures. Mary3 commented on her interactions with the Indian and Muslim cultures on her ward; she was also aware of other cultural practices because she socialised with friends from other cultures, while Mary 4 contrasted the non-verbal cultural practices of the same. Comments are below:

Western Interviewees

Some of my English staff have a tendency to be involved in conflict situations. You don't get such strong characters in other cultures (more reticent and a bit less forthright). They tend to just blend into the workforce. Bill2 (WNM)

I don't know an awful lot about their cultures. Some Chinese- Singapore girls, other than knowing how important Chinese New Year is to them and making sure they get that time of the year off. Mary7 (WNM)

Basic knowledge for people I come in contact with. Patients only, such as dietary requirements, such as halal, no beef products. Maybe who celebrates Christmas and who doesn't. Muslim culture – The women's dress, the types of food they eat, holidays, but that is partly to do with what we see a lot of that on our ward. Certain women prefer female doctors, female nurses. I have the basics, what you would expect from anyone who has been in nursing after 14 years, but not an in-depth knowledge [of cultural differences]. Mary1 (WN)

Australians, they come across as very forward, and quite rude at times I find, whereas I look at the Indian and Muslims, they are much more respectful. Africans, they are very loud. I find from my personal perspective as a nurse when you are talking to an

Australian, they take offence very quickly. They also attack, quickly, but I've learnt to cool down first, let things settle and then talk to them. With other cultures like Africans coming here, it's quite easy to relate, it's almost like a rapport with them as it is a known culture. We just met people from Turkey and it was amazing to know more about them. Can't be as open, you have to first see what the culture is all about and then try and act accordingly. Can't go to a Muslim home wearing mini skirts and open tops. With Asians it's an insult to wear shoes in the house. Don't leave any rice in the plate, it's an insult. Mary3 (WN)

They don't like to be looked at in the eye – ones of the Asian cultures. There are other cultural differences from a ward perspective when they are being nursed and they need to get out of bed and they feel they need to stay in bed. Mary4 (WPCA)

Two Western interviewees (PCAs) commented on the prayer practices of the Muslim workers.

Muslims, pray a few times a day and they cover their hair when I walk into the room. Bill1 (WPCA)

There is a Muslim girl. She always asks if she can go, as she has to pray five, six, seven times a day. She wears the nicap. Of all the different cultures we have, we don't have that many that practice their cultures. With Aboriginals, you can't make eye contact. Everyone else I haven't noticed anything. Mary5 (WPCA)

Non-Western Interviewees

There were six interviewees from non-Western backgrounds (three nurses and three PCAs) who commented on their knowledge of cultural practices and religious beliefs of other cultures. Barthi1 was from Singapore and she contrasted the positive communication aspects of Australians compared to the Asians. Bing1 highlighted the difference in conversation between Australian and the Singaporean people. For example in Australia, a colleague will disclose personal information about their lives, such as, my husband Paul had a prostrate operation where they found a tumor and he is not allowed to exert himself. In Singapore, disclosure of personal stories with colleagues is uncommon as a cultural practice. Bing1 says a colleague will only disclose relevant information in a conversation, such as, my husband had an operation or did not

have an operation. Bing2 contrasted the difference between greeting cultural practices in Australia and the Congo.

> *Aussie: Good culture, don't make a mountain out of a molehill. They don't like to give negative feedback and try to be positive. They tag along with you; there is no gossiping or whingeing. Not like in Singapore where they like to pick at you. Barthi1 (NWN)*

> *For the Western culture, I do know they are more open, they like talking about their families. They share a lot. More friendly, more cohesive, more open with each other in terms of their personal life. They have more time to talk about such things than in Singapore. Singapore is a different culture not so open with everyone else, e. g. my husband had this or did not have that, says it at all. Bing1 (NWN).*

> *In Australia when you are speaking to someone even if he is older than you, you have to maintain eye contact. You have to focus your eyes to the one you are talking to. In Congo with superiors, you can't look at the eyes straight away. Even to greet someone who is older than you, you can't be the first one to give hand in the Congo. Bing2 (NWPCA)*

Two non-Western Interviewees (one nurse and one PCA) commented on their knowledge about the religious practices of others. Barthi4 also commented on the values of people from other cultures.

> *Muslim – In nature they are really very [religious] - they always pray five times a day. One Muslim who works she always disappears at 12 o'clock, 1 o'clock, 7 o'clock. I know why they disappear, but some others don't know and so it makes them wild. Africans, some are nice, but [I don't know] much about their culture. Philippines- they are good workers, very Catholic, also some Muslim and Chinese. Barthi2 (NWPCA)*

> *Muslims need to pray a few times a day. Australians are very straightforward. Malaysians and Asians are hardworking. Barthi4 (NWN)*

Another non-Western PCA commented on the cultural value of individualism–collectivism aspect of self- interest versus teamwork, which she had learned from her experience at work:

> *I find working with Australians, they are good in talking, but when it comes to working, they are not as efficient as other cultures. We from the Asian culture, we like to help each other. If there is a job to be done we like to pool together and get the job out of the way, but with other cultures they are taught that if it's not their rooms or their job they will push it away. They try to escape from that part of it. They are more like protecting their own self. It all comes back to teamwork in this sense. Their culture seems to look after oneself more than on the whole of the job. Barthi3 (NWPCA)*

Two interviewees did not provide any comments related to the cultural practices, values and religious beliefs of other cultures.

To summarise this cognitive CQ factor, I found the interviewees provided surface level knowledge (visual indicators) through examples related to topics about cultural practices and religious beliefs. There were three main non-Western cultures that were discussed by the interviewees. The Africans were discussed in relation to their communication practices, tendency to speak loudly and in their own language (perceived as exclusionary), and their visual religious practices (many are Muslim). Those interviewees who discussed the Muslim culture commented mostly on their prayer practices, which staff observed on their wards, as the Muslim nurses and PCAs need to find a place to pray a few times per day, generally off the ward. Some interviewees also discussed the Asian cultural tendency to be more reticent, abrupt in their speech, and direct. None of the interviewees discussed the legal or marriage systems of other countries. The topics related to the arts and crafts of other cultures was also not discussed.

Motivation CQ

Motivation CQ reflects the ability and drive to learn about other cultures and function effectively in culturally diverse situations (Ang & Van Dyne, 2008). The interviewee numbers are categorised in relation to the CQ statements (See Table 5.4).

Table 5.4 *Number of Interviewees' Motivation Comments*

	M1	*M1*	*M2*	*M2*	*M3*	*M4*	*M5*
	Enjoy Interact	Not Enjoy Interact	Socialising	No Socialising	Deal with Stress	Living other Culture	Work-place
W	8	3	8	0	0	0	0
NW	6	3	2	2	0	0	0
No Comment	1	9	3	0	0	0	0
Cumulative Total	**15**	**15**	**13**	**15**	**0**	**0**	**0**

Enjoy Interactions

Fourteen interviewees (93%) reported that they enjoyed interacting with people from different cultures; eight were Western interviewees (three nurse managers, three nurses and two PCAs). Mary1 commented on her interest about different marriage customs and dietary choices based on cultural practices. Mary2 enjoyed her interactions with her Sri- Lankan colleague and wanted to learn more. Mary3 was excited about learning about different cultures and beliefs, especially since she was a part of the Apartheid era in Africa. Bill1, Mary5, Mary6, Bill2 and Mary7 all said they enjoyed meeting and connecting with people from different cultures. The stories, the different way of life, different attitudes to situations were all part of what motivated people to be willing to engage in intercultural exchanges.

Western Interviewees

It's interesting to hear about other people's cultures. I used to work with a doctor at PMH (Princess Margaret Hospital) who decided to have an arranged marriage and I thought it was so interesting because he was an Australian with a broader Australian accent than mine and it was really interesting to learn about the dynamics. I'm always interested in the differences in dietary restrictions but then that comes with all religions. Jehovah Witnesses have a whole lot of issues with hospital stays, I don't think it's racially related, I just think I'm nosey. Mary1 (WN)

The Sri Lankan surgeon was brought up here mostly. Even though he's got his culture he's more Australian than Sri Lankan, even though he eats his own cultural food and visits his parents there. He's obnoxious in an outgoing 'this has to be done' way. I've known him as long as I've been a nurse. He's lovely to work with [generally] even

though he is obnoxious [about one aspect of the job relating to getting things done] and he never gets stressed out ever. Mary2 (WN)

I enjoy to know about different cultures and what is the interrelationship between the cultures. Coming from a German Background, living in an African environment, it's nice to understand what is going on with other cultures. As a child it was quite protected through Apartheid and we couldn't have any contact with other cultures. I feel curious to know what are your beliefs and where do you come from. So much to learn from different cultures. Mary3 (WN)

I enjoy communicating with people, people are people whether patients or colleagues. You just communicate with people -connecting. I enjoy connecting with people. Bill1 (WPCA)

It's nice to meet people from different cultures, find out what they are about and what they are doing. I would do the same if it was someone from a similar culture. You look at people's personalities rather than their cultures. One nurse from China she is great and you can talk all night long. Mary5 (WPCA)

I like to experience different cultures. I am interested when people tell stories about people of different cultures. It broadens my horizons by working with them as a person. Mary6 (WNM)

I did my nurse training in Birmingham, it was a huge centre of Indians and Jamaicans, and I worked in that kind of environment. At one time I could speak a few words of Urdu and Punjabi and I love Indian food. Bill2 (WNM).

I think Australia is lucky we are multicultural. You don't get the nonsense we get in other countries, fighting over religions, I have made a lot of friends, German, Japanese, Indian friends from Bombay, Balinese friends, Russian friends, really it's totally different from Northern Ireland. It's very interesting. My friendship group gives me the exposure to other cultures. I have some lovely South African girls here. Mary7 (WNM)

One Western PCA was ambivalent. Work appeared to be a place she came to as part of life journey.

Non-Western Interviewees

There were six non-Western interviewees (three nurses and three PCAs). Barthi2 enjoyed nice attitudes displayed by some colleagues. Barthi3 enjoyed a well run shift. Bing2, enjoyed connecting with people of other cultures, while Bing1 liked the team bondedness. Barthi1 was happy when there were other people she could connect with and Barthi4, simply enjoyed the workplace.

I enjoy some people's attitudes- some of them are nice, but at least it is for experience you will know everything. Barthi2 (NWPCA)

I enjoy working there when we have a good shift, we work together and everything runs smoothly. Barthi3 (NWPCA)

I enjoy meeting people, I enjoy communicating with other people, I really enjoy being in relationships with other people from different backgrounds. There is no development or improvement in all sectors of life without being in contact with other people. My teacher said to me if you want to be a great man, know how to deal with other people. I am so excited to socialise and meet other people. I am excited about how other people are living, how other people think, how they are planning their future. Bing2 (NWPCA)

I really enjoy the fact that everyone is so closely bonded together. People are friendly, they don't brush you off. Bing1 (NWN)

Enjoy; Not being alone, makes the job colourful. Barthi1 (NWN)

I enjoy everything. I have to work hard but it is all good for me. I am flexible and easygoing. Barthi4 (NWN)

Not Enjoying Interactions

There were six interviewees (40%) who did not enjoy their interactions with people from other cultures. Three were from Western backgrounds (two nurses and one PCA). Mary2 as a Western nurse, found it challenging to work with a particular non-Western ethnic group when there were a group of them working in the same area, as she felt excluded. Mary3 did not enjoy having to constantly think about her use of words and if they had the correct meaning in Australia. Mary4 did not like interacting with people that she found had difficulties with communicating.

Western Interviewees

Don't enjoy, I know that when you get a theatre full of the South Africans, it can be really hard as they'll be talking within their language and I find it rude. You just don't speak another language in front of other people. If you don't want someone to know something, you talk another language. Another Asian surgeon if he gets stressed out, everyone is stressed. The whole team is on edge. If you do something wrong, you have to watch what you say and do, Yes Sir, No Sir. It's hard. Mary2 (WN)

The challenge is making sure that what you say is what you mean. By using the terminology that everyone understands I think is the most important. Mary3 (WN)

The only time I don't enjoy is if they don't understand and generally you can get over that. Mary4 (WPCA)

Non-Western Interviewees

There were three non-Western interviewees (two nurses and one PCA) who did not enjoy their intercultural encounters. Barthi1, did not enjoy interacting with the Australian nurses because her words and intent might be misconstrued because of a lack of cultural and linguistic communication knowledge. She was anxious about what she said and how she said things. Bing1, did not enjoy the interactions when he came across accents that were hard for him to understand. It was culturally difficult for him to ask people to keep repeating what they wanted and this embarrassed him. Barthi3 did not enjoy being excluded by the nurses especially at break times.

I occasionally get stressed about what you think and understand might be interpreted differently by another person. Barthi1 (NWN)

Don't enjoy a little bit to do with the accents. Sometimes it's difficult to understand some of the stronger accents, people from say, Ireland. If it's quite strong, I might have a bit of problem deciphering what they are trying to say, but it's not too much of that, but it's one of the things I don't enjoy. I don't like asking people to repeat things because I don't understand their accent. If something is really important I ask them to repeat, if not important, I say just yeah and I have no idea what they are saying. I think I don't need to know. Makes me feel a bit out of place. Maybe just a little my stress level goes up a bit. Because we are Asian, everyone is here and pronouncing all the words and I can't really decipher what they are saying so the level of stress goes up if I have to ask you to repeat. I don't like to ask people. Bing1 (NWN)

I don't enjoy working with them [Australians] because sometimes they don't include you as one of the team especially I'm talking when you go for break. Barthi3 (NWPCA)

Nine interviewees had no comments about not enjoying their intercultural interactions with people of other cultures.

Socialising

Eight Western interviewees (53%) mentioned that they enjoyed socialising with people of different cultures. For six of them below the main enjoyments of socialising seemed to be meeting people who have different cultural practices and the variety of foods introduced to the interviewees.

> *I am very confident in socialising. My family is open about everyone – we weren't constrained. I traveled extensively and had to put myself in someone else's culture. It was scary at first, then fun. When I came back, I was put on a ward that was very multicultural and made many friends even though we weren't the same age or of same cultural backgrounds. Yet our work was a bonding experience and it opened me up to new cultural experiences. Mary6 (WNM)*

> *I enjoy the food and some of the things that come into our staff room, I think, I'm so in the wrong country [in relation to foods, as some Western foods can be quite bland in comparison to the aromas from foods from countries like Asia]. It's interesting to hear about other people's cultures. Mary1 (WN)*

> *A surgeon, he is one of my best friends as I work outside the hospital with him. I feel excited and curious. At his wife's birthday, his parents made all this Sri Lankan food and I thought, cool I get to try all these homemade different foods. It was unique to experience all these different things. Mary2 (WN)*

> *At tea time everybody comes to tea. If you have a social thing after work, a BBQ (we call it a BRIE) everyone lovely Asian people as well, everybody comes to it. I feel curious to know what are your beliefs and where do you come from. Mary3 (WN)*

> *It's nice to meet people from different cultures, find out what they are about and what they are doing. Mary5 (WPCA)*

> *I socialise through the hospital with people. I enjoy connecting with people. I don't see anything different whether you come from another country or the same country. I make myself stay open. Bill1 (WPCA)*

Two Western nurse managers enjoyed socialising with people of other cultures outside work. Mary7 had an eclectic group of friends from varied backgrounds and this gave her exposure to other cultures as she has not traveled a lot in her life. Bill2 has had previous exposure to other cultures as he lived in England for many years. His enjoys socializing through his sporting group that is made up of different nationalities.

