

THE CULTURAL DIMENSIONS OF INFORMATION USE AMONG EMIRATI POSTGRADUATE STUDENTS

Helen Weston

B.A., Dip. Ed., M.A. Ed., Grad. Dip. Teacher Librarian

Submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy

Science and Engineering Faculty
School of Information Systems
Queensland University of Technology
2018

Abstract

This research investigated the cultural dimensions of information use of post graduate Emirati students. The purpose was to explore how information use is experienced in light of what is revealed when national culture is explored. A mixed methods approach was employed with two distinct phases. Phase One was quantitative in focus, and used Hofstede's Values Survey Module to gain an understanding of the cultural dimensions of a Master cohort of Emiratis studying at a number of Federal College campuses throughout the United Arab Emirates (UAE). To further understand if the values and sentiments inherent in the cultural dimensions were part of their information use, qualitative interviews were followed up with these male and female students in Phase Two. The relational approach to information literacy was used to understand the relationship between users and their information worlds. A mixed methods approach was used because each data set (qualitative and quantitative) is able to inform the other and provide authentic checks and balances for consideration.

Two distinct phenomena were explored in this research -information use and culture. Therefore this complex integrative exploration was better served by using mixed methods approach. The overarching research question guiding the study is - *What are the cultural dimensions of information use among Postgraduate Emirati students?*

Two sub questions are then used to guide each phase of the mixed methods research:

1. What are the cultural dimensions of Emirati Postgraduate students?
2. What is the relationship between these cultural dimensions and the students' information use?

Insights emerged deductively when the data was analysed thematically. The data revealed that when this group of students used information, the following cultural dimensions of information use were noted:

- Personified information;
- Information for personal needs

- Information for personal improvement
- Ambiguous information (acceptable in spoken situations)
- Using information purposefully
- Enjoyment in the information use flow
- Information contributors.

The UAE is slowly accumulating academic research contextually related to the country. However, at times there was not enough written academic resources to support the information use for these Masters Students studying at an applied level. As a result, this cohort had to use alternative ways of finding and using information to support their dissertation work. These students faced challenges such as a lack of written academic resources, studying in their second language and only gaining their confidence as researchers later in their educational experience. Persevering through these challenges steered them to finding information through alternate routes like industry professionals. Ultimately they were rewarded with growing confidence as researchers and enjoyable encounters with new information. More importantly these experiences have compelled these students to contributing to the knowledge economy of the UAE.

This research is significant because a relational approach to using information is not explicitly focussed on when Emirati students access information. The findings will guide information professionals working in the UAE or with Emirati students abroad. It will advise organisations who are committed to researching the knowledge economy of the UAE. It will raise awareness in Emirati higher education students to embrace their information use experiences, build confidence in their research approach and honour their country by their contributions to national information.

Key words: culture, Emiratisation, information, information use, Hofstede's cultural dimensions, mixed methods.

Table of Contents

Abstract	ii
List of figures	vi
List of tables	vii
List of abbreviations.....	viii
Statement of original authorship.....	ix
Acknowledgements.....	x
Chapter 1: Introduction.....	1
1.1 Introduction	1
1.2 Background	1
1.3 Research problem statement.....	4
1.4 Aim of the study.....	5
1.5 Research design	5
1.6 Key findings	7
1.7 Significance of research.....	8
1.8 Key terms.....	10
1.9 Thesis outline.....	12
1.10 Conclusion.....	13
Chapter 2: Literature Review.....	15
2.1 Introduction	15
2.2 Purpose and scope.....	15
2.3 Higher education degrees providing the way forward for Emiratisation.....	16
2.4 Educational reform in the UAE.....	18
2.5 Higher education in transition	23
2.6 Information literacy: the experience of effective information use	25
2.7 Culture defined and culture explored	35
2.8 Cultural dimensions and the UAE.....	40
2.9 Cultural dimensions, learning and information use.....	41
2.10 Research gap.....	47
2.11 Conclusion.....	49
Chapter 3: Research Design.....	51
3.1 Introduction	51
3.2 The research paradigm - pragmatism	51
3.3 The research approach: mixed methods.....	53
3.4 Quantitative – qualitative integration	61

3.5	Research context: the UAE	64
3.6	The Quantitative phase	64
3.7	The Qualitative phase	81
3.8	Ethics	94
3.9	Conclusion.....	94
Chapter 4: Phase One (Quantitative) Findings.....		96
4.1	Introduction	96
4.2	Cultural dimension scores.....	96
4.3	Power Distance	98
4.4	Individualism vs Collectivism	99
4.5	Masculine vs Feminine	100
4.6	Uncertainty Avoidance	101
4.7	Long Term vs Short Term Orientation	102
4.8	Indulgence vs Restraint.....	104
4.9	Monumentalism vs Self-Effacement	106
4.10	Responding to the research question	107
4.11	Conclusion.....	109
Chapter 5: Phase Two (Qualitative) Findings.....		110
5.1	Introduction	110
5.2	Cultural dimensions of Emirati postgraduate students as information users.....	110
5.3	Summary	161
5.4	Conclusion	164
Chapter 6: Discussion and Conclusion.....		165
6.1	Introduction	165
6.2	Research overview	165
6.3	Summary of key findings	166
6.4	Contributions to knowledge	170
6.5	Contributions to practice.....	185
6.6	Contributions to theory	188
6.7	Limitations	190
6.8	Recommendations	191
6.9	Conclusion.....	192
Chapter 7: Appendices		195
References.....		217

List of Figures

Figure 3.1 Visual model for Explanatory Sequential mixed methods design..... 58

List of Tables

Table 2.1 Components of Seven Faces of information literacy (1997) and Six Frames of information literacy (2006).....	27
Table 3.1 Comparison of total and sample 2014-15 enrolments.....	68
Table 3.2 Constant 30.....	79
Table 3.3 Constant 50.....	79
Table 3.4 Constant 70.....	79
Table 3.5 An example of basic coding, with brief explanatory notes used in the qualitative phase of research.....	88
Table 3.6 Formation of themes informed by coding.....	91
Table 4.1 Cultural dimension index scores for 2014-2015 UAE masters cohort	97
Table 4.2 Characteristics of high Power Distance	99
Table 4.3 Characteristics of high Individualism	100
Table 4.4 Characteristics of high Masculine	101
Table 4.5 Characteristics of weak Uncertainty Avoidance	102
Table 4.6 Characteristics of high Long Term Orientation	104
Table 4.7 Characteristics of high Indulgence	106
Table 5.1 Information use reflected in cultural dimensions.....	112

List of Abbreviations

ADEC- Abu Dhabi Education Council

ACRL – Association of College and Research Libraries

AKR – Arab Knowledge Report

ALA – American Library Association

ALIA – Australian Library and Information Association

ANZIL – Australian and New Zealand Information Literacy

PIRLS - Progress in International Reading Literacy Study

VSM08 – Values Survey Module 2008

UAE – United Arab Emirates

Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

QUT Verified Signature

Signature:

Date: 05/06/2018

Acknowledgements

This research allowed me to reconnect with and rethink my initial information literacy experiences, as well as explore my personal information use. I have my supervisors Professors Helen Partridge and Christine Bruce to thank first and foremost for guiding me on this journey. Over the past six years we connected mainly via long distance but the face to face catch ups made all the difference.

There are a host of people to thank:

QUT Faculty: Associate Professor Hilary Hughes and Dr Ian Stoodley for their precise and insightful feedback.

Colleagues: Drs Nicole Johnston, Alicia Salaz and Janet Martin who were there in the beginning and always checked in with advice and encouragement, also Drs Melanie Van Den Hoven, Rula Al Kayyali, Heather Friezen, Graham Ward and Dianne Pymble Ward; the HCT library crew especially Robin Bishop, Stephen Visagie, Marion Finnegan, Louise Sikkens; HCT faculty especially Dr. Edith Flahive, Angelique Cardon, Merlyn Thomas, Hilary Isaacs, Mohammed Al Marzouqi, Alan Pollock, Tom Smith, Ewa Gager and my beautiful friend and colleague Sandy McDonagh who in her final days still enthusiastically asked about my study and proof read chapters for me; QAHS crew Stef Vallen who was always so very supportive, Trudy Newlove, Hayley Kaminski, Brent Egan and Emily Merkas for their calm and supportive editing advice, Linda Young, the teaching staff and my inquiring, knowledgeable and caring students who asked constantly about how things were going.

Friends: You were never offended by my rejections to spend time with you. I would especially like to thank Julie Lewis, Dominique Crawley, Helene Demerci, Helen Richards, Suzanne Poulter, Ruth and David Whittaker, Helen Morely and Hobe Horton, Eve Francis who did the final round of editing and Greig Francis, Glenice

Cleary, Natalie Jane Prior-Nussey, Rachel O'Brien who was there from the beginning and Wantana Cr neighbours.

Family: Troy and Jonathan Weston – we all studied together at one point and to Hughie who was my constant companion.

Finally thank you to the Emirati Master students who gave their time freely, generously and whom I hope will continue to grow richly in their information use experiences

Chapter 1: Introduction

1.1 INTRODUCTION

This chapter introduces the study. It begins with a brief exploration of the background to this research in order to orientate the study within the broader context from which it originated and was inspired. Then, the study's aim and research design are described. Key findings and an outline of the significance of the study are provided. A number of key terms for the purpose of clarifying how these have been interpreted and understood in this study are included. Then in the final part of this chapter, an overview of the remaining chapters contained in this account is listed.

1.2 BACKGROUND

Currently within the United Arab Emirates, higher education institutes are enrolling national students so that they can obtain degrees in order to fill managerial positions, whilst at the same time attempting to preserve Emirati culture. This process is called Emiratisation and has a major impact on higher education enrolment. Due to the unpredictable and erratic growth of education in the United Arab Emirates (UAE) over the past forty six years, the education framework in the UAE has progressed through many cycles and changes in pedagogy. It is likely that the broad range of Emirati students have not been exposed to and soundly supported by the same frameworks necessary to develop a broad range of information literacy experiences as their western counterparts.

Upon transitioning to higher education students bring their cultural values and sentiments into the teaching and learning environment. Hofstede addresses these elements in his definition of culture. He describes culture as the "collective programming of the mind which manifests itself not only in values, but in more superficial ways: in symbols, heroes and rituals" (p.1, 2001). This research will use Hofstede's Cultural Dimensions framework to explore the cultural values and sentiments of the Emirati student enrolled in higher education. Following on from

this, the research will seek to understand the information use experience of the Emirati higher education student from a relational point of view (Bruce, 2008).

The Gulf States and the United Arab Emirates in particular have set themselves an important target of “preparing future generations for the knowledge society which is considered the cornerstone for building a sustainable human development” (Arab Knowledge Report (AKR) 2010, p.A). The current local education organisation is seeking to align itself to a system that “supports thinking, careful planning and an active search for information” (AKR 2010, p.129). Unfortunately that has not been the experience of many Emirati students. As they enter higher education institutions to gain the degrees necessary for them to contribute to the “knowledge society” within their workforce, their experience with information use is varied and may not equip them to engage with information as meaningfully as hoped (AKR 2010, p.29).

The history of the federation of the UAE is well documented in literature, as is the nation’s expansion in economic wealth due to the discovery of oil (Al Fahim, 1995; Baghat, 1999; Dahl, 2010; Godwin, 2006; Raven, 2010). Educational partnerships have evolved expeditiously over the forty year time frame. Emirati students in public systems have been exposed to teacher oriented pedagogy. Memorisation techniques are used to “learn”, and in many cases librarians and IT specialists have been non-existent until reaching higher education (King, 2011). Students would have been exposed to examination environments where recall is a more highly valued skill. This has become problematic when Emiratis seek to leave the public school system and enter higher education. Many higher education institutes in the UAE are in partnership with other western institutions, or the faculty is highly westernised.

Higher education exists on a national scale, for example Higher Colleges of Technology, Zayed University and University of United Arab Emirates, as well as imported institutions – New York University, University of Wollongong, Michigan State University. Many students who have been educated in the public system will be disadvantaged in a higher education setting which encourages independent learning and critical thinking, compared to their fellow students who could afford a western

education in international schools (Dahl, 2010; Sowa and De La Vega, 2009). The Ministry of Education in the UAE understands the need to develop critical and independent thinkers who can contribute to the knowledge economy (Mohammed, 2011). Many teachers are attempting critical thinking and problem based learning which are core to information use (Gitsaki, 2011), yet the discussion of the presence of library professionals and libraries to assist the academic educational community in supporting information use at a level common to most western institutions remains a gap in the literature.

Developments in all sectors of the United Arab Emirates have occurred at a lightning pace, and Emiratisation is encouraging the pursuit of education at a similar rate. As a result many students are experiencing the demands of using information in a higher education context. All are English as Second Language learners and Muslims. Many are coming to terms with the cultural aspects of western academic life and using their second language to communicate on all levels. What is the information use experience for these post-secondary Emirati students?

Juxtaposed to this scenario is the issue of culture. Many cultural theorists have attributed broad characteristics to nations and ethnic groups, commenting that certain behaviours, values, rituals and ideologies are a result of “collective programming of the mind” (Hofstede, p.1, 2001). Having observed Emirati students in a college setting for seven years, it became apparent to me that there are some unique traits that are observable within an information seeking context that may be attributed to national culture. As a librarian, I worked closely with faculty and students in the role of Information Literacy coordinator and eventually supervisor of three federal college libraries. The way students used information became a point of great interest to me and caused me to consider the relationship between information use and culture. One easily observable behaviour is the tendency for students to head straight to the teacher or librarian for direction, without problem solving the research question first. On the surface this may seem like students are lazy or unimaginative. However, in the Emirati culture, teachers signify authority and it is considered a sign of respect to confer first and be guided by your teacher.

Another interesting observation is that students tend to gather in groups to discuss an information task or project. Not many sit quietly in separate areas. The library can become quite a noisy bustling environment as students animatedly discuss their tasks. The task, although designed to be submitted individually, becomes a group task. This research will explore how the information use of post-secondary students is experienced in light of what is revealed when national culture is explored.

1.3 RESEARCH PROBLEM STATEMENT

This study addresses a significant socio-economically related higher education problem whereby Emiratis are enrolling in colleges and universities which are often styled after western institutions, so that they can obtain degrees in order to fill managerial positions whilst at the same time attempting to preserve culture within work place sectors. This process is called Emiratisation and is a government based initiative actively promoting the employment of Emiratis in the public or government sectors. It is likely that the broad range of Emirati students have not been exposed to western curriculum and information literacy instruction. Emiratis are seeking to procure graduate degrees and post graduate degrees in order to fill the more coveted management positions. There are challenges as well as growth opportunities involved in this academic journey.

To be competitive in this job market, Emirati graduates need knowledge and skills to participate in a global knowledge economy as explained in the background section 1.2. This includes the ability to use information critically, creatively and wisely for strategic planning and innovation but as the Arab Knowledge Reports (AKR) from 2010/2011 and 2014 suggest, this area requires more development and growth before the results measuring these criteria are comparable to higher achieving peers. This calls for active, collaborative, student-led learning approaches to using information. However, many UAE nationals seem ill-prepared to participate in this contemporary workforce due to the teacher-led model of direct instruction that is common in many public schools and universities.

Consequently, even at higher education level students tend to rely on teachers rather than seek out information independently, critique information or make decisions about information (Dahl, 2010). Students default to the values that were acceptable in previous educational settings where teachers led all the initiatives and the focus was very much on teacher led instruction (Sandiford, 2014). In order to address this problem at a systemic level, it is important to first understand the nature of Emirati students' educational experience and learning needs within the cultural context of the UAE.

Therefore, this study carefully considers the cultural dimensions associated with Postgraduate Emirati students' information use in order to understand the relationship between culture and the information user.

1.4 AIM OF THE STUDY

This study addresses the limited research about Emiratis in higher education (Johnston, Partridge & Hughes, 2014; Martin, 2013; Van den Hoven, 2014) and in particular the gap in the research considering the relevance of culture in using information. The aim of this research is to explore the relationship between culture and information use. The guiding research question for this study is therefore, "What are the cultural dimensions of information use among postgraduate Emirati students?"

1.5 RESEARCH DESIGN

The research adopts a mixed methods approach. Mixed methods allows the researcher to use both quantitative and qualitative data collection and analysis in order to derive full and deep understanding of the research problem (Cresswell & Plano Clark, 2011). Whilst mixed methods have gained momentum within academic research as a whole, this approach has not been as readily adopted in the information literacy domain.

As previously mentioned, the overarching question guiding this mixed methods research is, “What are the cultural dimensions of postgraduate Emirati students’ information use?” In order to explore this in detail, two sub questions were used to guide the study and research phases. The first sub question is, “What are the cultural dimensions of Emirati postgraduate students?” and this guides Phase One quantitative section of the research. An existing questionnaire was used to explore cultural values and sentiments. Geert Hofstede’s cultural dimensions framework was used to explore this area of the research. Hofstede (2001) proposes that people carry mental programs which are externalised through values and to a lesser degree in rituals, symbols and role models. They are developed at an early age due to family upbringing, and are realised further in institutions like school and work organisations. These mental programs become a part of a nation’s culture. According to Hofstede there are seven dimensions which reflect basic cultural characteristics. The seven dimensions are Power vs. Distance, Individualism vs. Collectivism, Masculinity vs. Femininity, Long Term Orientation vs. Short Term Orientation, Uncertainty Avoidance, Indulgence vs. Restraint, and Monumentalism vs. Self-Effacement. A full discussion of Hofstede’s cultural dimensions framework is provided in Chapter 2.

In the practice of mixed methods research, the data derived from one phase also goes on to inform the next phase of research. In this case, Phase One data contributed by helping to determine the types of questions to include in the interviews of Phase Two. The second sub question, “What is the relationship between these cultural dimensions and the students’ information use?” steered Phase Two of the research.

Conceptually the idea of information use may be interpreted in a number of different ways. This research study will take a relational perspective to investigate information use. The relational perspective of information use was established by Bruce (1997) and is evident in her Seven Faces of information literacy (1997) and together with Edwards and Lupton, expanded upon in Six Frames information literacy (2006) of information literacy. It emphasises the relationship between users and information when learning in different contexts. For this particular study, the relationship of

culture and information use will be explored. A full discussion of the relational perspective to information literacy is provided in Chapter 2.

Phase Two of this research was qualitative and involved interviewing participants about their information use experiences. The data collected from Phase One informed the composition of the interview question which is key to the mixed methods design. Both sets of data combined to inform the response to the overarching research question.

Participants for both phases of the study were recruited from the Masters cohort from a number of federal college institutions within the UAE. These students were all Emiratis and were studying applied Masters Research in Business, Information Technology and Education. The full details of the research design are provided in Chapter 3.

1.6 KEY FINDINGS

The study showed that both motivations and challenges associated with using information intersected with the cultural values and sentiments explored using Hofstede's Cultural Dimensions framework. As a result, framework for cultural dimensions of information use for Emirati students when using information was developed. When this group of higher education Emirati students used information to learn, the following cultural features were noted:

1. Personified information
2. Information for personal needs
3. Information for personal improvement
4. Dealing with ambiguous information
5. Using information purposefully
6. Enjoyment in discovering new information
7. Information contributors

These findings included a dependency on teachers or information professionals to support initial to mid stages of research work or information use (Personified information). Once students navigated their way through the challenges of not always finding written information through the traditional channels, or using information in their second language of English; this experience often led to enjoyment in using information once students began to feel more confident in their research abilities (Using information purposefully). Even though there was a lack of academic resources much needed to support research questions or tasks often contextualised or localised to the UAE, one positive outcome was an overwhelming determination to contribute to building up the resource bank of UAE academic information upon completion of the Master degree (Information contributors).

The ultimate goal for Emirati students in higher education, who are slowly coming to terms with western approaches to teaching and learning, would be to interact with information in a variety of contexts and ways allowing them to broaden their experience. A skills based approach or competency frame (Bruce, 2008, p.26) is definitely an entry point to expose and introduce Emirati students to ways of using and experiencing information. However, for Emirati higher education, the ultimate goal would be to examine the cultural relationship with information use in order to understand their information literacy context more effectively. For that to take place a relational approach would be the way forward because information literacy is explored holistically. A full discussion of the findings are provided in Chapters 4 and 5.

1.7 SIGNIFICANCE OF RESEARCH

The significance of this research is both local to the UAE and broader, extending globally. There is little documented evidence which discusses how Emirati postgraduate students use information to learn. This study is particularly significant because it provides empirical data contributing to the discussion of how culture intersects with information use in higher education.

This was achieved through the key findings listed in section 1.6. These findings contribute to the significance of this research not only because they are new contributions underpinning the relationship between culture and information use, but because they go on to support the design and implementation of pedagogical approaches that recognise cultural diversity of learners. This is significant for the UAE and beyond. International higher education institutions should carefully consider the implications for their own international education programs aimed at UAE students and other Arab nations.

The significance of this research should be noted by librarians; information literacy educators; English as a Second Language (ESL) educators; higher education administrators; government policy makers and researchers in the field of ESL education; information literacy; higher education pedagogy and national culture. The findings in this study all point towards supporting and enhancing curriculum and pedagogical development; collaboration between information literacy educators and academics; academic policies; standards and outcomes; UAE national and academic archives and depositories.

This study is of importance because Emiratis are being encouraged to pursue educational degrees beyond secondary education in order to be highly qualified to take on managerial positions (Emiratisation). This in turn means that whilst attending post-secondary educational institutions, they will be using information in an academic context. Also, many Emiratis are studying part time whilst working thus juxtaposing information use in a working environment with information use in an academic environment. Finally, this research reveals a way for Emirati students to use information critically, creatively and ethically. How can librarians and teaching faculty use this knowledge to better understand how Emirati students use information to learn in research?

1.8 KEY TERMS

This section provides a summary of key terms of relevance to this study. They establish clarity about how such terms have been interpreted and understood in this account.

Culture

For the purposes of this research the focus is on national culture, therefore Hofstede's definition of culture will be used - "collective programming of the mind which manifests itself not only in values, but in more superficial ways: in symbols, heroes and rituals" (Hofstede, p.1, 2001).

Emiratisation

The United Arab Emirates government based initiative to employ Emiratis in the public or government sectors and preserve heritage.

(<https://government.ae/en/information-and-services/jobs/vision-2021-and-emiratisation/emiratisation->)

Hofstede's Cultural Dimensions

Cultural dimensions are key components of the framework developed by Geert Hofstede in the 1970s to determine national cultural aspects. Originally designed to "be measured relative to other cultures" (Hofstede, Hofstede & Minkov, 2010, p.31) the cultural dimensions are measured statistically and determined by a score on an integer scale. Hofstede claims they are general guide to describing a cultural identity for groups of nationalities and in no way describe a typical individual of that nationality or culture.

Information

Anything that we experience as informing, explanative, expositional or interpretive. Information will appear differently in different contexts and different disciplines. Information can be experienced in a variety of ways (Information literacy) and information can be used to learn (Informed learning) (Bruce, 2008).

Information Use

This thesis examines the information use of Emirati postgrad students. As it views information use through a relational frame, it considers the relationship between users and information. Information is understood to encompass anything that people experience as ‘informing’ (Bruce). Thus, information use is conceptually underpinned by the relational model of information literacy (Bruce, 1997). As such this research interprets information literacy as being the complexity of ways in which people experience using information when learning in different contexts (Bruce, 1997; 2008). Information literacy involves “experiencing different ways of using information to learn” and “opens the door to informed learning” (Bruce, 2008, p.5).

The relational perspective of information literacy has more recently been called ‘informed learning’ (Bruce 2008): the change of name was realised to emphasise the focus of using information to learn. As informed learning is a holistic and continuous process, information skills are its enablers or building blocks rather than the end goal. These differing ways of using information to learn can be viewed through six different frames, namely: the content frame, the competency frame, learning to learn frame, personal relevance frame, social impact frame and relational frame. So for example, in the competency frame learners view information literacy as a set of skills or competencies, whereas in the relational frame learners are aware of the complex ways information may be interacted with.

Informed learning fosters critical, creative and ethical information use across varied education, community and workplace contexts. It is particularly relevant to this study as it emerged from and is increasingly applied in higher education contexts (Bruce & Hughes, 2010; Bruce, Hughes & Somerville, 2012; Maybee, 2014). It also recognises cultural dimensions of information use (Bruce & Hughes, 2010; Hughes, 2009).

Mixed Methods

The integration of both quantitative and qualitative approaches used within the same research design. The sequencing and priority of each approach must be specified in the data collection and analysis. A clear exploration of how the quantitative and

qualitative aspects relate to each other must be given. Finally this research method is consistently associated with the paradigm of pragmatism.

1.9 THESIS OUTLINE

This thesis is structured into six chapters.

Chapter 1 provides an introduction to this research, giving the context of the UAE and identifying Emirati higher education students as the focus for this research in information use experience. The research question guiding the research is presented and the scope and significance of the study are also addressed.

Chapter 2 is the review of literature related to this research. The UAE context is explained with a focus on education. Then more specifically, the UAE higher education background and current information use experiences are explored, then an overview of information literacy is explained with a focus on relational view of information literacy. Culture is explored with a focus on Geert Hofstede's Cultural Dimensions. Previous research about UAE higher education and information literacy is examined and the research gap is revealed.

Chapter 3 gives an account of the methodology used for this research. For this study mixed methods is used with a focus on Explanatory Sequential. It explains how and why quantitative and qualitative methods were used to collect and analyse the data.

Chapter 4 presents the findings of the Phase One Quantitative survey. Geert Hofstede's Values Survey Model (VSM08) was used to obtain data. Data collection, participant sampling and details of the data outcomes are presented in this chapter.

Chapter 5 presents the findings of the Phase Two Qualitative interviews. This chapter explains how the data from Phase One (Quantitative) established the framework for

the interview questions. As with the previous chapter, data collection, participant sampling and data outcomes are presented.

Chapter 6 offers a discussion and conclusion of the research. Thematic understandings are presented, along with the limitations of the research. Finally implications and further suggestions for research in the area of culture and information use experience are suggested.

1.10 CONCLUSION

This chapter has provided an introduction to the study. It has outlined the background to the study, articulated the research questions, research design and discusses the key findings and the study's significance. Key terms used in this account and summaries of the chapters contained in this thesis were also presented. In the next chapter, key relevant literature to the study is critically explored and discussed.

Chapter 2: Literature Review

2.1 INTRODUCTION

This chapter considers the documented research that is relevant to this study of information literacy. This review will also consider literature focussed on information literacy perspectives in educational contexts and the literature that explores national culture. It will also highlight research carried out in the UAE higher education involving information literacy and reveal the gaps in the research which is why this study was conducted.

The first section of this chapter reviews literature that explores how education was introduced into the UAE with a particular focus on the level of exposure Emirati students have had to information literacy prior to leaving secondary school and entering college or university in the UAE. The second section investigates the current literature on information literacy, what defines informed learning and how it applies to the Emirati student enrolled in higher education. Finally the third section explores the literature involving the definition of national culture, with a focus on Geert Hofstede's research on cultural dimensions.

2.2 PURPOSE AND SCOPE

The purpose of this review is to explore what is presently known about information literacy of higher education students in Emirati culture. In order to do this the theories and perspectives around information literacy in higher education, especially in ESL contexts, will be critically considered. Furthermore, consideration will be given to studies previously carried out in the UAE involving information use. Research discussing the relationship between culture and information literacy will also be key in this review. The investigation of the existing literature in the above mentioned areas will shed light on how much is already known about how Emirati students use and interact with information in a higher education context. It will also show the gaps that exist in the literature.

Research considering the relationships that exist between certain elements and aspects of information use has long been a point of consideration. For example culture and learning styles (Yamazaki, 2005); culture and information technology (Johns, Smith & Norman, 2003); personality and information interaction (Heinstrom, 2010); information use and international students (Hughes, 2009, 2013); information use and task complexity (Bystrom & Jarvelin, 1995). In comparison, very little empirical data exists on students' information use related to national culture in the UAE. Some research is emerging on developing information literacy models in English as a Foreign Language (EFL) frameworks (Johnston, Partridge & Hughes, 2014) and also the millennial generation and technology in the UAE context (Martin, 2013).