I haven't really traveled a lot. I have made a lot of friends, German Japanese, Indian friends from Bombay, Balinese friends, Russian friends, really it's totally different from Northern Ireland. Mary7 (WNM)

I play veterans hockey, I have a doctor who is a Sikh, I think he is Indian, he works as a teacher at the detention centre, there are lots of Australians, all sorts of individuals, I don't treat anyone any differently. Bill2 (WNM)

Non-Western Interviewees

Two non-Western interviewees enjoyed socialising. Bing2, a PCA, was filled with enthusiasm and curiosity to know about people from other cultures and their way of life. Barthi1, a nurse, indulged in her curiosity about other cultures and nursing during her tea breaks.

I am so excited to socialise and meet other people. I am excited about how other people are living, how other people thinks, how they are planning their future. Bing2 (NWPCA)

Like to socialize, more friends at tea time to ask about country of origin and what nursing is like in their country. Barthi1 (NWN)

Not Enjoying Socialising

Only two out of fifteen non-Western interviewees (a nurse and PCA) were not as comfortable socialising with the locals (Australians). Bing1 was anxious about meeting people from a different culture at a social setting. Barthi2 had limited exposure to other cultures prior to her immigration and she felt socialising with her Western colleagues was more about gossiping than getting to know about people.

Socialising at work. We do have chats at the tearoom table but they do have events like BBQs, which I didn't go to because I did not feel especially comfortable. It's like any other social party you're invited to where you have never been to one before with that group of people everyone else has been before. I think it's just a normal human reaction. A fear of the unknown. Not sure how people are going to be when you go there. Bing1 (NWN)

Not really traveled, only been to two countries, Brunei and Australia. I don't enjoy to go to socialise, it's noisy, there are gossips there. I eat alone. If someone came to me and ask me to go I will go sometimes. Usually I don't mix with them. They ask me, but I'm not happy sitting there, I just sitting down, I don't say anything, they come to talk, they ignore you like that, better not to come, better me alone, I'm happy. Barthi2 (NWPCA)

Three interviewees made no comments whether they enjoyed socialising or did not enjoy socialising with people from other cultures.

In summary, the motivation CQ factor comments focused mainly on the willingness of interviewees to learn about other cultures. Most of the interviewees (14) were interested in interacting with people who were different to them. From the interview comments I ascertained that the main focus of interest was about the food people ate and the stories people told about their lives in the Western or non-Western culture. Items in the CQ 20-item survey that were not elaborated upon included cultural adjustment and the interviewees' ability to function in an unfamiliar culture, as I did not ask specific questions related to these topics, and the interviewees did not volunteer any information about how they adapted to life in Australia. This may be an area for future research.

Behavioural CQ

Behavioral CQ refers to the extent to which a person acts in an appropriate manner during intercultural interactions (Ang & Van Dyne, 2008). Interviewee comments are listed below and the interviewee numbers are categorised by the CQ statements (See Table 5.5).

Table 5.5 *Number of Interviewees' Behavioral Comments*

	B1	*B1*	*B2*	*B2*	*B3*	*B3*	*B4 / B5*	*B4 / B5*
	Change Verbal	Not Change Verbal	Use Pause/ Silence	No Pause/ Silence	Vary Rate Speech	Not vary Rate Speech	Change non-Verbal	Not Change non-Verbal
W	5	0	0	0	5	0	4	0
NW	3	0	3	0	0	0	1	0
No Comment	7	0	12	0	10	0	10	0
Cumulative Total	**15**	**0**	**15**	**0**	**15**	**0**	**15**	**0**

Changing Verbal Behaviour

Eight interviewees (53%) from different job roles stated they changed their verbal behavioral patterns during their intercultural interactions. The five Western nurses and PCAs altered their communication interactions in various ways. Mary6 changed her verbal and non-verbal behaviour, Mary7 tried not to use slang words, Mary2 changed the way she spoke (less blunt), and Mary5 tried to face the other person when talking. Bill1 slowed down his verbal pace. Their comments are below.

Western Interviewees

I adjust my behaviour through tone. Mary6 (WNM)

I adjust my behaviour through my communication style. Through verbal communication, I try not to use slang, make the sentences clearer and concise, more of a direct sentence so he/she doesn't have so much English to cipher through. If there is something I thought they didn't understand I often say, "Do you understand what I have asked you to do" so get them to repeat it back to me. I would even show them what it was, "come with me so I can show you what I mean". Really demonstrate it to them. Make really sure they got the message. Mary7 (WNM)

Be mindful how you say things. My honesty can be a bit blunt sometimes, you change the way you consciously say things. You change the way you talk and the way you do things. Mary2 (WN)

Make sure you are face-to-face they can understand what you are saying. Mary5 (WPCA)

I slow down and speak a bit louder, more precise. Bill1 (WPCA)

Non-Western Interviewees

The three non-Western interviewees (two nurses and one PCA) said they adjusted their accents, speed of talking and body language.

> *I adjust my behaviour, my accent, I adapt to their accent. Sometimes they don't understand and ask me to repeat several times. I understand so I speak like them – mirror them. Barthi1 (NWN)*

> *When I first have difficulties, I speak slowly and then by using body language. Bing2 (NWPCA)*

> *I talk slowly and always try and make sure they understand what I am asking of them. Barthi4 (NWN)*

Seven interviewees made no comments about changing their verbal behaviours in interactions with people of different cultures.

Use of Pause and Silence

Non-Western Interviewees

There were three non-Western interviewees that changed their communication behaviour through various methods, such as, using pause and silence, as part of a conflict avoidance strategy. Bing1 stated he kept a reserved distance between himself and his non-Western managers as a respect for the power distance between managers and subordinates, which is an intrinsic part of the Asian cultural practice. Barthi2 became silent, and Barthi3 also internalized her feelings and used silence to convey her disapproval or anger and save "face".

> *I do have an Asian senior colleague in the department who just because she is Asian I tend to bring back my own Asian culture into it. I give her a bit more respect and try and not to interrupt her when she's doing things. The usual Asian culture I put a bit more power distance between us but with the Western culture colleague, I really don't have a problem asking anything at all. For me the Westerners are a bit more open, behaviour wise. Bing1 (NWN)*

> *I look them straight in the eye. Talk normal – adjust my behaviour by being silent or avoid them, those I don't know. Barth12 (NWPCA)*

> *I try not to show my anger when I'm angry. Barthi3 (NWPCA)*

Twelve interviewees did not make any comments in relation to pause and silence.

Change Rate of Speech

Five Western interviewees (two nurse managers, one nurse and two PCAs), stated they specifically altered their rate of speech during intercultural exchanges in order to manage their interactions.

Western Interviewees

Lowering my voice and speed of talking. Mary6 (WNM)

I slow down, as I'm inclined to talk quickly. Mary7 (WNM)

I slow down my speech for everyone because I talk really quick. I tend to go on tangents. But that's the only thing I would do. Mary1 (WN)

Talking slowly. Mary5 (WPCA)

I'll talk much slower. I slow down and speak a bit louder, more precise. Bill1 (WPCA)

Ten interviewees made no comments about varying their rate of speech.

Changing Non- Verbal Behaviour

Five interviewees (33%) adjusted their non-verbal behaviour such as facial expressions, tone of voice and displayed a friendly demeanor. Four of the interviewees were from Western backgrounds (two nurse managers, one nurse and one PCA) and one non-Western PCA. Some of the ways the interviewees adjusted their non-verbal behaviour was through body language, such as softening facial features, making the body stance non-threatening, being more respectful in demeanor and using hand gestures. The interviewee comments elaborate further on this below.

Western Interviewees

I soften my face and nod a lot with some culturally different staff, to show I am empathetic and listening to them. My body language becomes more polite as it mirrors their politeness. I nod and smile to show you are being understood. Some Middle Eastern and Asian staff are not as expressive – not on the same wave length, so the body language is a way to communicate. Mary6 (WNM)

I don't see that it's an issue for me I think sometimes particularly when staff from other cultures first start they are almost subservient in their approach, they soon see I'm not a threat and get comfortable. As a manager I'm aware I'm a male and dealing with females, I'm not a huggy sort of person, mainly not that sort of personality and in a profession I have to be careful. I'm in an office and I don't want to be seen to abuse that office. New staff of other cultures can be very reticent and almost shy. I give them time to build up rapport. Through being totally accessible, the door is always open. New graduates - one guy that's from China probably, but a mix of personalities, I show them the ward, a tour, it's their first step of allocation, we generally get positive feedback. It's about making yourself available and being seen as non-threatening and supportive. When you go out, acknowledge them. I make myself non-threatening. Bill2 (WNM)

Body behaviour. You have to be careful about different cultures, always ask - is this allowed? I am sometimes more reserved when it is a culture I do not know. Mary3 (WN)

Using hand gestures. Mary5 (WPCA)

Non-Western Interviewees

One non-Western PCA stated he altered his body language to suit the situation when he was in an intercultural interaction.

By changing body language. Bing2 (NWPCA)

Ten interviewees made no comments about changing their non-verbal behaviour or altering their facial expressions during intercultural exchanges.

A summary of the behavioural CQ factor revealed that most of the interviewees changed their behavioural patterns in some way. Eight of the interviewees changed their verbal communication patterns through tone, accent, sentence construction, minimalising colloquialisms or varying their rate of speech. Seven interviewees did not comment about changing their verbal communication patterns. Five of the fifteen interviewees stated they also changed their non-verbal communication by altering their facial expressions, using body language, hand gestures, or softening the face. Ten interviewees did not comment on the latter. These comments revealed that there was a willingness to communicate in some way during intercultural interactions.

The Importance of Language

The cultural and linguistic diversity of the interviewees inevitably affects the quality and outcomes of intercultural interactions. Scott (2004) advocates that host country language acquisition is relevant for acquiring high CQ and increasingly important for effective intercultural interactions (Scott, 2004). In relation to the value language plays in the workplace, the interviewees provided their comments. The interviewee numbers were labeled by their job roles and culture type (See Table 5.6).

Table 5.6 *Challenges of Language –Interviewee Numbers by Job Role / Culture Type*

	NM	*N*	*N*	*PCA*	*PCA*	*No Comment*	*Total*
	W	W	NW	W	NW		
Challenges of understanding/ being understood	3	3	2	2	3	2	15

Challenges of Understanding and being Understood

Western Interviewees

Three nurse managers were asked if they encountered challenges in understanding any of the nurses and PCAs in the workplace or of being understood by their staff. All three nurse managers stated that they talked too fast; however, they knew this and therefore attempted to adjust the way they spoke to match the level of the person from a different culture. The following are the nurse managers' comments.

> *I can talk fairly rapidly, the Irish in me rabbiting on a bit. I ask if I don't understand anyone. I could have someone who is Australian, but have a crisis on the ward and their thoughts may be jumbled and I have to clarify them. I don't think about the nationality of the person and how I'm going to manage the situation. Our nurses have a good grasp of the English language. There are the IELTS they have to pass. The PCAs I've worked with, say a German, South African, Philippino or something, who are all on this ward, they all understand what is needed of them. Bill2 (WNM)*

Yes, as a Westerner, I speak rapidly. It comes out as a mumble to some and some of my language can be colloquial. I choose my words carefully like "what I'm saying is…" I lower my voice. The best way to communicate is in English that is understood and to have a tolerance for broken English. English is way more important for nurses than PCAs. You can't be registered without passing the English test. So it is mandatory to have a good level of English because of the test and speak clearly and concisely. PCAs need a standard of English – be able to understand instructions and be able to communicate with people. Mary6 (WNM)

Occasionally someone from this department and on the telephone will say slow down slow down, that's fair enough, I do speak quickly and if I get excited or sort of anxious about anything it goes…LLLLLLLLL. I don't use the telephone as much as I used to. Communication is very much electronic. This may have overcome a few problems for me. I have been here for 15 years and we have good staff retention rates. I haven't received feedback about people not understanding me. I often back up something important with the taped work and the communication book and my newsletters and group emails to all staff. So I get the message across to staff OK. The German girl I had to listen very carefully until I got used to her. That's really all. The colored guy, I listened to him carefully. If you take the time to listen and concentrate on what they are saying it's not rocket science. Give them time, can't be impatient must be wee bit tolerant. If you don't understand it's up to you to find out what they are saying. It's a two way thing communication. Mary7 (WNM)

Five Western interviewees (three nurses and two PCA) found it challenging at times to understand their non-Western colleagues. Mary1 struggled with accents, Mary2 got frustrated with terminology and the lack of ability of some non-Western colleagues in conveying their message, Mary3 found some ethnic groups talked too fast and coupled with their accents it made it difficult for her to understand what was being said. In turn, Mary3 also acknowledged her pronunciation may have made it difficult for her colleagues to understand her. Mary4 also had difficulty at times with understanding some of her non-Western colleagues because of the language barrier. Bill1 adjusted his method of communication when he found his non-Western colleagues could not understand him. Their comments are listed below.

Couple of young guys, African descent, I struggle with them. That could be my hearing. I have problems with my hearing every now and again. The Asian nurses don't really have any problems. Perth is very multi cultural, not sure if that plays a part as I hear it. My mum and dad are POMS [British migrants] and they have lots of Scottish, Welsh and South African friends. I have been surrounded by accents. Mary1 (WN)

Language is important especially if they are quite new. Sometimes with the equipment, I know it to be one thing and they know it to be something else. In South Africa, they may call it something else. It's just about describing the instruments. I get frustrated because I know what they want to ask me and I have to guess and I'll guess and I'll be right or wrong. I'll say what you meant to say is or how about trying to ask me this way rather than that way as it's quite rude. Depending on who it is, I can't do it with everyone. Asians OK to do it with; South Africans you can't tell them how to do anything. Mary2 (WN)

Initially I found it hard to understand the staff. Sometimes the Indian girls it's difficult because they also talk fast and you also have to really listen to what they are saying because of the accent. I'm an English speaking South African different to an Afrikaans speaking African. The accents are very different.
I talk too quickly because of where I come from and my terminology is different, like Deurmekaar. A South African would immediately pick up what I'm saying. Others would say they are just not sure what I mean. My accent how you pronounce the actual words such as, Finigan and finurgen can make it difficult for some non-Westerners to understand. Mary3 (WN)

I've had some problems understanding others of a different culture. If I have trouble understanding, I re-ask a question. You just have to find out. I've never upset anyone nor have they upset me with their culture. It's just their language. Mary4 (WPCA)

Yes, sometimes the non-Westerners have trouble understanding but then I straightaway I would speak even slower, use body language and sign language and make myself understood. Bill1 (WPCA)

Non-Western Interviewees

Five non-Western interviewees discussed their difficulties understanding their Western colleagues. Barthi1 (a nurse) and Barthi2 (a PCA), found it difficult to follow the communications when the Australian nurses and PCAs talked too fast. Bing1 (a nurse) also found the accents hard to grasp. Bing2 (a PCA) was always polite and used clarification to ensure his message was understood during intercultural interactions. He was also studying English in order to improve his level of understanding and communication. Barthi3 (a PCA) realised she spoke too fast and to facilitate better communication, she encouraged the other party to let her know if they didn't understand her.

I occasionally don't understand as they can speak very fast, typical Aussie or Irish accent. Barthi1 (NWN)

The only miscommunication can occur when I don't understand the other party so it goes back to the accents. I would answer the question wrongly and there would be confusion but it doesn't happen often in terms of working at the hospital. Bing1 (NWN)

The way they –Aussies- speak is difficult to understand. The way they say, the way they are doing and what they want you to do, especially the nurses. The instructions they give. They sometimes speak too fast, they don't look at you. Barthi2 (NWPCA)

When I feel that they (Westerners) don't understand I do my best to adjust, I do my best to make them understand. I ask them, friend, did you understand what I have said? I ask the question normally. I remember one nurse manager told me that how I don't believe all this one year and half you have been studying English. Since I came here I didn't do anything but study English, because in Kenya, as a volunteer, the white doctor from America, they used to teach in English but there was always an interpreter to change to Swahili, so if you were good in Swahili you had a chance to be given a job to do. I was good in Swahili so I was given an opportunity to work with very, very little knowledge of English. I had to come here and really improve it. Bing2 (NWPCA)

Yes, sometimes I think I speak too fast. People don't understand me and with being Asian I have an accent so I always tell people if I talk too fast please slow me down, especially when there is new staff on. I always remind them. I'm not trying to be bossy; I'm trying to explain the job to you and if you don't understand please tell me and don't just keep quiet and then say [Barthi] is bossy. Barthi3 (NWPCA)

Two interviewees made no comment in relation to the challenges of understanding or being understood by people of a different culture during their communication interactions.

The Importance of Speaking English

Ten out of fifteen interviewees (seven Western and three non-Westerns) commented on the importance of understanding and speaking English proficiently as part of the job requirement. These interviewees are classified by job role and culture type (See Table 5.7).

Table 5.7 Importance *of English –Number of Interviewees by Job Role / Culture Type*

	NM	*N*	*N*	*PCA*	*PCA*	*No Comment*	*Total*
	W	W	NW	W	NW		
Importance of speaking English	2	3	3	2	0	5	15

Each of the ten interviewees (seven Western and three non-Westerns) felt it was important that all workers had a good grasp of the local language, which in Australia is English because it was part of the intercultural issues that caused dissatisfaction. Nurses have to pass English as part of their nursing degree and therefore must be proficient in accordance with International English Language Test (IELT) requirements. PCAs are deemed competent by the hospital recruiter during the interview process. As Barthi1 stated, occupational English is all that the PCAs need; however, Mary1 put forward her viewpoint through an example. Mary1 suggested that if a PCA doesn't understand that a patient is fasting, then there could be some serious life endangering consequences. There is no English benchmark test for PCAs. The interviewee comments are listed below.

Western Interviewees

It's very important to have a grasp of English. Everybody needs to be able to understand each other and so if you are working in customer service position, which as nurses, midwives, PCAs, catering staff, we have to be able to make ourselves understood and be able to understand everyone. In a hospital setting it could be a problem. If someone doesn't understand if patient in 1301 is fasting, if they don't have that general understanding, we could have a problem. Now PCAs have a certain level of training. Most of them do a course now, so they have to have a certain grasp of English to pass the course, that has empowered them as well as they have a bit of an education of what is expected of them in a hospital setting. Having a bit of knowledge is important for you personally. Mary1 (WN)

Very important to speak English because things can go horribly wrong if you get the wrong thing. It's a safety issue as in if a PCA doesn't know the right way to transfer a patient, e.g. go slowly and they go really quick. Equipment, if you are asking for

something specific, and they get something else and you need it now. If their English is not up to scratch, then it can be a problem. I don't have a problem with people learning English, I speak of couple of languages well. English is the hardest language to learn but it is important. Mary2 (WN)

It is very important for nurses to speak English so they can at least communicate to their patients and to their fellows as not everybody is as understanding and if you can't talk English, I find you get ridiculed quite quickly, from patients and colleagues (Australian and British) and they make you feel stupid. You're not stupid; it's just that their English is not fluent. They automatically class you as somebody stupid, which is very sad. Mary3 (WN)

[It is an] English speaking country we need to have at least a little grasp of it [English]. Mary5 (WPCA).

English is way more important for nurses than PCAs. You can't be registered [as a nurse] without passing the English test…PCAs need a standard of English – be able to understand instructions and communicate with people. Mary6 (WNM)

Fairly important for nurses ad PCAs to have good level of English. Mary7 (WNM)

Only language barrier. If they haven't got the language then you have to try a bit harder to make yourself understood. I've never had any problems in that area. Mary4 (WPCA)
Speaking fluent English it's important but not that important. There's always ways to communicate. Eighty percent of language is body so you don't necessarily need words. As long as they can speak a little bit of English and make themselves understood, that's very important. To be fluent in English is not that important. Bill1 (WPCA)

Non-Western Interviewees

Nurses – IEL is too tough, occupational English (OATS) is good enough. Not relevant to nursing. OATS was abolished in 1970's. PCAs' occupational English is good enough. Barthi1 (NWN)

English is important, especially for nurses, as we must understand what the doctors, nurses and patients are saying, for patient to have quality care. Barthi4 (NWN)

Over here in Australia, absolutely important because the main language spoken is English. You never have colleagues who can't speak English (nurses). In Australia, the nurses need to take an English test and need to score quite high seven before you can register so English is very important. It's your way of communication with other health care workers and things can go really wrong if you communicate the wrong thing. Bing1 (NWN)

Five interviewees did not comment on the importance of speaking English well in Australia.

In summary empirical research has observed that individuals with high CQ and higher language proficiency levels simplify the way they speak to match the level of the person (of another culture) (Babcock & Du-Babcock, 2001). This has been illustrated through the interviewees' examples as they have recognised if they have spoken too fast or not clearly enough and have tried to adjust their verbal and non-verbal communication. Mawer (1999) states that effective communications and host language used are key arbiters of workplace performance. In support of this viewpoint, all interviewees thought a good grasp of English was important for effective workplace interactions and task performance, as a lack of good English in the hospital workplace could make a difference in acute patient care situations.

Intercultural Relationships between Cultural Groups and Job Roles

The clashing of value assumptions lies at the heart of most conflict situations in the workplace. "In a sense all of life is an intercultural experience" (Harris & Moran, 1996, p. 120) and a perpetual "process of coping and acculturation" (Harris & Moran, 1996, p. 121). These value dissimilarities have been reported below through the interviewees comments organised around the added Satisfaction factor statements in the CQ 20-item survey (See Table 5.8).

Table 5.8 *Intercultural Experiences of Cultural Groups and Job Roles*

Satisfaction Statements	***Yes (n)***	***No (n)***	***No Comment***	***Total***
I find it easy to work with nurses & PCAs from a Western background	0	3	12	15
I find it easy to work with nurses & PCAs from a non-Western background	2	6	8	15
I find it easy to interact with my managers	2	2	11	15
I am treated with respect by managers	1	0	14	15
I am treated with respect by nurses & PCAs from a Western background	0	2	13	15
I am treated with respect by nurses & PCAs from a non-Western background	0	0	0	0

Note: Yes/No categories are numbers of interviewees' (n=15) comments

Ease of Working with Nurses and PCAs from a Western Background

Three non-Western interviewees found it intimidating to work with their Western counterparts. Barthi1 felt intimidated by the sensitivity of the Western nurses who took offence at her manner of conversing (perceived as abrupt) and work actions. For Barthi1, the Asian method of communicating only what is necessary and relevant was a commonplace cultural practice. Barthi2 of South East Asian descent felt oppressed by the Western PCAs on her ward as they were always telling her what to do and she fell into a passive aggressive response of silence.

Non-Western Interviewees

> *They (Aussies) PCAs can be extra sensitive, think they are bullied or given the worst cases. I must be aware they don't feel they are being victimised. Barthi1 (NWN)*

> *There are some Aussies, who act like supervisors, every time I come to work, they have lots of instruction. Do this, why last night things is not here. That's not nice, but the first thing every time I work in the afternoon, sometimes all the supplies in the kitchen are finished. They are wild, you don't do this. So I answer them back- look when before I left it's all there, I don't know what's happened maybe it's the night staff. Then they put an instruction to the board, night PCA you have to do this and this…These people are the same level as me – PCA. If they say something to me, I look at them up and down, is that all. Just an insult to them but they know what I mean. You know what I don't like is nepotism – they are all related to each other. That's why in survey I put down I don't want nepotism. Close to nurse manager, good source of information – [they are] smoking buddies. Barthi2 (NWPCA)*

Barthi3, the third non-Western PCA, discussed a difficult working relationship with a condescending and arrogant Western PCA.

> *There was a PCA three years ago who treated me and another work colleague (one from India and me, from Malaysia) she treated us like nothing. She speaks to the nurses and ignores us the whole shift. She was an Australian PCA. She didn't want to work with us but each time we were put together, she ignored us. Made the shift very miserable. Barthi3 (NWPCA)*

Twelve interviewees did not comment on their ease of working relationships with Western colleagues.

Ease of Working and Interacting with non-Western Nurses and PCAs

Two Western interviewees discussed their easy interactions with their non-Western colleagues. Bill1 described how he helped his Chinese colleague with her English, as she wants to pass her English exams. Mary1 enjoyed interacting with her colleagues as she was exposed to new aspects of culture, such as food.

Western Interviewees

> *There is a Chinese PCA. She has a problem pronouncing words. She asked me what was the difference between Pan and Pain and some other word but she made them sound all the same. First, I didn't understand what she was trying to say, she can spell so she wrote it down and then I understood and then I explained it to her. We find a way to communicate. Bill1* (WPCA)

> *My old ward we used to celebrate Chinese New Year as we had a high population of Asian nurses. We used it as an excuse to go out. It enabled them to introduce us to their culture. We'd go to dim sum. We'd go out and one of the girls would hand out the fortune nags with the coins in. I worked on that ward about 5 years and we'd do that every year I was there. I had never Dim Sum before working there. That was new for me. I love all forms of Asian food but I'd never tried that. Some of the food is really obscure to us, like chickens feet. Some of the foods made me say "God I'll be OK, I'll stick to my pork dumplings." Got me a bit adventurous. She did it at her house once and had a bunch of nurses at her house, I thought that was brave. It was good for ward morale. Mary1 (WN)*

Three Western nurse managers elaborated on the uneasy relationships between their Western nurses and PCAs and the non-Western nurses and PCAs on the wards. Mary6 highlighted the power struggle in the attitude towards work, which she had recognised in some of the South Africa nurses who worked in her team. Mary6 also provided a second example of a senior nurse who had trouble with her Western counterparts due to her brusque manner. Mary7 was diplomatic and discussed her Negro PCA (as she was not sure where he came from but he was different) in terms of liking him but the challenge was how he fit into her department. Bill2 provided an example about his Indian South African nurse who was reserved and therefore had a passive response during group meetings. Western pedagogical ways of running meetings still permeate the hospital where it is a public forum and everyone has a chance to raise issues;

therefore, the nurse may have to wait a month for the one to one meetings to raise any concerns. Bill2 did suggest that if he thought an issue was important, he would raise it immediately and this again suggested that what was important in value to Bill2 had prominence over what may be culturally important to the nurse. The comments are listed below.

> *African nurses (Black South African) – for example one nurse, her attitude is power orientated, wants to know who is in charge. It's like bucking the system, apartheid. They are also more likely to complain, fight the work allocated saying it's not fair. There are two night staff who complain about staff levels, work they have to do and how they are always late. I believe South African nurses see position as power, so they believe…"I can speak to you in this way". An example, I know a white South African nurse who also has same power issues, as she equates, power with control, she is lazy and delegates work she is given. Mary6 (WNM)*
>
> *I have a conflict situation with a clinical nurse who is extremely good, highly skilled technician who coordinates the ward and does it well of Asian descent. Junior nurses come to me because she has been abrupt. She is blunt, forthright, here to work, straightforward. The other Western nurses think she is rude to them. Her personality is upfront, she is often misconstrued. For her it is about pride that all is done right and so she just tells them matter of fact what needs to be done- regimented instructions. She communicates the facts only, example, "doctor rang, do this now." Western nurses get offended saying she was rude to me. I had one graduate in tears asking, "why doesn't she like me?" I don't see anything rude in what she is asking, but the nurses are not used to it. Mary6 (WNM)*
>
> *We have a Negro guy at the moment PCA casual, everyone likes him, but, he's a little bit different to some people. I'm saying you couldn't help like him, but I can't say nurse B likes him. Challenge is do they fit in the department with colleagues and the organisation. Mary7 (WNM)*

Three Western interviewees discussed their uneasy relationship with non-Western nurses and PCAs they worked with and the conflicts that arose because of the lack of knowledge about how different cultures communicate. Interaction management is an aspect of CQ, which is implicit in the behavioural CQ factor and is about the skill of negotiating intercultural communication interactions. Mary2 found the South African nurses in theatre were blunt in their manner of speaking which she found rude. Mary3 provided an example about Western nurses on

her ward who found it difficult to work with the nurses of non-Western descent because they had accents, which were perceived as hard to understand.

> *South Africans in theatre they can be very blunt which I don't like. Even though I can be blunt, I do it in a polite way. Mary2 (WN)*

> *Recently I came away with one staff member who came to me who is a senior nursing staff, Australian, who commented certain staff members British and Australian would not work with the Indian nurses. The reason being the Indian nurses were unable to talk English and can't understand the handover they are given and they are regarded as inferior. Mary3 (WN)*

Mary5 initially took umbrage at the way she was spoken to by a South African nurse on her ward; however, she realised later it was cultural. Mary5 shared her second story about the relationships on her ward where one of her Western PCA colleagues was not interested in working with non-Westerners because they were different. She witnessed this often. The comments are listed below.