2.3 HIGHER EDUCATION DEGREES PROVIDING THE WAY FORWARD FOR EMIRATISATION

2013 was nominated the “Year of Emiratisation” with a particular focus of increasing Emirati presence in the private sector. In May 2013, it was reported that less than ten per cent of the 225,000 working UAE nationals have jobs in the private sector; together they account for only about 20,000 of the 4 million private-sector employees (Arnold, 2013). In response to the lack of Emirati presence in many key positions in the work place, there is a high level of importance placed on Emiratisation. This is the government based initiative to employ Emiratis in the public and private sectors. It seeks to redress the imbalance of expatriates who are employed in middle management and executive positions rather than Emiratis. Expatriates have filled the majority of managerial positions in the UAE workforce while Emiratis have remained the minority

Emiratisation appears to have a dual purpose: to enable UAE nationals to fill executive roles and balance the deficit of nationals in management and to preserve the culture of the UAE (Dada in Gitsaki, p.206, 2011). In order to do this many Emiratis are entering higher education to obtain the necessary degrees to fill these positions. Many higher education candidates transition from secondary school, or enter as mature age students often sponsored by their companies to obtain a degree.

So there is a demand for quality education and one that will equip students with critical thinking skills and the ability to interact with information necessary to complete Bachelor and Master degrees. Although the education system that has been available to students prior to entering tertiary education has not always provided support for critical thinking and independent thinking – which are all components of using information critically, creatively and ethically (Dahl, 2010).

As mentioned, the Education sector has been caught up in vigorous growth of all social, cultural and political divisions of the UAE. Nevertheless, the quality of education does not correspond to the pedagogical needs of Gulf countries, despite its rapid growth in comparison to other sectors in Gulf society (Arab Knowledge Report, 2010; Arab Knowledge Report, 2014). The concern regarding the mismatch between traditional and modern education was raised nearly 20 years ago (Bahgat, 1999). Most Emirati students have been educated in local public schools prior to entry into higher education and have not had access to a wide range of teaching pedagogy or resources in comparison to neighbouring international schools (Dahl, 2010).

Raven (2010) believes education as a profession for Emiratis is an important step towards Emiratisation but few follow in this line, opting for other Government based professions as they are more financially viable offering better working hours. In 2014 the Arab Knowledge Report (AKR) published biennially for the United Nations records 8.24% studying Education compared to 8.93% in Humanities and Arts; 12.1% in Sciences and 49.4% in Social Sciences including, Business, Law and Administration (p.68). As very few of the teachers are Emirati, many have come from neighbouring Arab countries where they are generally poorly trained. English is still the second language and aspects of western pedagogy are not wholly embraced (Van den Hoven, 2014, p.68.) Many of these teachers defer to the directives of bureaucracy (Dada in Gitsaki, p.207, 2011). However, upon arrival at most higher education institutions, students encounter a mix of Western and Middle Eastern faculty. Many students who have been educated in the public system will be disadvantaged compared to their fellow students who could afford western education in International schools (Dahl, 2010). Standardised public school curriculum would

have involved a traditional suite of subjects including Arabic, Religion, English, Science and Civics. Most of this knowledge would have been acquired through memorisation and passive teacher oriented focus (King in Gitsaki, p.360, 2011); whereas in the private international schools, students have access to globally accredited curricula, such as the International Baccalaureate, offering a broader range of subjects as well as life skills opportunities.

With the acknowledgement that Emiratis are better prepared for Emiratisation if they have graduate or postgraduate degrees, how equipped is the education system to support the implementation of these degrees? The next section examines the ongoing educational reforms that have been put into place to improve the learning experience for Emirati students in tertiary level.

2.4 EDUCATIONAL REFORM IN THE UAE

In order to keep pace with the rapid growth of infrastructure, the UAE has long opted to import their educational models, and hire expatriate teachers in UAE schools and universities to deliver the courses. In 2011 only two of the 21 higher education institutes were public (AKR, 2014). The benefit of this practice is that education becomes instant and time was not wasted developing a system from the ground up. This “private foreign model” whilst encouraging diversity, distance learning opportunities and the adoption of a progressive free market and globalised knowledge economy based framework, still is a very expensive alternative to the existing public institutions and not always affordable for the average Emirati family (AKR, 2014, p.96). Throughout the UAE there are a growing number of “education souks” – overseas branches of Western universities have been established and provide excellent revenue for the UAE economy (Kirk & Markaz, 2010). In 2012, the UAE hosted almost one quarter of the Gulf region’s international university branches (AKR, 2014, p.96).

Despite many attempts at reform, the plans have had their short comings. It appears that secondary public schools have faced challenges in sustaining the attempts to

meld together ill-fitting educational practices and philosophies that have been borrowed from neighbouring Arab and Western countries (Dada in Gitsaki, p.208, 2011; Kirk & Markaz, 2010). Similar concerns exist for higher education where “efforts will remain futile unless efforts to advance the quality of education services and outputs” match the rate of institutional expansion (AKR, 2014, p.97). Up until recently, higher education seems to have been viewed as a commercial enterprise. Little appears to have been done to develop local capacity or improve the indigenous education model until now. As a result, Kirk (2010), argues that the Emiratisation campaign has put a strain on the higher education system; to continue with a hybridised model of education is unsustainable.

The current education system in the UAE appears to reflect experiences in other countries. Forty years ago, anthropologist, Edward T. Hall commented on the rigidity of exported educational systems. Referring to past examples of France and Japan where education was once imported, once the educational system became “established and functioning”, they became “extraordinarily stable and difficult to change” (1976, p.211). Furthermore Hall went on to say, exported educational systems that have been established in foreign countries have proved to be “more resistant to change” and “usually thought to be the most persistent and resisting group in the world” (1976, p.211). The Arab Knowledge Report of 2014 which focusses particularly on higher education also raises the concern that the introduction of western pedagogy – particularly in the mathematics, science and technology curricula will be at odds with the UAE political and social culture and the knowledge will not be integrated, thus these institutions will remain isolated from national culture (AKR, 2014).

The UAE unified by Sheik Zayed in 1971, always placed emphasis on education being the way forward, and the present government is committed to primary and further education modelled on Western systems. The Emirati Government commitment to reforming the education system appears to be focused in the primary and secondary sectors of the public system (Al Sharhan, 1999). Any noticeable outcomes from such reforms would take a while to be noticed within the higher

education sector. However, the following goals that were identified to transform the education system in 2012 indirectly involve higher education:

- Ensuring quality education for all educational sectors via licensing and accreditation.
- Preparing graduates for private employment and maintaining local research to sustain UAE economy.
- All Emiratis graduating from secondary school should continue their education at a higher education facility.

(Wagie & Fox, 2006)

Since Wagie and Fox presented their recommendations, the Abu Dhabi Educational Council (ADEC) has introduced its vision for all sectors in education inclusive of higher education. In 2012 through the Abu Dhabi Education reform: The road to 2030; Sheikh Khalifah announced 2016 “The Reading Year” because “reading is a fundamental skill required for building a generation of scientists, thinkers, researchers and innovators’ (Abu Dhabi Government, 2015); and Dubai introduced their National Agenda’s Vision 2021 for a first rate P-12 education program which includes the goal of 100% entry into college by 2018-2019 (Pennington, 2016). As this research is focused on information use in higher education, it is important to note that an ADEC report (2012) addressed the five pillars holistic framework focusing on:

- Governance
- Research, Innovation and Technology
- Academic programs and credit system
- Human capital
- Student and learning environment

This framework intends to develop higher education quality standards to a recognised international level; align education to social, cultural and economic needs; develop a “Research Ecosystem” to guide an innovation based economy and

provide affordable access to higher education to all who qualify (Abu Dhabi Education Council (ADEC), 2012).

Within the recommendations outlined, there is a recurring theme that the students within the current UAE Education system need to be critical thinkers, innovative problem solvers, independent learners and contributors to a knowledge economy. This has indeed been confirmed by the Arab Knowledge Reports of 2011/12 and 2014. As stated previously, these reports are published by the United Nations for the purpose of fostering understanding of the knowledge needs of Arabic nations. The UAE was one of four Arab countries to conduct research about Grade 12 students to determine the “readiness of future generations to access the knowledge society” (AKR 2010). The survey instruments were designed to evaluate student cognitive, conative and social skills but the items did not reflect the current curricula, rather real life scenarios and problem solving situations. The UAE averaged a collective cognitive score of 32.9, well below average which is a “troubling result” (AKR, 2010, p.90)

In particular, the skills of searching for and processing information ranked as an average of 9.65 for the UAE on a total ranking of 0 to 25. Students who were potentially looking to enter a tertiary institution at the end of 2012 did not possess the core attributes which are considered to contribute to lifelong learning. Their abilities to search for specific information, understand its meaning, identify connecting relationships and contexts were below the average. Conveying information through writing is also problematic. Here the UAE ranked 5 out of a possible 25, making it the lowest ranked out of the four countries (AKR, 2010, p93).

Trending the same way was the skill of problem solving where it was remarked that the focus was more on “the theoretical aspects of sciences” rather than how inquiry skills and problem solving apply in “unusual and everyday circumstances” (AKR, 2010, pp.93,94). Despite this deficit in cognitive skills, of real interest is the high ranking that is allocated to conative skills. The report contends that a healthy level of self-esteem and an equally high level of positive attitude towards the sciences and

mathematics and these results were much higher than their global counterparts (AKR, 2010, p.99). Similarly, there is a high level of confidence amongst Emirati students for technology skills (Hashem, 2009; Tubaishat, Bhatti & El Qawasmeh, 2006).

Whilst the 2011/12 report assesses tertiary entrance level students' ability to access and contribute to the Knowledge Society, the difficulty students have with interacting with information is inferred throughout the report (AKR, 2010). However, in 2015, the 2014 Arab Knowledge Report was released with a focus on higher education and continued to explore cognitive, searching and processing skills amongst higher education students. In some cases there were improvements in the scores. In the 2014 Report, the UAE scored the highest of all the Arab nations in the report (representative countries were Jordan, Tunisia, Morocco and UAE - total sample population was 3,800) with an average score of 64.01 out of 100, whereas the overall mean was 55.81% (p.148). In problem solving skills the UAE still ranked the highest average of 14.65 out of 20. The total representative sample mean was 14.20. Written Arabic communication ranked a mean score 10.90 out of a possible 20, with the overall mean ranking for representative Arab nations coming in at 9.78. Written communication ranks with the lowest score of all the skills and this is a concern for the production and dissemination of the innovative research that is planned for in educational policies (AKR, 2010).

In the 2014 AKR, searching for and processing information was surveyed and again the UAE ranked the highest with a mean score of 13.74 out of 20. The mean score was 12.94 and the report described this score as acceptable. Of interest is the PIRLS (Progress in International Reading Literacy Study) score that was published in the report. Dubai participants in 2011 scored 488 for reading to acquire information out of a possible 1000, compared to 466 out of a possible 1000 for reading to gain literary experience, nevertheless the Emirati performance was still behind their non-Emirati peers (AKR 2014, p.152). Finally, the UAE improved their technology skills compared to the 2011 findings. They ranked a mean score of 13.12 out of a possible 20, the average mean score for Arab nations was 11.86. The 2014 report suggests the

improved rankings for the UAE may be due to the educational reforms implemented in 2011-2013 (p.148). However, the results reflect that fact that,

“Skills constantly need updating and developing in light of scientific and technological advancements and in accordance with the requirements imposed by the nature of each professional activity. From here comes the importance of what can be considered the mother of all skills, “learning how to learn”, as this is the only guarantee for the establishment of the rules of a ‘learning society’”

(AKR, 2014, p.156).

With these statistics in mind, the question then arises - what is the personal experience for Emirati students as they transition into higher education? More specifically, what is their experience as they begin to use information to support their learning? The next section delves into the literature developed around transitioning into UAE tertiary institutions.

2.5 HIGHER EDUCATION IN TRANSITION

When Emirati students enter a higher education institute after attending the public system, the likelihood is that it will be the first time they would encounter a western teacher or western approaches to teaching and learning. Many would not have benefited from a well-resourced library or engaged in information use of any shape or form. Most public school curriculums are test driven. When encountering a constructivist style approach to learning often utilised in tertiary education, many Emirati public school students flounder in that environment. It has not been part of their previous education experience (Dahl, 2010; Sowa & De La Vega, 2009). Even under the current reform information literacy skills and higher order critical thinking are curriculum bound, tied to skills (AKR 2010; 2014) and little application is given to independent knowledge construction (Dada in Gitsaki, p.207, 2011).

The literature reviewed so far has described the establishment of education in the UAE and the struggles of having to provide an educational solution for Emiratis in a rapidly and sophisticatedly evolving society and infrastructure. It has also shown the

vast difference in the expectations between secondary schooling and higher education experience. The education they have received prior to entering tertiary education has been ad hoc and teacher centred, with memorisation encouraged as a key learning tool (Dahl, 2010; King in Gitsaki, p.360, 2011). This situation was specifically addressed at a keynote conference for educators in Dubai, April 2017. The current system was criticised for producing students who are trained to evidence learning under exam conditions, not ‘experiential’ learning with the capacity to “reimagine society, to meet the challenges of their generation” (Hanif, 2017).

Similar data exists for students transitioning from high school to tertiary institutions in Korea. Of particular note is the similarity of Korea to the UAE in its rapid economic growth since the 1950 Korean War and the placement of the education sector in that economy. Whilst the percentage of students enrolling in tertiary institutions immediately after high school in Korea is relatively high (85%), the transition experience is not so successful (Jang & Kim, 2004). Jang and Kim (2004) contend that Korean high schools prepare their students adequately to communicate and socialise but did not adequately develop the necessary “creative problem solving skills or self-directed learning abilities” that are required in college learning (p.701).

Relevant insights can also be gained from research regarding the experience of international higher education students studying abroad. When conducting a study amongst international students studying in Australia, Hughes (2013) found there was an “information literacy imbalance between more developed skills and less developed critical information use” (p.131). Ethical information use and the avoidance of plagiarism, often addressed as a foundational concept in information literacy, is not always an understood concept for international students. It occurs because many consider copying strong exemplars of text as a “valid writing strategy” (Schmidt, 2007, p.69).

The UAE Ministry of Education understands the need to develop critical and independent thinkers who can contribute to the knowledge economy (Mohamed, 2011). O’Sullivan (2002) believes that information professionals hold the key “in the form of information literacy” to the disparity between the requirements of a knowledge based economy and the knowledge workers who are “floundering with

too much information readily available, too little relevant and timely information when they need it, and with few tools or skills to deal with information when they need it” (p.9). Many teachers are attempting critical thinking and problem based learning (Gitsaki, 2011), yet the use of library professionals and libraries to assist the academic educational community in exploring experiences within the realm of information use, remains a gap in the literature about the UAE.

The challenges are real for Emiratis as they migrate to college or university but once established in the system their information use journey is set in motion. The next section examines what it means to be information literate and the underpinning relational theory of information literacy.

2.6 INFORMATION LITERACY: THE EXPERIENCE OF EFFECTIVE INFORMATION USE

As this research pertains to a national college context, this next phase of discussion surrounding information literacy is contextualised within an educational framework. In an educational context, the use of information has been more commonly referred to as information literacy or more recently informed learning (Bruce, 2008). Paul Zurkowski identified the importance of information literacy in 1974 but did not define it as such (Dorner, Gorman & Gaston, 2012). Influenced by the American Library Association (ALA) and Association of College and Research Libraries (ACRL), information literacy was long viewed as a suite of technological skills, or practical skills that are embedded in to teaching frameworks. Competency, or demonstration of research skills is the emphasis under the ACRL branch of information literacy, and achievement is gained from demonstrating the ability to:

- Determine the extent of information needed
- Access the needed information effectively and efficiently
- Evaluate information and its sources critically
- Incorporate selected information into one’s own knowledge base
- Use information effectively to accomplish a specific purpose

- Understand the economic, legal, and social issues surrounding the use of information, and to access and use information ethically and legally.

(ACRL, 2002, p.2-3)

The Information Literacy Competency Standards for higher education framework published by ACRL (2002) is consistently used by many educational institutions and organisations and it underpins many pedagogical frameworks like the Big 6 (1990), Australian and New Zealand Institute for Information Literacy (ANZIIL) (2003), SCONUL Seven Pillars for Information Literacy (1999). However, the skills based or competency approach has come under review and has allowed alternative views to be considered (Bruce, 2008; Dorner & Gorman, 2006; Lloyd, 2005; Meyer, Land & Baillie, 2010). In contrast to this behavioural model, the Relational model of Information Literacy focuses on how people experience information use. The frameworks commonly known as information literacy (how information use is experienced or used to learn) can be researched behaviourally or experientially using different “lenses” to gain varying perspectives of information literacy (Bruce, 2008). Gunton explains that understanding the components of “information”, “use” and “learn” are key to the relational approach to information literacy. Grounded within a phenomenographical background, using information to learn applied relationally, implies a holistic approach. Gunton, Bruce and Davis (2016) goes on to further explain that use implies “engagement with information”; information “refers to what people find informing in their context” and learning implies “a change or widening of awareness” (Gunton, Bruce & Davis, p.1951, 2016).

Bruce (2008) developed a pedagogical construct to underpin an experiential approach where students use, interact and engage with information so that they can apply that experience in any new information use encounter (Bruce, 2008). In Bruce’s seminal work, *The Seven Faces of Information Literacy* (1997), the competency based or skills based approach to using and working with information, is just one of the seven ways people experience information literacy. Bruce, Edwards and Lupton (2006) contend that “each frame brings with it a particular view of information literacy, information, curriculum focus, learning and teaching, content,

and assessment.” The frames (Six Frames of information literacy 2008) were developed after exploring the ways information literacy can be experienced (Seven Faces of information literacy 1997). The components of each model are shown in Table 2.1 below and even though they are all listed in specific order, students and teachers can revisit the frames at any time depending on the context of information use (Bruce, 2008).

Seven Faces of information literacy (ways of experiencing information) – Information literacy is seen as:	Six Frames of information literacy (ways of learning and teaching information literacy) – Focus is on:
Information technology conception – using information technology to retrieve information	Content frame – what should learners know about the world of information
Information sources conception – finding information	Competency frame – what should learners be able to do with information? Also at what level of competency?
Information process conception – executing a process	Learning to learn frame – what is it like to think like an information literate professional in a particular field of knowledge? E.g. Accountant, engineer, entrepreneur
Information control conception – controlling information	Personal relevance frame – What kinds of experiences are required for learners to engage with information so that learning is relevant?
Knowledge construction conception – building up personal knowledge base in a new area of interest	Social impact frame - How does information literacy impact society and how might it help communities inform significant problems?
Knowledge extension conception - working with knowledge and personal perspectives adopted in such a way that novel insights are gained	Relational frame – Awareness of the complexities of information literacy and the different ways students can think about using information.
Wisdom conception – using information wisely for the benefit of others	Content frame – what should learners know about the world of information
Information technology conception – using information technology to retrieve information	

Table 2.1 Components of Seven Faces of information literacy (1997) and Six Frames of information literacy (2006)

Information literacy at its inception was regarded generally as a behavioural practice whereby skills were taught to be learned sequentially to achieve student success (Dewald, 1999). Still this practice of information literacy is foregrounded in many educational institutions. Socio cultural theorists such as Limberg (2000), Li Wang (2008), Lloyd (2005) and Sundin (2008) would contend that in today's learning environment information literacy can be integrated in a number of contextual levels across subjects or courses. Information literacy is more appropriate when students learn by accessing new information tools and resources available to them and evaluating it in their learning context amongst a community of collaborative learners (Li Wang, 2008). More importantly, Bruce's Relational Frame exemplified by the Seven Faces of information literacy model, suggests that a holistic approach where the relationship between an individual and information use is described rather than quantified; is a more meaningful way of developing an understanding of information literacy, further challenging the traditional theory of acquiring skills in order to become information literate (Gunton, Bruce & Davis, 2016).

Furthermore, the ACRL (2016) adjusted perspectives on their own framework in 2014 proposing the Threshold Concept framework as an alternative to existing information literacy instruction. The framework draws from the seminal work on the threshold concepts of Jan Meyer, Ray Land and Caroline Baillie (2010) and posits that "there are certain concepts, or learning experiences, which resemble passing through a portal, from which a new perspective opens up, allowing things formerly not perceived to come into view" (p.ix). This framework is compatible with the relational perspective of information literacy (Bruce, 2008), allowing the user of information to wrestle with "troublesome knowledge" (Meyer, Land & Baillie, 2010) thus transforming conceptual perspectives as they pass through the threshold of learning. As with a relational approach to information learning, a changing of understanding or awareness is created in the threshold concepts model. As students struggle or wrestle with their learning whilst using information, eventually passing through the "gateway", they create new or changed understandings (Akerlind, Mackenzie & Lupton, 2011).

Despite the breakthrough approaches to experiencing information, ESL teachers in the UAE still teach using a behavioural competency approach with little scope for

ways of experiencing information use such as Bruce outlines in her information literacy models (Dahl, 2010; Gitsaki, 2011). Students learn English by building vocabulary and grammar skills sequentially and then embed them in a context such as a paragraph for a book review. Therefore in the UAE context, a competency based frame is heavily adopted in English language learning and also in information literacy instruction. There are random cases where teachers working in an ESL environment are also engaging their students in critical and analytical thinking to improve their language skills (Gitsaki, 2011) but the learning curve is steep as at times it can be perceived to conflict with culture and religious beliefs (Raddawi in Gitsaki, p.78, 2011). Cultural and religious practices are engrained and do not come under scrutiny (Dahl, 2010, p.61).

It appears that Emirati students do prefer to remain operating within the first two frames – Content and Competency when using information for study purposes (Dahl, 2010). The ultimate goal for Emirati students in higher education, who are slowly coming to terms with constructivist approaches to teaching and learning, would be to interact more and more with the other frames of using information within a relational framework. The Competency frame (Bruce, 2008, p.26) is definitely an entry point to expose and introduce Emirati students to multiple ways of using and experiencing information. However, as information literacy is a holistic and continuous process, the skills learned act as enablers or building blocks to support the learning process rather than an end goal. Culture does exist within the context of information literacy (Bruce & Hughes, 2010; Hughes, 2009) and so the ultimate goal would be to examine the relationship between culture and information. For that to take place a relational approach to teaching and learning would be the way forward because Emirati students would be able to experience information literacy in a variety of ways and contexts developing them as critical, creative and ethical users of information.

The UAE context of using information to learn, particularly in an ESL environment, is not an isolated experience. Nizam, Normazidah and Wahi (2010), after reviewing Malaysian ESL student's experience of information literacy via the Empowering 8 Framework, found similar gaps in critical thinking and independent learning. Nizam, Normazidah and Wahi states that "teachers should not be the sole source of

information, but rather, should be intermediaries of active learning” (2010, p.63). Korean higher education students follow similar examples where students do not eagerly engage in critical thinking or higher level questioning, preferring to rely solely on the teacher to disseminate knowledge (DeWaelche, 2015). A combination of Confucianism and a process of socialisation that pays great consideration to what others think has led to an over reliance on teacher instruction and exam focused learning (McGuire, 2007). Contradictory to these language acquisition contexts, Conteh-Morgan provides some insight from ESL learners themselves in the context of information use which indicates that “students do not like the instructor-dominated, lecture-demonstrated format that typify library skills classes” (2001, p.32).

Hughes has explored information with ESL learners in the context of international students using online resources in two Australian universities. This research suggests and agrees that “informed learning is subject to ongoing development with regard to learners from varied cultural contexts” (Bruce & Hughes, 2010 p.A-5). Emirati higher education students are part of this “ongoing development”.

Horton also addresses culture in his UNESCO document which was intended to “prime” interest for information literacy amongst government official, business executives and policy makers within developing societies. Horton claims that culture is an important consideration in the information literacy arena. His discussion includes the impact on many elements of culture, not only national culture. However, he makes specific mention that developing nations should consider the partnering of “cultural literacy” with information literacy in lifelong learning policies. Horton believes this is key to a country’s lifelong learning and instrumental in achieving “political, economic and social goals” (Horton, 2008, p.83)

Limburg raises the concern that “there is an over emphasis on technical aspects of information seeking” and that librarians are the worst offenders of this practice (Limberg in Bruce & Candy, 2000, p.201). Dorner and Gorman (2006) further support this line of inquiry by suggesting that on a “superficial level” the ACRL definition of Information Literacy “cannot be faulted” but still remains problematic because it “fails to question some basic assumptions about ‘information” (p.282).

Rather, information literacy is more about “learning how to integrate and evaluate information in complex situations and within communication structures” (Dorner & Gorman, 2006, p.283). Furthermore, Dorner and Gorman offer an alternative to Bruce’s framework by proposing a model that incorporates Bloom’s taxonomy and Hofstede’s Cultural Dimensions particularly within developing nations (2006). Focussing on the fifth dimension Long Term vs. Short Term combined with Hofstede’s views on how the Cultural Dimensions impact on education they used his framework to compare established (New Zealand) and developing (Thailand, South Korea) countries. They compared the ways of thinking using Hofstede’s scoring system and Bloom’s Taxonomy. More specifically they were interested to compare Eastern and Western ‘ways of thinking’. They discovered that the countries they were comparing had very different information needs. It also led them to consider redefining information literacy for developing countries and a firm belief that developing countries in the east have much different information needs than their western counterparts. Thus they address how cultural awareness can support information literacy frameworks and how best to approach establishing these frameworks in developing education systems.

This review indicates that the traditional notion of information literacy is being challenged in literature, with information literacy exposing a more holistic approach to information use in the Seven Faces of information literacy model. Yet most of these discussions are occurring in a western context. In the UAE, a competency based approach has worked well in the past with ESL learners in all subject modes, including information literacy. Hunt and Birks (2004) discuss information literacy in a UAE context as being a goal successfully achieved by consciously thinking about the steps students need to learn in order to achieve “success” in information literacy. Still this approach assumes an accomplished skill set as an end goal. Whilst the Content and Competency based frames are included in Bruce’s framework to help educators apply and explore different ways of using information (2008), this approach may well continue in the UAE for a period of time in some of the technical colleges students attend, where the focus is “Learning by Doing” as outlined in the 2012-2017 strategic plan (Higher Colleges of Technology, 2012). To focus solely on that approach is not always helpful in developing “an inclusive informed learning approach” (Hughes, 2013, p.144). However, this competency based approach

adapted from the Canadian technological college system, can alternatively be viewed as a Westernised import which may have very little to do with culture and more to do with imposing a teaching and learning framework more familiar to ESL students.

An interesting perspective regarding using information to learn in an educational context can be seen in the work of Annemaree Lloyd. Lloyd observes that librarians and educators have long praised the concept of lifelong learning and information literacy's skills and competencies contributions to lifelong learning. However, Lloyd (2005) argues that lifelong learning and information literacy trapped in an educational discourse can be disempowering for students once they leave the educational context. Lloyd, who adopts a socio-cultural perspective to information literacy, goes on to challenge the idea of information literacy simply being the acquisition of a set of skills and competencies derived from context specific tasks and reliant on print or online resources. She argues that this perspective is "strongly aligned with pejoratives of western educational practices" (2005, p.83).

Lloyd's work on information literacy in the work place, in particular an empirical study she did on firefighters, led her to the premise that if we truly want to empower students with lifelong learning we need to broaden our understanding of what it means to be information literate. More specifically she argues that if we want to encourage information literacy beyond the classroom and in the workplace we should "account for the actions and influences of others as information sources and recognise the importance of accessing information from non-textual sources which give access to embodied or cultural sites of knowledge. Broadening our concept of information literacy allows us to acknowledge the multiple realities of everyday life, which are enhanced through effective, but diverse access to information" (2005, p.84)

This insight into information literacy beyond the educational context is significant in the UAE higher education context as many students attending university or college are studying part time and working as well. In fact many are sponsored by their place of employment so that they may gain qualifications necessary for their industry. Whilst the overarching research question is "What are the cultural dimensions of information use among post graduate Emirati students?" it is important that their

information literacy learning takes into account their movement between the education and work context. Would they find the content/competency based approach to using information counter intuitive as they use information in a work place context?