> *There's one African nurse, she can be quite abrupt. She's an upfront, bold, and loud personality anyway. She has no time for chitchat. She's a, I want this and I want it now kind of person. When people come at you like that, you think.. who the hell do you think you are? What you feel is completely different to how you react. When she would be upfront with us. We were taken aback by what she said and you just went and did what she asked you to do as it's your job. She's from Africa. She's been here about a year. She sounds like she is shouting at you when she is talking to you. Then you get to realise it's not personal it's just her. Mary5 (WPCA)*

> *There is also a person who still works here now of Australian background. When we saw who the third PCA was to work with us that day she said, "for God's sakes I don't understand a word they say". She completely blanked that person out for the whole day. That person was from another culture she had broken English but you could perfectly understand her. Just the fact she was not someone she knew and liked, she was just not interested in her and her attitude was don't ask me for any help because I won't give it. This person did that to me also at the very start. The problem is there's a lot of people like that in here and I've met them. It is really difficult and it's really bad. We should all have the training where we welcome all cultures and all team members and make them feel comfortable. This is what you do and where you go, so come and ask me if you need help. When you are standing on the outside like that you can feel very cold. It's not nice. It's happened more than once. Mary5 (WPCA)*

Eight interviewees did not comment on the ease or unease of working with their non-Western colleagues.

Easy to Interact with Managers

Two interviewees also commented on their satisfaction and ease of interaction experience working with their managers at the hospital. Mary3, a Western nurse found an easy interaction with the senior nurse coordinator and ward manager. The ward manager's intervention was interculturally sensitive as he tried to bring about cultural awareness in his team so they could work together. Mary6 as a Western nurse manager provided her perspective of her difficult interaction with a nurse from an Asian background.

Western Interviewee

So it took a lot of meetings and the Ward Manager to say we have to work together as a team and learn to talk slower and the other staff had to start to accept one another. It's taken months to accept this. Mary3 (WN)

An example of a challenging cultural communication situation was a young nurse from New Zealand of Asian origin, who consistently called me ma'am and I asked her not to. I was offended because I was young. It felt like she was being officious, derogatory and I felt an aggressiveness from her. It was an insult. I asked her to call me Mary a few times and she wouldn't. It made me angry, that she couldn't see me and my manner. I was upset. I understand she was brought up trying to be respectful, but not where I came from. She did stop ultimately, but then most of the time she hid if she saw me coming, and when she did have to talk to me, there was no title [or no name] used to start the conversation. Mary6 (WNM)

Non-Western Interviewee

Two non-Western interviewees (one nurse and one PCA) commented on their interactions with their managers. Bing1 discussed how helpful he found his non-Western senior nurses in contrast to what he was used to in Singapore. He attributed this to their long-term acculturation within the Australian society. Barthi3 (a non-Western PCA) discussed how she went to her manager after she had trouble with an Australian PCA and was advised she had to deal with the situation herself first.

Only two Asian senior staff. They have been here since 1970 something. I notice although they might not as western as original from Australian or Westernised countries but they do adapt to the culture quite well. When you look lost, they can see you look lost and they ask are you looking for something. I find it quite important especially in our department you need to get medication fast and the room is so big and you wonder where is this medication and stare at the shelves and someone pops their head in and says do you need help. They behave like everyone else, compared to me I still have to do some subtle adjustments here and there like being more open with whatever problem I have. I try to solve things myself . Working in Singapore for three years, you tend to solve things yourself because you don't want to ask. But I have to remind myself it's ok to ask and this is a friendly Western culture and they want you to ask. In Singapore, it could be due to time that people are busy. I just feel they are more helpful here. Bing1 (WN)

There was a [Australian]PCA three years ago who treated me and another work colleague, (one from India and me from Malaysia) she treats us like nothing…I went to the manager and reported it but she say I have to deal with her first but if she doesn't want to talk how can the manager do anything. Barthi3 (NWPCA)

Eleven interviewees did not comment on their working relationships with their managers.

Treated with Respect by Managers.

Being treated with respect is a fundamental element of intercultural competency and is an aspect of high CQ. Bill2, a Western nurse manager, was full of praise for one of his non-Western PCAs who constantly did the extra things and was respectful of people that seemed a part of his cultural make up. He is the same with his colleagues as I have worked with this PCA.

Western Interviewee

One PCA (probably Philippino), I got a letter a while ago, who was nominated as caregiver of month. Got a letter from a patient. This lady who wrote to say how good he was, how good his service was. Her husband gave him a hug because he appreciated the extra things he did. Out of character for her husband and she said he was outstanding. Little things like that can you make me an extra cup of tea, pick up from radiology, always have a smile, recently appointed to the ward. It should form a really good basis for care giver of the month, hoping he will take out an award. Quite a sensitive guy. I know if I said something to him, he'll get really upset if he hasn't worked to a high standard. That high standard is what a lot of people from other cultures aspire to, they want to please you, provided they understand what the role is, they want to do a good job. Bill2 (WNM)

Fourteen interviewees did not comment on the aspect of respect by their managers.

***Treated with Respect by Nurses and PCAs from a Western Background*.**

Two non-Western PCAs provided examples of the lack of respect by their colleagues. Bing2 discussed his unpleasant experience as a new migrant PCA who was treated disrespectfully during one of his first shifts at the hospital. Barthi2 also described her ongoing battle with the Western PCAs on her ward who treat her with disrespect by trying to boss her around.

Non-Western Interviewees

One PCA when I was new, she said, stop everything, I will do the central cleaning and you will go get the blood. So I said to my colleague, please I can't go there because I don't know it, but the carpet, when I was in Armadale hospital on work experience I used the small one, but this is too big, can you please explain to me how to use this one and just leave me and go. When I said that, she started to get angry, oh she said my friend, so how comes you don't know how? You can't go and pick blood, and you can't use the machine, how have you been employed here. She lifted the voice to me, my mood, and everything, I was so embarrassed. I was so stressed until the time I came and then I said I'm so sorry for that, if you didn't get what I wanted to mean to you, just please the blood I can't go, it's too risky, I want to be confident of that before I go, but for this machine, you can just tell me what I have to do, just that's all and I will do it. It won't take two minutes. Bing2 (NWPCA)

Aussies: They do all the instruction. It bothers me when they act like supervisor. I have to ignore it. It gets me angry sometimes and I answer them back. It surprises them because I don't do this before and before they do what they want to me. But this time I now I say what did you say, I think do you want a fight. They know they can put you down, then they always do it to you. Barthi2 (NWPCA)

Thirteen interviewees did not comment about respect or the lack of respect by their colleagues.

In summary, the main aspects of intercultural relationships between job roles consisted of issues related to challenges between Western and non-Western cultural groups. The main satisfaction statement that stood out was the uneasy interaction between Western nurses and PCAs and their non-Western counterparts. The Western interviewees noted the South African nurses (both black and white) and their power orientated approaches to work and relationships.

Some of the Western interviewees also commented that many Asian nurses and PCAs were brusque in their speech and often worked on a need-to-know, efficient work ethos. Some Indian nurses had trouble with their Western counterparts because of their accents and were considered inferior by the British nurses within the team. Other issues related to intimidation on the wards. There were also examples of harmonious working relationships that showed respect for other cultures. Three non-Western interviewees found it easy to work with the Western nurses and PCAs. Another nurse manager highly praised his Philippine PCA who went above and beyond his duties to help patients and also his co-workers. In another instance, there was a Western-PCA who helped his Chinese PCA to pass her English exams so she could work as a nurse. In this section, the interviewee comments were weighted more about the inharmonious relationships between Western nurses and PCAs and their non-Western counterparts.

Summary of Overall Qualitative Findings

The overall major qualitative findings are summarised below:

- The overall CQ of the interviewees was high.
- The interviewees' high CQ was associated with high satisfaction levels.
- Satisfaction levels of the collectivist interviewees was low.
- There was no association between total CQ and individualism.
- There were no differences in the relationship between total CQ and job roles.
- There was no relationship between CQ and culture type.
- The overseas interviewees had high metacognitive CQ.
- The interviewees' metacognitive CQ was the highest of the four CQ factors and cognitive CQ was the lowest.
- The interviewees' motivation CQ scores were higher than their behavioural CQ scores.
- Metacognitive CQ and behavioural CQ had high scores.

- All interviewees agreed that it was important to have a good grasp of English especially in a hospital where a lack of good host language skills could endanger patient lives.

Chapter 6

DISCUSSION AND CONCLUSION

This research explored the intercultural experiences of hospital workers (nurse managers, nurses and PCAs) as part of their daily activities and tried to assess the degree of CQ these workers had. In this chapter I summarise the main findings by outlining the quantitative results and show how the qualitative analysis provides supporting depth. Next, I discuss the contributions and implications of this research and suggest recommendations for the organisation on including CQ in their human resource processes. Finally, I identify the limitations of this research and possible future directions.

Discussion of Main Findings.

Differences in CQ and Satisfaction Scores

The participants' moderately high overall CQ score (M=2.76) was attributed mainly to high metacognitive CQ (M=3.08) and motivation CQ (M=3.01) attributes. This indicated that the participants had a willingness to engage in meeting new people and expanding their intercultural experiences. The interviewees provided statements that support this claim. Mary3, an Anglo-Saxon South African nurse's comment summarises the overall group attitude, *"I really enjoy working with diverse people… from my personal perspective as a nurse when you are talking to an Australian, they take offence very quickly, they also attack, quickly, With other cultures like Africans, Indians and Muslims coming here, it's quite easy to relate to them, it's almost like a rapport with them as it is a known culture… rather than where I come from in South Africa where there are lots of racial issues… I've had to change my terminology to suit the culture here."* Another Western nurse, Mary1, was introduced to new foods by some Asian nurses on

her ward: *"In my old ward we used to celebrate Chinese New Year as we had a high population of Asian nurses. We used it as an excuse to go out. It enabled them to introduce us to their culture. We'd go to dim sum."* These examples suggest a willingness to be open to new experiences. The questionnaire findings showed that most (94%) of the participants were also consciously aware of the cultural knowledge they used and applied during their intercultural interactions. For example Mary4, a Western PCA states, *"I'm aware there are some cultures, like in our culture we would look you straight in the eye, that they would find that rude so I try and be aware of it."* The findings also showed that even though there was a high level of conscious awareness to use cultural knowledge during interactions, 77% of the participants reported on the questionnaire that they did not check the accuracy of their cultural knowledge.

Shannon and Begley (2008) conducted a study at a large university in Ireland of 1,333 business graduates representing 24 nationalities from around the world. The study measured whether international work experience was related to metacognition, motivation and behavioural CQ. When on international assignments, the business graduates had to socialise with people of different cultures (other expatriates and locals). Shannon and Begley (2008) found that those graduates who liked to travel and meet different people had an intrinsic curiosity which in turn made them want to think more about how to engage with other cultures. The depth of their knowledge of the dos and don'ts of the local culture determined how successfully they navigated their intercultural relationships. This aspect was also supported in my study as exemplified by one of the interviewee's (who is the daughter of an expatriate) comments that showed her curiosity about other cultures: "*Some of the Asians have certain diet requirements after delivery of a baby… and I'm nosey as well and I'll ask."* Mary1 (WN).

The main differences highlighted between the four CQ factors were that metacognitive CQ scored the highest (M=3.07) and cognitive CQ scored the lowest (M=2.34) mean scores. This

indicates that the participants were willing to use and apply their cultural knowledge in intercultural situations, but they may not have the factual knowledge about different cultures to help their decision making processes on how to behave in a culturally appropriate manner in intercultural interactions. As Mary5, a Western PCA interviewee, stated: *"Yes, I definitely think about cultural differences...there is a Muslim girl who works with us. She always asks if she can go as she has to pray 5, 6, 7 times. She wears the nicap...everyone else I haven't noticed anything."* The low cognitive CQ score may be because there is a lack of cultural awareness training within the hospital and the majority of hospital workers who come to work do their job to the best of their ability and do not have enough time to discover information about other cultures unless it has an impact on their job tasks. As Barthi1 states, *"The hospital should have sessions where they inform and explain other cultures."* Mary5 had similar sentiments, *"The hospital could, as part of annual competencies, have a talk about different cultures and tell us about them."*

In the initial development of the CQ Scale conducted in Singapore by the researchers at the Centre for Cultural Intelligence Studies, the CQ scores were based on a 7-point Likert Scale. Study One was completed by 576 Business School undergraduates and their mean scores for the four CQ factors had a similar trend from highest to lowest mean scores as this study. Study Two also in Singapore of 447 non overlapping students produced similar mean scores (See Table 5.1, Ang, Van Dyne & Koh, 2008, p. 22). This current research was completed as a 4-point Likert Scale and had similar pattern from highest to lowest factor in the mean scores. However, the means were considerably lower for some factors that may be attributed to the differences in age, education levels and cultural experiences and backgrounds.

Table 6.1 *Comparison of CQ Scores from Singapore and Australia*

CQ Factor	Singapore Study One	Singapore Study Two	Australian Martins Study
Metacognition	4.71	4.89	3.07
Cognition	3.03	3.16	2.34
Motivation	4.72	4.74	3.01
Behavioural	4.10	4.22	2.76

In my research, there was a positive association between motivation and behavioural CQ. An example given by Bing2, a non-Western PCA, shows his enthusiasm for intercultural interactions, *"I enjoy meeting people, I enjoy communicating with other people, I really enjoy being in relationships with other people from different backgrounds."* Bing2's motivation leads him to try and be good at his job by overcoming his language difficulties and being as helpful as he can towards the nurses:

> *I thank God now after 5 months I am so confident in my job and happy I know most of everything because I have been shown and I'm working in the casual pool and shifted everywhere. I've been trying to understand the tasks to make sure I have learned something from different places. I try to help people very much and make the job easier for me and the nurses.*

This may suggest that individuals with a strong desire to interact with people of other cultures may also have a strong desire to behave with conscious awareness in their exchanges with people of different cultures.

A case study of 103 foreign professionals and their supervisors recruited from other countries (USA, United Kingdom, Denmark, Germany, Belgium, Austria, Greece, Australia, Indonesia, Philippines, China and India) and working for an information technology consulting firm in Singapore concluded that "motivational CQ and behavioural CQ predicted self-reported cultural adaptation" (Ang, et al., 2007, p. 359). Motivational CQ and behavioural CQ should positively relate to cultural adaptation because those with an intrinsic interest in other cultures

have high motivational CQ and expect to be successful in culturally diverse situations (Ang et al., 2007). According to social cognitive theory (Bandura, 2002), they initiate effort and are persistent in their efforts. Since cultural adaptation (years spent in a host country) is about an individual's sense of assimilation, those with the capability to vary their behaviour (behavioural CQ) should have higher levels of assimilation into the new culture and potentially higher CQ (Ang, et al., 2007).