Whilst there are a number of frameworks for information literacy and how users of information might experience or behave with information, the focus of this research is to explore Emirati students' information use experience so as to inform information professionals working with these students in post-secondary education. Whilst there does not appear to be much empirical work done on information literacy and culture in the Emirati context, there have been successful studies outside of the UAE which inform this research. The following studies undertaken by Dorner and Gorman (2006), Heinström (2005) and Steinwachs (1999) explore how certain phenomenon like personality and culture might impact upon the way a person might use, interact or approach information.

Linking the concept of student approaches to learning as proposed by Entwistle (1981), Jannica Heinström explored whether personality might influence student approaches to information interaction (2005). She connected approaches to information seeking behaviour thematically to Fast Surfing, Deep Diving and Broad Scanning.

Heinström used the Five Factor Model and explored the strengths and weaknesses of each trait to investigate how students' interact with information. The traits are: Neuroticism; Extroversion; Openness; Agreeableness and Conscientiousness. Salient points are made connecting strengths and weaknesses of personality to ability levels and approaches in seeking out information. Once a person is aware of how their personality affects the way they engage in information seeking, they become empowered by knowing their strengths in the process and the pitfalls to avoid (Heinström, 2010). Her work is centred in the influence of personality. Despite the fact that personality and culture are often juxtaposed, she does not mention cultural makeup as a possible influence.

Another researcher whose research informs mine is Katerina Steinwachs. She has focused on information use and its relationship with another element or phenomenon. Steinwachs used Hofstede's cultural dimensions to develop a theory regarding the impact of culture on information system. She describes the "information system" as being made up of the following components:

- The sender of the information
- The recipient of the information
- The information itself
- The information channel

(Steinwachs, 1999)

Steinwachs follows a similar vein as Bruce and Limberg regarding aspects of information use, in that they cannot be experienced in isolation of each other, they "interact with each other for a purpose" (Steinwachs, 1999, p.198). She also comments that their purpose is to reduce "a state of uncertainty on the recipient's side" (Steinwachs, 1999, p.198). This is reminiscent of Kuhlthau's Information Process Stages where it is identified that students do go through stages of anxiety and uncertainty before they reach the stages where they feel confident and interested in completing the information task (Kuhlthau, 1991).

Steinwachs used Geert Hofstede's model to explore culture and the components of the information system, all the time being very aware of the fact that Hofstede's model was describing whole groups of national culture and not individuals. Her focus is theoretical and systems based and uses the above components to explore the possible impact of culture on information processes; whereas this research is concerned with the experiences associated with those processes and what role culture plays in that relationship.

Another similar investigation is found in an article by Dorner and Gorman (2006) who have used Hofstede's Cultural Dimensions and Bloom's Taxonomy to investigate Information Literacy education in developing countries. They use Hofstede's existing findings on Thailand, South Korea and New Zealand to compare approaches to teaching information literacy and consider "how can cultural

awareness improve information literacy education?” (2005, p.290). Their socio cultural focus on developing countries is relevant to this study as the UAE is one of the 126 developing countries (Central Intelligence Agency, 2012, p.834). According to the previously mentioned literature on educational reform in the UAE, the education sector is in perpetual development. In another study Dorner, Gorman and Gaston develop information literacy definitions in alignment with specific nations, Cambodia and Laos. In doing so the attempt was made to understand how information literacy was viewed as both a practice and a concept within specific cultural context. What ensued was an understanding that information literacy occurs on a continuum of learning, similar to the relational approach to information literacy. However, Dorner, Gorman and Gaston go on to say that “the IL continuum relates to the individual’s increasing awareness of his or her country’s unique contexts of the information he or she is finding or using” (Dorner, Gorman & Gaston, 2015, p.169).

It appears that Heinström and Steinwachs’ research demonstrates that external elements such as personality or culture can influence the way students interact with information. Furthermore Dorner and Gorman (2006) and Dorner, Gorman and Gaston (2015) suggest cultural understanding is key to a successful information literacy program. These studies highlight the importance of potential relationships that exist between information literacy or information use. Horton encourages culture to be written into policy documents involving information literacy. This last section has contemplated the variety of elements that may form relationships information literacy. This research is more specifically interested in the relational approach of exploring information use and culture. As we have seen, culture and information literacy have already been examined. However, the next section of the literature review looks at national culture and considers an appropriate framework to explore its relationship with information use in the higher education context of the UAE.

2.7 CULTURE DEFINED AND CULTURE EXPLORED

Literature which researches culture and its impacts is diverse and abounding. When dealing with cultural research, the most challenging aspect is “defining culture itself” (Gauvain, Beebe & Zhao, 2011, p.126). In fact Jones (2007, p.2) suggests that there are 164 working definitions for “culture”. When trying to obtain a working definition

of culture, researchers may end up excluding many elements of culture (Gauvain, Beebe & Zhao, 2011). However, it is important to generate a definition that works within the field of research involving aspects of information literacy development. Furthermore when considering the possibilities of cultural definitions and frameworks, it is important to settle on a model that will allow the best possible exploration of Emirati national culture in the context of information use.

For the purposes of this research Hofstede's definition of culture was chosen. The reasons will be outlined in due course but looking towards Hofstede's definition of culture, we see he defines culture as, "collective programming of the mind which manifests itself not only in values, but in more superficial ways: in symbols, heroes and rituals" (p.1, 2001). Many models and many variables are associated with national culture. Familiar models are Hall's High-Context/Low-Context (1990); Hofstede's Cultural Dimensions (2001); Inglehart's study using two values (2008); McCrae's Personality Profiles of Cultures Project (2005); Rokeach's Values Survey (1973); Schwartz's study on Seven Cultural Dimensions (1994) and Triandis' Individualism and Collectivism (2001). Elements or dimensions such as age, gender, social class and personality are interconnected and form a packaged variable rather than an independent variable.

Geert Hofstede (2001) proposes that people carry mental programs that are developed at an early age due to family upbringing, then they are developed further in institutions like school and work organisations. Finally these mental programs become very much a part of a nation's culture. Interestingly Hofstede's definition aligns rather well with the relational approach to thinking about information literacy. Understandably, Hofstede as a quantitative researcher, discusses observing culture through behaviour but mental programming and acquiring values may not always be observable behaviourally but may reveal themselves in experiential ways. Hofstede concurs with Rokeach by suggesting values are synonymous with "attitudes and beliefs" which can be unquantifiable (Hofstede, 2001, p.5). Furthermore Hofstede believes that values are "feelings with arrows to them" (Hofstede, 2001, p.6). Whilst Hofstede believes that values are "invisible until they become evident in behaviour" (2001, p.10), a relational view would argue that values may not always be

measurable but may be phenomenon which can be experienced or conceptualised (Bruce, 1997).

Professor Hofstede accomplished far-reaching studies of how values in the workplace are influenced by culture through his empirical research. This was conducted amongst the IBM organisation in 72 countries in 1968 and 1972, with ongoing data collection from other countries later on. He developed four original dimensions, which expanded into five, on country cultures which reflect basic characteristics within society and the coping strategies used. Countries are ranked or indexed in a graph. The dimensions are:

- Power versus Distance
- Uncertainty Avoidance
- Individualism versus Collectivism
- Masculinity versus Femininity
- Long term Orientation versus Short Term Orientation

(Hofstede, 2001)

Two additional dimensions were added in 2010, Indulgence versus Restraint and Monumentalism versus Self-Effacement (Hofstede, Hofstede and Minkov, 2010. p.281) These are incorporated in Hofstede's latest Value Survey model (VSM2008) as they were deemed to provide depth and insight into the Long Term vs. Short Term dimension (Hofstede, Hofstede, Minkov, & Vinken, 2008)

Whilst Hofstede focuses on cross cultural differentiation within organisations, his dimensions are extremely useful in understanding culture within a particular country. Hofstede is also very careful to remind us that these dimensions are general not typical of an individual of that nationality or culture. Still his cultural theory has come under serious question, and there are strong cases within literature as to why his model is criticised. McSweeney (2002) claimed Hofstede has "conflated" his analysis of culture failing to appreciate the macro and micro levels that exist within cultures. Other researchers concur with McSweeney's concern that an industry or

organisation such as IBM can authentically reflect national culture due to the fact these variables are cultures in themselves (Baskerville, 2003; Ng, Lee & Soutar, 2007; Steinwachs, 1999).

Despite these counterarguments, Hofstede has continued to build upon his previous work and involved key researchers, Bond (1996) and Minkov (2007), in critiquing and evolving his original model. He continued to gain support from many other researchers who confidently use his dimensions when investigating culture, particularly within management and organisations. Accounting, Business, Education and Psychology are the main fields that continue to use Hofstede's model. Despite these opposing or cautionary viewpoints, there appear to be authors who confidently use Hofstede's model in their research (Barberà, Gómez-Rey & Fernández-Navarro, 2016; Drogendijk & Slangen, 2006; Sondergaard, 1994; Van Oudenhoven, 2001; Williamson, 2002) Williamson points out that McSweeney does have some realistic concerns regarding the use of Hofstede's model and the assumption that all members of a culture carry the same attributes with behaviour solely programmed by their cultural background (2002, p.1391). Williamson also warns not to "confuse dimensions of culture with the constructs they purport to measure" (2002, p.1388).

However, McSweeney's argument is not without its flaws too. Williamson makes a valid point that Hofstede and McSweeney are operating within two very different paradigms. Hofstede presents his methodology from a functionalist paradigm, whereas McSweeney makes his argument from an interpretivist paradigm. Therefore it is very difficult to challenge the logic of one paradigm based on assumptions and logic from a totally different paradigm (2006). Furthermore, Williamson issues a stern warning that, "Unless the flaws in McSweeney's argument are recognised, there is a danger that readers may reject all functionalist models of national culture, including those of Schwartz and of Trompenaars and Hampden-Turner. They may reject the phenomenon of national culture" (2002 p.1391).

Baskerville (2003) also presents an argument along similar lines to McSweeney. She is particularly concerned about the "danger" of using Hofstede's methodology in the

area of business and accounting, “because support for this methodology is not reducing, and regularly appears in accounting conference proceedings and journals” (2003, p.3). Baskerville is correct in surmising that support for Hofstede’s model was on the increase in 2003 and nearly fifteen years later her prediction for an increase in the use of Hofstede’s framework in academic research has grown exponentially. Sondergaard collated a succinct study of reviews, citations and replications of Hofstede’s. Sondergaard recorded 1036 citations of Hofstede’s work from 1980-1993; 36 positive reviews concerning “relevance and rigour” of *Culture’s Consequences*. However, there were several reviewers who voiced the same concerns McSweeney would raise more fully in his article 13 years later; 61 replications of Hofstede’s study occurred with similar findings and 274 references where Hofstede’s dimensions were applied as paradigms (Sondergaard, 1994, pp. 448, 451, 453). Researchers and authors have continued to use Hofstede’s dimensions to support their work on culture and organisations post Sondergaard. Quality academic research continues to use Hofstede’s model to explore culture despite the fact that not all of his suppositions stand up to public scrutiny. The majority of his findings have stood up to criticism and will continue to guide researchers in the future (Jones, 2007).

Hofstede’s original research was concerned with intercultural relations and how the differences that ensue impact within organisations. He revisited his original four dimensional model in *Cultures and organizations: Software of the mind: Intercultural cooperation and its importance for survival* (2010) but made specific connections to family life, health care, schools, businesses, governments and other sectors of life. The considerations Hofstede, Hofstede and Minkov (2010) make to education and society have intrinsic relevance to this research. Hofstede and his team make very clear connections to how the characteristics of each dimension may emerge depending where they score on the index. These are outlined in tables throughout the body of work *Cultures and organizations: Software of the mind* (2010). Due to the clarity of their discussions around approaches to teaching and learning as a response to the characteristics evident in an educational setting, the connection to information use was straight forward.

Despite the perceived “limitations” of Hofstede’s model, it has been widely used. Steinwachs phrases her decision to use Hofstede’s model very succinctly whereby her focus lay “in identifying the areas in which culture may play a role, not on the verification of the model” (p.198, 1999). Hofstede has been increasingly reflective responding to his critics by adding extra dimensions, updating his survey instruments and remaining current in his field. The next section further illuminates why Hofstede’s model is so applicable to the context of the UAE in examining information use.

2.8 CULTURAL DIMENSIONS AND THE UAE

The question arises whether aspects of UAE culture and culturally associated approaches to information seeking show why students would approach information use in a particular way. Hofstede’s Cultural Dimensions index measures have now been applied to the UAE therefore these results would give some indication although previously the UAE had not been included as a single nation (Clearly Cultural, 2012). Until recently any research using the dimensions would have been sought from the collective index group of “Egypt, Lebanon, Kuwait, Iraq, Saudi Arabia, and the United Arab Republic”. As a result, there was a gap in literature using Hofstede’s cultural dimensions to study the Emirati culture in particular whilst many nations’ cultures have been observed through the various dimensions, the United Arab Emirates has not had such focus. This is possibly due to the fact that until recently it has been difficult to obtain statistics as the UAE has been careful not to disclose information freely as will be seen in Chapters 5 and 6.

Hingston’s (2012) doctoral studies on *The Influence of Cultural Orientations on Cross-Cultural Negotiation* involved analysing the processes and behaviours of negotiations across and between English-speaking background Australians and Arabic-speaking background speakers from the Gulf Cooperation Council countries of which the United Arab Emirates was included. Hingston’s methodology included Hofstede’s dimensions but other mainstream studies with a focus on the UAE using Hofstede’s cultural dimensions remain few and far between.

Studies have been conducted in neighbouring Arab countries. One in Jordan on national culture the research did not concur with Hofstede's dimensions. This was possibly because Hofstede was grouping all Arab countries together in the overall table, despite having really only focused on Egypt (Alkailani, Azzam, Athamneh, 2012). It is not clear why Hofstede considered all Arabic nations together, apart from the aforementioned difficulty of accessing data, but despite the similarities in ecology, climate, education and government beliefs - attitudes and values can be extremely different (Hayes & Allinson, 1988, p.76). Recent studies have enabled a more nuanced treatment of individual Arab nations.

A final consideration for using Hofstede's model to explore culture and information use in the UAE context would be the findings that were reported in the Arab Knowledge Report of 2014. This report focussed on the UAE higher education students in its data collection. The report suggested that "traditional knowledge values are still prevalent" and these knowledge and values are rarely exposed to change (p.72). Furthermore Burden-Leahy (2009) introduces the idea that the UAE is "a nation that wishes to be a nation" (p.540), as the UAE has not "experienced migration, diaspora formation, creation of new cultural identities, war or famine" (p.540). Interestingly, Burden-Leahy goes as far as to suggest the UAE "uses its education system to reinforce messages about the traditions of the region, country and religion" (2009, p.540). These studies support the use of Hofstede's model as the UAE has such a staunch sense of national identity. The next section reviews the literature on research performed using Hofstede's model to better understand teaching and learning in the context of information use.

2.9 CULTURAL DIMENSIONS, LEARNING AND INFORMATION USE

Hofstede has drawn inferences between culture, teaching and learning in each of the cultural dimensions by ascribing distinct personal attributes noticeable within an educational setting (2010). Therefore, it is possible to associate information literacy and information use with the domain of teaching and learning as it is "increasingly associated with learning or ways of knowing" (Bruce & Hughes, 2010, p.A2).

Gunton, Davis and Bruce explore this connection further by stating,

“Learning is understood by gaining insights into what varies across different ways of experiencing a phenomenon. Helping learners expand their own experiences across the bandwidth of variation identified brings about learning” (p.1947).

As Hofstede’s framework naturally accommodates a relationship between culture, teaching and learning, it also accommodates a close examination of information use and how it may be applied to the UAE higher education context. Still much of the discussion about how students use information in the context of the UAE national culture and information use, is meta-analyses with only a small body of empirical data which indicates the need for this research.

To reinforce this point further, much of the literature on culture and higher education revolves around international students interacting with a host nation’s faculty (Dahl, 2010). In the case of the United Arab Emirates the situation regarding culture is reversed. The faculty themselves are multicultural and seek to work with a homogenous Emirati culture. Therefore many of the issues addressed in the literature regarding international students transitioning to higher education may not apply on the same scale but are still relevant in the context of the UAE.

This research is using Hofstede’s notion of culture which acknowledges that values which may be more obvious than sentiments may not always be as obvious. Therefore it is possible that similar values and sentiments are shared by the Emirati higher education students in the UAE as the Arab Knowledge Report 2014 suggests. Students may “respond and react” to information use experiences based on “shared understandings; beliefs and/or actions” which give information use professionals some insight and a chance to reflect on how best to approach the information use needs of these students (Bodycott & Walker, 2000, p.83). Hofstede has given insight in his own literature into education and how the behaviour of cultural groups might manifest in a teaching and learning environment (2010). In regards to learning and interacting with information, he leads us to see the following behaviours in the learning context according to each of the dimensions of national cultures:

Power vs. Distance

Power vs. Distance refers to the extent to which the less powerful members of institutions and organisations within a country accept and expect that power is distributed unequally (Hofstede, Hofstede & Minkov, 2010, p.61). In high Power Distance cultures, Hofstede, Hofstede and Minkov (2010) assert that students replicate the child - parent relationship thus teachers are treated with a high degree of authority - almost “guru” like. Therefore students consider that the quality of learning depends entirely on the standing of the teacher. Whereas in a low Power Distance culture students and teachers are on an equal playing field. Teaching and learning is student centred.

Individualism vs. Collectivism

Individualism vs. Collectivism is the degree to which individuals are supposed to look after themselves or remain integrated into groups, usually around the immediate family (Hofstede, Hofstede & Minkov, 2010, p.92). Students operating within a collectivist culture are unlikely to speak up in large groups. These students tend to strive for harmony and don't like to “rock the boat” arguing or disagreeing with anyone. Learning is often viewed as a one off process, more to do with following procedure till the end result is acquired. Conversely the individualistic culture encourages an environment where students expect to be treated individually and fairly regardless of backgrounds or affiliations. Debates and alternate viewpoints are encouraged; learning is more about the “knowing” rather than the “how to” approach of the collectivist culture (Hofstede, Hofstede, & Minkov, 2010).

Masculine vs. Feminine

A society is called masculine when emotional gender roles are clearly distinct - men are supposed to be assertive, tough and focussed on material success, women are supposed to be more modest, tender and concerned with quality of life. In a feminine society, these roles are more fluid (Hofstede, Hofstede & Minkov, 2010, p.140). In masculine culture, classroom behaviour is competitive, excellence is openly strived for. Whereas in feminine culture dimensions, academic excellence is kept to oneself,

friendliness and social skills are emphasised and failure is not a drastic incident - unlike the masculine counterpart (Hofstede, Hofstede, & Minkov, 2010).

Uncertainty Avoidance

Uncertainty Avoidance can be defined as the extent to which the members of a culture feel threatened by ambiguous or unknown situations (Hofstede, Hofstede & Minkov, 2010, p.191). Students from high level Uncertainty Avoidance countries tend to look to their teachers to provide all the expert answers. Again the “guru” mentality is operative and students will not disagree with the teacher’s intellectual instruction, the teacher often being the ultimate authority. However, students with low Uncertainty Avoidance accept that their teachers don’t know everything, and that they are responsible for their own learning and often a community approach to learning is apparent where other experts in the field are consulted for knowledge. (Hofstede, Hofstede, & Minkov, 2010).

Long Term Orientation vs. Short Term Orientation

Long Term Orientation stands for fostering virtues oriented toward future rewards - in particular, perseverance and thrift. Its opposite pole, Short Term Orientation, stands for the fostering of values related to the past and present - in particular, respect for tradition, preservation of “face” and fulfilling social obligations (Hofstede, Hofstede & Minkov, 2010, p.239). High Long Term Orientation is usually associated with societies which consider wide differences in economic and social conditions undesirable. Low Long Term Orientation allows for “meritocracy and differentiation according to abilities” (Hofstede, Hofstede, & Minkov, 2010, p.246). High Long Term Orientation cultures tend to have stronger mathematical skills, and the overarching attitude is “what works” is more important than the “why it works” (Hofstede, Hofstede, & Minkov, 2010, p.262).

Indulgence vs. Restraint

Indulgence vs. restraint is the tendency to allow relatively free gratification of basic and natural human desires related to enjoying life and having fun. Its opposite pole,

restraint, reflects a conviction that such gratification needs to be curbed and regulated by strict social norms (Hofstede, Hofstede, and Minkov, 2010, p.281).

Monumentalism

Refers to an unchanging pride in self, nation, religion and the capacity to make parents proud (Hofstede, Hofstede, and Minkov, 2010, p.252). Its opposite is flex humility which indicates a more self-effacing outlook.

Cronje's study is particularly relevant as he used Hofstede's cultural dimensions as the framework for researching a group of Sudanese Master's students studying online through a South African University. His intention was to compare this group against the cultural backgrounds of South Africa and the United States of America (USA). At the time of study, Hofstede had grouped Sudan within "Egypt, Lebanon, Kuwait, Iraq, Saudi Arabia, and the United Arab Republic" as the "Arabic Speaking Region". The Sudanese sample group is Arabic in culture and Cronje used the combined group of Arabic Speaking Region to accommodate for the possibility that some sample groups may come from different regions due to the civil war. The study used Hofstede to analyse using information to learn in an online collaborative environment. Three instructors worked with the students and they were chosen for their "experience, enthusiasm and ability to adapt" (Cronje, 2011, p.596). His aim was to contribute to the pool of cross cultural communication using four of the five of Hofstede's dimensions to examine the cross cultural communications and compared the Sudanese ranking against the South African and USA ones.

Sudan ranks high on Hofstede's Power Distance scale and Cronje revealed that these higher education students expected a very authoritarian approach from their teachers, and were reluctant to take responsibility for their learning. Cronje showed that the ranking for Individualism vs. Collectivism for Sudan was low - and the students were reluctant to work cooperatively compared to their USA and South African counterparts. They were taught this skill explicitly by the instructors via online learning and eventually did engage in group work. Sudan had a higher Uncertainty Avoidance than South Africa and anxiety levels were high regarding error

prevention, making choices, and the students preferred to deal with smaller chunks of information. Cronje found that using online technology with a constructivist approach reduced communicative uncertainty for his students. Cronje (2011) was aware of the short fallings of using the Hofstede framework but he has used this dominant framework to encourage collaborative work and explain the previous resistance to using information collaboratively by examining the relationship with culture.

Another study of specific significance to this research is Katarina Steinwachs' work on impact of national culture on the information process. Steinwachs contends that culture is "expected to have an influence on the production of knowledge" (p.198, 1999). She has drawn parallel examples from Hofstede's and Hall's cultural models, suggesting that culture may determine "what sources of information the student gets access to and how he or she is encouraged to use the information" (Steinwachs, p.200, 1999). Based on her theory, Steinwachs proposes large Power Distance cultures may produce a teacher oriented focus, whereby students are reluctant to independently seek information and problem solve. Regarding Individual versus Collectivist cultures, individualist cultures would tend to encourage students to come up with and maintain their own viewpoints. Many other examples are given from Hofstede's model. However, of significance is the connection Steinwachs makes with Hall's High-Context culture and oral cultures. The communication aspect of High-Context cultures is signified by the tendency to be less formal in verbal and written capacities (Hall, 1976). The Emiratis are traditionally an oral culture, whereby 'survival skills and folk lore' have served them well for years (Dahl, 2010, p.75). Students compete to memorise the Quran every year in extremely prestigious annual competition (Dahl, 2010). This infers that oral culture is a trait of High-Context and that face to face, or direct channels of communication are preferred to written documents and electronic resources (Steinwachs 1999).

Another aspect worth noting is cultural differences between faculty and students within the UAE. As a result faculty bring their brand of culture which tends to pervade their educational and workplace values, as well as their understanding of teaching and learning. Dahl reiterates this by saying, "Constructivist learning does

not come easily or naturally to non-western learners, particularly those accustomed to rigid rote memorisation and repetition methods” (2010, p.85). The majority of public school students enter college having encountered a traditional behaviourist approach to information use and no exposure to libraries or the internet (Gardiner-Hyland, 2014; Kaufman 1996; Martin, 2013). It appears that the effect of this pedagogy has had lasting impact on student information use and it requires a great deal of sensitivity and understanding to create a paradigm shift from using information from a behavioural perspective to relational.

This section has explored how culture can inform teaching and learning. It has also considered how relevant Hofstede’s model can be in understanding how students use information to learn and how researchers have employed it to better understand information use.

2.10 RESEARCH GAP

After reviewing the literature several themes become apparent. There is currently pressure on UAE higher education institutes to enrol national students so that they can obtain degrees in order to fill managerial positions, at the same time the institutes attempt to preserve national culture. This process is called Emiratisation. Also due to the growth of education in the UAE over the past forty years, it is likely that the broad range of Emirati students have not been exposed to and supported by the same constructivist, socio-cultural pedagogy in the methodical way their western counterparts have. Whilst the UAE higher education system has embraced the western approaches of constructivism and socioculturalism in their pedagogical frameworks when focussing on information use, it does not appear to consider the possibility that students can experience information use through a relational lens in order to learn. Whereby information use experienced relationally allows for more than the consideration of knowledge construction and pedagogical contexts; the relational lens considers the complexity of ways in which people experience using information when learning in different contexts.

The perspective of using information from a relational approach is not openly acknowledged in the pedagogical framework of the UAE as teachers are yet to incorporate this approach when working with ESL students. The literature presented supports there are attempts to reinforce student information use as per sociocultural approaches and as a result there may be issues around adjusting to the Western style pedagogy Emiratis will encounter in higher education. However, literature discussing a relational approach to using information in the UAE is even rarer and higher education institutions are yet to consider the possibility of a holistic and continuous process of using information to learn.

The literature suggests that upon facing information use situations in the higher education context of the UAE, faculty and information professionals tend to approach information literacy as a set of skills to be learned and demonstrated in a certain time frame (competency), rather than supporting the relationship between the user and the information which provides an experience (relational). This acknowledges an approach due to existing ESL teaching frameworks which also rely on a competency based method of teaching and learning. This also supports the sociocultural approach more readily adopted by university and college educators in the UAE therefore highlighting the gap in the literature which considers a relational approach to information use in higher education in the UAE.

After reviewing the literature discussed previously on cultural models, Hofstede's framework of Cultural Dimensions and his definition of culture was considered for this study. For the purposes of this research, this model will be followed bearing in mind that the focus of this research is information use of Emirati college students. Hofstede's model utilises national culture to explore values and dimensions, and literature has been reviewed which suggests the UAE is a nation which has a strong sense of national identity due to lack of, or resistance to, exposure factors that influence change. This, combined with the informed discussion Hofstede provides around the cultural dimensions and learning in an educational setting - the platform where information use is being explored for this research - provides the rationale to use Hofstede's model. It is important to note that a relational perspective to information use is the area that should remain in the foreground of this research and

culture is to be explored in terms of the relationship that may exist with information use. For example, the findings of Heinström and Steinwachs support that external phenomena can influence the way information is used or experienced, thus encouraging the exploration of culture in this research.

Whilst culture has been studied in the Emirati ESL context, there is a significant gap in the research which would illuminate whether an external element such as culture would influence student information use and ultimately the information literacy experience. This research would add value to understanding how Emirati higher education students experience information via a relational exploration, as well as discovering a way forward to use these findings in order to support Emirati students to use information to learn in a holistic way that is suited to learning approaches common in higher education contexts.

2.11 CONCLUSION

This chapter has explored the existing body of literature related to Emirati students enrolled in higher education institutes and has found that only limited research exploring their information use experience is available. It has been argued through a review of this literature that Emirati students who have been encouraged to obtain degrees to support them in the workplace in the pursuit of Emiratisation, may not be soundly equipped to use information to learn effectively in a higher education context. This may be because of the mismatch in pedagogical ideologies of their teachers and supervisors who were trained, more often than not, in western cultures. Furthermore, information use in previous educational settings would have been supported at various degrees and it appears that any examples of information literacy in practice - either in secondary or higher education environments would have been a skills based in approach rather than relational, accommodating the experiential side of using information.

The aim of this research is to explore whether culture enlightens understanding on the information use of these students as very little research exists in this area. Finally

using Hofstede's Cultural Dimensions framework as a means to analyse culture and information use is favourable as it has been widely used to explore connections between culture and other phenomenon, like information use. Hofstede's definition of culture also aligns well with the relational approach to exploring the research question. The next chapter will outline the mixed methods approach used to explore the research question guiding this study.

Chapter 3: Research Design

3.1 INTRODUCTION

This chapter formulates the theoretical framework for the methodology used in this research. It discusses the research question, explains the research design, describing how the data was collected, justifying the selection of the data-collection instruments and explaining the procedure followed in analysing data. Matters relating to the validity, the reliability and the ethical considerations of the research methodology are also addressed.

3.2 THE RESEARCH PARADIGM - PRAGMATISM

In adopting a pragmatic stance for this study, I acknowledge that researchers have a choice to make when it comes to choice of paradigms - rules, beliefs, practices, or world views - to answer their research question. In choosing a research paradigm, the researcher is choosing an overall approach to select a research question, data collection techniques, analysing and writing up their findings. Mertens offers the viewpoint that paradigms are “philosophical frameworks that delineate assumptions about ethics, reality, knowledge and systematic enquiry” (2012, p.256). For the purposes of this research, it is useful to briefly address the philosophies or frameworks embracing the methodologies supporting research.

Researchers engaging in quantitative research frequently adopt the Post Positivist paradigm which encompasses a “deterministic philosophy” identifying and assessing causes that influence outcomes (Cresswell, 2009, p.7). This approach to research evolved from the Positive worldview where research was a “technical enterprise that followed rules of scientific method” (O’Leary, 2010, p4). It involves empirical observation and measurement of reality once the theory is developed, collection of data which in turn supports or refutes the theory, whilst at the same time “recognising that we cannot be ‘positive’ about our claims of knowledge when studying the behaviour and actions of humans” (Cresswell, 2009, p.7).

Qualitative researchers frequently adopt the Constructivist approach which involves constructing meanings whilst seeking to understand the world in which we live (Creswell, 2007; Crotty, 1998). Information is collected by constructing broad, open ended questions or discussions which allow participants to construct meaning of their situations and all the while the researcher is positioning their experiences against those of the participants. The theory usually develops or is generated out of the research.

There are other researchers who adhere to the philosophy of Pragmatism. This worldview is associated with mixed methods research which utilises both quantitative and qualitative research methods but stands alone as a philosophy and does more than simply provide a bridge for the gap between positivism and constructivism (Bergman, 2008, p.19). Pragmatism accommodates the belief that there is more than one system of philosophy and that researchers have a freedom of choice in their perspectives. Pragmatism is concerned with the problem or question to be researched and producing knowledge which best represents reality (Creswell, 2009; Feilzer, 2010).

Pragmatists believe that reality can be both singular and multiple, or “truth is what works at the time”, therefore grounding the research in social, historical or political context (Creswell, 2009). Ormerod (2006) clarifies that this philosophy does not accommodate an “anything goes” belief. Even though pragmatists “do not ‘care’ which methods they use as long as the methods chosen have the potential of answering what it is one wants to know”, there is no excuse for “sloppy” research and this philosophy should never be “confused with expedient” research (Feilzer, 2010, p.14).

Therefore more than one system of philosophy may be used and pragmatic researchers have a freedom of choice in their perspectives. “Pragmatists look[ed] not at the origins of the idea but instead to its destination” (Tashakkori and Teddlie, 2003, p.75). Ultimately a paradigm should be appropriate for the purpose of the research. In the case of this research, I will adopt the pragmatic approach because the

desire is to produce socially useful knowledge. There is no way of knowing if the results of this research will show interdependent relationships, although pragmatism allows for a “commitment to uncertainty” and that any “knowledge produced is relative and not absolute” (Feilzer, 2010, p.14).

3.3 THE RESEARCH APPROACH: MIXED METHODS

The research approach chosen for this study is mixed methods. In its simplest form, the mixed methods approach requires “the collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process” (Cresswell, Plano Clark, Gutmann & Hanson, p.209, 2003). Mixed methods research embraces the philosophical framework of pragmatism because it accommodates the pluralism of quantitative and qualitative research.

Mixed methods may be a design in its own right or contained within a design, for example ethnography, or action research. It involves working with different data types, and in some cases a variety of researchers depending on whether the research is a single study method or a “long term strategy” (Brannen, 2008). In most cases practitioners of mixed methods research using quantitative and qualitative approaches perceive the obvious differences between the methods and are comfortable working with the “diverse worlds they represent” (Tashakkorie & Teddlie, 2003, p.329).

The ability to use both qualitative and quantitative approaches is aligned to the belief that there are “singular and multiple realities that open to empirical inquiry” which are positioned “toward solving practical problems in the ‘real world’” (Feilzer, 2010, p.8). Mixed methods research allows the researcher to shift between philosophical frameworks in an attempt to “‘know’ the social world” (Cresswell & Plano Clark, 2011, p.45). By adopting a “pluralistic stance” in being allowed to gather all

dimensions of data, mixed methods researchers can effectively answer their research question (Cresswell & Plano Clark, 2011).

Mixed methods practice is an established research method, although it is a more contemporary offering compared to the more traditional mono method research designs. It seems to have gained most momentum during the 1980s when Patton gave a name to the method but lead up work had begun as early as 1950 (Cresswell & Plano Clark, 2011, pp.20-21). This method of research has undergone a series of evolutionary stages to gain the credence it has today, although many still argue that the approach is controversial and at opposition with itself (Cresswell & Plano Clark, 2011).

For every advocate (Bazeley, 2006; Caracelli & Greene, 1993; Cresswell, 2009; Greene, 2008; Mertens, 2012; Johnson, Onweuzbuzie & Turner, 2007; Onweuzbuzie & Johnson, 2006; Tashakkori & Teddlie, 2003) that exists for a mixed methods approach to research, there is also a critic (Gage, 1989; Lincoln & Guba, 1985; Newman and Benz, 1998; Noblitt & Hare, 1988; Rosenberg, 1988; Reichardt & Cook, 1979; Smith, 1983; Steckler, McLeroy, Goodman, Bird & McCormick, 1992; Viadero, 2005). Common concerns are the shifting and changing nature of the definition; the juxtaposition of quantitative and qualitative methods in the same study; the privileging of post positivism; possible confusion and misappropriation in design of research; the actual value gained, if any, from mixed methods (Cresswell & Plano Clark, 2011, p.37).

Cresswell and Plano Clark (2011) along with Johnson, Onweugbuzie and Turner (2007) address these issues convincingly in their writings. Cresswell and Plano Clark firmly believe that the value added by using mixed methods is constantly increasing and “stronger justification for use of mixed methods will emerge and contribute to its use” (2011, p.283). An academic journal entitled *Journal of Mixed Methods Research* was introduced in 2007 where contributions from significant researchers are devoted entirely to this research method and the contemporary developments in this field. Researchers have done much to raise the standing of this research method

and as a result it has ‘moved beyond the debate of methodological dichotomisation’ (Freshwater, 2013, p.3).

Mixed methods is usually aligned with the social sciences but in the formative period it was really a matter of researchers and methodologists believing that both “qualitative and quantitative viewpoints were useful as they addressed their research questions.” (Johnson, Onwuegbuzie & Turner, 2007, p.113). Exemplary mixed methods studies are found in the fields of psychology, nursing, education, sociology and political science (Mastenbroek & Doorenspleet, 2007, p.18). Haines (2011) conducted a simple search in Proquest to explore the number of cases using mixed methodology. She found that there were three studies cited in 1980-1984 compared to 2524 cases in 2005 - 2009. Furthermore, publications including books and journals, based solely on the topic of mixed methods have gained an increasing presence in the field of professional research (Cresswell, 2009).

It is commonly believed by advocates of mixed methods research, that this method or design provides better answers than a single quantitative or a qualitative study would. However, it is my belief that mixed methods research has progressed beyond the point of producing “a fuller picture of the empirical domain under study” (Erzberger & Kelle, 2003, p.469 -470). Rather it is a strategy that provides “alternative to mono methods design” (Bergman, 2008, p.19) and “an apparent opportunity for advancement in methodology” (Brannen, 2008, p.54).

The decision to use the mixed methods approach was because of the complex nature of the overarching question. Exploration of Emirati students’ information use experience whilst taking into account culture, is complex because it combines the two phenomena of information use and culture. The research question is better addressed by a mix of quantitative and qualitative approaches. This is because it allows this research to draw upon the nuances of both quantitative and qualitative approaches. These in combination enrich the study by yielding a greater and diverse range of data. Collectively these approaches under the umbrella of a mixed method study will strengthen the study (Cresswell, Plano Clark, Gutman & Hanson, 2003;

Greene & Caracelli, 1997). More specifically, when addressing the main research question “What are the cultural dimensions of postgraduate Emirati students’ information use experience?” the quantitative approach allows the exploration of the “what”. Whereas the qualitative allows exploration of the “how” in terms of the students’ information use experience, especially when this study is aimed at exploring the cultural dimensions evident in thinking about and using information.

There has been moderate development in mixed methods research completed in the research domain of information research informatics. The work of Mayoh, Todres and Bond (2011) investigated health information seeking experiences of chronically ill adults using mixed methods research. Ultimately these researchers were pleased with the breadth and depth of their study which provided a more complete picture of online health information seeking than had they used a single study approach. Another example of how the mixed methods approach was used in the field of health informatics was conducted in the previous year by Nicholson, Knapp, Gardner & Raynor (2011) to conduct a usability and readability study of web based medical sites. This design was explanatory sequential which is also the design for this study and found that many medicine websites “obstructed participants’ attempts to locate specific information on the web pages” (p.25).

A further mixed methods research approach relevant to the domain of information use is the work done by Igo, Kiewra & Bruning (2008). These researchers investigated web based note taking both quantitatively and qualitatively to examine students’ preference to copy-paste their notes while gathering information online. The first round of quantitative results were ambiguous, as was previous research conducted in this field due to restrictions in the amount of text students were allowed to copy-paste. However, the final qualitative analysis where findings of the two approaches were mixed, allowed the researchers to find the “why” of the data and “make sense of the puzzling experimental results” (p.149).

A more recent and contextual example related to the context of this study is Martin’s (2013) doctoral work on technology, education and Arab youth in the 21st century

focussing on the UAE. Using mixed methods, Martin gathered data across multiple higher level institutions to explore the extent to which Emirati students engage with digital technologies in order to compare their international counterparts. Martin used an adapted survey as well as semi structured interviews to produce six major findings to add to the emerging body of work in the UAE. She justified mixed methods by stating, “to enable both internationally comparable data on Emirati young people as a result of the adapted survey instrument, and insight into possible local implications and influences of cultural, educational and language factors by also using semi-structured interviews” (Martin, 2013, p.65).

3.3.1 Explanatory Sequential Mixed Methods Design

The design used for this mixed methods research is explanatory sequential, meaning that the design has a two phase approach which will begin quantitatively with those results being followed up with qualitative research. This term was coined by Cresswell and Plano Clark (2003) to indicate that the quantitative phase is followed by a qualitative phase. Other researchers have called sequential frameworks sequential model (Tashakkori & Teddlie, 2003), sequential triangulation (Morse, 1991) and iterative design (Greene, 2008). The intention was that the qualitative research would explain further the initial results or data obtained from the quantitative research (Cresswell & Plano Clark, 2011). Figure 3.1 shows the flow of research phases, where the mixing occurs and the results are analysed and interpreted, and how the research sub questions align with the phases.

“What are the cultural dimensions of information use among postgraduate Emirati students?”

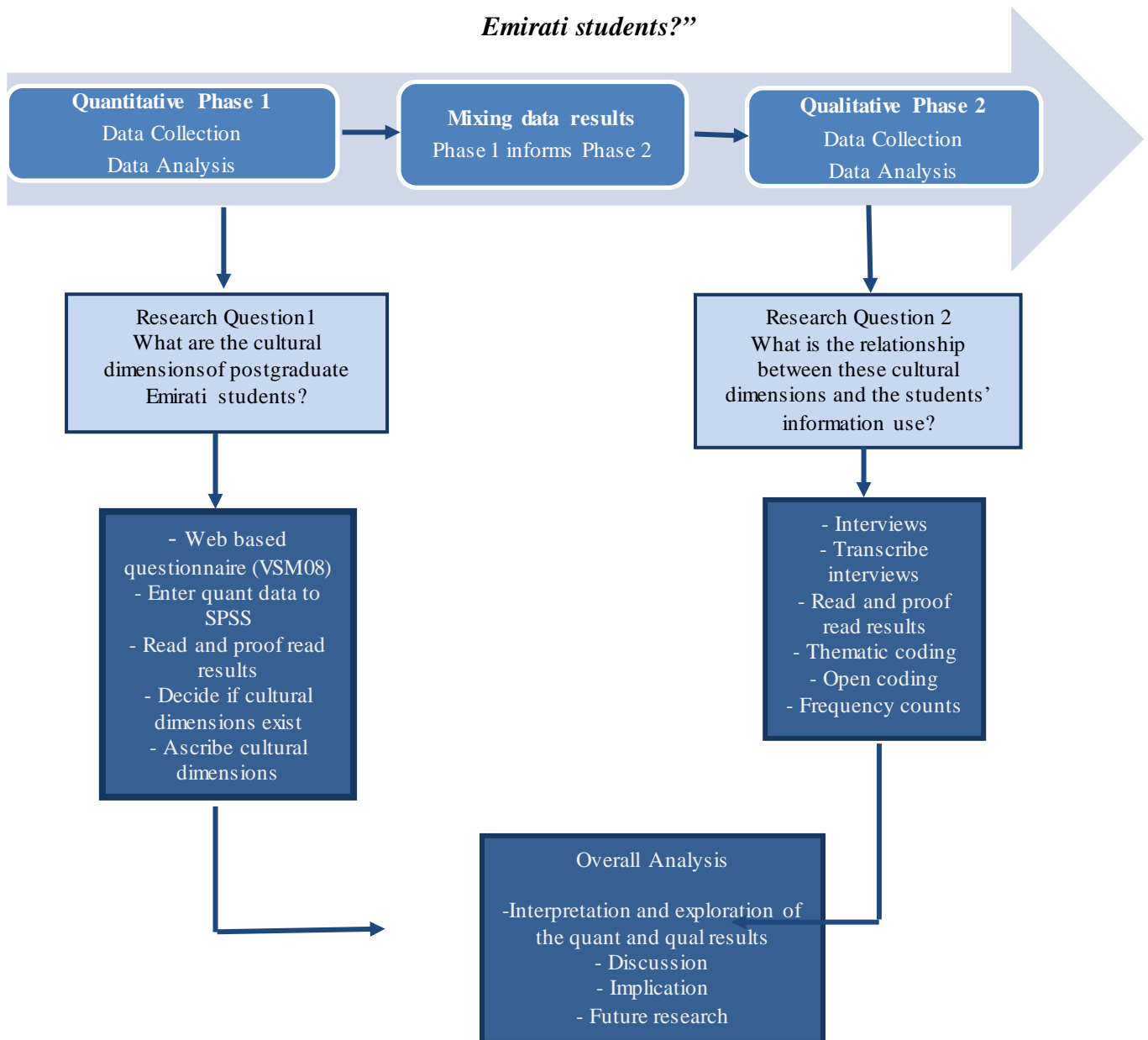


Figure 3.1 Visual model for Explanatory Sequential Mixed Methods design

Traditionally mixed methods design is beneficial when quantitative data needs further explaining, or when the trends and relationships in the aforesaid data need explaining (Cresswell & Plano Clark, 2011). Furthermore the mechanisms that are behind these trends and relationships can also be clarified through explanatory sequential design (Cresswell & Plano Clark, 2011, p.82). However, the design of this study takes on a slight variation of the main stream application of explanatory sequential approach. Although the quantitative phase preceded the qualitative phase

emphasis was placed on the second qualitative phase. This is called participant selection variant where the participants from the quantitative phase inform or contribute to the qualitative phase (Cresswell & Plano Clark, 2011).

Ivankova, Cresswell and Plano Clark (2006) explain that one of the considerations when implementing mixed methods is deciding where the priority or weight will occur in the process. Equal priority can be determined, or the quantitative data can have priority over the qualitative data – or vice versa. This decision can be dependent on a variety of reasons. There could be an issue with one data set making the other the more dependable. It could be - as it is in the case of this research - one set of data needs to be understood before proceeding on to the next and it can even come down to the intended audience of the research project – what their preference is or what the researcher feels more comfortable with (Cresswell, Plano Clark, Gutmann & Hanson, 2003). Other considerations are how and when to connect the data and how to integrate the findings in order to answer the guiding research question. In the case of this study, the intention is more qualitatively focused on the information use of Emirati students. However, I needed to first conduct quantitative research to identify the cultural characteristics of the participants and then decide the more appropriate questions to ask about information use based on the outcome of the questionnaire.

More specifically, this design established a cultural profile for the Emirati student participants through the quantitative results in the first phase, and explored more fully how those results inform the experience of these students as information users in the qualitative phases of data collection. This approach reflected the pragmatic world view which involved focusing on the research problem and the use of multiple approaches in order to understand it. Mixing or integrating occurred throughout the design phases because I identified quantitative results that needed further explanation via qualitative instruments. Therefore the “qualitative research questions, purposeful sampling procedures, and data collection protocols” were refined as a result of the quantitative data (Cresswell & Plano Clark, 2011 p.83). However, the strategic mixing occurred in the final phase where the results of the quantitative research were connected to the qualitative phases of research, answering the first sub question – “What are the cultural dimensions of Emirati postgraduate students?” Again strategic

mixing occurred in the findings of both phases when the second sub question was considered – “What is the relationship between these dimensions and the students’ information use?” At these points the data was analysed and interpreted.

There are both advantages and disadvantages to the explanatory sequential design which are applicable in the case of this research. Primarily the straightforward nature of data collection is the main appeal. The two phased approach and the fact that data can be collected one type at a time, makes it attractive to single researchers.

Mirroring this point is that there is “opportunity to tackle individual elements of a complex phenomenon in a single study” (Mayoh, Todres & Bond; 2011, p23). This design is also easy to manage because the findings for each phase can be written up straight after the data analysis which then connect to the next phase of data collection and analysis. Finally in true pragmatic style this design is “emergent”, meaning that the second phase was developed based on the learning of Phase One, allowing me to be guided by the development of the research whilst remaining faithful to the research question and the socially useful knowledge that is produced (Cresswell & Plano Clark, 2011; pp.84, 85).

The disadvantages are the time taken to implement the two phases, particularly the qualitative phase. Ethics clearance is another issue. It can be difficult to clear as the researcher cannot always address how the participants will be selected for the second phase, as this selection is sometimes dependent on the findings of the quantitative results. Additionally there is the potential that the data collection instrument in second phase of the research may not be formulated as tightly as Phase One. In the case of this study, the finely tuned details were not as certain when submitting the interview questions for ethics, as it was anticipated that the results of the first phase instrument may dictate the kinds of questions asked in an interview (Cresswell & Plano Clark, 2011, pp.84, 85). As the researcher, I needed to clarify certain aspects of the submission and as a result, I did not encounter any issues with ethics committee as a result of the aforementioned disadvantages.

In order to minimise the disadvantages previously noted, I considered a number of options for follow up through the qualitative study e.g. notable results and notable predictors from the previous quantitative study. I considered that these elements would direct the areas of interest in student information use that the qualitative interview would explore with the respondents. I provided a variety of exemplar questions which reflected the findings of Phase One and utilised Hofstede's descriptors associated related to an educational setting. Due to the nature of the semi-structured interview, these exemplars provided a good grounding for the final formation of interview questions.

3.4 QUANTITATIVE – QUALITATIVE INTEGRATION

This section will outline the nature of the quantitative – qualitative integration in the context of the current study.

3.4.1 Quantitative Design

Quantitative research is concerned with using numbers and mathematical equations to derive results and analyse information. Statistics is the name generally given to this phase of research and its purposes can comprise making comparisons, measuring, making forecasts, testing hypothesis, exploring, controlling and explaining (Walliman, 2011). The quantitative phase of this research used Geert Hofstede's VSM08 (Values Survey Module 2008). It is an "intact survey instrument" (Cresswell, 2009, p.149) which compares cultural values and sentiments in comparative countries, or regions within countries (Hofstede, Hofstede, Minkov & Vinken, 2008).

The aim of this questionnaire was to produce numeric attitudes or opinions by asking people questions, and by collecting this information from a percentage of the population. In this study, this questionnaire was administered electronically to a cross sectional sample of the Emirati student population in the UAE, selected by convenience sampling to characteristically represent Emirati males and females between the ages of 25 and 45 years old, who are enrolled in tertiary educational

institutions in the UAE. All survey responses were sought on the basis of participants' informed consent, after ethical clearance has been achieved in both Australia and the UAE.

I chose to use the questionnaire because it would allow me to collect and analyse data rapidly from a large cross section of the population, examining whether there are cultural dimensions evident in Emirati society. This feature is also the reason why some choose to criticise Hofstede's research. Williamson in 2002 accused Hofstede of "parsimony" or being too simplistic by using just five dimensions to explore a national culture (p.1386). Interestingly, Hofstede has since introduced two more dimensions increasing his framework to seven. Despite this criticism, the limited number of dimensions is a positive aspect in this study as the survey respondents are all ESL students. To use a survey such as Schwartz (1994) or Trompenaars and Hampden-Turner (1998) used would be far too overwhelming for Emirati students with relatively limited English capabilities, as the number of questions used in their research instruments are extensive compared to the Value Survey Module. The same effect of being overwhelmed with reading content would occur if the surveys were delivered in Arabic, so I deemed that Hofstede's Values Survey would be easily accessed by the survey participants.

The surveys of Hall (1976) and Inglehart (2008) were also considered. However, none of the instruments reflected the cultural values in the Emirati context as well as the Hofstede questionnaire. As a result Hofstede's instrument complemented this research approach. Sondergaard explains this approach when he discusses how researchers have used Hofstede's model as a paradigm. Thus by embracing a pragmatic paradigm for this research, I have used Hofstede's dimensions in effect are used "as a conceptual framework outside their original setting" (Sondergaard, 1994, p.453). Sondergaard continues to explain that the dimensions are "used to classify and explain the influence of culture on the research topic" (1994, p.453). This research is therefore designed to explore the information use experiences of Emirati higher education students.

3.4.2 Qualitative Design

Qualitative research is “based on data expressed mostly in the form of words - descriptions, accounts, opinions, feelings etc. - rather than on numbers” (Walliman, 2011, p.130). As people or cultural groups are frequently the focus of this research approach, qualitative data collection contributes significantly to understanding a phenomenon or human experience, allowing the researcher to “get at the inner experience of participants, to determine how meanings are formed through and in culture, and to discover rather than test variables” (Corbin & Strauss, 2008, p.12). Creswell (2009) outlines the following as major forms of qualitative data collections types - each with its own advantages and limitations: observations, interviews, documents, and audio-visual materials.

The second instrument is qualitative and explores students’ information use experiences. The intention was that the data from the cultural values questionnaire would inform the interview questions in the qualitative phase, allowing further exploration of the relationship between culture and information use. For this research, personal interviews based on information use experiences were conducted with a selected number of respondents, to enable an authentic discussion on students’ engagement with information use experiences. These qualitative interviews were conducted face to face and online using Zoom and Skype software technology.

DiCicco-Bloom and Crabtree (2006) explain, “The purpose of the qualitative research interview is to contribute to a body of knowledge that is conceptual and theoretical and is based on the meanings that life experiences hold for the interviewees” (p.314). Despite the valuable insights achieved from research interviews, this research method has been criticised. Investigator bias and subjectivity are highlighted as concerns (Kvale, 1996). Of specific interest to this research was the cross cultural nature of the interviews. The potential for encountering barriers is paramount due to the fact that “cultural differences between an interviewer and interviewee challenge interviewers’ ability to enter into a meaningful conversation, no less ‘collect’ valuable ‘data’” (Sands, Bourjolly & RoerStrier, 2007, p.354). Therefore bias, subjectivity and cross cultural differences

were addressed in the design and conduct of all interviews and discussed more fully in sections 3.7.3 and 3.7.4. Semi structured interview questions were used with individuals and responses were recorded on audio tape and using Zoom software. They were transcribed, coded, and analysed manually.

3.5 RESEARCH CONTEXT: THE UAE

Participants were selected from different emirates within the UAE - Sharjah, Fujairah, Ras al Kaimah and Abu Dhabi (including Al Ain, Ruwais and Madinat Zayed) in order to incorporate the requirement of the Hofstede model that was used in the questionnaire that participants be from different regions. Students were both male and female enrolled in a Master program at one of the national colleges in higher education which had 17 campuses across the emirates at the time of data collection. Students enrolled in this college are all Emirati nationals which is one of the conditions of enrolment in the federal colleges. In selecting the research site, I considered the risk of using participants from the same institution I worked in. Sometimes the decision to choose certain sites and participants is skewed by the “perceived ease of gaining access” (Mulhall, 2003, p.310). The fact that I worked for a department within one of the campuses could have made the decision to choose this site to conduct research a cause for concern. However, these colleges are collectively the largest higher education institution in the UAE and therefore are a logical choice for site and participants. Added to this, the campus I worked in has the largest enrolment of Master Students. This postgraduate level of participants is contextually appropriate as prior to a Master program students were unlikely to have engaged in a thoroughly independent and sustained academic level of information use allowing them to consider the experience involved in such an encounter. English is the main language of instruction and all students are required to participate in learning tasks using English which is their second language.

3.6 THE QUANTITATIVE PHASE

This section will discuss the quantitative research phase which used a questionnaire to extract statistical information. The section begins with an explanation regarding

how the participants were recruited and the sample population they were drawn from. It will then go on to discuss the background of the questionnaire and the pilot study, along with the learnings from this part of the study. Finally the structure employed to analyse the questionnaire will be discussed and in closing how quality of the research for this phase was maintained.

3.6.1 The Participants

Students enrolled in Applied Masters Programs at Higher Colleges of Technology were approached to complete the questionnaire. This student cohort was approached with the second data collection phase in mind due to my observations that these groups of students are engaging with information use more independently than the Applied Bachelor students who are given more cognitive recall or process based work. 60% of the participants were females and 39% were males. 42% of participants were aged between 21-30 years of age and 58% were between 31- 40 years of age. The highest level of education obtained was as follows: 65% Bachelor, 27% Master and 7% did not provide educational level details. Regarding employment, participants answered in the following way concerning employment status. 4% were unemployed, 92% were employed full time, 1% were part-time, 1% were casually employed, 1% were contract employed and 1% full time students. Concerning nationality, 97% of the participants were Emirati by birth. 3% were not and 1% of these indicated they were “other” by birth. However, these same participants were Emirati by marriage. It is mandatory to be Emirati to attend the federal college and Arabic is their mother tongue.

3.6.2 Sampling and Recruiting

Data was collected between August 2014 and December 2014 using an English online version of Geert Hofstede’s VSM08. The Hofstede instrument is a well-known and a highly used and validated instrument. The online tool used to disseminate the questionnaire was Google Forms. The sampling method used was Convenience sampling, so the entire Master student population of a major federal college in the UAE was approached via email. This federal college has 17 campuses spread across the emirates of the UAE. In total 297 students were emailed inviting

them to participate in this phase of the study. 100 participants completed the questionnaire providing a response rate of 33.67%, twice the recommended amount by Hofstede who suggest a minimum of 50 “homogenous” participants as being ideal (Hofstede, Hofstede, Minkov & Vinken, 2008, p.2).