Another finding in this study highlighted that an individual who has high metacognitive CQ may have the ability to think about the cultural situation at hand; however, they may or may not have enough cognitive cultural knowledge to draw on to enact a culturally appropriate action (behavioural CQ). Even though there was a positive correlation between metacognitive CQ and behavioural CQ in the quantitative findings, the qualitative findings emphasised when there was diminished intercultural interaction between people, there were fewer chances to build up a skill set filled with different cultural frames of experiences. For example, Barthi1, a Singaporean nurse, stated that in her experience, "*Young Aussie nurses, they can be extra sensitive, think they are bullied or given the worst cases. I must be aware they don't feel they are being victimised*." The reason Barthi1 needs increased awareness of the Australian nurses' cultural backgrounds is because they have limited or no knowledge that Barthi's direct and blunt communication style is a part of her Asian cultural upbringing. This lack of understanding has caused problems for Barthi2 on a few occasions. Klafehn, Banerjee and Chiu's (2008) theoretical model emphasises that metacognitive CQ is determined by the extent of an individual's intercultural experiences. The degree to which an individual can engage in cognitive flexibility (an aspect of metacognitive CQ) is reliant on the degree of an individual's immersion in experiences filled with cultural variety (Klafehn, Banerjee and Chiu, 2008). This intercultural immersion then allows an

individual the capability to draw out the best possible culturally appropriate behaviour in a contextual situation.

Another finding revealed that individuals born overseas had slightly higher metacognitive CQ than those born in Australia. Metacognitive CQ refers to an individual's ability to actively monitor cultural assumptions and knowledge and then adjust behaviours during intercultural interactions (Ang, et al., 2007). A metacognitive model developed by Klafehn, Banerjee and Chiu (2008) emphasised that metacognitive CQ is jointly determined by exposure to different intercultural experiences and psychological tendencies. I argue that individuals born overseas may have had more opportunities to have intercultural encounters than the Australian born participants. Australia had a White Australia Policy until the 1970s and therefore many older Australians may not have had many opportunities to check their cultural assumptions and adjust their contextualized thought processes. It is only in the last few years in the hospital that I have noticed an influx of overseas employees from countries such as Sudan, Congo, Nigeria and South Africa. Until this point, the ethnic demographic in the hospital was mostly Anglo-Saxon, European and Asian.

Although the hospital workforce is becoming more multicultural over time there are some employees that still prefer to socialise with people who are similar in culture. Barthi2, a non-Western PCA, describes the reason she does not socialize with her Western colleagues, "*I never go to socialise… the Aussie type, come to talk, they ignore you like that, better not to come, better me alone, I'm happy.*"

Gudykunst's (1983a) research into uncertainty and anxiety indicates that people ask more questions when they associate with people of dissimilar cultures and have more intimate self-disclosure interactions with people who are similar. It is stressful and fast-paced work in the hospital and at break times (which are of short duration), it may be that many workers will

want to vent their thoughts and feelings and therefore tend to find similar culture types to associate with and hence may not create new opportunities to expand their range of intercultural behavioural skills. This could be true for Australians and overseas-born workers. There may be cultural reasons why some non-Western workers do not want to share their emotional feelings. Bing1, a non-Western nurse, states, *"For the Western culture…they share a lot…Singapore is a different culture not so open with everyone else."* This is where learning and development activities may facilitate an expanded perspective about how to embrace the similarities of different cultures and use them to bridge the differences.

Overall satisfaction levels were high for the questionnaire group (M=3.20) and the interviewees (M=3.10). This highlights that the majority (over 90%) of the participants found it easy to work with colleagues from diverse backgrounds and felt they were respected. Bill1, a Western PCA, talks about a Chinese PCA, *"She has a problem pronouncing words…she can spell so she wrote it [the words] down and then I understood and I explained it to her. We find a way to communicate."* Barthi1, a non-Western nurse, initially had problems when patient notes were handed over at the end of a shift by Western nurses. She found it hard to understand what the Western nurses were saying: "*I would scribble notes on the back of the report to ask questions and quickly run back and clarify. Now we can ask questions at bed to bed handovers so it is better."* The hospital procedure has changed to make it easier for nurses from different cultures to communicate with each other. They have to handover patient details by visiting each patient room together. This promotes satisfaction as nurses can now ask relevant questions of each other while in the patient's room. The correlations showed that satisfaction (ease of working relationships and mutual respect) in intercultural interactions is influenced by CQ. The higher the total CQ, the more mindful (Thomas, 2006) a person tends to be when dealing with

someone from a different culture and this enables the interaction to go smoothly, potentially creating a sense of wellbeing (satisfaction) about the experience

Group Differences in CQ and Satisfaction Scores

Total CQ was not substantially different dependent on one's position in the hospital hierarchy. There was a small 13 point difference between and the highest and lowest group mean scores for the nurse managers (M=2.76), nurses (M=2.80) and PCAs (M=2.67). However some PCAs had higher total CQ mean scores than the nurses and nurse managers. This study indicates that CQ is not dependent on hierarchical job roles but on individual capabilities.

In nearly 20 years of study on leadership there has been limited research on the capabilities required of executives to be successful in culturally diverse situations (Mannor, 2008). In a study by Mannor (2008) on CQ and executive leadership, he concludes that CQ is required to develop leadership skills, to process environmental information and then make decisions in culturally diverse settings. This indicates that CQ is not just a trait of those in leadership positions but is a capability required to enhance leadership traits.

Even though the overall satisfaction levels in this study were high, the interviewees' satisfaction mean score (M=3.10) was (14 were born overseas with one Australian and seven were Asian) lower by 10 points than the total questionnaire participants (M=3.20). This was supported in the quantitative findings where the overseas participants' satisfaction levels (3.16) were slightly lower than the Australians (M=3.23). Barthi3, an overseas born (Asian) PCA, provided an example of the source of some of her frustration: *"I find working with Aussies they are good in talking but when it comes to working they are not as efficient as other cultures. We from the Asian culture, we like to help each other."*

Another reason for the lower satisfaction score among the interviewees may be a result of the voluntary nature of the interview process. The interview group was composed of a

representative sample from the participant group that completed the questionnaire and volunteered to be interviewed. The representative sample was made up of job groups and culture groups; three nurse managers, three nurses and three PCAs from collectivist countries, three nurses and three PCAs from individualist countries. The differences in length of time in Australia, age, cultural practices and values may all affect the satisfaction levels of the interviewees.

Smith, Dugan, Peterson & Leung (1998) conducted a study about the frequency of disagreement between collectivist nations and high power distance nations (individualist). They found that frequency was unrelated to individualism−collectivism but the emphasis was on conflict avoidance with authority and in-group harmony. It was found that collectivists prefer harmony in their in-group relationships, while individualists can be confrontational. These divergent methods of handling issues may be the reason for some of the lower satisfaction in the interviewee scores.

English Language Issues

One of the major challenges (86% agreed) for the interviewees was language. For example, Barthi1 stated in her critical incident story, *"As a Singaporean, I have difficulty understanding people from China and Nigeria. An example, I had difficulty with another nurse over handover of a report for a patient. It was not clear what they were trying to tell me. If I don't understand, that's worse for the Aussies."* Mary3 cited a critical incident where "*an African gentleman who is an ICU [Intensive Care Unit] trained nurse in his country and he is a PCA here. He is busy working to get a qualification on par with what Australia has for nurses. Because he's not fluent in English and has an accent, they automatically class him as stupid. They don't bother to ask you and they assume you are in that class."* Having good comprehension and speaking English well was deemed very important based on the interviews and appeared to be a driver of

satisfaction in intercultural interactions in the hospital setting. English is the national language of Australia and how well English is spoken and understood by the hospital workers involved in patient care is important for their integration in the ward. Babcock & Du-Babcock (2001) observed that individuals with high CQ simplify the way they speak to accommodate the less proficient speaker. Many of the participants responded on the questionnaire that they changed their verbal (61%) and non-verbal (73%) communication in some way when speaking to someone (a colleague or a patient) with lower English proficiency skills.

Sometimes when it is stressful on the wards and the person working with you cannot understand what they have to do because of their language deficit, it may cause additional stress and this may lead to people with low CQ to be less accommodating and respond bluntly or just ignore the other person. The interviewee Bing2, a PCA from Congo, found it hard when he was asked to clean up a blood spill and did not understand how to operate the cleaning machine. The other Western PCA working with him rudely stated, *"So how come you don't know how to do anything, you can't go and pick up blood, and you can't use the machine, how have you been employed here?"* Bing2 remained silent and tried to work the machine until the Australian PCA took it from him and did it herself. This incident demonstrates how different culture types may handle conflict that can also create anxiety and frustration in intercultural interactions and potentially lead to low satisfaction levels.

Summary of Integrated Findings

The current study extends the body of empirical research about CQ. The sample of 157 Australian and overseas born participants increases the generalisability of the CQ construct beyond the original case studies conducted in Singapore and the United States. Analyses of this study's integrated findings are summarised below.

- The overall total CQ and satisfaction levels were high.

- An increase in total CQ levels may be associated with increased satisfaction levels.
- Metacognitive CQ had the highest CQ and cognitive CQ had the lowest CQ mean scores.
- Increased levels of metacognition and motivation were associated with more culturally appropriate behaviours being displayed.
- There was no difference in CQ levels by job roles.
- The overseas born group had higher metacognitive CQ than those born in Australia.
- Lower satisfaction levels were associated with the overseas born group than those born in Australia.
- Having fluent English skills was deemed important in a hospital setting and it was an important driver of satisfaction levels as revealed in the interview group.

Contributions and Implications

This study has a number of strengths and contributions. I investigated CQ in a unique volunteer sample group (nurse managers, nurses and PCAs) in a hospital setting in Western Australia. To the best of my knowledge this is the first study that examined the intercultural interactions of this type of hospital employees using the CQ framework.

This study adds to the growing body of literature that suggests that high levels of CQ may increase the satisfaction levels of colleagues, including having respect for each others' differences in their intercultural exchanges. The relevance of using the CQS in this research was that it gave me insights into the participants' capabilities to cope with cultural diversity and also to see how culture affects behaviour in intercultural exchanges. Another relevance of the CQS was that it allowed me to measure the association between CQ and satisfaction in intercultural interactions and individualism traits.

The research has important implications for the effective workplace relationships between cultural groups such as Western, non-Western, Australian and overseas born, in

differing job roles. As intercultural exchanges, especially between individuals with disparate world-views and values, can potentially be stressful (Hofstede, 1980), developing CQ capabilities and promoting a sense of satisfaction and well-being may be beneficial to the organisation. In this study the t tests and ANOVAs highlighted that CQ was associated with satisfaction levels and culture type and satisfaction levels may be moderators of stress or potential for conflict in intercultural interactions. CQS was a reliable measure (based on Cronbach Alpha) for comparing all the groups in this study as it is based on individual capability, regardless of group affiliations. The CQS compares the results of the high and low CQ workers to develop learning activities that will raise CQ levels. However, there needs to be an additional measure that captures demonstration of high CQ, otherwise the self-bias is not regulated.

The researcher developed an Intercultural Experiences (Satisfaction) set of statements of six items similar to the CQS scale that was reliable with a Cronbach's Alpha of .88 (Nunnally, 1978). It was a relevant set of statements as it was developed specifically for this study to support the CQS statements and provide some depth about specific areas related to intercultural working interactions.

Another item that was used to determine culture type was Hofstede's (1980) Country Individualism Scores. There are many points of view related to whether his country categorisations are still valid. Smith, Dugan, Peterson and Leung (1998, p. 351) state that "Hofstede scores for collectivism and power distance have predictive validity" in relation to intercultural interactions. A limitation in this research was that Hofstede's study was conducted during the period of Apartheid and many Eastern block countries were out of bounds. A few (5%) individuals in the questionnaire group were therefore subjectively placed into groups with the closest values. Finally, the Ali Individualism Scale (AIS) (Ali, 1988) was used to measure the individualism traits of the Western and non-Western

questionnaire group. Western researchers and scholars claim that ‘individualism is the foundation of the work ethic and high achievement in Western society” (Ali, 1988, p. 576). This scale was used to validate Hofstede’s individualism categorisation of countries, to see if the questionnaire group from collectivist countries had less individualistic traits. A limitation of the AIS was that it was developed mainly for an Arab population and tested on Arab students in the United States. Two of the individualism questions were specific to the Bedouin and Ali does state that the instrument needs to be refined and perhaps tried in a broader population It was not effective because this study’s collectivist born members of the questionnaire group had been living in Australia for a long time and their individualism scores in some cases were higher than those participants born in Australia. A more relevant scale (perhaps on Power Distance) may have been better to measure individualism. Perhaps for this study the AIS was not a valid scale.

Additionally, this study has implications for training and development. It is suggested that all four factors of CQ (metacognition, cognition, motivation and behavioural) should be included into training programs as they have an impact on each other and each CQ capability builds on the next one. Metacognition is developed through cultural awareness that another person is culturally different in a communication interaction. If the person has factual knowledge about the other person’s culture and is interested in understanding how other cultures think and behave, then more culturally appropriate behaviours should be displayed. It is my contention that although it may not be possible to train for intrinsic motivation, it may be possible to highlight extrinsic motivation benefits such as, working in an inclusive environment, having supportive team-members who help in busy times rather than just leaving a colleague to cope alone. These are just some extrinsic motivators that may assist a person who is close-minded to become more open-minded towards new experiences.

Recommendations for Organisations

Research indicates that CQ is relevant and important in intercultural human resource management (workforce planning, recruitment, performance appraisals, competency assessments and learning and development). Suggestions of how CQ can be integrated in the hospital work environment through their human resource systems are outlined below.

Workforce Planning: A review of job descriptions of all aspects of nursing and PCA duties could be undertaken to consider adding some skills related to CQ, such as cultural adaptation, openness to cultural diversity, cultural judgment and decision-making. Examining job performance tasks of individuals in job roles involved in intercultural exchanges (through observation) might enrich the job description process as it would allow the human resource officer first hand knowledge of how the job tasks are related to CQ.

Recruitment: Armed with fuller and more thorough job descriptions, it would be incumbent on the hospital recruitment area to select individuals for job roles with as close a fit to the job descriptions as possible. Employing people with expanded CQ capabilities, such as open-mindedness towards cultural diversity and new experiences may ensure that the individual fits into the organisation more effectively. This could increase culturally appropriate behaviours because there would be an intrinsic motivation to be interested in new people and cultures. These new recruits would also be more observant of the culturally expected behaviours being displayed by other people and might strive to emulate them. This in turn may have a positive effect on task performance.

Job Appraisals: CQ may also be added to the job appraisals. An organisation that evaluates its employees, inclusive of CQ, will show their employees that CQ is important to the organisation (Tan, 2004). It may also be a competitive advantage for the organisation to be able to show tangible measures of success relating to cultural diversity in the organisation as part of the hospitals' accreditation as an employer of choice.