However, it is important to note that percentage figures of 70-80% response rates for online surveys have been suggested as more acceptable (Eysenbach, 2004; Fincham, 2008; Nulty, 2008). In order to comply with academic research practice, I continued to recruit more participants than the recommended 50. Nevertheless, the experience reflected the findings in literature which explain that even though online surveys are advantageous, they are not as likely to receive the same response rate as those administered on paper. Nulty (2008, p303) provides a table of online response rates comparing online and paper-based response rates. His article cites nine different researchers/research institutions who achieve a range of response rates from 20-47% for online surveys. The online response rate for this questionnaire falls well within this range.

As mentioned above, the purposive technique of convenience sampling was used and expedited the process of surveying individuals for the quantitative instruments (O’Leary, 2010, p.168). Purposive sampling is traditionally linked to qualitative studies but “neither purposive nor probability sampling techniques are the sole domain of either research tradition” (Kemper, Stringfield & Teddlie, 2003, p.277) Convenience sampling is a technique of purposive sampling. Here the researcher draws from a sub population that is easily accessible. It is commonly used for ease of access and in pilot studies. The criticism of convenience sampling is that just because the access to participants is easy and low in cost, the responses may be biased which does not always generate appropriate answers to the research question. Convenience sampling can often result in “spurious conclusions” (Kemper, Stringfield & Teddlie, 2003, p.280).

In order to counteract the criticism of convenience sampling, the entire Master student population at 17 campuses was approached (Abu Dhabi - including Al Ain

and Ruwais and Madinat Zayed, Dubai, Sharjah, Fujairah and Ras al Kaimah) in an attempt to get as many results as possible on the questionnaire. The questionnaire was attached to an email explaining the research and if necessary I followed up with emails if the participants were not responding as readily as hoped. This type of sampling would also contribute to limiting the time it would take to collect participants in a mixed methods approach because of the ease of approaching a large and accurate representation of the population. For the initial questionnaire pilot study I applied convenience sampling to conduct the questionnaire.

Table 3.1 below makes a comparison between the sample population where the data was collated from and the overall Master population enrolled in the Higher Colleges of Technology. It provides an overview of the total 2014-2015 enrolled Emirati population, gender, age, education level and employment status. The sample population and overall population differ in terms of male and female percentages. The total male overall population is 18% larger than the female, yet there were more female respondents represented in the sample group. This may be attributed to the fact that I am a female and culturally females may have felt more comfortable than males responding to the request for participants.

The remaining participant demographics with regard to age and employment are similar to those of the entire student population. However, the number of sample participants responding from their subject areas did not represent the numbers enrolled in subjects from the total population. For example, Business has the highest number of students enrolled, yet it attracted the least number of respondents. Overall the sample drawn, represents the overall population with sound breadth and depth.

The practicalities of working with both qualitative and quantitative data will naturally determine sample numbers (O'Leary, 2010, pp.164-165). According to Cresswell, Plano Clark, Gutmann and Hanson (2003, p.235) participant numbers for each data collection method in mixed methods research do not have to be equal. However, a greater sample population was recruited for the quantitative questionnaire in order to establish the extent of cultural dimensions.

Variable	Categories	Total Population (n=297)	Sample Population (n=100)
Gender	Male	59%	39%
	Female	41%	60%
Age	17-20	0%	0%
	21-30	39%	42%
	31- 40	58.4%	57%
	41-50	2%	1%
	N/A	.6%	
Field of Study	Business	65%	35%
	Education	6%	25%
	IT	29%	40%
Employment	Senior Official/Manager	34%	20%
	Professional Technical/ Associate	57%	67%
	Professional	8%	13%

Table 3.1 Comparison of total and sample 2014-15 enrolments

3.6.3 Questionnaire

The questionnaire used for this research was the Values Survey Module 2008 (VSM08), a quantitative survey instrument developed by Geert Hofstede, Gert Jan Hofstede, Michael Minkov and Henk Vincken in 2008. As this research is concerned with the relationship between information use and students' national culture, I chose Geert Hofstede's questionnaire to gather data for this study. Whilst Hofstede focuses on people working in organisations in different countries in order to identify differing cultural characteristics, his dimensions are extremely useful in understanding culture, remembering always that these dimensions are generally not typical of an individual of that nationality or culture.

The VSM08 traditionally is a paper-and-pencil Likert Scale questionnaire developed for comparing culturally influenced values and sentiments of similar respondents from two or more countries, or sometimes regions within countries. It allows scores to be calculated on seven dimensions of national culture - as identified by Hofstede in his original research and first published in *Culture's consequences: International differences in work-related values* (1980). There have been a number of iterations of the Values Survey Module in response to critical feedback which demonstrates the integrity of this instrument. VSM08 was the most recent version at the time of data collection. *Values Survey Module 13* was published after data was collected. Hofstede was aware of the weaknesses in the original *Values Survey Module 80* because the questions were very much isolated to an IBM workplace context as explained in Chapter 2. This was appropriate in the beginning but now that the survey has been validated, the VSM08 better incorporates all people groups and countries. The VSM08 actually acknowledges that participants may still be students and not working (Hofstede, Hofstede, Minkov & Vinken 2008).

The VSM08 also reflects the latest inclusion of dimensions six and seven devised by Minkov mentioned below. These dimensions were included in the VSM08 to counterbalance or offset a few problems that were presenting with the dimension Short Term Orientation vs. Long Term Orientation in the previous *Values Survey Module 94* (Hofstede, Hofstede, Minkov & Vinken, 2008, p.13). The survey is divided into seven sections which mirror the seven dimensions. There are four questions per dimension; therefore there are 28 content questions. The six other questions are demographic in nature, seeking out gender, age, education level, kind of job, current residing nationality and nationality at birth.

The dimensions have been discussed within the literature review, Chapter 2 "Culture defined and culture explored", but can be summarised here:

- Power vs. Distance (large vs. small)
- Individualism vs. Collectivism
- Masculinity vs. Femininity

- Uncertainty Avoidance (strong vs. weak)
- Long Term Orientation vs. Short Term Orientation
- Indulgence vs. Restraint
- Monumentalism vs. Self-Effacement

The first five of the dimensions were developed and analysed in the work of Geert Hofstede (Hofstede, 2001; Hofstede & Hofstede, 2005). They dealt with key values in national cultures that Hofstede identified from social anthropology and cross cultural research. The other two dimensions are based on the work of Michael Minkov (2007) and were added more recently with the view to revealing “aspects of national culture not yet covered in the Hofstede dimensions” (Hofstede, Hofstede, Minkov & Vinken, 2008, p2). These additions continue to add depth and rigor to this framework investigating culture.

The VSM08 is intentionally designed to compare countries – not individuals, organisations, and already published scores. However, in some cases, *Value Survey Module* dimension scores can be meaningfully computed and compared for the genders (female versus male) and for successive generations (grandparents versus parents versus children) (Hofstede, Hofstede, Minkov & Vinken, 2008). In the case of this research, the questionnaire used measured culture in geographical regions within a country - the UAE. The research survey was extended to Emirati students in national colleges across the emirates of Fujairah, Ras al Kaimah, Sharjah, Dubai and Abu Dhabi, in order to fulfil the requirements of ‘geographical regions’ (Hofstede, Hofstede, Minkov & Vinken, 2008, p5).

Hofstede, Hofstede, Vinken and Minkov (2008) freely gives permission for their survey to be used for research purposes. Sample questions from the original survey are included below so as to provide a sense of the variety of angles Hofstede attempts to explore culture in the work place, or in the case of this study – tertiary college:

In your private life, how important is each of the following to you: (please circle one answer in each line across):

- | | | | | | |
|-------------------------------------|---|---|---|---|---|
| 11. keeping time free for fun | 1 | 2 | 3 | 4 | 5 |
| 12. moderation: having few desires | 1 | 2 | 3 | 4 | 5 |
| 13. being generous to other people | 1 | 2 | 3 | 4 | 5 |
| 14. modesty: looking small, not big | 1 | 2 | 3 | 4 | 5 |

18. Are you the same person at work (or at school if you're a student) and at home?

1. quite the same
2. mostly the same
3. don't know
4. mostly different
5. quite different

23. How often, in your experience, are subordinates afraid to contradict their boss (or students their teacher?)

1. never
2. seldom
3. sometimes
4. usually
5. always

The purpose of this questionnaire was to ascertain whether identifiable cultural dimensions exist among the student participants surveyed across the UAE; and to form the foundation to move deeper into the following qualitative observation and interview studies which are focused on student information use and culture. I expected that strong cultural traits would become evident.

3.6.4 Pilot Study

The questionnaire was piloted just prior to the main August to December 2014 data collection round with the aim of improving the design of the overall research. The pilot enabled me to focus on the processes that needed to be put in place. Therefore the entire method was under scrutiny from the recruitment of participants to the final interview regarding the trial instrument.

The pilot study participants were sourced from students currently enrolled in Master programs in the Higher Colleges of Technology. Masters students were chosen as they were the participant group the research was targeting for the main study. I approached the teachers of these classes to explain the study and for permission to contact the students during class time. These classes are relatively small and it was not difficult to visit the classes individually.

I followed up with a visit to the same Master classes with the participant information flyer (Appendix A). At this point it was very important not to appear coercive, and to stress that marks would not be affected by students' decision to participate or not participate. This was also a condition of ethics clearance which was subject to ensuring students understood this, as well as the fact that their teachers would not see results of the questionnaire or the interview. Students were given my contact details and were invited to contact me to set up a time and place convenient to them to participate in the pilot study.

Four participants came forward from the Master of Information Systems Management course. Prior to taking part in the pilot questionnaire, students received more detailed information outlining the kinds of questions they would be asked and the length of time required to complete the questionnaire. They were then asked to give feedback in the form of an interview (Appendix B). The participants were all Emirati and female. All worked full time and all but one had completed a Bachelor degree prior to their Master course. One participant had completed a Higher Diploma. These students had completed five modules of their current Masters course.

Before taking the pilot questionnaire, each participant signed a consent form (Appendix C).

The questionnaire was designed to explore the cultural values and sentiments of Emiratis and assign a cultural dimension score from the combined results (Appendix D). The questionnaire addressed the first sub question of the main study - “What are the cultural characteristics of Emirati postgraduate students?” The introduction consisted of questions designed to provide simple demographic details of each participant. The remainder of the questions were designed to compare “culturally influenced values and sentiments of similar respondents from two or more countries, or *“sometimes regions within countries”* (Hofstede, Hofstede, Minken & Vinken, 2008, p.2 – italics emphasis is author’s).

Ten minutes were allowed for participants to respond to the questionnaire. The questionnaire was a pen and paper medium. The participants answered the questions well within the given time frame. Participant one finished in 4.49 minutes; Participant two finished in 6.44 minutes; Participant three finished in 5.59 minutes and Participant four finished in 5.00 minutes. This is significant as English is the second language of all the participants. I was careful to notice if any of the participants hesitated for too long over any questions. Every participant appeared to transition smoothly from question to question. In summary there was nothing outstanding to report from the observation of the participants whilst they were answering the questionnaire.

After the survey each pilot study participant was interviewed about the questionnaire. I explained again the purpose of the questionnaire, this time providing a little more detail about the main study and how this questionnaire fitted into the overall research design. The feedback interview consisted of the following questions:

1. Is there any comment you would like to make about this survey?
2. Is there anything that is worded that would be offensive in any way?
3. Is there any vocabulary that is difficult?

The feedback provided was very succinct and mainly to do with the organisation of the questionnaire. I recorded feedback using the Quick Voice App on an iPad. The feedback resulted in a very slight change of the final questionnaire which was to do with the Likert scale order. The participants preferred the order of the Likert scale questions to be reversed with beginning questions containing the most important or highest value. This feedback was reflected in the main study. A title was added to inform the participants clearly about the purpose of the questionnaire. Finally a demographic question regarding which emirate the participants resided in was added. Due to there being minimal difficulties with collecting the data at pilot stage, the results from the pilot study were used to contribute to the main data collection. These were the only changes made to the original instrument therefore the validity of the instrument remained intact.

3.6.5 Data Analysis – Main study questionnaire

The questionnaire contained the specific sets of questions which measured national culture. At the time of administering the online format of this questionnaire, VSM08 was the latest version of the survey available. Seven cultural dimensions are assessed via 28 questions. The dimensions are: Power vs. Distance, Individualism vs. Collectivism, Masculinity vs. Feminism, Uncertainty Avoidance, Long Term Orientation vs. Short Term Orientation, Indulgence vs. Restraint and Monumentalism vs. Self-Effacement. Each set of questions uses a five point Likert scale to measure the participant response. The questions are grouped in sets with participants being asked to respond to levels of importance for the first fourteen questions. They were then asked to consider the levels of frequency in the next nine sets – with one question focusing on level of importance included in that grouping. The final set of five questions asks respondents to agree or disagree.

Analysis of the questionnaire data involved following the formula used to calculate each of the dimensions detailed in the Values Survey Manual (Hofstede, Hofstede, Minkov & Vinken, 2008). However, it is useful to consider the evolution of the instrument and its calculations, most of which is explained in *Culture's Consequences* (2001). Originally, Hofstede had set specific calculations which were

an essential part of the initial IBM international survey containing 126 questions - 60 core, 66 recommended and local managers were also able to add their own questions if needed (Hofstede, 2001, p.45). Although I did not use the original formula, it is of value to explore the evolution of the survey formula to understand how the questionnaire and formula calculations have evolved. The original example for calculating Power vs. Distance (PDI) which used questions slightly different to the VSM08 developed by Hofstede in 1967 to 1969 is provided below. The original formula used to calculate PDI in this rather lengthy 126 question survey was:

$$\text{PDI} = 135 - 25 (\text{mean score of employees afraid to disagree with their manager}) + (\text{percentage perceived manager is autocratic } 1+2) - (\text{percentage preferred manager to have consultative style } 3)$$

(Hofstede, 2001)

Hofstede used the constant 135 to bring about a range of zero to 100. He multiplied the mean by the coefficient 25 “to make their range, and therefore their contribution to the PDI, roughly equal to the range in percentage values” of perceived manager (where employees are afraid to disagree and regard their boss as autocratic) and preferred manager (where employees would prefer their boss to be democratic and consult them in decision making) (Hofstede, 2001, p.86). Hofstede explains that the “theoretical range of the index is from -90 to +210 but the index values for all his dimensions have been adjusted to a more manageable range of the previously mentioned zero to 100 (Hofstede, 2001, p.86).

Hofstede calculated the other dimensions using similar formula, depending on the number of questions assigned to determine that particular dimension. The data collected for the index values occurred between 1967- 69 and 1971-73 across 53 countries (Hofstede, 2001, pp.86 -87). The number of dimensions first examined were four in number – Power vs. Distance, Uncertainty Avoidance, Individualism vs. Collectivism and Masculinity vs. Femininity. In 1981- 82, Hofstede changed the Values Survey Modules by decreasing the number of questions in the original questionnaire. By 1982, VSM82 contained 47 specified questions, as well as six

demographic questions (Hofstede, 2001, pp.493-494). By the time VSM94 was developed in 1994, only 20 content questions remained as well as the usual 6 demographic. At this stage the fifth dimension Long Term Orientation vs Short Term Orientation was added. An index formula for calculating the five dimensions was developed, whereby the mean score of each question (question numbers appear in brackets) is calculated and multiplied by a set of coefficients and constants as follows:

Power Distance

$$\text{PDI} = -35\text{m} (03) + 35\text{m} (06) + 25\text{m} (14) - 20\text{m} (17) - 20$$

Uncertainty Avoidance

$$\text{UAI} = 25(13) + 20\text{m} (16) - 50\text{m} (18) - 15\text{m} (19) + 120$$

Individualism Collectivism

$$\text{IDV} = -50\text{m} (01) + 30\text{m} (02) + 20\text{m} (04) - 25(08) + 130$$

Masculine Feminine

$$\text{MAS} = 60\text{m} (05) - 20\text{m} (07)$$

Long Term Orientation

$$\text{LTO} = -20\text{m} (10) + 20\text{m} (12) + 40\text{m}$$

(Hofstede, G., 2001)

The Values Survey instrument I used for data collection with student participants was the VSM08 developed in 2008. The VSM08 questions are essentially the same as VSM94 but two more dimensions were incorporated extending the questionnaire. The added dimensions were Individualism vs. Restraint and Monumentalism vs. Self-Effacement. At this time Hofstede altered his prescribed formula calculations to allow researchers to manipulate the last constant in the equation so that the final

index numbers fell into the zero to 100 ranges. This formula is primarily meant to compare correlations between countries and as the VSM is a widely used instrument, previously there were often great differences in scores derived for countries. Hofstede has set the coefficients in the VSM08 to correct for this and try to make the contribution of each question to the index as equal as possible (Hofstede, Hofstede, & Minkov, 2010, p32-33). Depending on the nature of the samples, the constant “C” can be chosen to shift the “values between 0 and 100” (Hofstede, Hofstede, Minkov & Vinken, 2008, p.7).

The new formula calculations are as follows whereby the mean score of each question (question numbers appear in brackets) is calculated and multiplied by a set coefficients and constants as follows:

Power Distance

$$PDI = 35(m07 - m02) + 25(m23 - m26) + C(pd)$$

In which m02 is the mean score for question 2, etc; and C(pd) is the constant for Power Distance, etc.

Individualism Collectivism

$$IDV = 35(m04 - m01) + 35(m09 - m06) + C(ic)$$

Masculine Feminine

$$MAS = 35(m05 - m03) + 35(m08 - m10) + C(mf)$$

Uncertainty Avoidance

$$UAI = 40(m20 - m16) + 25(m24 - m27) + C(ua)$$

Long Term Orientation

$$LTO = 40(m18 - m15) + 25(m28 - m25) + C(ls)$$

Indulgence Restraint

$$IVR = 35(m12 - m11) + 40(m19 - m17) + C(ir)$$

Monumentalism

$$MON = 35(m14 - m13) + 25(m22 - m21) + C (mo)$$

(Hofstede, Hofstede, Minkov & Vinken, 2008)

The questionnaire was completed by 100 students (n=100). This included the four pilot study responses. The response results were generated for each question by Google docs and those results were then entered into an Excel spreadsheet with the VSM08 formulas. Three rounds of calculations were completed, each round using a different constant to achieve an index value. According to Hofstede, the main consideration when calculating the index scores is to achieve an outcome where scores sit between 0 to 100 on the scale. It is possible that some scores will exceed the range and that is acceptable (Fischer & Al-Issa, 2012; Hofstede, 2001; Hofstede, Hofstede, Minkov & Vinken, 2008).

In this study I computed the first round of calculations by entering the formula and solutions into an Excel file, the chosen constant was 50. The results can be seen in Table 3.3 and all values with the exception of the Indulgence vs. Restraint (IVR) index fall nicely in the 0 to 100 range. I experimented with other calculations by using constants below 50 and above. Table 3.4 shows the index scores for when I set the constant at 70. The ranges fall within 0 to 100. However, the IVR index was +120.32, pushing the range outside the 100 mark. When the constant 30 was chosen as shown in Table 3.2, the index scores fell within the specified ranges but the Uncertainty Avoidance (UAI) index figure was below 0. The results from Table 3.3 show a more natural spread between 0 and 100, therefore these index scores were chosen to explore the cultural dimensions of the UAE Masters student enrolled in higher education.

S.No.	Dimensions	Formula	Mean 1	Mean 2	Mean 3	Mean 4	M1-M2	M3-M4	Constant	Value
1	PDI	$PDI = 35(m_{07} - m_{02}) + 25(m_{23} - m_{26}) + C(pd)$	2.31	2.11	2.82	2.08	0.20	0.74	30	55.42
2	IDV	$IDV = 35(m_{04} - m_{01}) + 35(m_{09} - m_{06}) + C(ic)$	1.92	1.99	2.26	2.13	-0.07	0.13	30	32.10
3	MAS	$MAS = 35(m_{05} - m_{03}) + 35(m_{08} - m_{10}) + C(mf)$	2.24	1.99	2.47	1.98	0.25	0.49	30	55.98
4	UAI	$UAI = 40(m_{20} - m_{16}) + 25(m_{24} - m_{27}) + C(ua)$	2.07	2.91	2.64	2.57	-0.84	0.07	30	-1.85
5	LTO	$LTO = 40(m_{18} - m_{15}) + 25(m_{28} - m_{25}) + C(ls)$	2.74	2.15	1.72	2.35	0.59	-0.64	30	37.78
6	IVR	$IVR = 35(m_{12} - m_{11}) + 40(m_{19} - m_{17}) + C(ir)$	2.63	2.30	3.05	2.08	0.33	0.97	30	80.32
7	MON	$MON = 35(m_{14} - m_{13}) + 25(m_{22} - m_{21}) + C(mo)$	2.65	2.30	1.09	1.41	0.35	-0.32	30	34.25

Table 3.2 Constant 30

S.No.	Dimensions	Formula	Mean 1	Mean 2	Mean 3	Mean 4	M1-M2	M3-M4	Constant	Value
1	PDI	$PDI = 35(m_{07} - m_{02}) + 25(m_{23} - m_{26}) + C(pd)$	2.31	2.11	2.82	2.08	0.20	0.74	50	75.42
2	IDV	$IDV = 35(m_{04} - m_{01}) + 35(m_{09} - m_{06}) + C(ic)$	1.92	1.99	2.26	2.13	-0.07	0.13	50	52.10
3	MAS	$MAS = 35(m_{05} - m_{03}) + 35(m_{08} - m_{10}) + C(mf)$	2.24	1.99	2.47	1.98	0.25	0.49	50	75.98
4	UAI	$UAI = 40(m_{20} - m_{16}) + 25(m_{24} - m_{27}) + C(ua)$	2.07	2.91	2.64	2.57	-0.84	0.07	50	18.15
5	LTO	$LTO = 40(m_{18} - m_{15}) + 25(m_{28} - m_{25}) + C(ls)$	2.74	2.15	1.72	2.35	0.59	-0.64	50	57.78
6	IVR	$IVR = 35(m_{12} - m_{11}) + 40(m_{19} - m_{17}) + C(ir)$	2.63	2.30	3.05	2.08	0.33	0.97	50	100.32
7	MON	$MON = 35(m_{14} - m_{13}) + 25(m_{22} - m_{21}) + C(mo)$	2.65	2.30	1.09	1.41	0.35	-0.32	50	54.25

Table 3.3 Constant 50

S.No.	Dimensions	Formula	Mean 1	Mean 2	Mean 3	Mean 4	M1-M2	M3-M4	Constant	Value
1	PDI	$PDI = 35(m_{07} - m_{02}) + 25(m_{23} - m_{26}) + C(pd)$	2.31	2.11	2.82	2.08	0.20	0.74	70	95.42
2	IDV	$IDV = 35(m_{04} - m_{01}) + 35(m_{09} - m_{06}) + C(ic)$	1.92	1.99	2.26	2.13	-0.07	0.13	70	72.10
3	MAS	$MAS = 35(m_{05} - m_{03}) + 35(m_{08} - m_{10}) + C(mf)$	2.24	1.99	2.47	1.98	0.25	0.49	70	95.98
4	UAI	$UAI = 40(m_{20} - m_{16}) + 25(m_{24} - m_{27}) + C(ua)$	2.07	2.91	2.64	2.57	-0.84	0.07	70	38.15
5	LTO	$LTO = 40(m_{18} - m_{15}) + 25(m_{28} - m_{25}) + C(ls)$	2.74	2.15	1.72	2.35	0.59	-0.64	70	77.78
6	IVR	$IVR = 35(m_{12} - m_{11}) + 40(m_{19} - m_{17}) + C(ir)$	2.63	2.30	3.05	2.08	0.33	0.97	70	120.32
7	MON	$MON = 35(m_{14} - m_{13}) + 25(m_{22} - m_{21}) + C(mo)$	2.65	2.30	1.09	1.41	0.35	-0.32	70	74.25

Table 3.4 Constant 70

Note : S. No. is serial number ; Mean 1,2,3,4 columns show mean scores for each question ; M1-M2 and M3-M4 show difference of each bracketed mean score

3.6.6 Maintaining Quality in Quantitative Phase

All good research embeds methods “to ensure the validity of the data, results, and their interpretation” (Cresswell & Plano Clark, 2011, p.210). Maintaining quality (validity and reliability) of a research method encompasses “truth value, credibility, dependability, trustworthiness, generalisability, legitimation and authenticity” (Dellinger & Leech, 2007, p.312). Mixed methods research utilises instruments from both fields of quantitative and qualitative research. Maintaining quality in quantitative research has long been regarded as important (Onwuegbuzie & Johnson,

2006). In this quantitative research, I was concerned both with the quality of scores from the instruments used and the quality of the conclusions drawn from the results of those scores. Therefore quantitative validity involves ensuring that “the scores received from participants are meaningful indicators of the construct being measured” (Cresswell & Plano Clark, 2011, p.210).

In order to ensure the measurements were stable, error and bias free the research used an instrument (VSM08) that has been subjected to testing of validity and reliability for many years previous to this research. The instrument was adapted slightly to collect demographic information. The only variation was the addition of the question “What level of study are you currently enrolled in?” This was used to identify the type of Master program the participants were enrolled. As this question was added only to understand the demographics more fully, there were no implications for the rest of the survey or the data collected. Apart from this, the questionnaire was used intact with permission. This instrument has produced results which “remain as valid in the year 2010 as they were around 1970, indicating they describe relatively enduring aspects of these countries’ societies” (Hofstede, Hofstede & Minkov, 2010, p.39).

The formula used to retrieve quality scores in order to draw quality conclusions was adhered to strictly as exemplified in the quantitative analysis section. As explained in the analysis, a number of iterations at calculating the index scores to achieve an outcome where scores sat between 0 to 100 on the scale occurred. Comparing these data sets was key to maintaining the trustworthiness shown in tables 3.2 to 3.4.

The pilot test of this instrument prior to surveying a large body of participants ensured reliability of the instrument. I was careful to address the feedback of the pilot participants to enhance understanding for a more reliable outcome. The recommendations were minimal but were incorporated into the questionnaire to improve directions. The recommendation was to reverse the Likert scale order, whereby selecting 1 *equalled of little or no importance* through to 5 *equalling of utmost importance*. I am unaware if this is a cultural expectation; although it was

clearly an issue for some of the participants. In this way, I sought to maintain the integrity of the instrument was maintained to ensure reliable and valid responses across the participant group.

3.7 THE QUALITATIVE PHASE

This section will discuss the qualitative research phase which used semi-structured interviews to gain in-depth insights. The section begins with an explanation regarding how the participants were recruited and the sample population they were drawn from. It will then go on to discuss the background of the interviews and the pilot study, along with the learnings from the study. Finally the structure employed to analyse the interviews will be discussed and in closing how quality of the research for this phase was maintained.

3.7.1 The Participants

The demographics were very similar to the quantitative phase because the participants were enrolled in similar, if not the same courses. The data was collected from participants studying Business Management, Information Technology (IT) and Education. Students enrolled in the Applied Master Program at a federal higher education institution with 17 campuses were approached to take part in the interview. However, two participants had recently completed their degrees at the time of the interviews. This student cohort was approached due to the understanding that these groups of students were engaging with information use more independently via dissertation and project work than the Applied Bachelor students who mainly engaged in end of term exams rather than project work.

There were twenty participants in total who included 20% male and 80% were female Emiratis. 75% were aged between 21-30years of age; 20% were aged between 31- 40 years of and 5% were between 41-50 years of age. The fields of study and enrolment figures were Business 35%; Education 25%; IT 40%. These participants were all employed with 10% working in a senior official/manager sector and 90% as professionals.

Table 3.1 mentioned previously provides an indication of how well the research data sample is represented, providing an overview of the total 2014 -2015 enrolled Emirati population only, gender, age, education level and employment status. The more personalised nature of the interview instrument combined with the fact I was female, probably meant that more females would respond to the recruitment than men. Culturally, male and females who are not known to each other do not usually interact. Male and female interaction is appropriate only if chaperoned or if they are related. So it was understandable that there were not a lot of male responses.

3.7.2 Sampling and Recruiting

I collected interview data from October 2015, through to June 2016 using a purpose developed set of interview questions developed from the findings of Phase One data. I proceeded with “Volunteer Sampling” for the qualitative instrument. Students from the first survey tool were asked to volunteer to participate in the qualitative instrument. This non random sampling process credibly meets the representativeness goal and a sometimes hard to reach population (O’Leary, 2010, p.168). I decided that the sample size would not need to be more than 20 to 25 participants. Factors such as saturation, minimum requirements, theoretical underpinnings, heterogeneity of the population and breadth and scope of research questions all play a role in determining the number of qualitative interviews (Bryman, 2012). As the participants were assumed to be part of a homogenous population as far as culture is concerned, the results were expected to reflect that and little would be gained by surveying and observing more (Leedy & Ormrod, 2010, p.214).

The study’s use of volunteer sampling came under the umbrella of *purposive sampling* in that the volunteers were drawn randomly (O’Leary 2010). The sample group were characteristically appropriate to this study as all were enrolled or near completion of their Master program. In total 318 students were invited via email to participate in an interview (Appendix E). The email contained attachments which contained the recruitment information (Appendix F) and consent form (Appendix G). The response rate was 20 participants. These participants may or may not have participated in the previous Phase One data collection and their previous

participation was not dependent on the results of the data. The semi-structured interviews contained four scene setting questions, seven general information use questions and twelve questions designed from Phase One results based on using information within the cultural dimensions. The interviews lasted on average 40 to 50 minutes and were continued until the information retrieved had reached saturation point.

3.7.3 Interviews

The interviews were intended to explore Emirati student's information use experiences. Supported by the understanding I gained about Emirati cultural dimensions through Phase One data, the interviews delved more specifically into the approaches students take with their information use, so that insight into the experience of their encounters with information in an academic context was available for analysis. As this research focused on two distinct phenomenon, culture and information use, the relational framework of exploring information literacy (Bruce, 2008) was employed in this phase of the research in order to better understand the contexts where information is used. This was achieved by structuring questions around the experiences of using information, rather than behaviour.

Appendix E details the entire interview process. Prior to the interviews, the process began by recruiting participants via email inviting them to participate in the study. After responding to the email invitation, students were asked to sign a consent form and a place to meet for the interview was agreed upon. For the students who were able to meet face to face, the interviews mainly occurred on the campus they were enrolled in. For those being interviewed by Skype or Zoom, the interview times and places were very flexible.

This phase employed semi-structured qualitative interviewing. The questions were formulated to allow the interviewee more scope to express their point of view. With this format, the interviewee was welcome to go off in tangents and explore the relating issues raised. Therefore the interview was flexible, as I could ask questions stemming from participant replies and even vary the wording of some of the set questions. The aim was to seek "rich, detailed answers" (Bryman, 2008, p.437)

which could authentically provide insight into participants' experiences (Silverman, 1993).

The interview structure used for this study was semi-structured. Even though the interviewees had a large scope in which to discuss their information use experiences, I had designated questions and topics to cover. Questions not originally included in the "interview guide" were also asked. Clarification questions or extension questions were asked for example, "What is it about information that makes you think *this will be really good for me?*" In the same vein, questions were not necessarily asked in the order originally listed. Participants were interviewed using Zoom and Skype communication software or face to face. In all situations a second recording instrument was used in case one device failed to work. The interviews focused on what the interviewees deemed as important, how they understood "events, patterns, and forms of behaviour" (Bryman, 2008, p.438). The aim was for the interviewer and interviewee to be in "partnership and dialogue as they construct memory, meaning and experience together" (Bryman, 2008; Madison, 2012, p.28).

Prior to the questions related to Hofstede's dimensions and information use (Appendix H), I built a set of more general questions. These were intended to set the scene, provide a context and generally build rapport. The scene setting questions were designed to settle the participant in to the interview situation and have them answer questions which they would comfortably be able to answer about their overall research in their Master course. The general information use questions were intended to provide context to using information. They are broader questions that allow the participant to reveal their lived experiences of information use generally in the context of their study. The questions were as follows:

Scene-setting:

Which Masters course are you enrolled in?

How far into the course are you e.g. 1 year, 2 years or 3 years?

What courses or subjects have you covered so far?

Tell me about the topic you have chosen for your research?

General information use:

What do you understand by the term information use?

How did you go about finding information?

How did you decide on the quality of information you were finding?

What types of information did you use?

Please describe how you used that information in your research?

What sources did you find most useful and why?

How confident do you feel about researching information?

3.7.4 Pilot Study

The interview was piloted in late September to early October 2015 in order to ensure the overall research design was operating at optimum capacity. The pilot enabled me to focus on the processes that needed to be put in place. The entire method was under scrutiny from the recruitment of participants to the final interview regarding the trial instrument.

The first three interviews were formally treated as “pilot” interviews to attest the practicality of the process. The participants were all female and the interviews were conducted virtually through Zoom. The semi structured questions outlined in the previous section were followed in strict order. Zoom does record and convert interviews to MP3 files. A backup recorder was also used in case there was an issue with the Zoom recordings. Although 60 minutes was originally allotted to the interview time, the pilot interviews only took 40 minutes.

After the interview, I transcribed each of the recordings. I then reflected upon the transcription and recorded any considerations memos. The transcripts and memos were then provided for careful examination by my research supervisors. Valuable feedback was gained and as a result a question was added and some of the questions were rephrased. It was noted that a few of the introductory questions seemed to duplicate themselves and so the questions were streamlined a little more so it was not confusing and the participants did not repeat themselves. Also another question was added in the introductory questions. The question “What does information use mean

to you?" was added to help set the scene for an interview designed to shed light on the information use experience of the participants.

After discussing the memo reflections with the supervisors of this research, the recommended adjustment of adding the information use question into the scene setting questions was made in order to improve the interviewee experience. A major observation was made regarding the amount of talking the interviewer did in the beginning of this research. The pilot interview recordings were invaluable as part of the reflection process and determining how much clarification and explanation of terms was necessary for the participants. However, there were no significant changes necessary for the main study. The pilot study indicated that the semi-structured interview design worked well with the participants.

3.7.5 Data Analysis – Qualitative Thematic Approach

Ezzy (2013, p.73) notes, "Qualitative data analysis is an interpretive task." The researcher makes choices throughout the whole process which will play an important role in how data will be analysed. The processes that add to that understanding or interpretation of that data can include: meetings with supervisors, checking understanding with participants, transcribing, keeping memos, reading and coding data, establishing themes (Ezzy, 2013).

The interview results were analysed using thematic analysis due to its "theoretical freedom" and because it "provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex account of data" (Braun & Clarke, 2006, p.78). This marries well with the Pragmatic paradigm also guiding the research. Combined with this research paradigm, thematic analysis also guided what was said about the data and informed how the outcomes were perceived (Braun & Clarke, 2006).

3.7.6 Stage One – Transcribing

I recorded, transcribed and analysed the semi-structured interviews manually. Transcribing is part of the initial stages of data analysis (Ezzy, 2013, p.70). I carried this out myself because of the significant value in undertaking such an exercise. This acts as both a teaching tool and opportunity to reflect on the process (Ezzy, 2013). I kept memos of each transcript simultaneously so that reflections and insights during transcribing could be captured and used later in the analysis. I saved all the transcriptions in a password protected computer system and in keeping with ethics considerations, I removed names and any identifying details and replaced with a numbering system.

3.7.7 Stage Two – Coding

After transcription, the interviews were coded with a view to creating major themes for analysis, discover agreements and disagreements expressed in answers to questions, and to form categories which related back to questions or areas of interest in culture and in information use. In this phase the research moved from dealing with the “raw data” of interview transcripts to qualitative data analysis where codes were created. I created meaningful words or phrases from key words, phrases or contextual statements to establish codes for the qualitative data. I did not reuse the words of the participants, instead I scrutinised the data to categorise similar concepts, patterns or repeated perceptions.

“The idea is not just to take a phrase from “raw” data and use it as a label. Rather, coding requires searching for the right word or two that best describe conceptually what the researcher believes is indicated by the data” (Corbin & Strauss, 2008, p.160).

I undertook an iterative reading process of the transcripts with careful attention to the data at all times. I created a coding frame and the transcripts were coded accordingly as seen in Table 3.5. This process was iterative also and involved creating a coding memo similar to the ones developed for the transcripts.

<i>A-Z Codes</i>	<i>Frequency</i>	<i>Location</i>	<i>Quote</i>
<i>Constraints of obtaining govt. & commercial info in the UAE</i>	15	<i>I4p5; I11p4; I11p12; I20p5; I15p6; I1p9; I4p3; I9p2; I11p5; I18p4; I18p5; I20p3; I20p6; I20p6; I20p6;</i>	<i>“they say please... for example research, research ADCO (an Abu Dhabi Oil Company) take for you some topic and work on it. I say ok Doctor I cannot because my work is in the oil sector, it’s confidential and I can’t give you some information about my work.”</i>
<i>Enjoyment in research</i>	11	<i>I6p5; I14p12; I16p5; I17p5; I18p6; I3p10; I11p10; I2p6; I13p8; I8p10; I17p9; I16p3;</i>	<i>“would say the whole process was enjoyable, but living in it, I would say it was not enjoyable, but now I have finished, yes. Because even for the obstacles like maybe using SPSS as I always mentioned I face problems with sticks and organising the numbers and everything. It was a quite struggle but everything, every small thing was a huge accomplishment. “</i>
<i>Information provided by people</i>	31	<i>I5p1; I10p3; I11p4; I11p5; I11p8; I11p9; I13p4; I17p5; I18p1; I18p5; I18p9; I1p4; I1p4; I1p2; I1p3; I14p6; I19p3; I19p3; I18p8; I1p3; I10p9; I1p7; I1p9; I5p1; I20p4; I10p3; I10p4; I10p4; I18p5; I18p5; I11p5; I5p4; I1p3;</i>	<i>So what I’ve done ah I have went to, saw the Project Manager here in the HCT and I asked them, since we were working together so I prefer to ask an experienced person. As most of the time we are not sure about the people who are giving these comments, we not sure of them, we don’t know their experience of this program. So yeah I go to people with experience and ah ask them about this and then I will go with them. If they say that it’s good, that information is good or accurate information ... then I will go with them.</i>

Table 3.5 An example of basic coding, with brief explanatory notes used in the Qualitative phase of research

The codes were directly related to the data and they reflected information use in light of cultural dimensions. As a result a number of codes emerged based around that phenomena (Braun & Clarke, 2006). Close supervision and discussion with supervisors also occurred during this process. Each time new codes emerged, or were merged the frame was changed and transcripts were reviewed accordingly. This process allowed me to then develop broad categories which were then “conceptualised into broad themes” (Jain & Ogden, 1999).

3.7.8 Stage Three – Creating themes

After coding, I examined the data for emerging themes or patterns. As previously outlined, the themes were related to Hofstede’s cultural dimensions and were identified deductively - where previous knowledge exists "and the purpose of the study is theory testing" (Elo & Kyngas, 2008, p.109). This approach required several readings of the data; understanding and making decisions about data; selecting units or sections of text; coding those units or sections; revisiting coding and adjusting codes as they reflect or deflect relationships with the phenomenon being examined; grouping into themes (Braun & Clarke, 2006; Elo & Kyngas, 2008; Ryan & Bernard, 2003; Schilling, J, 2006). Through this deductive approach, I identified seven information use themes namely: Information personified; Information for personal needs; Information for personal improvement; Ambiguous information (acceptable in spoken context); Using information purposefully; Enjoyment in the flow of information use and Information contributors. As shown in Table 3.6 below, these information use themes relate to Hofstede’s seven cultural dimensions. These ultimately became *cultural dimensions of information use*. Table 3.6 also shows the codes which were grouped or classified to identify these themes.

Initially there were 373 codes with a distributed frequency of 1,193. After eleven iterations, the codes were finalised to a total of 88, of which 64 were useable to inform themes. After discussions with research supervisors, it was decided that codes that had fewer than 10 frequencies were either not included, or were merged with ones that had a clear relationship. The codes underwent developmental phases after each review, capturing the information use concepts relatable to culture more

accurately with each iteration. Therefore the cultural information use phenomenon under analysis was better understood. The codes were then placed into groups of similar concepts according to the deductive analysis process.

The deductive approach to discovering themes remained under the aim and guidance of the research question, “What is the relationship between these cultural characteristics and the students’ information use?” for this phase of analysis. For a full list of the final codes, see Appendix I.

Information use themes and Hofstede’s Cultural Dimensions as they relate to Emirati postgraduate students	
Information personified (Power vs. Distance cultural dimension)	<ul style="list-style-type: none"> • Students give teachers respect, even outside class • Teachers should take all initiatives in class • Quality of learning depends on excellence of the teacher • Teachers are gurus who transfer personal wisdom • Teacher guidance • Teacher input • Gauging quality of info found through people • Info provided by people • Finding info
Information for personal needs (Individualism vs. Collectivism cultural dimension)	<ul style="list-style-type: none"> • Students are expected to individually speak up in class. • The purpose of education is learning how to learn. • Diplomas increase economic worth and/ or self-respect. • The internet and e-mail hold strong appeal and are frequently used to link individuals • Points of view • Establishing an opinion • Info preferences • Types of info used • Value of info • Using Social Media to fill in info gaps • Using information in a group environment • Using info to increase learning
Information for personal improvement (Masculinity vs. Femininity cultural dimension)	<ul style="list-style-type: none"> • Competition in class; trying to excel • Students overrate their own performance: ego boosting. • Brilliance in teachers is admired. • More factual information is read

<ul style="list-style-type: none"> • The internet is used for fact gathering. • Reading experiences • Personal interest info • Being selective
<p>Ambiguous information (acceptable in spoken context) (Uncertainty Avoidance cultural dimension)</p> <ul style="list-style-type: none"> • Students are comfortable with open-ended learning situations and concerned with good discussions • Teachers may say “I don’t know” • Results are attributed to a person’s own ability • Sharing info • English skills for understanding
<p>Using information purposefully (Long Term Orientation vs. Short Term Orientation cultural dimension)</p> <ul style="list-style-type: none"> • Priority is given to common sense • Disagreement does not hurt • Synthetic thinking • Bringing information together • Gauging quality info • Criteria used to assess quality of info • Making decisions • Dissertation Topic
<p>Enjoyment in the flow of information use (Indulgence vs. Restraint cultural dimension)</p> <ul style="list-style-type: none"> • A perception of personal life control. • Higher importance of leisure. • Freedom of speech • Positive attitude • Personal development and lifelong learning • Enjoyment in research • Enjoyment in encountering new info • Meaning of information use • Time Management challenge • Blending job and study • Comparing info use experience between BA and MA • Research Impressions • Info is found in multiple ways and places
<p>Information contributors (Monumentalism vs. Self-Effacement cultural dimension)</p> <ul style="list-style-type: none"> • Pride in self • National pride • Believing religion to be important • Frustrations with finding info • Constraints with obtaining UAE government and organisational info • Development as a researcher • Researcher Practitioner

Table 3.6 Formation of themes informed by coding

3.7.9 Maintaining Quality: Qualitative Phase

Discussions surrounding qualitative validity can be slightly “more contentious and different typologies and terms have been produced” (Onwuegbuzie & Johnson, 2006, p.48). Just as in quantitative research, qualitative research also addresses issues of reliability, meaning that “scores received from participants are consistent and stable over time” (Cresswell & Plano Clark, 2011, p.211). There are multiple words to describe validity in qualitative studies and as many as 17 terms to define it (Dellinger & Leech, 2007, p.312). However, the core components of validity should focus on what is accurate, trustworthy and credible (Cresswell & Plano Clark, 2011).

In order to address these components, I was careful to develop the semi-structured interview questions in light of the findings of Phase One research. The questions were generated from the findings on cultural dimensions and aligned with questions directly associated with information use. After submitting the proposed interview structure for ethics review, it was piloted to ensure all participants were able to understand the questions and respond confidently. The Emirati masters students used English predominantly in their studies. However, their ability to grasp the English language was not always consistent therefore it was important to ask clarifying questions to check for understanding, or to rephrase questions if they needed. Similarly if I needed clarification on participant responses, clarifying questions were asked.

Cross cultural views were also taken into consideration. Skype and Zoom (IT communication tools) were used if students were uncomfortable meeting face to face which could have been the case with some of the male participants. These tools also allowed students who lived further away equal access in participating in the interviews. Female participants were able to turn off the camera if they wanted to maintain privacy.

Whilst transcribing the interviews, I kept detailed memos which were closely scrutinised by supervisors to ensure analysis truly reflected the data in a reliable and valid way. This was true for coding and thematic analysis as well. To ensure rigor

and validation, codes and themes were analysed at each iteration and coding memos were also created. Decisions to include or discard were only actioned after sound discussion with the supervisors associated with this research.

Both quantitative and qualitative analysis techniques were used sequentially after data collection, but interpretations were also paralleled and integrated at various points of the analysis, for example when the interview questions were developed, resulting in the final merging of data for interpretation. When it comes to the discussion of mixed methods validity, it is not as simple as stating that the researcher validates the quantitative part of the study using measures appropriate to that phase and then applies appropriate measures to validate the qualitative study. Whilst this essentially does occur, the key objective and a strong argument for using mixed methods is that it uses the strengths of both approaches. If there are weaknesses in one study, the other approach should more than compensate (Onwuegbuzie & Johnson, 2006). This is a commonly held principle amongst mixed methods researchers and the one which is used most constantly to justify this research approach. Further investigation in Chapter 5 will reveal that this indeed was the case in the findings around Uncertainty Avoidance. I sought to draw upon data from both the quantitative and qualitative phases and to ensure inference quality and interpretive rigor, therefore enhancing the validity and reliability of the data and minimising researcher bias.

Finally a mention about objectivity so as to maintain quality when interviewing students who were aware that I was professionally involved in the field I was researching. In all of the interviews I was careful to arrange meetings in times and places that were favourable to the students. Many times we interviewed virtually or met away from my office so as to provide equal ground and avoid power imbalances. I always assured the students both verbally and in writing that this research was for personal fulfilment and in no way would their lecturers be informed of their conversations with me, nor would their results be affected.

3.8 ETHICS

Ethics approval was sought from both Queensland University of Technology and the UAE higher education institutes involved in the project, so that I might access students to participate in the pilot study and beyond for further phases of research. Both institutions consented after appropriate documentation was submitted and all details of the study provided. This research was considered low risk and conducted under the Queensland University of Technology ethics number 1400000161.

3.9 CONCLUSION

This chapter has justified the suitability of a pragmatic position which allowed me to produce socially useful knowledge whilst taking into account the social, historical or political context of the phenomenon being explored. It has been stated that Pragmatism is best suited to this research because not only does it accommodate the connection of technical concerns and epistemological concerns used to understand and generate knowledge, it argues “for a properly integrated methodology for the social sciences” – such as information science (Morgan, 2007, p.73). Discussion also supported the proposal of mixed methods as a viable research method as it aligned best with the research question and sub questions, as well as the desired data collection methods.

A questionnaire was used in the first phase of research and was conducted using the existing and well tested instrument devised by Geert Hofstede –Values Survey Instrument 2008. This was followed up by semi-structured interviews in the second phase, which were devised from the learnings of the first phase data. The questionnaire and interview participants were selected from tertiary colleges in the UAE using convenience sampling. A total of 297 higher education students for the questionnaire; and 318 higher education students for the interviews from across the United Arab Emirates were approached to participate in data collection. In 2014, a total of 100 useable online surveys were completed and in 2015/2016 20 interviews were conducted.

Statistical data analysis of the questionnaire data based on Hofstede's formula was conducted to understand the cultural characteristics of Emirati higher education students. Thematic analysis of the interviews was undertaken to explore how these students' information use intersected with my findings on their cultural dimension profiles. Ethical issues, research reliability and validity were considered carefully throughout the entire process. The next chapter will discuss the findings from the quantitative research or Phase One data collection.

Chapter 4: Phase One (Quantitative) Findings

4.1 INTRODUCTION

This chapter presents the data findings of the quantitative stage of the research, which provide an overview of the participant students' cultural characteristics. The results provided by the participants were key as they established, "*What are the cultural dimensions of Emirati postgraduate students?*" This is the first sub question of the Explanatory Sequential design - (see Figure 3.1). This chapter establishes how this group of Emirati students scored on the cultural dimensions index and "unpacks" the cultural dimensions as they pertain to the score derived. The findings here ultimately pave the way for an examination of the dimensions within an information use framework.

4.2 CULTURAL DIMENSION SCORES

Section 3.6.5 in Chapter 3 Methodology outlines how the scores were derived from the VSM08 questionnaire. Using the formula as outlined in 3.6.5 of the Methodology chapter, the cultural dimension scores derived for this sample group are displayed in Table 4.1 below:

Cultural dimension index scores (VSM08)	
Dimension	UAE Masters Students
Power Distance	75.42
Individualism versus Collectivism	52.10
Masculinity versus Feminine	75.98
Uncertainty Avoidance	18.15
Long Term Orientation	57.78
Indulgence versus restraint	100.32
Monumentalism	54.25

Table 4.1 Cultural Dimension index scores for 2014-2015 UAE Masters Cohort

In reviewing the above findings it is important to note that by focussing only on postgraduate students within one country, this research deviates from the original intention of the VSM08 to compare culture across countries. Even though this model has proven to be quite often correct when applied to the general population, one must be aware that not all individuals or even regions with subcultures fit into the mould as prescribed in the dimensions. Thus, in this research I have used Hofstede's model as a conceptual framework to examine cultural dimensions of the UAE postgraduate students' information use.

According to Hofstede, "next to nationality, the answers to the 24 content questions will also reflect other characteristics of the respondents, such as their gender, age, level of education, occupation, kind of work and the point in time when they answered the questions" (Hofstede, Hofstede, Minkov & Vinken, 2008, p.3). Culture can be conceptualised at several levels, meta culture (for instance global culture), national culture and also micro culture (for instance organisation culture) (Hofstede, Hofstede, Minkov, 2010). In the case of this research there are a number of factors at play which may signal other characteristics. Similar to the many researchers who have retrieved variations to Hofstede's results (Oshlyansky, Cairns & Thimbleby, 2006; Pylypenko, Voloshenuk & Lytvynenko, 2012) the educational background and age group of the participants are possible issues in this research. It is important to keep in mind that data collection used convenience sampling, and as a result there is not a lot of difference in the demographics, occupation or education, therefore distinct cultural or value sets may be created because of the cultural groupings or layers these individuals belong to (Wiesemes, Murphy & Signorini, 2009). Also the demographical statistics indicate that just under half (47%) of the sample group members were in managerial positions and may have played a role in the responses.

A closer look at the scores in relation to the dimensions revealed the cultural profile of the sample group. I endeavoured to gain an understanding of the cultural makeup according to Hofstede's descriptions of the cultural dimensions. In the following sections, the scores gathered from the responses will be explained in terms of how

the participants profiled. In each case a profile or characteristic description will be given using descriptors from Hofstede's summaries he provides for attributes noticeable in an educational context or setting (Hofstede, Hofstede & Minkov, 2010).

4.3 POWER DISTANCE

According to Hofstede, Power Distance refers to "the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally" (Hofstede, Hofstede & Minkov, 2010, p.61). Scores aligning to the lower end of the index are described as low Power Distance countries and the opposite result indicates a high power distance country. In this study the questions that particularly related to Power Distance were 7, 2, 23 and 26. They dealt with power and authority, in particular employee relations with bosses and organisational rules. VSM08 allows students to consider their teachers as their 'boss' if the participant is not currently working.

In the case of this sample group, the index score was 75.42, placing these UAE students high on the Power versus Distance index. This means that according to these results the UAE higher education reflects Hofstede's findings for collective Arab nations as a high Power Distance country (2010). The characteristics of a high Power Distance country across the sectors of general norm, family, school, health, workplace and government are listed in Table 4.2.

General Norm, Family, School, Health
<ul style="list-style-type: none"> • Inequalities among people are expected • Status should be balanced with restraint • Less powerful people should be dependent • Less powerful people are emotionally polarised between dependence and counterdependence • Parents teach children obedience • Respect for parents and older relatives is a basic and lifelong virtue • Children are a source of old-age security to parents • Students give teachers respect, even outside class • Teachers should take all initiatives in class

- Quality of learning depends on excellence of the teacher
- Teachers are gurus who transfer personal wisdom
- More educated and less educated persons show equally authoritarian values
- Educational policy focuses on universities
- Patients treat doctors as superiors; consultations are shorter and controlled by the doctor

Table 4.2 Characteristics of high Power Distance

(Hofstede, Hofstede & Minkov, 2010, pp.72, 76, 83)

4.4 INDIVIDUALISM VS COLLECTIVISM

Individualism refers to “societies in which the ties between individuals are loose: everyone is expected to look after him or herself and his or her immediate family”; and Collectivism refers to “societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people’s lifetime continue to protect them in exchange for unquestioning loyalty” (Hofstede, Hofstede & Minkov, 2010, p.92). Scores aligning to the lower end of the index are described as collectivist countries and the opposite result indicates an individualistic country. In this study the questions that particularly related to Individualism versus Collectivism were 4, 1, 9 and 6. They dealt with personal time, freedom and workplace challenge (Individualism); and training, physical conditions, use of skills (Collectivism).

In the case of this sample group, the index score was 52.10, placing these UAE students just past the halfway mark on the index, which may mean characteristics from each cultural value of the dimension may be present. As the result is closer to the middle of the index, the characteristics of both Individualist and Collectivist countries across the sectors of, school, workplace, and internet are listed in Table 4.3.

Workplace, School, ICT	
Individualist	Collectivist
<ul style="list-style-type: none"> • Students are expected to individually speak up in class • The purpose of education is learning how to learn • Diplomas increase economic worth and/or self-respect • Occupational mobility is higher • Employees are “economic persons” who will pursue the employer’s interests if it coincides with their interest • Hiring and promotion decisions are supposed to be based on skills and rules only • The employer-employee relationship is a contract between parties in a labour market • Management is management of individuals • Management training teaches honest sharing of feelings • Every customer should get the same treatment • Task prevails over relationship • The internet and e-mail hold strong appeal and are frequently used to link individuals 	<ul style="list-style-type: none"> • Students speak up in class only when sanctioned by the group • The purpose of education is learning how to do • Diplomas provide entry into higher-status groups • Occupational mobility is lower • Employees are members of the in-groups who will pursue the in-group’s interest • Hiring and promotion decisions take the employee’s in-group into account • The employer-employee relationship is basically moral, like a family link • Management is management of groups • Direct appraisal of subordinates spoils harmony • In-group customers get better treatment (particularism) • Relationship prevails over task • The internet and email are less attractive and less frequently used

Table 4.3 Characteristics of high Individualism

(Hofstede, G., Hofstede, G.J., Minkov, 2010, pp.113, 117,124,130)

4.5 MASCULINE VS FEMININE

A masculine society infers that the “emotional gender roles are clearly distinct: men are supposed to be assertive, tough, and focused on material success, whereas women are supposed to be more modest, tender, and concerned with the quality of life” (Hofstede, Hofstede & Minkov, 2010, p.140). A feminine society is inferred “when emotional gender roles overlap: both men and women are supposed to be modest, tender, and concerned with quality of life” (Hofstede, Hofstede & Minkov, 2010, p.140). Scores aligning to the lower end of the index are described as feminine countries and the opposite result indicates a masculine country. In this study the questions that particularly related to Individualism versus Collectivism were 5, 3, 8 and 10. They dealt with earnings, recognition, advancement and challenge

(masculine); and relationships with the manager, cooperation, living area and employment security (feminine).