Learning and Development: CQ is a capability that can be developed as part of learning and development within an organisation (Earley & Peterson, 2004). Any hospital worker involved in intercultural interactions would benefit from the training. The learning and development function should be able to incorporate all four factors of CQ into training programs, including communication training adapted to meet the needs of individuals as they will be at different levels of CQ. Critical incident scenarios can be developed as case studies for face-to-face training or online training based on the demographics of the workers in the hospital to add authenticity to the process and involve those who are at the forefront of patient care. The menu system (system that generates patient menus) can be enhanced with explanations of the different foods (for example, explain what a halal meal is or what Rogan Josh is). A recipe booklet can be developed based on cultural preferences with explanations of the meals and traditions of the different cultures, as the participants highlighted they enjoyed the foods of different cultures. Regular ward team building days can also involve foods from different cultures and have a bonding effect on the workers, increasing their satisfaction levels. I argue that CQ learning and development must become an entrenched part of the daily processes of the hospital's operations to effect behavioural change within the organisation.

Competency Assessment: Competency assessment would necessitate job roles that are involved in intercultural interactions to be measured, including CQ capability. This could be completing the CQ 20-item self report for all staff and for managers. It could also involve an addition of a CQ peer-report for anyone in a supervisory capacity to prevent self bias. This would involve a supervisor's peer completing a CQ report on the person being assessed to provide a broader perspective. Those supervisors with lower levels of CQ could have the areas of CQ development form part of their learning and development activities.

Career Planning: An organisation to be sustainable should potentially have a good succession planning program in place to cover critical roles within the organisation. The career planning process

may also benefit from the inclusion of CQ (Ang & Van Dyne, 2008). Individuals in the workforce with high levels of CQ (assuming these individuals also possess the technical skills for the job role) may then be groomed for succession into managerial positions within the organisation.

Summary of Recommendations

- Review job descriptions to include aspects related to CQ;
- Use CQ in the recruitment process by asking questions of potential employees that demonstrate high CQ capabilities;
- Have CQ as a key performance indicator (KPI) in the job appraisals and give it an appropriate percentage which shows its importance to the organisation;
- Cultural awareness learning and development activities to be developed for face-to-face training sessions and through on-line training modules, through the menu system, using daily job related activities as a medium to disseminate intercultural knowledge;
- Measure individual CQ capability by using the CQ20-item self report and for managers also using the CQ peer report;
- Use the results of CQ measures as part of talent management in succession planning for the organisation.

Limitations

This research study used the CQ 20-item self report as the main measurement of CQ. This method has obvious limitations. It shares the same drawback as any other self reporting instrument – response bias. The CQS asked the participants to describe aspects of their own behaviour but there is no place to capture how these behaviours are demonstrated through examples. To mitigate the latter, fifteen volunteers from the questionnaire group also agreed to be interviewed to further explain through demonstration of examples each of the four factors of

CQ. There was a question associated with each CQ factor that allowed the interviewees to provide experiences from their working life at the hospital.

Another drawback was the small number (n=15) of voluntary interviewees and almost all of them were born overseas. There were 157 participants who completed the questionnaire and it would have been preferable to have an interview group with broader representation from overseas and Australian-born individuals to provide their comments and experiences on their working life in the hospital. However, the process was voluntary and only a small number of individuals were prepared to be interviewed. It may also have been worthwhile to have a purposive sampling method for the individual interviews so that the sub-sample approximated the cultural mix of the total sample. As it was a voluntary interview process, the researcher tried to equalize the Western and Non-Western interviews where possible to draw out the intercultural experiences.

Future Directions

Intercultural awareness training is a critical future direction for workplaces in multicultural societies. Anglo-Saxon work cultures are increasingly becoming intercultural in nature due to an increase in planned and unplanned migration. I have found through experience that the difficulty for individuals from the local Western host culture is that they suddenly encounter colleagues within their workforce who are from dissimilar cultures to them and who have different value systems. The host culture workers are expected to work and interact with their new migrant colleagues in an easy and cooperative manner without any intercultural awareness skills training.

Language training for PCAs is another future direction that will improve productivity in the hospital by including a section in the induction program on introduction to terms commonly used in the hospital. For those individuals who have a limited understanding of English, it is important to have

face-to-face training sessions on understanding what is required of the most critical elements of work tasks for the different roles and terminology used in completing the tasks.

Increasing creativity and innovation in the workforce by drawing on the experiences of migrants is an aspect to consider for the future. Some studies have found that increased exposure to culturally diverse experiences result in higher levels of multifaceted cognitive ability in individuals and greater levels of creativity in job performance (Benet-Martinez, Lee & Leu, 2006). For example, an individual with more intercultural experiences has a broader range of skills to draw from when asked to perform a creative task. Therefore, they may draw from different cultural sources to complete the creative task. In the hospital setting, Australian nurses can draw on the experiences of new migrant nurses in relation to nursing techniques and procedures that are used in their countries and this may provide opportunities for improvement.

A recent report, *Developing an Asia Capable Workforce: A National Strategy* (Asialink, 2012), made similar recommendations for Australia as it integrates with the Asian region and hopes to gain economically from building Asian capabilities. In quoting a 2011 survey, they commented: "The higher the proportion of senior leaders who have cultural training, speak an Asian language or have lived and worked in Asia for more than 3 months, the more likely it is that business performance will exceed expectations" (p. 13). For hospitals, there may be the potential to treat more Asian patients and a greater need then to have a workforce that is knowledgeable about Asian cultures. The report advocated the case for Australian businesses to invest in developing Asia capabilities to capitalise on the Asian century and if this does not happen, Australia's moment could be missed.

Directions for Further Study

Further studies can potentially expand on this research and look at several areas, such as: 1) the social complexity, physical and cultural impact of migrant workers on a local host country workforce through the medium of CQ using self-rated and peer-rated surveys; 2) how

each individual's CQ, especially a manager's CQ, impacts on teamwork in a diverse cultural setting within a local culture; 3) exploring experiential factors that may result in attaining higher levels of CQ, such as vacations to countries with dissimilar cultures or volunteering in an overseas hospital in Asia or Africa.

Conclusion

Sternberg (2003) pointed out that the domain of intelligence has common universal processes. What is different across cultures is the "content to which these processes are applied and the consequences of the content that is considered 'intelligent'" (Ang & Van Dyne, 2008, p. 315). A person who has the capability to analyse issues and solve problems will always have an advantage in any culture, but the challenge is whether the individual has the declarative (factual), procedural (how to perform with the knowledge), or tacit (unspoken) knowledge and experiences to adapt or deal effectively with a culture dissimilar to their own (Sternberg, 2003). Below are the three questions that guided my research study.

1. How do nurse managers', nurses and PCAs experience intercultural encounters at the hospital?
2. What is the CQ of these interviewees and how is it related to their experiences?
3. How is culture type related to CQ and intercultural experiences?

I have argued that the nurse managers, nurses and PCAs experienced intercultural encounters at the hospital in a variety of ways, dependent on their level of CQ. Those with higher levels of CQ enjoyed meeting people of different cultures and had more satisfactory relationships. Those with lower levels of CQ seemed to have more challenging intercultural interactions. The study also found that a few (12%) of the participant Western nurses and PCAs appeared to have uneasy working interactions with their colleagues from non-Western backgrounds that was supported by almost half (*n*=6) of the

interviewees (See Table 5.8). The main areas of CQ that needed to be developed were cognitive CQ and behavioural CQ. To become culturally intelligent, the main recognition is that the skills an individual needs to deal with culturally diverse situations can be learned through cultural awareness training and exposure to cultural experiences. No matter how intelligent a person is, if they do not have this awareness, they will fail to have successful intercultural interactions or adapt across cultures. Therefore, organisations that realise the importance of CQ and use it as a competitive advantage will potentially develop a workforce capable of dealing with change (especially cultural) in a much more effective manner.

References

Abe, H., & Wiseman, R. (1983). A cross-cultural confirmation of the dimensions of intercultural effectiveness. *International Journal of Intercultural Relations, 7*, 53-67.

Abrams, I, (1979). The impact of Antioch education through experience abroad. *Alternative Higher Education, 3,* 176-187.

Abrams, D., & Hogg, M.A. (Eds.), (1990). *Social identity theory: Constructive and critical advances*. London: Harvester Wheatsheaf.

Adler, N.J. (1981). Re-entry: Managing cross-cultural transitions. *Group & Organization Studies, 6* (3), 341- 356.

Adler, P. (1975). The transition experience. An alternative view of culture shock, *Journal of Humanistic Psychology*, *15*, 13-23.

Ali, A.J. (1988). Scaling an islamic work ethic. *Journal of Social Psychology, 128*, 575-583.

Alon, I., & Higgins, J.M. (2005). Global leadership success through emotional and cultural intelligences. *Business Horizons, 48*, 501-512.

Ang, S., Van Dyne, L., & Koh, C.S.K. (2008). Development and validation of the CQS: The cultural intelligence scale. In S. Ang, & L. Van Dyne (Eds.)*, Handbook of cultural intelligence: Theory, measurement, and applications,* (pp. 192-205). Armonk, New York: M.E. Sharpe.

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

Ang, S., & Van Dyne, L. (2008). *Handbook of cultural intelligence: Theory, measurement, and applications.* Armonk, New York: M.E. Sharpe.

Asante, M.K., & Gudykunst.W.B. (1989). *Handbook of International and Intercultural Communication*. Newbury Park, CA: Sage.

Asialink Taskforce (2012). *Developing an Asia capable workforce: A national strategy*. Melbourne: The University of Melbourne.

Australian Bureau of Statistics (2006). *Census of Population and Housing. 4819.0*

Australian Bureau of Statistics (2008). *Migration Australia. 3412.0*

Aycan, Z. (1997). Acculturation of Expatriate Managers: A process model of adjustment and performance. In Z. Aycan (Ed.), *New approaches to employee management*, (pp. 1-40). Stamford, CT: JAI Press.

Babcock, R.D., & Du-Babcock, B. (2001). Language-based communication zones in international communication. *The Journal of Business Communication, 38,* 372-412.

Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology: An International Review, 51*, 269-290.

Benet-Martinez, V., Lee, F., & Leu, J. (2006). Biculturalism and cognitive complexity: Expertise in cultural representations. *Journal of Cross-Cultural Psychology, 37*, 386-407.

Bennett, M.J. (1993). Towards ethnorelativism: A developmental model of intercultural sensitivity. In R.M. Paige (Ed.), *Cross-cultural orientation: New conceptualizations and applications*, (pp. 27-70). Yarmouth, ME: Intercultural Press.

Berger, C.R. (1979). Beyond initial interaction. In H. Giles & R St. Clair (Eds.), *Language and Social Psychology*, (pp. 122-144). Oxford, IK: Basil Blackwell.

Berger, C.R., & Calabrese, R.J. (1975). Some exploration in initial interactions and beyond. *Human Communication Research, 1,* 99-112.

Bergstrom, N., Braden, B., Laguzza, A., & Holman, A. (1987). The Braden Scale for predicting pressure sore risk. *Nursing Research. 36* (4), 205-210.

Bernstein, R. (1983). *Beyond objectivism and relativism*. Philadelphia: University of Pennsylvania Press.

Bjorkqvist, K (2007). Empathy, social intelligence and aggression in adolescent boys and girls. In T. Farrow & P. Woodruff (Ed.), *Empathy in mental illness,* (pp. 76-88). New York: Cambridge University Press.

Bochner, S. (1994). Cross-cultural differences in the self concept: a test of Hofstede's individualism/collectivism distinction. *Journal of Cross-Cultural Psychology, 25,* 273-283.

Boneau, C.A. (1960). The effects of violations of assumptions underlying the *t* test. *Psychological Bulletin, 57*, 49-64.

Brislin, R.W. (1981). *Cross-Cultural Encounters: Face-To-Face Interaction.* New York, Sydney: Pergamon Press.

Brislin, R.W., Worthley, R., & McNab, B. (2006). Cultural Intelligence: Understanding Behaviors that serve people's goals. *Group and Organizational Management, 31*, 40-55.

Burgum, M., & Bridge, C. (1997). Using critical incidents in professional education to develop skills of reflection and critical thinking. In R. Pospisil & L. Willcoxson (Eds.), *Learning through teaching, (pp. 58-61).* Perth: Murdoch University.

Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. Clevedon, U.K: Multilingual Matters Ltd.

Byram, M., Nichols, A., & Stevens, D. (2001). *Developing intercultural competence in practice*. Clevedon, U.K: Multilingual Matters Ltd.

Campbell, J.P. (1999). The definition and measurement of performance in the new age. In D.R. Ilgen & E.D. Pulakos (Eds.), *The changing nature of performance: Implications for staffing, motivation and development,* (pp. 339-429). San Francisco: Jossey-Bass.

Chen, L. (2002). Perceptions of intercultural interaction and communication satisfaction: A study on initial encounters. *Communication Reports, 15* (2), 133-147.

Collier, M.J. (1996). Communication competence problematics in ethnic friendships. *Communication Monographs, 63*, 314-337.

Costa, P.T., Jr., & McCrae, R.R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and new five factor inventory (NEO FFI) professional manual.* Odessa, Florida: Psychological Assessment Resources.

Crowne, K.A. (2009). The relationship among social intelligence, emotional intelligence and cultural intelligence. *Organizational Management Journal, 6,* 148-163.

Deaux, K. (1976). *The behavior of women and men*. Monterey, California: Brooks/Cole.

Deardoff, D.K. (Ed.). (2009). *The sage handbook of intercultural competence*. Thousand Oaks, CA : Sage.

Deci, E.L., & Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

Du-Babcock, B, (1999). Topic management and turn taking in professional communication: First-versus second-language strategies. *Management Communication Quarterly, 12,* 544-574.

Earley, P.C. & Ang, S. (2003). *Cultural intelligence: An analysis of individual interactions across cultures.* Palo Alto, California: Stanford University Press.

Earley, P.C., Ang, S. & Tan J.S. (2006). *CQ: Developing cultural intelligence at work.* Stanford, California: Stanford University Press.

Earley, P.C. & Peterson, R.S. (2004). The elusive cultural chameleon: Cultural intelligence as a new approach to intercultural training for the global manager. *Academy of Management Learning and Education, 3,* 100-115.

Ellesworth, P. (1994). Sense, culture, and sensibility. In S. Kitayama & H. Markus (Eds.), *Emotion and culture: Empirical studies of cultural influence,* (pp. 23-50). Washington, DC: American Psychological Association.

Flanagan, J.C. (1954). The critical incident technique. *Psychological Bulletin, 51* (4), 327-358.

Gardner, H. (2002). On the three faces of intelligence. *Daedalus, 131*(1*),* 139-142.

Gibson D., & Zhong, M. (2005). Intercultural communication competence in the healthcare context, *International Journal of Intercultural Relations, 29*, 621-634.

Giles, H. & Byrne, J.L. (1982). An intergroup approach to second language acquisition. *Journal of Multilingual and Multicultural Development, 3*(1*),* 17-40.

Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction*. New York: Longman.