In the case of this sample group, the index score was 75.98, placing these UAE students higher on the index, indicating a Masculine ranking. The characteristics of a Masculine country across the sectors of school and consumerism are listed in Table 4.4.

School and Consumerism
<ul style="list-style-type: none"> • Best student is the norm; praise for excellent students • Competition in class; trying to excel • Failing in school is a disaster • Competitive sports are part of the curriculum • Aggression in children is accepted • Students overrate their own performance: ego boosting • Brilliance in teachers is admired • Job choice is based on career opportunities • Men and women study different subjects • Women teach young children • Women shop for food, men for cars • Couples need two cars • More status products are sold • More nonfiction is read • The internet is used for fact gathering

Table 4.4 Characteristics of high Masculine

(Hofstede, Hofstede & Minkov, 2010, pp.159, 165,170,180)

4.6 UNCERTAINTY AVOIDANCE

Uncertainty Avoidance can be described as “the extent to which members of a culture feel threatened by ambiguous or unknown situations” (Hofstede, Hofstede & Minkov, 2010, p.191). Scores aligning to the lower end of the index are described as weak Uncertainty Avoidance or less anxious and fearful countries; and the opposite result indicates a high Uncertainty Avoidance or anxious and fearful countries. In this study the questions that particularly related to Uncertainty Avoidance were 20, 16, 24 and 27. These questions explored job stress and general health.

In the case of this sample group of UAE students, the index score was 18.15, indicating a weak Uncertainty Avoidance ranking. The characteristics of a weak Uncertainty Avoidance country across the sectors of health, school and consumerism are listed in Table 4.5.

Health, School, Consumerism
<ul style="list-style-type: none"> • Fewer people feel unhappy • People have fewer worries about health and money • People have more heart attacks • There are many nurses but fewer doctors • Students are comfortable with open-ended learning situations and concerned with good discussions • Teachers may say “I don’t know” • Results are attributed to a person’s own ability • Teachers involve parents • In shopping, the search is for convenience • Used cars, do-it-yourself repairs • People more often claim ethical consideration in buying • There is fast acceptance of new features such as mobile phones, email and the Internet • Risky investment • Appeal of humour in advertising

Table 4.5 Characteristics of weak Uncertainty Avoidance

(Hofstede, Hofstede & Minkov, 2010, pp.203, 208, 217, 223, 231)

4.7 LONG TERM VS SHORT TERM ORIENTATION

The fifth dimension of Long Term Orientation versus Short Term Orientation was added in 1991 to accommodate the Chinese Values Survey developed by Michael Bond when it was discovered that the Uncertainty Avoidance dimension did not correlate and indeed had no equivalent in the Chinese culture (Hofstede, Hofstede & Minkov, 2010, p.236). After discovering this dimension did exist and was an “essential” addition to the IBM research by compensating for the short fall in Uncertainty Avoidance, Hofstede developed questions to include the Long Term versus Short Term Orientation dimension (Hofstede, Hofstede & Minkov, 2010, p.239). If a country is described as having Long Term Orientation, this means that “the fostering of virtues oriented towards future rewards – in particular, perseverance and thrift” (Hofstede, Hofstede & Minkov 2010, p.239). A country having Short Term Orientation means that “the fostering of virtues related to the past and present -

in particular, respect for tradition, preservation of ‘face’ and fulfilling social obligations” (Hofstede, Hofstede & Minkov, 2010, p.239).

Scores aligning to the lower end of the index are described as Short Term Orientation countries; and the opposite result indicates Long Term Orientation countries. In this study the questions that particularly related to Long Term Orientation versus Short Term Orientation were 18, 15, 28 and 25. These questions explored thrift, national pride and the importance of service to others.

In the case of this sample group, the index score was 57.78, placing these UAE students just over the midway mark on the index, indicating closer to Long Term Orientation. Again the research results may be indicative of the sample group being selected from a particular micro culture and as the score is toward the middle of the index, there may well be characteristics related to Short Term Orientation as well. As a result, the characteristics of both Long Term Orientation and Short Term Orientation countries across the sectors of general norm, family, gender, business and ways of thinking are listed in Table 4.6.

General Norm and Family	
Long Term Orientation	Short Term Orientation
<ul style="list-style-type: none"> • Thrift, being sparing with resources • Perseverance, sustained efforts towards slow results • Willing to subordinate oneself for a purpose • Having a sense of shame • Respect for circumstances • Concern for personal adaptiveness • Marriage is a pragmatic arrangement • Living with in-laws is normal • Young women associate affection with a husband • Humility is for both men and women • Old age is a happy period and it starts early • Mothers should have time for their preschool children • Children get gifts for education and development 	<ul style="list-style-type: none"> • Social pressure towards spending • Efforts should produce quick results • Concern with social and status obligations • Concern with “face” • Respect for traditions • Concern with personal stability • Marriage is a moral arrangement • Living with in-laws is a source of trouble • Young women associate affection with a boyfriend • Humility is for women only • Old age is an unhappy period, and it starts late • Preschool children can be cared for by others • Children get gifts for fun and love

Business and Ways of Thinking	
Long Term Orientation	Short Term Orientation
<ul style="list-style-type: none"> • Main work values include learning, honesty, adaptiveness, accountability, and self-discipline • Leisure time is not important • Focus is on market position • Importance of profits ten years from now • Owner-managers and workers share the same aspirations • Wide social and economic differences are undesirable • Investment in lifelong personal networks, guanxi • Concern with respecting the demands of Virtue • What is good and evil depends on circumstances • Satisfaction with one's own contributions to daily human relations and to correcting injustice • Matter and spirit are integrated • If A is true, its opposite B can also be true • Priority is given to common sense • Disagreement does not hurt • Synthetic thinking 	<ul style="list-style-type: none"> • Main work values include freedom, rights, achievement, and thinking for oneself • Leisure time is important • Focus is on "the bottom line" • Importance of this year's profits • Managers and workers are psychologically in two camps • Meritocracy, reward by abilities • Personal loyalties vary with business needs • Concern with possessing the truth • There are universal guidelines about what is good and evil • Dissatisfaction with one's own contributions to daily human relations and to correcting injustice • Matter and spirit are separated • If A is true, its opposite B must be false • Priority is given to abstract rationality • There is need for cognitive consistency • Analytical thinking

Table 4.6 Characteristics of high Long Term Orientation

(Hofstede, Hofstede & Minkov, 2010, p.243, 251).

4.8 INDULGENCE VS RESTRAINT

Indulgence versus Restraint dimension was introduced by Michael Minkov (also known as Misho), after he delved further into a dimension called Universalism versus Exclusion which was a variation of Individualism versus Collectivism. Taking into consideration the World Values Survey and his own exploration into universalism versus exclusion, Minkov discovered yet another dimension not yet included by Hofstede (Hofstede, Hofstede & Minkov, 2010, pp.280, 281). Although it existed "conceptually" in Hofstede's Uncertainty Avoidance dimension, this dimension was formally called Indulgence versus Restraint (Hofstede, Hofstede, Minkov, 2010, p.286). It appears that Hofstede endorsed and included IVR in his

own cultural dimensions when *Cultures and Organizations: Software of the Mind* was republished in 2010.

If a country is described as *indulgent*, that means that there is a “tendency to allow relatively free gratification of basic and natural human desires related to enjoying life and having fun” (Hofstede, Hofstede & Minkov, 2010, p.281). Conversely if a country is labelled as *restrained*, it refers to a “conviction that such gratification needs to be curbed and regulated by strict social norms” (Hofstede, Hofstede & Minkov, 2010, p.218). Scores aligning to the lower end of the index are described as countries ranking high in Restraint; and the opposite result indicates countries ranking high in Indulgence. In this study the questions that particularly related to Indulgence versus Restraint were 12, 11, 19 and 17. These questions explored happiness, life control and the importance of leisure. It is important to note here that the reference to any kind of indulgence of human gratification refers to enjoying life and having fun, not a general tendency to gratify human desires (Hofstede, Hofstede & Minkov, 2010, p.218).

In the case of this sample group, the index score was 100.32, placing these UAE students extremely high on the index, indicating Indulgence. The characteristics of an Indulgent country across the sectors of general norm, personal feeling, health, private life, consumer behaviour, sex, and government are listed in Table 4.7.

General Norm, Personal Feeling, Health
<ul style="list-style-type: none"> • Higher percentage of very happy people • A perception of personal life control • Higher importance of leisure • Higher importance of having friends • Thrift is not very important. • Loose society • More likely to remember positive emotions • Less moral discipline. • Positive attitude • More extroverted personalities • Higher percentage of people who feel healthy • Higher optimism • In countries with well-educated populations, higher birth-rates • Lower death rates from cardio vascular disease.

Private Life, Consumer Behaviour, Sex, and Government
<ul style="list-style-type: none"> • Higher approval of foreign music and films • More satisfying family life • Household tasks should be shared between partners • People are actively involved in sports • Email and the Internet are used for private contacts • More email and Internet contacts with foreigners • Less consumption of fish • More consumption of soft drinks and beer • In wealthy countries, higher percentages of obese people • Loosely prescribed gender roles • In wealthy countries, less strict sexual norms • Smiling as a norm • Freedom of speech is viewed as relatively important • Maintaining order in the nation is not given high priority • Lower numbers of police officers per 100,000 population

Table 4.7 Characteristics of high Indulgence

(Hofstede, Hofstede & Minkov, 2010, pp.291, 297).

4.9 MONUMENTALISM VS SELF-EFFACEMENT

Monumentalism versus Self-Effacement is another dimension discovered by Minkov after his analysis of the World Values Survey and utilised later by Hofstede (Hofstede, Hofstede & Minkov, 2010, p.252). Monumentalism is related to pride in self, national pride, making parents proud, and believing religion to be important. It is similar to McClelland's concept of need for achievement which is also a theoretical basis of the GLOBE (Global Leadership and Organisational Behaviour Effectiveness) dimensions which was a replication and expansion of Hofstede's original survey (Littrell, 2012, p.5; Hofstede, Hofstede & Minkov, 2010, p.41). To begin with, Self-Effacement was referred to as *Flexhumility* which identifies societies valuing humility, with members seeing themselves as having a changeable invariant self-concept and a flexible attitude toward Truth (Littrell, 2012, p.5).

Monumentalism stands for a society which rewards people who are, metaphorically speaking, like monuments: proud and unchangeable. Its opposite pole, Self-Effacement, stands for a society which rewards humility and flexibility (Hofstede, 2008, p.10). Whilst the Monumentalism dimension was added to the VSM08, it is

not dealt with in the same detail that the other dimensions are in the literature describing characteristics or traits of the dimension types.

Hofstede explained that Monumentalism versus Flexhumility (flexibility plus humility), as Minkov originally labelled the dimension, was significantly correlated with Short Term Orientation and less strongly with Power vs. Distance. In the VSM 94 the measurement of Long versus Short Term Orientation has been problematic, so in the VSM 08 Hofstede introduced new question items for this dimension. By measuring Monumentalism versus Flexhumility items as well, as an additional security to the STO and PDI dimensions. Hofstede replaced the Minkov's "Flexhumility" with "Self-Effacement" (Hofstede, 2008, p.13).

Scores aligning to the lower end of the index are described as countries ranking high in Self-Effacement; and the opposite result indicates countries ranking high in Monumentalism. In this study the questions that particularly related to Monumentalism were 13, 14, 21 and 22. These questions explored national pride, achievement, religion and humility. In the case of this sample group, the index score was 54.25, placing these UAE students past the halfway mark on the index, orienting them towards Monumentalism. However, there may be aspects of Self-Effacement discernible also. Monumentalism infers the unchangeable values and beliefs of a nation. Monumentalist nations have a very rigid view of their identity and "cultural flexibility" is seen as a betrayal of "national interests" (Pylypenko, Voloshenuk & Lytvynenko, 2012, p.198). Additionally these nations are uncritical of authority and "high piteousness" (Pylypenko, Voloshenuk & Lytvynenko, 2012, p.198). Whereas self-effacing cultures tend to seek positive information about themselves and promote humility, flexibility and adaptability to changing circumstances (Hofstede & Minkov, 2010).

4.10 RESPONDING TO THE RESEARCH QUESTION

This section will provide a summarised response to the research question, "What are the cultural characteristics evident in Emirati students?" The survey responses

revealed a variety of interesting cultural insights from this sample group. The results indicated that this particular Masters group of students scored relatively high on all the dimensional indexes, apart from Uncertainty Avoidance. As mentioned the results were not obtained to compare against other countries, even though this instrument was developed specifically for that purpose. Hofstede goes as far as to say “one-country replications are meaningless because they have no match to compare with: the VSM is like a thermometer that has to be re-calibrated at each use” (Hofstede & Hofstede, n.d.). This instrument was chosen because of the specific cultural traits it explores and defines and because of its reliability and validity. However, this research did not intend to use Hofstede’s model to solely analyse culture in a vacuum. For this research, Hofstede’s model was used as a data collection and analysis framework to further explore the relationship culture may have with Emirati student information use.

Therefore the rationale for using Hofstede’s VSM08 aligns with the research paradigm. As explained in Chapter 3, this research is grounded in Pragmatism, where there can be multiple truths contextualised in social, political and historical frameworks. Whilst there may be a justifiable query for using an instrument that is formed from an entirely different paradigm for a singular purpose, this research is comfortable with accommodating this because the VSM08 instrument combined with a qualitative instrument, will allow this research to potentially answer the overarching question - “What are the cultural dimensions of information use among Emirati students?”

Whilst the dimensions looked at all aspects of culture, this study pursued understanding of the information use experience of higher education students in the UAE. The use of a quantitative study on culture to better inform the research is of secondary importance to the qualitative study devised to explore the information use experience. The data gathered here informed the next phase of qualitative study and provided me with rich data about the culture of these UAE Masters Students which created questions that pinpointed specific and meaningful enquiries about their experiences in using information.

4.11 CONCLUSION

This chapter provided the quantitative data scores and how they are characterised culturally according to Hofstede's original framework. It also focussed on Hofstede's descriptions of how those characteristics appear in society. These theories will be broadened to accommodate my original findings relevant to the Emirati students' information use in the remaining chapters of the study. As this is an Explanatory Sequential design with a participation-selection variant focus mixed methods research, the quantitative phase of data collection was implemented first to contribute to the qualitative study phase of this research. The first sub-question "What are the cultural dimensions of Emirati postgraduate students?" was therefore explored and the established cultural characteristics evidenced within the index scores (Table 4.1), the generic descriptions of each dimension and the detailed characteristics outlined in Tables 4.2, 4.3, 4.4, 4.5, 4.6 and 4.7. The next chapter will proceed to discuss the qualitative data (Phase Two) collection and findings.

Chapter 5: Phase Two (Qualitative) Findings

5.1 INTRODUCTION

The previous chapter presented the data of Phase One of the research. This chapter provides findings from Phase Two of the research. In keeping with the Explanatory Sequential design and participation-selection variant focus of this mixed methods research, the qualitative phase of data collection was implemented after the quantitative study phase of this research. The prioritised area of research is centred in this particular phase, as understandings derived from Phase One were used to create interview questions for this phase. Phase One informed and provided the cultural characteristics of Emirati postgraduate students. The findings of the interviews (Phase Two) respond to the following sub question of the Explanatory Sequential design “What is the relationship between these cultural dimensions and the students’ information use?” This chapter reveals cultural dimensions of Emiratis students’ information use. A different perspective of the information use phenomenon was revealed where information users are highlighted. The chapter opens with a short disclosure of the dimensions that were developed from Phase One’s data and the findings from the interviews. A description of each cultural dimension of information use and their features is presented, supported by verbatim interview quotes. This is followed by a chapter summary.

5.2 CULTURAL DIMENSIONS OF EMIRATI POSTGRADUATE STUDENTS AS INFORMATION USERS

Dimensional features of Emirati postgraduate students’ identified in Phase One align broadly with Hofstede’s cultural dimensions in the exploration of information use. In particular, the data was investigated for relationships between these characteristics and information use. The following discussion reveals that information use is experienced in a variety of ways that relate to or intersect with culture. Hofstede’s dimensional framework has enhanced the exploration of information use and as a

result notable findings regarding information use amongst Emirati students in higher education have emerged.

Key aspects or elements of information use were evident as a result of exploring the relationship between culture and information use of the Masters students enrolled in UAE College institutions. Before these elements are discussed in detail, it is useful to consider Table 5.1 which provides the highlights of how information use intersects with the cultural dimensions. The first column contains the cultural information use themes that arose from the thematic analysis of the qualitative data, and the cultural dimension it relates to. The second column shows the specific elements that emerged from each of those themes. These are my theoretical perspective on culture intersecting with information use in order to examine the *cultural dimensions of information use* of post graduate Emirati students.

Cultural Dimensions of Information Use	
Information use (themes)	Elements of information use
Information personified (Power vs. Distance)	<ul style="list-style-type: none"> • A heavy reliance on teachers and supervisors • Industry experts are also perceived as valuable sources of information
Information for personal needs (Individualism vs. Collectivism)	<ul style="list-style-type: none"> • Strong preference for online and internet resources appeals directly to personal information needs. • Users of this information type can control how they receive and respond to information online. • Importance of personal development as they use and become more confident with information. • Information is contextually valuable to the user.
Information for personal improvement (Masculine vs. Feminine)	<ul style="list-style-type: none"> • Desire to personally improve in their results or improve their experiences with information. • Proud to be seen doing well as they engage with information. • Favours the perceived factual, scientific nature of the internet when sourcing information • Preference for non-fiction information pervades their personal information use.
Ambiguous information acceptable in spoken context (Uncertainty Avoidance)	<ul style="list-style-type: none"> • Frustration or displeasure in instances when information did not draw clear conclusions for them to access.

	<ul style="list-style-type: none"> • Open ended information welcomed in spoken information
Using Information Purposefully (Long Term Orientation vs. Short Term Orientation)	<ul style="list-style-type: none"> • Grit and perseverance to push through the complexities of using information. • Understanding that applying effort now saves time later regarding certain information tasks.
Enjoyment in the flow of information use (Indulgence vs. Restraint)	<ul style="list-style-type: none"> • Great enjoyment in discovering new information. • Students were more confident researchers as a result of surmounting information challenges • a real sense of accomplishment in their research achievements • “Information short cuts” utilised to maximise use of leisure time.
Information contributors (Monumentalism vs. Self-Effacement)	<ul style="list-style-type: none"> • Contribute to the knowledge economy of the UAE. • Extreme pride in their nation • There is also a sense of despair over so little reliable academic information available about the UAE. • Information that is communicated by the rulers of the UAE is consumed with great enthusiasm • Hope that the global community will also be able to access the information achievements that are developed in the UAE.

Table 5.1 Information use reflected in cultural dimensions

5.2.1 Information personified

As outlined in the previous chapter the Emirati higher education students who participated in Phase One (i.e. the questionnaire) ranked high on the Power Distance index. This means the participants in this study accept that there is inequality in power relationships in society. Exploring this further in Phase Two (i.e. interviews) revealed that the Emirati higher education students who participated in the study had a large amount of dependence upon the teachers when it came to using information. This means that teachers are considered authority figures, who initiate and control student approaches to information use. In order to understand how a student might experience information when they have been immersed in a high Power vs. Distance culture, discussions were based around how reliant they were on their lecturer or other education professionals for assistance when deciding on their research

questions or topics. This was intended to explore the level of input a teacher or lecturer might have had in guiding the student towards a certain direction or whether there were any conditions involved in selecting information or the type of information used.

The interviews conducted reflected the students' acceptance of the power imbalance between themselves and the teachers. A prevailing respect is essential in the relationship between the student and teacher. It is something that is ingrained in them from home and has lasting effects as illustrated by the following quotation:

“...because the background from my family, like my mother told me respect your teacher, don't say anything even if they something to you that's not good, they know your way and know your future and they will try to help you anyway even if they shout respect them because they bigger than you so I put that in my mind.” (I 13 p9)

The older the teacher, the more experienced and more respected they are. One student admitted that she relied on her tutor as far as receiving better support in her information use. However, the professor who was described as quite elderly and somewhat forgetful is perceived as “so educated”, therefore he is more admired as evidenced by the following quote:

“But my professor is sooo nice and he is soooooo educated, I can't find someone who is educated like him, he wonderful, he so kind.” (I 5 p4)

Students were asked how much they rely on their teachers to help them create their research topics. There were mixed responses. Many indicated they were able to choose their own topics but they still were reliant on the approval of their teachers. Or they needed support in crafting the wording of their topics as they felt unsure how to best approach this task. This quote regarding the participant's efforts and motivation in selecting a topic to research contains an “afterword” of gratitude to her professor, deferring her ability to make appropriate choices to that of her teacher.

“That’s what makes it interesting, I mean I am the one who chose the topic and am working on it. Of course with my professor’s guidance I’m... you know supported.” (I 10 p4)

Students are aware of the balance of power in the teacher student relationship and eagerly look to their teachers for the final word on their choice of information, or decision making around information. Therefore being in control of decision making in their information use experience and the empowerment that is affiliated with that, is defaulted to the supervisors and teachers. There is a strong trend within the interview comments for teachers instigating the initiatives in using information, for example:

“With one of my professors, we had statistical analysis project and he said if you use measures outside of whatever we taught you, I’ll give you an “A”. So they encourage you to do better.” (I 9 p15)

This, on face value, is perceived as encouragement from the teacher. Or on the other hand it could be a determined attempt by the teacher to think “aloud” for the students thus initiating how to achieve the better mark. Here we see an example of a teacher operating in a number of information frameworks. The ‘building blocks’ of content have been established but there is encouragement for the students to risk take a little and use information to learn more independently and personally.

Making choices about information or directing the course of writing up research tasks or the dissertation remains dependent on the teachers. When asked about how they might come up with an idea for a topic and how reliant they were on the teacher to guide them, one participant suggested that she was able to create a topic but would not proceed to look for information without first speaking with the teacher. This is evidenced in the following quotation:

“...well no after I find the topic and after I find information, I’m not taking that information unless I talk to my teacher.” (I 14 p6)

Further to this she expressed the reason for doing this was because teachers and student’s thought differently and most revealing is the doubt that exists about her own information use abilities. There is an underlying feeling of ineptitude present and evidence of the perception of authority teachers have to make decisions regarding information choices. The following quote by the same participant implies this:

“It’s like teachers think differently so I’m not sure if it’s correct or not, even if it’s correct I don’t know how to write or how to start unless I talk to the teacher.” (I 14 p6)

The reliance on supervisors or teachers to take initiative in matters concerning information use became problematic for many participants when they transitioned from a Bachelor degree to undertaking their Master degree. Participants struggled as supervisors and professors, often trained in Western countries, expected a greater deal of independence of their students. This same independence did not seem to be encouraged in the Bachelor years. One participant was very cognisant of this when she discussed making information decisions whilst studying her Bachelor degree. She believed due to her inexperience and being overwhelmed by the course work in the Bachelor degree, she relied heavily on her teachers to give her direction and guide her towards information. She describes it as “taking the Power from the teacher.” (I 13 p2)

However, there is the realisation for the students that teachers looked to them to grow in independence in the Masters courses as they approached their own research. If students can cross the bridge from dependence to independence then the information experience is far more rewarding. This quote from the same student reflects her understandings of being independent and taking control of her research in the Masters year:

“Even my opinions, not just taking the things from one way. I try to think about being more positive about the things, even if I have problem because I can see the things is from different ways and I can try to solve the problem as much I can and a faster way.” (I 13 p3)

Other participants echoed the same sentiments. In the Masters year they became aware that the spoon feeding of information use was an experience that was real for them in the Bachelor years. Now in the Master program it was evident that teachers require individual focus, ownership and self-sufficiency. This is indicated in the following quote:

“...so like here in the bachelor you know they will teach you, you have a little experience. But in the master level it’s like, no, they will not teach you any more you will teach them.” (I 11 p8)

Students are reluctant to leave that practice experienced in the Bachelor years where information was experienced at a content and competency level. Students were heavily reliant on their teachers for content and waited for teachers to set out stages of the research journey before attempting to explore the frontiers of information for themselves. In fact they took ‘the power’ from the teacher and ‘only talk’ to the teacher before confidently engaging with information. Many still seem to be working through the new challenges of using information in the Master program. The following quote illustrates this:

“Ah when I was doing my actual research for my Bachelor I always find it easy but I did this research but when I entered the Masters I think that it was really kind of more difficult.” (I 5 p4)

When participants were asked about making decisions around their dissertation topic, many felt they had a certain amount of autonomy or flexibility in their direction of research. However, as seen in the beginning of this discussion, a few noted the importance of seeking guidance and input from their supervisors. In this way,

students feel a lot more confident that their information responses will be accurate. Further to this, even if they begin confidently, doubt often creeps in and thwarts progress as evidenced by the following quotation:

“But then it was the time to start, it was difficult because I thought I could do it without referring to the advisor that much but I was wrong!” (I 16 p4)

At many points, participants directly sought teacher direction which was slightly different from guidance. Seeking direction implies Supervisor intervention, or students specifically needing teachers to tell them step by step what to do. The expectation is that the teacher or supervisor establishes the outline to follow when using information perpetuating a heavy reliance upon the teacher to demonstrate competency in information use. The following quotation shows that many students were very appreciative of this approach:

“So we go back to the teacher and she says, no this is the key word, search about this topic or write like change your way of writing and then this help us to find, or she will say no read this book or this article it will help you to link what topic you have.” (I 1 p5)

There is evidence that there is a hesitancy arising in students in owning the information and they are less likely to make efforts in interpreting and analysing information. Furthermore there is a sense that these participants were conforming to the information use expectations of their supervisors. This is represented by the following quote:

“Well my teacher at the college here who taught me about the Action Research, I go to him and I say this what I have, this is what I want to talk about and I don't know how to start! So he helped me specify the topic and where to start. Specifying the information and limiting it to the ones I want to use. Other than that I'm going to go to the teacher whose teaching me, I'm

telling him what I want to find out, he's telling me what I should write to find this information." (I 14 p9)

Again we see the underlying perception that teachers can initiate the steps to use information. Some students expect that teachers can dip into their own collection of resources, so that they ultimately have the best resources to use for their projects or dissertations. The following quote supports this:

"So like oh can you help me? I didn't find something about my topic and you know some teachers they have their own resources so they can help us with that, so if I am having some challenges with that I can ask my professor. I think most of our teachers, professors have lots of sources even they can provide online links for online books." (I 8 p7)

When it comes to sharpening perspectives, acquiring the best information and even thinking about information, students rely on the 'excellence' of teachers to guide the information use pathway in order to produce 'quality information'. There is a hesitance to take risks and make independent steps to making sense of the information they encounter. The information they encounter, is more trusted if the teacher or supervisor has guided them towards the source. In the case of the following quote, it was the librarians in one of the college libraries who provided the guidance:

"because I trust more in library because they put more the right people in place that guide more in good way so I will not depend on anybody who fail my level who will not give good information so perfect and professional way to ask somebody who have more experience in these things" (I 13 p4)

The interview discussions indicated that the students revere the teachers as an authority figure. The implication here is that students see teachers as an extremely important source of information. Therefore this has the potential consequence that the teacher may pass on his or her brand of personal wisdom to the student. When

trying to understand the information use experience of the Master students, the findings here imply a further unique information experience. This being a hierarchy of confidence in teachers. The following quote exemplifies the student's awareness that she can tap into the experience of the Program Chair who is the highest authority in the department:

“I need information I go to the Program Chair and I ask her because she knows so many, she is experienced and I go to my tutor she is helping me, at my university.” (I 5 p2)

This trend of seeking out the highest authority – the Program Chair, was reflected in a number of the interview discussions. Even when the participant is fairly sure her information is reliable, she checks with the Program Chair, as evidenced here:

“So I go to the database of the library and I'm not, I'm not sure if it's good quality but I trust the library website but I go back to my Program Chair and I ask her is this ahh accurate or can I use it for my presentation, for my research or should I not include this resource?” (I 5 p2)

Teachers were not the only people held in high esteem. Students turned to seeking out professionals in the industry for information. Talking to industry professionals rated highly as a way to obtain information. This may be due to two reasons. Firstly accessing this information verbally was easier, as the difficulty of finding UAE contextual written or published information makes the entire information search process extremely frustrating. Secondly, the theme of trust and respect for people's experience was an overriding factor and was heavily cited.