Guba, E. & Lincoln, Y. (1989). *Fourth generation evaluation*. Newbury Park, California: Sage.

Gudykunst, W.B. (1983a). Similarities and differences in perceptions of initial intracultural and intercultural encounters. *Southern Speech Communication Journal, 49, 40-65.*

Gudykunst, W.B. (1988). Uncertainty and anxiety. In Y.Y. Kim & W.B. Gudykunst (Eds.), *Handbook of Communication Science*. Newbury Park, CA: Sage.

Gudykunst, W.B. (1993). Toward a theory of effective interpersonal and intergroup communication. An anxiety/uncertainty management perspective. In R.L. Wiseman, & J. Koester (Eds.), *Intercultural Communication Competence*, (pp. 33-71). Newbury Park, CA: Sage.

Gudykunst, W.B., & Chua, E., & Gray, A. (1987). Cultural dissimilarities and uncertainty reduction processes. In M.McLaughlin (Ed.), *Communication yearbook* (Vol. 10). Beverley Hills, CA: Sage.

Gudykunst W.B., & Matsumoto, Y. (1996). Cultural variability of communication in personal relationships. In W.B Gudykunst, S. Ting-Toomey, & T. Nishida (Eds.), *Communication in personal relationships across cultures*, (pp. 19-56). Thousand Oaks, CA; London: Sage.

Gudykunst, W.B., & Mody, B. (2002). *Handbook of international and intercultural communication.* Thousand Oaks, London; New Delhi: Sage.

Gudykunst, W.B., & Nishida, T. (2001). Anxiety, uncertainty, and perceived effectiveness of communication across relationships and cultures. *International Journal of Intercultural Relations, 25,* 55-72.

Gudykunst, W.B., & Nishida, T. (1984). Individualism and cultural influences on uncertainty reduction. *Communication Monographs, 51*, 21-26.

Gudykunst, W.B., & Ting-Toomey, S, (1988*). Culture and interpersonal communication.* Newbury Park, CA: Sage.

Hall, E.T. (1959). *The silent language.* Garden City, New York: Doubleday.

Hammer, M.R., Bennett, M.J., & Wiseman, R. (2003). Measuring intercultural sensitivity: The intercultural development inventory. *International Journal of Intercultural Relations, 27,* 421-443.

Hammer, M.R., Gudykunst, W.B. & Wiseman, R.L. (1978). Dimensions of intercultural effectiveness: An exploratory study. *International Journal of Intercultural Relations, 2,* 383-393.

Harris, P.R., & Moran, M.T. (1996). *Managing cultural differences.* Houston: Gulf Publishing.

Havlicek, L.L., & Peterson, N.L. (1976). Robustness of the Pearson correlation against violations of assumptions. *Perceptual and Motor Skills, 43,* 1319-1334.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverley Hills, CA: Sage.

Hofstede, G. (1983). 'Dimensions of national cultures in fifty countries and three regions'. In J. Deregowski, S. Dzuirawiec & R.C. Annis (Eds.), *Expiscations in cross-cultural psychology* (pp. 335-355). Lisse, the Netherlands: Swets & Zeitlinger.

Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. London: McGraw-Hill.

Hofstede, G.H., & Hofstede, G.J. (2005). *Cultures and Organizations: Software of the Mind*. London; New York: McGraw-Hill.

Horn, J.L. (1979). Trends in the measurement of intelligence. In R.J. Sternberg, & D.K. Detterman (Eds.), *Human intelligence: Perspectives on its theory and measurement.* Norwood, New Jersey: Ablex Publishing Corporation.

Hospital Group Annual Report (2009). *Service for Life*. Perth: WA. Crystal Printing Solutions.

Howell, W.S. (1982). *The empathic communicator*. University of Minnesota: Wadsworth Publishing Company.

Jacob, N. (2003). *Intercultural management*, Kogan Page: London.

Janssens, M., & Brett, J.M. (2006). Cultural intelligence in global teams: A fusion model of collaboration. *Group and Organization Management, 31.* 124-153.

Kealey, D.J., & Ruben, B. (1983*). Cross-cultural personnel selection: criteria, issues, and methods. In D.Landis & R. Brislin (Eds.), Handbook of intercultural training* (pp. 155-175). New York: Pergammon Press.

Kim, Y.Y. & Gudykunst, W.B. (1988). *Theories in intercultural communication*. Beverley Hills, California: Sage.

Klafehn, J., Banerjee, P.M., & Chiu, C. (2008). Navigating cultures: The role of metacognitive cultural intelligence. In S. Ang, & L. Van Dyne (Eds.), *Handbook of cultural intelligence: Theory, measurement, and applications* (pp. 318-331). New York: M.E. Sharpe.

Klineberg, O., & Hull, W.F. (1979). *At a foreign university: An international study of adaptation and coping*. New York: Praeger.

Koester, J., & Olebe, M. (1988). The Behavioral assessment scale for international communication effectiveness. *International Journal of Intercultural Relations, 12,* 233-246.

Koch, T. (1994). Establishing rigour in qualitative research: the decision trail. *The Journal of Advanced Nursing*, *19*, 976-986.

Lather, P. (1991). *Getting Smart. Feminist Research and Pedagogy within the Postmodern.* New York: Routledge.

Leyens, J.P., Yzerbyt, V. & Schadron, G (1994) *Stereotypes and social cognition*: Thousand Oaks California: Sage.

Livermore, D. (2011). *The cultural intelligence difference: Master the one skill you can't do without in today's global economy*. New York: AMACOM.

Lustig, M.W., & Koester, J. (2010). *Intercultural competence: Interpersonal communication across cultures*. Boston, MA: Allyn & Bacon.

Mannor, M.J. (2008). Top executives and global leadership at the intersection of cultural intelligence and strategic leadership theory. In S. Ang, & L. Van Dyne (Eds.), *Handbook of cultural intelligence: Theory, measurement, and applications* (pp. 91-106), New York: M.E. Sharpe.

Markus, H.R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98,* 224-253.

Marshall, C. & Rossman, G. (1989). *Designing qualitative research.* Newbury Park. CA: Sage.

Martin, J.N., & Hammer, M.R. (1989). Behavioral categories of intercultural communication competence: Everyday communicators' perceptions. *International Journal of Intercultural Relations, 13*, 303-332.

Mawer, G. (1999) . *Language and literacy in workplace education: Learning at work*, London: Longman.

McCotter, S.S. (2001). The journey of a beginning researcher. *The Qualitative Report*, *6* (2), 1-21.

McDade, S.A., & Sloma-Williams, L. (2006*). Critical incidents as indicators of leadership development: Case of the ELAM program*. Anaheim, CA: Association for the study of higher education.

Milhouse, V.H. (1993). Communication competence in the intercultural communication context. In R. L. Wiseman, & J. Koester (Eds.), *Intercultural communication competence* (pp. 184-203). London: Sage.

Morisaki, S. & Gudykunst, W.B. (1994). Face in Japan and the United States. In S. Ting-Toomey (Ed.). *The Challenge of Facework*, (pp. 47-93). Albany, New York: State University of New York Press.

Murdock, G.P. (1987). *Outline of cultural materials (5th rev ed.).* New Haven, CT: HRAF Press.

Mutsuo, S. (2004). Different roles of left and right frontal lobes for cognitive versus emotional and social intelligence. *Tohoku Psychologica Folia, 63,* 73-83.

National Review of Nursing Education (2002*). The nursing workforce.* Canberra, ACT: Commonwealth of Australia.

Norman, G. (2010). Likert scales, levels of measurement and the “laws” of statistics. *Advances in Health Science Education, 15*, 625-632.

Nunnally, J.C. (1978). *Psychometric Theory*. (2nd Ed). New York: McGraw-Hill.

Oetzel, J., Ting-Toomey, S., Masumoto, T., Yokochi, Y., Pan, X.,Takai, J., & Wilcox, R. (2001). Face and factwork in conflict: A cross-cultural comparison of China, Germany, Japan and the United States. *Communication Monographs*, *68* (3), 235-258.

Oetzel, J., Garcia, A.J., & Ting-Toomey, S. (2008). An analysis of the relationships among face concerns and facework behaviours in perceived conflict situations. A four-culture investigation. *International Journal of Conflict Management, 19* (4), 382-403.

Oetzel, J., & Ting-Toomey, S. (2003). Face concerns in interpersonal conflict. A cross-cultural empirical test of the face negotiation theory. *Communication Research, 30* (6), 599-624,

O’Neil, H.F., & Abedi, J. (1996*).* Reliability and validity of a state metacognitive inventory: Potential for alternative assessment. *Journal of Educational Research, 89,* 234-245.

Ones, D.S., & Viswesvaran, C. (1997). Personality determinants in the prediction of aspects of expatriate job success. In Z Aycan (Ed*.). New approaches to employee management* (pp. 63-92).Greenwich, CT: JAI Press.

Oolders, T., Chernyshenko, O.S., & Stark, S. (2008). Cultural Intelligence as a mediator of relationships between openness to experience and adaptive

performance. In S. Ang & L. Van Dyne (Eds.), *Handbook of Cultural Intelligence: Theory, measurement, and applications* (pp. 145-158). Armonk, New York: M.E. Sharpe.

Oyserman, D., Kemmelmeier, M., & Coon, H. M. (2002). Cultural Psychology, A New Look: Reply to [2] Bond (2002), [3] Fiske (2002), [9] Kitayama (2002), and [11] Miller. *Psychological Bulletin, 128 (*1), 110-117.

Parker, V., & McMillan, M. (2007). Challenges facing internationalisation of nursing practice, nurse education and nursing workforce in Australia. *Contemporary Nurse, 24,* 128-136.

Patton, M.Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.

Pallant, J. (2007). *SPSS: Survival Manual (3rd rev ed.).*New York: McGraw-Hill.

Pearson, E.S. (1931). The analysis of variance in the case of non-normal variation. *Biometrika, 23*, 114-133.

Pelled, L.H. (1996). Demographic diversity, conflict, and work group outcomes: An intervening process theory. *Organization Science, 7 (*6), *615-631.*

Pelled, L.H., Eisenhardt, K.M., & Xin, K.R. (1999). Exploring the black box. An analysis of work group diversity, conflict and performance. *Administrative Science Quarterly, 44* (1), 1-28.

Pintrich, P.R., & De Groot, E.V. (1990). Motivational and self-regulated learning components of class-room academic performance. *Journal of Educational Psychology, 82,* 33-40.

Ruben, B. (1976). Assessing communication competency for intercultural adaptation. *Group and Organizational Studies, 1,* 334-354.

Ruben, B., & Kealey, D.J. (1979). Behavioral assessment of communication competency and the prediction of cross-cultural adaptation. *International Journal of Intercultural Relations, 3,* 15-48.

Salovey, P., & Mayer, J.D. (1990). Emotional Intelligence. *Imagination, Cognition & Personality, 9*(3*)*, 185-211.

Salovey, P., & Pizarro, D. (2003). The value of emotional intelligence. In R.J. Sternberg, J Lautry, & T.I. Lubart (Eds.), *Models of intelligence: international perspectives* (pp. 263-278). Washington DC: American Psychological Association.

Schram, S.F. (2003). Return to Politics: Perestroika and post-paradigmatic political science. *Political Theory, 31 (6), 835-851.*

Segall, M.H., Lonner, W.J., & Berry, J.W. (1998). Cross-cultural psychology as a scholarly discipline: On the flowering of culture in behavioral research. *American Psychologist, 53*(10), 1101-1110.

Schwarzer, R. (2011). Everything you want to know about the General Self-Efficacy Scale but were afraid to ask. Retrieved from http://userpage.fu-belin.de /~health/self/selfeff __public.htm.

Scott, J.C. (2004). American and British business-related spelling differences. *Business Communication Quarterly, 67* (2), 153-167.

Shannon, L.M., & Begley, T.M. (2008*). Antecedents of the four-factor model of cultural intelligence.* In S. Ang, & L. Van Dyne (Eds.), *Handbook of cultural intellgence: Theory, measurement, and applications* (pp. 41-55). New York: M.E. Sharpe.

Smith, P.B., Dugan, S., Peterson, M.F., & Leung, K. (1998). Individualism: Collectivism and the handling of disagreement. A 23 country study. *International Journal of Cultural Relations, 22 (3),* 351-367.

Smith, K.G., Smith, K.A., Olian, J.D., Sims, H.P., O'Bannon, D.P., & Scully, J.A. (1994). Top management team demography and process: The role of social integration and communication. *Administrative Science Quarterly, 39*, 29-55.

Snider, P.D. (2003). *Exploring the relationship between individualism and collectivism and attitudes towards counseling among ethnic Chinese, Australian, and American university students*. Perth, WA: Murdoch University.

Snider, P.D. (2009). The cultural dynamics of counseling international students: *Exploring the relationship between individualism and collectivism and attitudes towards counseling*. Germany: VDM

Solomon, C.M. & Schell, M.S. (2009). *Managing across cultures: The seven keys to doing business with a global mindset.* McGraw Hill: New York.

Sorti, C. (1994). *Cross-cultural dialogues: 74 brief encounters with cultural differences.* Yarmouth, MN: Intercultural Press.

Spitzberg, B.H. & Cupach, W.R. (1984). *Interpersonal communication competence*. Beverley Hills, CA: Sage.

Stephan, W.G (1977). Stereotyping. The role of ingroup-outgroup differences in causal attribution for behavior. *The Journal of Social Psychology*, *101*, 255-266.

Sternberg, R.J. (2003). *Wisdom intelligence, and creativity synthesized.* Cambridge: University Press.

Sternberg, R.J. & Detterman, D.K. (1979). *Human intelligence: Perspectives on its theory and measurement.* Norwood, New Jersey: Ablex Publishing Corporation.

Sternberg, R.J. & Detterman, D.K. (1986). *What is intelligence? Contemporary viewpoints on its nature and definition.* Norwood, New Jersey: Ablex Publishing Corporation.

Tan, J.S. (2004). Cultural intelligence and the global economy. *Leadership in Action, 24*(5)*, 19-21.*

Tajfel, H. (1981). *Human groups and social categories*. Cambridge: Cambridge University Press.

Thomas, D.C. (2006*).* Domain and development of cultural intelligence. The importance of mindfulness. *Group and Organization Management, 31, 78-99.*

Thomas, D.C., & Inkson, K. (2004). *Cultural Intelligence: People skills for global business.* San Francisco. CA: Berrett-Kohler Publishers.

Thomas, D.C., Stahl, G., Ravlin, E.C., Poelmans, S., Pekerti, A., Maznevski, M., Lazarove, M.B., Elron, E., Ekelund, B.Z., Cerdin, J.L., Brislin, R., Aycan, Z., & Au, K. (2008). Cultural Intelligence: Domain and Assessment. *International Journal of Intercultural Relations, 8,*123-143.

Thorndike, R.L. (1936). Factor analysis of social and abstract intelligence. *Journal of Educational Psychology, 27*, 231-233.

Thorndike, R.L., & Stein, S. (1937). An evaluation of the attempts to measure social intelligence. *Psychological Bulletin, 34,* 275-285.

Ting-Toomey, S., & Kurogi, A. (1998). Facework competence in intercultural conflict: An updated face-negotiation theory. *International Journal of Intercultural Relations, 22*, 187-225.

Ting-Toomey, S., & Oetzel, J. (2001). *Managing intercultural conflict effectively*. Thousand Oaks, CA: Sage.

Triandis, H.C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review, 96*, 506-517.

Triandis, H,C, (1994*). Culture and social behavior.* New York, London: McGraw-Hill.

Triandis, H.C. (1995a). *Individualism and collectivism*. Boulder, CO: Westview Press.

Triandis, H.C. (2000a). Culture and conflict, *International Journal of Psychology, 35*, 145-152.

Triandis, H.C., McCusker, C. & Hui, C.H. (1990). Multimethod probes of individualism and collectivism. *Journal of Personality and Social Psychology, 59,* 1006-1020.

Tripp, D. (1993). *Critical Incidents in Teaching: Developing Professional Judgment.* London: Routledge.

Walpole, P., Isaac, C.L., & Reynders, H.J. (2008). A comparison of emotional and cognitive intelligences in people with and without temporal lobe epilepsy. *Epilepsia, 49* (8), 1470-1474.

Walter, M. (Ed.) (2010). *Social research methods*. Victoria, Australia: Oxford University Press.

Ward, C., Bochner, S. & Furnham, A. (2001). *The psychology of culture shock*. (2nd rev ed.). Sussex, U.K.: Routledge.

Werner, H. (1959). The concept of development from a comparative and organismic point of view. In D.B. Harris (Ed.), *The concept of development* (pp. 125-146). Minneapolis: University of Minnesota Press.

Wink, P. (1997). Beyond ethnic differences: Contextualizing the influence of ethnicity on individualism and collectivism. *Journal of Social Issues, 53,* 329-349.

Wong, C.S., & Law, K.S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *Leadership Quarterly, 13* (3*),* 243-274.

Wiseman, R.L., & Abe, H. (1984). Finding and explaining differences: A reply to Gudykunst and Hammer, *International Journal of Intercultural Relations, 8,* 11-16.

Wood, M.J., & Atkins, M. (2006). Immersion in another culture: One strategy for increasing cultural competency. *Journal of Cultural Diversity, 13* (1), *50-54.*

Appendix A

Murdoch University Research Project Information Flyer

Intercultural communication experiences of hospital patient care workers

Personal Background

My name is Sue Martins and I work as a casual PCA in this Hospital. I am currently completing my Masters in Education (Research) at Murdoch University which requires me to conduct a research study in a workplace. My topic of study tries to *examine and understand the intercultural communication experiences between nurses, Patient Care Assistants and nurse managers in an Australian hospital setting.*

The focus of this study

The aim of this study is to better understand how as patient carers we manage our communication experiences with other workers from different cultural backgrounds. To measure this there will be a cultural intelligence survey conducted and an interview with some interested staff.

What is Cultural Intelligence? What does it mean for you?

Cultural Intelligence is the way a person is able to function and work well with people of different cultures in a particular setting, such as a workplace. In today's hospital environment we have a large multicultural work team and this means that each of us needs specific capabilities that are important to develop good relationships so we can deal with the different communication interactions which may arise during our daily work activities.

What is the benefit of knowing about Cultural Intelligence?

As members of a multi-cultural work team, we are faced with many types of intercultural situations when dealing with people of different backgrounds to ourselves. Being aware of our cultural intelligence allows us the space to create genuine relationships based on cultural understanding.

Contact Details

Sue Martins
Mobile: 0434 189 474
Email: sem3@optusnet.com.au

Please return the survey in the reply paid envelope provided by xx January 2011.

Appendix B

Information Letter

Faculty of Arts & Education, School of Education

Title**:** Intercultural Communication between patient carers in an Australian Private Hospital

I am a Masters of Education student at Murdoch University in Perth, Australia exploring the intercultural communication experiences of nurses, patient care assistants and nurse managers in this hospital.

The aim of the research project is to better understand your experience of interacting with your colleagues from different cultural backgrounds. Your help in this study is critical. Should you agree to participate, I would like to collect some background demographic and employment information from you first and give you a small questionnaire to complete. This will only take about fifteen minutes of your time.

The next step involves some of you being interviewed if you have provided consent on the questionnaire and this process will take approximately 30-45 minutes, at a time and place suitable to you. The interview will give you a chance to discuss your intercultural experiences at this hospital. Interviews will be tape recorded. As this is a participatory research project you are free to withdraw consent at any time. All information given will be confidential and no names or information will be used in any publication arising from the research. All data will be stored in a safe locked place and shredded after five years.

If you have any questions about this research project, please feel free to contact either my supervisor Laura Perry at Murdoch University on 08 93606983 or me on 0434 189 474 or email sem3@optusnet.com.au.

This study has been approved by the Murdoch University Human Research Ethics Committee (Approval 2010/236). If you have any reservation or complaint about the ethical conduct of this research, and wish to talk with an independent person or you may contact Murdoch University's Research Ethics Office (Tel. 08 9360 6677 (for overseas studies, +61 8 9360 6677) or email ethics@murdoch.edu.au). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

Sue Martins
Murdoch Research Student
Murdoch University

Appendix C

Intercultural Communication in an Australian Private Hospital

---

Interviewee Consent

I have read the Information flyer about the nature and scope of this questionnaire. Any questions I have about the research process have been answered to my satisfaction. I agree to take part in this research. By submitting the questionnaire directly to the researcher I give my consent for the results to be used in the research. I am aware that this questionnaire is anonymous and personal details are being collected and used as part of the research. I know that I may change my mind, withdraw my consent, and stop participating at any time; and I acknowledge that once my questionnaire has been submitted, it will not be possible to withdraw my data.

I understand that all information provided is treated as confidential by the researcher and will not be released to a third party unless required to do so by law.

I understand that the findings of this study may be published and that no information which can specifically identify me will be published.

Demographic and Employment Questionnaire

Please answer the following questions about yourself. All information is anonymous and confidential. This information will be used in combining your responses with those of other staff like you.

1. Socio-Demographic Data

What is your gender? Male ☐ Female ☐

What is your year of birth?___________

What is your highest educational level?
Secondary Certificate ☐ Certificate Level ☐ Diploma Level ☐ Bachelor Degree Level ☐

Graduate Certificate or ☐ Graduate Diploma Level ☐ Postgraduate ☐
Other_________

What is your country of birth? Australia ☐Other____________

If you were not born in Australia what year did you migrate? __________

2. Employment Data

If you were not born in Australia what job did you hold in your home country?____________

What is your current position and title? ______________

What is your employment status? Full Time ☐ Part Time ☐

20-Item CQS Four Factor Self Report Survey

Appendix C

Questionnaire Items	Strongly Disagree	Disagree	Agree	Strongly Agree
Metacognitive CQ				
I am conscious of the cultural knowledge I use when interacting with culturally different people	1	2	3	4
I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me	1	2	3	4
I am conscious of the cultural knowledge I apply to interactions with people from different cultures	1	2	3	4
I check the accuracy of my cultural knowledge as I interact with people from different cultures	1	2	3	4
Cognitive CQ			3	4
I know the legal systems of other cultures (e.g. Bali has death penalty for drug smuggling)	1	2	3	4
I know the rules (e.g. vocabulary, grammar) of other languages	1	2	3	4
I know the cultural values and religious beliefs of other cultures	1	2	3	4
I know the marriage systems of other cultures	1	2	3	4
I know the arts and crafts of other cultures	1	2	3	4
I know the rules for expressing non-verbal behaviours (e.g. eye contact) in other cultures	1	2	3	4
Motivational CQ				
I enjoy interacting with people from different cultures	1	2	3	4
I am confident that I can socialize with locals in a culture that is unfamiliar to me	1	2	3	4
I am sure I can deal with the stresses of adjusting to a culture that is new to me	1	2	3	4
I enjoy living in cultures that are unfamiliar to me	1	2	3	4
I am confident that I can get accustomed to the working conditions in a different culture	1	2	3	4
Behavioural CQ			3	4
I change my verbal behavior (e.g. accent, tone) when communicating with someone from a different culture	1	2	3	4
I use pause and silence differently to suit different intercultural situations	1	2	3	4
I vary the rate of my speaking when an intercultural situation requires it	1	2	3	4
I change my non-verbal behaviour (e.g. eye contact) when an intercultural situation requires it	1	2	3	4
I alter my facial expressions when an intercultural situation requires it	1	2	3	4

Copyright @ Cultural Intelligence Centre 2005. Used by permission of the Cultural Intelligence Centre. All rights reserved.

Appendix C

6-Item Intercultural Experiences at the Hospital

Intercultural Experiences (Satisfaction)				
I find it easy to work with nurses & PCAs from a Western background	1	2	3	4
I find it easy to work with nurses & PCAs from a non-Western background	1	2	3	4
I find it easy to interact with my managers	1	2	3	4
I am treated with respect by nurses & PCAs from a Western background	1	2	3	4
I am treated with respect by nurses & PCAs from a non-Western background	1	2	3	4
I am treated with respect by managers	1	2	3	4

7- Item Individualism Survey

Questionnaire Items	Strongly Disagree	Disagree	Agree	Strongly Agree
One should be proud of one's own achievements and accomplishments.	1	2	3	4
Individual incentives and rewards should be given priority over group incentives and rewards.	1	2	3	4
One's loyalty should be first and foremost to oneself and one's family.	1	2	3	4
Individuals are the best judge of their own best interests.	1	2	3	4
Giving personal orders may hurt an individual's feelings and dignity.	1	2	3	4
To be successful one has to rely on oneself.	1	2	3	4
Loyalty to one's superior is necessary for an organisation to survive.	1	2	3	4

Copyright @Ali, A.J. (1988). Scaling an Islamic work ethic. *Journal of Social Psychology, 128*, 575-583.

Please place this survey in the reply paid sealed envelope provided and return it before 24 January 2011.

I agree to be interviewed as part of this research study. **Yes** ☐ **No** ☐

Contact Number_______________

Appendix D

Consent Form Interview

Intercultural Communication in an Australian Private Hospital

Interviewee Consent

I have read the interviewee information flyer and letter, which explains the nature of the research and the possible risks. The information has been explained to me and all my questions have been satisfactorily answered. I have been given a copy of the information sheet to keep.

I am happy to be interviewed and for the interview to be audio recorded as part of this research. I understand that I do not have to answer particular questions if I do not want to and that I can withdraw at any time without consequences to myself.

I agree that research data gathered from the results of the study may be published provided my name or any identifying data is not used. I have also been informed that I may not receive any direct benefits from participating in this study.

I understand that all information provided by me is treated as confidential and will not be released by the researcher to a third party unless required to do so by law.

______________________________ ____________________

Signature of Interviewee Date

Investigator

I have fully explained to ____________________________ the nature and purpose of the research, the procedures to be employed, and the possible risks involved. I have provided the interviewee with a copy of the Information Sheet.

______________________________ ____________________

Signature of Investigator Date

_____ Laura Perry________________ _Senior Lecturer__________

Print Name Position

Interview Questions Appendix D

Apply to non-Western Nurses, PCAs (South East Asian/ Indian/ African)

Please answer the following questions about yourself. All information is anonymous and confidential. This information will be used in combining your responses with those of other staff like you.

Section 1: CQ: Please provide detailed examples to the questions asked below.

1.1 Metacognition (Strategy):

Do you consciously think about the language you use when you are talking with a nurse or PCA from another culture?

1.2 Cognition (Knowledge): Understanding Intercultural Differences

Name a few cultural differences that you have noticed about any of the nurses and PCAs you work with who are from a different culture to yours.

1.3 Motivation: Showing Interest, Confidence and Drive to Adapt Cross-culturally

Do you enjoy working with the nurses and PCAs from other cultures?

1.4 Behavioral (Action)

What ways do you adjust your behavior when speaking to a Western or non-Western colleague at work?

1.5 Language:

*Do you have any difficulty in being understood by other staff members with whom you work? And do you understand other staff members when they are giving you instructions? (*Western and non-Western nurses, PCAs)

*Do you have any difficulty in understanding any of the nurses and PCAs that you work with? Does this impact on the working environment in the hospital? (*nurse managers)

Appendix E

Codebook

Variable	*SPSS Variable Name*	*Coding Instructions*
Identification Number	ID	Assigned to each survey
Sex	Sex	1=Male; 2=Female
Age	Age	Age in Years
Education	Ed. Level	1=Secondary; 2=Certificate; 3=Diploma; 4=Bachelor Degree; 5=Graduate Certificate; 6= Graduate Diploma; 7= Postgraduate; 8=Other
Country of Birth	COB	1=Australia; 2=UK; 3=Canada; 4=NZ; 5=South Africa; 6=Italy; 7=Switzerland; 8=China; 9=Thailand; 10 = Philippines; 11= Malaysia; 12= Singapore; 13=India; 14=Africa;15=India; 16=Hong Kong; 17=Russia
Year of Migration	Yr Migrate	Calendar Year
Number of Years in Australia	No Yrs Aust.	2011 minus Year of Migration
Job Role	Role	1=Nurse Manager; 2=Nurse; 3= PCA
Job Status	Job Status	1=Full-time; 2=Part-time;3=Casual
Metacognitive CQ Scale 1=MC1; 2=MC2; 3=MC3; 4=MC4	MC	1=Strongly Disagree; 2= Disagree; 3=Agree; 4= Strongly Agree
Cognitive CQ 1=C1; 2=C2; 3=C3; 4=C4; 5=C5; 6=C6	Cog	1=Strongly Disagree; 2= Disagree; 3=Agree; 4= Strongly Agree
Motivation CQ 1=M1; 2=M2; 3=M3; 4=M4; 5=M5	Mot	1=Strongly Disagree; 2= Disagree; 3=Agree; 4= Strongly Agree
Behavioural CQ 1=B1; 2=B2; 3=B3; 4=B4; 5=B5	Beh	1=Strongly Disagree; 2= Disagree; 3=Agree; 4= Strongly Agree
Total CQ 1=Metacognition; 2=Cognition; 3=Motivation; 4= Behavioural	Total CQ	1=Strongly Disagree; 2= Disagree; 3=Agree; 4= Strongly Agree
Satisfaction Scale 1=IE1; 2=IE2; 3=IE3; 4=IE4; 5=IE5; 6=IE6	IE	1=Strongly Disagree; 2= Disagree; 3=Agree; 4= Strongly Agree
Ali Individualism 1=IND1; 2=IND2; 3=IND3; 4=IND4; 5=IND5; 6=IND6; IND7	INDV	1=Strongly Disagree; 2= Disagree; 3=Agree; 4= Strongly Agree