Participants appeared to rely heavily on 'personified' information because it was easy to access and because of the authority attached to such information. This could be related to the fact that Emiratis are traditionally an oral culture and hence students tend to rely on teachers or industry professionals for direct spoken information. Students acknowledged that people had power in their field of knowledge because of

their industry experience hence the inclusion of this in the *Information Personified* category of this study. This point is summarised by a student in the following quote:

“This topic (Internet of Things) has been everywhere over the net so we can find so many articles related to that topic but if you ask about something related to our community and there’s the bottle neck issue thing. There are not so many researchers contacted from this region ok? And related to that topic and this is the main bottle neck issue we are having, so we don’t prefer doing the research over the internet ok. We prefer to stick with those entities and interview face to face questions” (I 20 p4)

Many students, particularly in the Information Technology (IT) and Business courses, turned to people as an information source if they needed industry related material. The emphasis on the importance of finding information through people was significant. Participants cited experience, accuracy and updated information as to why they would prefer to use people as information sources. Students believed they were retrieving “exact details” and company expertise not always found on company websites. Students also placed high importance on the opinions of people working directly in industry claiming it was important for students as researchers to access this type of information. In turn the students hope that their research would contribute to the body of research still developing in the UAE, as this quote suggests:

“You have to call somebody from the company, ask them for permission to do interview with them because you will not have anything in the (company) website. Only like the company background and nothing. So we have to go there and do interview with people and then we wrote what we (heard), and this is the problem I hope like one day. I hope like one day we can enhance the information.” (I 11 p4)

A question remains, about the reliability of personified resources? Participants felt they were accessing extremely reliable resources in people. When questioned about how they would know if their human resource was reliable, participants relayed a

variety of measures that they believed would help them know if what they were hearing could be trusted. Seniority, professionalism, global experience were all contributing factors to reliability and validity of information. Students suggested that they would speak to a number of people in the industry and compare responses as a way of ensuring reliability. One student suggested body language would confirm if the person was reliable or not. The following quote supports the belief that people as industry experts are reliable sources of information:

“It’s my senior colleagues which is a really rich resource of information. You know their experience also, they are all very professional and have worked around the world so they are very, very reliable resources.” (I 10 p3)

A further point for consideration is if these information sources are acceptable to use, under many referencing systems they would not be included as a listing on their final references or bibliography. Therefore it is important for students to understand how different information types contribute to forming knowledge and ultimately lead to the creation of new information. However, as it stands for many students required to submit dissertations at the Applied Research level, it is still a huge source of frustration and disappointment that access to written information that would support these dissertations, is not feely available as explained in the following quote:

“We have a limited (resources) only. I think all the education entities has to, you know, all the research imports coming from the education centre, for example in HCT Sharjah, Dubai all these education. I think if they have agreed on asking all the students to make researches, or as part of syllabus, to make of many researches about everything here related to UAE community, instead of wasting... I’m not saying wasting but I’m saying instead of looking to other things that would not give much value as if they were making the research for UAE only. We need to have so many resources about the UAE” (I 20 p5)

Summary:

The experiences around information use as reflected in the *Information personified* cultural dimension of information use suggests a heavy reliance on teachers and supervisors because they are perceived to hold the balance of power as far as using information is concerned. Experienced teachers and supervisors are the ultimate authority on how to use and work with information and so students are reluctant to leave that comfort zone of dependence to independence. Experienced industry experts are also perceived as valuable sources of information and in many cases the ultimate resource. Information becomes personified when people are used in favour of static written material.

5.2.2 Information for personal needs

The masters cohort results from Phase One data reflected a medium ranking in the Individualism versus Collectivism dimension. As they scored just over the 50th percentile, I leaned more towards structuring questions related to Individualism. This suggests the sample cohort surveyed are devoted to pursuing personal interests. People closely associated with them, like immediate family and friends are priority and individuals tend to remain independent. However, in devising the questions this way, I was aware the qualitative nature of the data collection may reveal Collectivist elements of information use if they were evident. A number of questions related to using information were addressed, for example, “Has using information helped you understand how you learn or build your knowledge? Can you share examples?” These explored how these students have understood their personal information use habits, forming personal opinions, as well as tapping into how students might have learned to construct knowledge by using information.

When asked about how they felt about expressing opinions or how confident they felt speaking up in class upon hearing or reading information, many agreed this was not a problem. Western trained professors would encourage students to express their opinion in class but the previous findings in the *Information personified* dimension would give reason to believe that there may be a reluctance to do so. There is a strong indication that despite often deferring to the teacher’s opinion regarding

embracing information, that this sample group was confident to speak up about their opinion or views on information heard or viewed during the course of their Master program. This could be because expressing their singular ideas allows them the opportunity to test their individual opinions and gauge the responses as to the value of their personal ideas around information. For example, the following quote shows how expressing personal ideologies allows flow of communication:

“Well I’ll express but in the right way. I won’t say I disagree with you. I will say yeah it’s a good idea but if we can think about it in another way like this way, and I will mention my point of view, I think this is a good way to communicate with different ideas.” (I 12 p6)

Other students feel that sharing of information verbally is linked to learning. If the individuals are not able to express their ideas formed around information, how will they learn? This characteristic is closely related to the dimension of Uncertainty Avoidance where a ‘good discussion’ is also enjoyed in cultures with a low Uncertainty Avoidance ranking. The point of voicing an opinion is that reciprocal rights might be enjoyed and everyone has the benefit of hearing different points of view on specific information topics. In the following quote this student welcomes others’ opinions and feels that she will ultimately benefit as a result of being able to measure her opinion against others:

“Because if I don’t say... How I learn? Maybe like if I feel if what they do is wrong, but maybe they do right so they need to convince me its right. Or I need to convince them.” (I 11 p10)

Participants were very conscious of self-development and the fulfilment of study and further study. Many were keen to go on to do PhDs, not simply to amass certificates but to further engage in using information thus developing themselves. Again the connection with information use and the experience of learning and encountering information is prominent in the discussion. Despite the fact that there has been a lot of dependence upon their supervisors in guiding the information use pathway,

motivation to continue to use information does not diminish. In many situations it has flourished as is seen in the following quote:

“I say now I finish the Master, I will now go with the PhD. I’ve done the research I say now I feel different taste of the education so I now I am thinking to do my PhD because of the research.” (I 16 p5)

Elements of Individualism were evident in discussions regarding the personal benefit of publishing thesis work. Working independently on a thesis was extremely important for one participant, who went on to discuss her findings in an international conference in Portugal with her supervisor. Owning her work by publishing was important to her. She stated:

“For my thesis it was very important, because I was determined to publish it, so if I put my name on it then it should be all my work. That’s why it is very important.” (I 6 p9)

Elements of lifelong learning and personal development are evident in the comments. There is a desire for the current information use experience to be extended into the next phase whether this be a PhD, publishing or career. A participant explained that her thesis work should be relevant to her life experience, not just a project that will never be used again. Therefore it appears that information use can be interconnected with many elements in life to enrich learning, not only within postgraduate study. When reflecting on the usefulness of her Masters studies, this quote shows the interconnectedness of the individual and her study:

“I am thinking to connect my studies to the career, my development and to my life” (I 14 p2)

The internet connects individuals intimately with information. It became very apparent through the course of the interviews that participants preferred the internet

to access electronic resources over print resources. The range of reasons vary. However, the more common ones were convenience, lack of availability of print resources, ease of use and the most up to date resources appeared to be found on line. The information accessed also appeals to the individual's immediate needs. It is clear the internet has a strong appeal as the ability to focus and absorb and ultimately preoccupy the individual is apparent. The following quote declaring websites as a preferred resource explains the direct experience associated with using information via the internet:

“Um I websites because it's easy to understand, very direct and recent. Sometimes information is written by a special(ist) who has not published in a journal but he has a degree in that area so it will be easier for me to see if it was news or a technological website. There is something that gets right to the point and exact words, so I think of what these are...” (I 2 p3)

The relationship between the individual and information found online is tangible, interactive. Combined with using a device such as a phone, or iPad the experience is described as better than using a book. The individual remains in control of the information. Using technology, information can be found, saved and stored to revisit when it suits the individual. This can be seen in the following quote:

“Yeah but reading online its better online is better than reading a book. Yeah I can find an article using my smart phone and so I'll read, put it, save the page and return to check it again.” (I 12 p2)

The benefit of loading e-texts and being able to write notes and store them in one place like an iPad, is a useful experience for students. It reduces the impact of having to carry heavy textbooks with them all day. Technology and the information that can be accessed as a result benefits the individual user experience. As demonstrated in this quote:

“Information for student concept, ah it’s better to carry iPad load with e-texts and a place that I can write my notes on my iPad. It’s better than carrying books this big, two or three all day.” (I 16 p2)

Information found on websites are attributed as representing specialist information, trendy topics, recent and relevant information which can be received directly. These are worthwhile qualities in the minds of the participants interviewed and will translate into the information they eventually will produce to communicate in their dissertations and project work. This quote summarises the aforementioned concepts:

“I like websites because firstly it’s news and news it gives you the most recent trends on prospective technology and how life is changing, how technology is changing specially with those in IT. So news and technology I think it will give me more ideas, more general or special trend which is coming in future or what’s happened in the past and how they are going to go in future.” (I 2 p4)

An interesting phenomenon that presented itself in the data analysis was the notion of information having value to the individual. This phenomenon is best placed within this discussion regarding information use and Individualism because the value placed on information is very personal. What is valuable to one person may not have the same value to another. Information may be more valuable because of its scarcity, as can be seen in the discussion which follows in *Information contributors’* cultural dimension of information use. Many of the students remember a time when information was very hard to access in the UAE. This quote acknowledges the comparison of available information during one student’s undergraduate years and her current Masters course. Her comment is interesting because there were books available. However, she feels the resources were still limited even though access to information was easy.

“Ah when we were students for Bachelor that was long ago... even for HD it was nearly 1993, 1994 and at that time we didn’t have internet. Now with just a clicking it will bring all the information that you would require but at that

time we lived in a time where we only had books in the library. That's the only source of information and then we lived with a time it is so easy to get information. And to us knowing how difficult it is and important it is, that gives a huge value to obtaining information. We need it for research purposes and by the way I am a researcher as well, I work as a part timer at one of the research companies in Dubai doing some research for Government developments so I'm just a part timer doing some part time research from home. So I know what information means and how important it is." (I 17 p2)

When evaluating the merit of information, the demand is perceived differently by users of information. There are no descriptors by which we can value information, in fact the same information may well have differing value for different users. Some individual users of information may not see the value at the time they encounter information and as a result it may be devalued. Or as one student suggests it could be stored away like a "database" to be used at a further stage. This notion is supported by the following quote:

"All is important – information is valuable for either I can apply it for use on my own application, either for my own knowledge or to be used in a further stage. It may not have a value but it may suit you. This is my own perception. Whatever you may come and tell me I will understand it, try to make it reason, if it didn't make reason, just store it in a 'database'. When the time comes it will come back. Someone came and told me something about Australia right? I may not be going to Australia but I may go for a conference so whatever information you give me is valuable. You may come and tell me I shouldn't go out on public after 8 o'clock, cause such and such and such. Ok now I'm in ADI have no intention of going Australia now, so there is no use of info now. Some people may delete it but for me, everything is important valuable information. I think value (ing) information is really important." (I 9 p25)

It was significant to discover the language associated with discussions around the value of information. Students commented on the "worth" of information and "richer" information within the data. These descriptors are related to the economy of information and even though it may have been appropriate to discuss this in the

Enjoyment in the flow of information use cultural dimension of information use, it is more appropriate to involve it in the *Information for personal needs* cultural dimension of information use as the value of information appears to be subjective. Regardless, when an individual found information they deem valuable, the end result is “richer knowledge” and “richer information” as evidenced in the following quote:

“And then when I start I want to support, In’shallah (God willing) my ideas so when using literature and put it with your own work, it will be more you know? It would have more quality I would say. And of course I will have richer knowledge, richer information presented in the written work.” (I 10 p4)

Among these participants, social media was a highly valued and reliable resource. Data involving the use of social media to fill in information gaps emerged in the interviews which interconnects with Individualism. There is a lot of research to suggest students are turning more and more to Social Media as an important information source (Kim, Sin, & Yoo-Lee, 2014). These students cited You Tube, Wikipedia, Snap Chat and even Google as sources which they used to help them understand inconsistencies in information they encountered at a personal level. For one student struggling with her literature review, You Tube was very helpful, as seen in this quote:

“Honestly for sources for the Lit Review I used some of the You Tube videos. It’s a source, I used it to understand how to structure the Lit Reviews some parts I didn’t understand, how to structure it you know, which sections. I needed more information. Because 3 weeks as a research methodologies course ... I don’t know and half of that time it’s just case studies ok and we are Zooming we are not attending class daily.” (I 3 p5)

Students who struggled to understand information they encountered in lectures, or in their readings were able to find personalised solutions or how-to instructions which were far more comprehensible to the individual in the visual and auditory nature of You Tube or Wikipedia formats. Data revealed UAE students use social media for

the reasons mentioned, although their use is closely connected to the lack of published academic information and the fact that English is their second language. You Tube and Google provide a “wider explanation”. They are aware that there might be quality issues associated with using information found on social media. There was lots of nervous laughter associated when revealing they used Google for their information. Others clarified they used it only in the beginning of their search. As Emiratis are traditionally an oral culture (Dahl, 2010), social media is particularly appealing to students who do not take in written information easily. They are still able to exercise control over the quality of information they encounter. If the source is not known, then students are able to exercise discretion over whether they will use the resource or not as we see here in this quote:

“...unfortunately I will say, I’m not a reader – I’d like to be, but for me I like to use social media – What’s App like that. Ahh most things I like to hear. Video, I like videos but there is something everyone should know. I will call my friend I get resources from many people, before that I should know from where, where is the resource. Just they send me the resources from where I don’t know. I ask many of my friends from where do you get this resource, from where did you receive it. They don’t know. I say ok don’t send it.” (I4 p10)

The comments reflected that if there was an issue with lack of understanding course content, or how to proceed with the next step in their research – You Tube was considered a reliable source of information and a support in their information use experience.

Information shared on Snap Chat can be quite motivational, particularly if the person sharing information is famous. One participant explained that information shared on Snap Chat has positive ramifications in encouraging people to search further on the subjects discussed. She felt the information influence had far reaching effects beyond the realm of her studies, again contributing to personal development which is further explored in the next category.

“This is good, they speak about women have to do sport because it’s good. So this is like ok, like I have to search. Because if I don’t have project, I don’t search but sometimes you need search for your daily life. If you need to know about something, you have to search not depend on your project, on your grade or your study. Even on your work you have to research sometime how to improve your work. So I think this is influence people to more research or this book is good for personal develop, you have to read it. So when you see somebody talk about it, this will encourage and you think ok maybe I need to ...” (I 11 p6)

The participants showed a strong preference for online and internet resources which appealed directly to personal information needs. They can control how they receive and respond to information online.

Summary:

Within the *Information for personal needs* cultural dimension of information use, this cohort also conveyed the importance of information being tailored to their personal needs. They use online resources to cater to their personal needs in order to understand information better and access information of a more visual nature. In addition, individuals appear to place a value on information knowing that at times it is difficult to obtain.

5.2.3 Information for personal improvement

Similar to Hofstede’s Masculinity dimension, this cohort demonstrated assertiveness and competitiveness in their use of information. The question “How long are you prepared to search for information?” provided understanding about how competitive these students might be about finding the best information. The additional question regarding extra-curricular information gained insight into whether these students prefer non-fictional, factual information often associated with Hofstede’s definition of a masculine society. Some clear trends reflecting the characteristic of information for personal improvement became apparent during the interviews.

When using information in the context of trying to excel or achieve, participants were focussed on discussing their dissertation work. A smaller group of participants emphasised academically surpassing personal and class mates' expectations. Many were delighted in experiencing the rewards of surpassing personal goals as a result of researching. The following quote exemplifies of the need to excel:

“Go beyond the scope of the report. So when I go that way, I learning something new. Learning more than my colleagues, so you find personal satisfaction in whatever you do. The grades tell you what you're doing.” (I9 p15)

Some participants were able to pin point the area that they would like to focus on to improve their information use. As students are operating in English, which is their second language, when using information they often grapple with improving their vocabulary. Writing a Master dissertation in a second language can be challenging and so successful vocabulary choices impact on the quality of information produced. Therefore aiming to improve writing ability is key, as this quote suggests:

“...to have a strong writing. What I do is I write the word and am finding other synonyms to have the best academic word, I am not having that much ability words to have the really strong vocabulary. But I'm improving I can use better words in my writing.” (I 14 p9)

There seemed to be more acknowledgement that using information contributed to personal development and personal challenges. In effect, the competitive characteristics were directed towards inward competition rather than outward. So the effort to excel becomes internalised. One participant supplied a unique observation regarding applying research to improve the final project. By researching how to improve your work, you can develop personally, as evidenced in this quote:

“...Even on your work you have to research sometime how to improve your work. So I think this is influence people to more research, or this book is good for personal develop, you have to read it.... Yeah push myself.” (I 11 p6)

Furthermore in order to achieve to the best of his ability, approaching supervisors for feedback to improve his understanding was important. One participant was quite forthright in expecting feedback from his supervisor as it was important for informing his overall understanding as well as to better his marks. The following quote is a strong example of where marks simply aren't enough:

“Some of the Doctors they just do marks without the feedback. Really for some students they won't. I say “Please I need the feedback, I need to find the error for this and the others. I get 80, 85”. I go ok where this feedback is?” (I 4 p3)

The idea that you can continuously improve by exposing yourself to any information is evident from participant comments. There is much to be gained and people's perceptions of your ability are enhanced if you can gather information to use in communication with others. When asked about reading, one participant said she loved to read and acquire information because it made her look more professional, as seen here in this quote:

“Anything because I think to be qualified more and look more professional... yeah I need to for example anything about the world, about the environment about anything that you take like from each story one point that you put it in your mind, you develop yourself on it right?” (I 13 p8)

Competition against others is not so evident in the interview data. Rather the desire to improve personal results, look more professional, push oneself and constantly improve for personal satisfaction is more evident. It is also clear that this proficiency is gained from interacting with various forms of information. Stories, thesis writing,

projects, books and interacting with vocabulary are the examples of information that these participants have given which enable them to experience excellence.

There is some evidence of elevated self-confidence when it comes to the information they produced for the course work. A few of the participants were very pleased to share that their professors were impressed with their work, as in this quote:

“And I showed him my PowerPoint and he said wow this is really advanced!”
(I 4 p9)

In the case of one participant studying Education, she was encouraged when she found that her own results often correlated with other authors or researchers. She enjoyed establishing or asserting her “own findings”. After sharing this with her professor, she was praised for good research, as can be seen in the following quote:

“Originally when I am looking for a topic, when I am getting the topic, I come up with my own findings. I can see the author’s findings, I always look at tables or statistics and numbers or anything, I come up with my own findings, it’s always happening. So I think this is interesting. So I share it with my professor and he says wow you are really good at researching, you are on the right way.” (I 5 p8)

One participant’s account incorporated an instance of male dominance, as well as acknowledging the aggressive nature of his female peers. He left his female student peers working on a problem to attend the interview for this research. They had been having difficulty with a research task they were working on but he was able to point them in the right direction. However, at the same time he regarded them as aggressive because they kept referring to their professor’s answer for the issue at hand, rather than considering an alternative answer to solving the problem. This could be related to Information personified and a reluctance to consider any other

information than the recommendation from their professor. His interpretation of the situation can be seen in the quote:

“I gave them the idea and they are working on it, they are happy working on it now because now it makes sense to them. I say ok, how do you know this is a problem? Why - I keep asking. They will say “our professor – they (he) proved it”. They are very aggressive.” (I 9 p21)

There was an overwhelming preference for online resources via the internet or databases. However, in the case of a “masculine society” it is because the participants consider information found online factual or accurate. Participants were very emphatic about their choice to use technology to access information for their dissertation or project work. When asked about how they go about “finding information” or their “information preference” participants responded that websites, Google, databases, e-books, You Tube were their preferred ways of accessing information. Considering their studies were based in Applied Research, also focusing on a UAE context and many students were IT or Business students, the information needed to be practical, contextual and current. This meant that using online resources was the only option, as observed in this quote:

“I relied on online sources because my topic was very recent, very new, and I was struggling actually, even to find the online resources, that umm specifically tackled my point – my area of research. So is only online.” (I 6 p2)

A few students spoke of their preference for print but the choice to use online information was overwhelming. Some comments linked an interest in technology with using online information. Also using online information allows students to access written information and visual information. Finally there is the belief that information can be found online when all other avenues have been exhausted.

The participants were enthusiastic in responding to the question of what other types of information they like to use apart from their studies. Everyone liked to engage in a

personal pursuit of information unrelated to their studies. The common denominator was non-fiction or factual information. This quote sums up the eagerness participants have for interacting with information beyond their Masters studies.

“Recently I am trying to develop a hobby of growing plants so now I am searching this, but basically anything, I am just wondering how to do this, or why this is this. You Tube is a really good source I find.” (I 6 p13)

The interview data gathered indicated that their preferences for factual information and technology were interconnected. Participants were attracted towards factual information beyond their Masters work. There was a resounding interest in medical information, news, social media, psychology, gardening, cooking, career specialisation and delving further into text books. However, only one participant mentioned she liked to read novels.

As reading is not always the preferred way of encountering information, participants expressed an interest in viewing or hearing factual information as well as reading. It was clearly evident that this information was accessed through technology, in particular smart phones. The quote below reveals the preference towards factual material, in particular the news:

“...when I am at home before I go to sleep I have to read some news especially nowadays you should be aware of what is happening so before I go to bed I’m reading news, and when I wake upon I like to read some news on line. I don’t have time to read the paper so news is info that I would like to know about it and read about.” (I 8 p12)

Summary:

The experiences around information use as associated with the cultural dimension of information use *Information for personal improvement*, suggest students desire to personally improve in their results or improve their experiences with information.

These students are proud to be seen doing well as they engage with information. They also favour the perceived factual, scientific nature of the internet when sourcing information and a preference for non-fiction information pervades their personal information use.

5.2.4 Ambiguous information (acceptable in spoken context)

This aspect of information use was explored through questions focussing on the open ended nature of information; making decisions about information that has different points of view and working independently. The interview data gathered here did not correspond overwhelmingly with the data in Phase One which indicated that the sample group scored low on Hofstede's index indicating a lack of anxiety in new or unknown situations and the tendency to be more easy going and laid back. Many comments appeared to reflect the need for certainty or closure in information use scenarios rather than an acceptance of ambiguous information indicating a tendency towards apprehension and frustration in situations which are new or unknown. Insights about this characteristic were gained through the students' responses to the questions, "What if there are a number of points of view on the subject you are seeking information for? How do you decide what to use and what not to use?" The question, "How important is it to have produced work using only your own efforts and abilities?" gave insight into the levels of confidence of this student population.

Participants were questioned about the importance of finding conclusive answers when using information to produce their dissertation or a project task. As mentioned the responses were conflicting with the lower Uncertainty Avoidance score from Phase One. They indicated trend towards reaching conclusions in their written findings but in their learning situations and classroom discussions participants embraced flexible environments. A few students who did embrace the opportunity enjoyed the experience of "open ended" information situations. The following quote demonstrates the acceptance that research involves multiple findings where some information is absorbed and redefined and other information is discarded:

“Well that is research, research is about findings... or I may just ignore this message and find others, more clear ones but since I have to take in all ideas regarding what I am doing, it depends sometimes I just do my own and sometimes I just ignore the research and continue.” (I 5 p6)

Not all the comments reflected this attitude. The majority of comments continue to reflect the need to draw a final conclusion or information that is in agreement, and while they did not report experiencing anxiety specifically, they did indicate some frustration if information obtained wasn't convincing. The majority of students continued to strive to achieve clarity when presented with information that seemed imprecise, or a little cloudy. The following quote exemplifies this:

“You want to end up with a conclusion to know what you're going to end up with.” (I 7 p1)

The experience of not finding information that is methodical and that clearly answers the research topic is frustrating. Time plays a big factor in the source of this frustration. If an article does not prove to be helpful in answering aspects of the research question, then the student needs to replace it with a better alternative and this is frustrating because time is needed to interpret and analyse the new information source as well. This sentiment is clearly demonstrated in this quote:

“Frustrating, because of the time mainly. Because it means ok I need to search for another article, another resource, I need to read and think about it and analyse the information.” (I 6 p8)

Students employed various strategies to draw conclusions when producing student research. Discussing options with class members or people who have a background in the research area, combining a number of findings, using own opinions or experiences were all strategies used to cope with the disappointment of inconclusive or open ended information. For example, the following quote explains a few of these strategies:

“I can’t draw a conclusion based on the findings if I don’t find an answer. So the only thing I can do is to draw a conclusion on a combination of the findings that I found, plus my own opinion or own experience.”(I 10 p7)

When dealing with open ended information situations there appears to be a trend to pursue a conclusion when producing written information, rather than allow an undetermined conclusion. This is juxtaposed against the desire to engage in discussions which may have opposing viewpoints. When engaging in verbal information, this sample group was a lot more tolerant of being involved in open ended information exchanges. For example:

“So I would just you know, have a discussion, you know. It would be really interesting to see if they agree or why do I disagree with them. Why do I not like for such reasons. And present in such ways as I bring my rationale in and they bring their rationale in it will be interesting to see the points of view, but that doesn’t mean that they’re wrong.” (I 10 pp.6, 7)

Discussions and verbal information that served to draw a variety of conclusions was not as confronting to students as written information. They did not show frustrations associated with the open ended nature of the information presented in verbal form. Emiratis are an oral culture and this could contribute to feeling more comfortable when an opportunity was present to discuss inconclusive information with others verbally. This quote explains how discussing a topic with someone else helps clarify understanding:

“So we learn from each other, everybody have a different understanding of the work so when you hear them, you understand a little bit more of the topic itself. And when you explain it to somebody else, you start to have a better understanding of it because you don’t want to send the wrong message.” (I 9 p15)

Having graduated from the Bachelor's environment where many students perhaps would have been comfortable relying solely on teacher input and advice, it was compelling to discover participant's thoughts on disagreement. Whether disagreements focussed on something the teacher or their classmates had said, or something they had read, participants were very comfortable expressing their difference of opinion. This positions them in an environment where outcomes are unknown. Again because the communication is occurring orally, students may be more comfortable in facing the unpredictable and unstructured nature of small group or classroom discussions. They were also accepting of other's voicing their disagreement on a topic, as this quote suggests:

“Well it's not necessarily right or wrong but they might be right for some people anyway even if I didn't agree with them. So I would just you know, have a discussion, you know. It would be really interesting to see if they agree or why do I disagree with them. Why do I not like for such reasons. And present in such ways as I bring my rationale in and they bring their rationale in it will be interesting to see the points of view, but that doesn't mean that they're wrong.” (I 10 p7)

This trait has connections with Hofstede's Individualism vs. Collectivism and Restraint vs. Indulgence. All three traits are related to expressing opinions, in this case the outcome is that expressing various opinions regarding information is situated in an atmosphere of unknown outcomes and uncertainty. When communicated verbally, differing opinions regarding how information is perceived upon reading or hearing is considered 'interesting'. A few prefaced that disagreement should be delivered in a 'polite' or 'friendly' way. However, it was clear that 'references', 'research' and 'examples' should be at the core of their expressed opinion if it is in disagreement with others.

Summary:

The experiences around information use related to the characteristic of *Ambiguous information (acceptable in spoken context)* as reflected in the Uncertainty Avoidance

dimension suggest a slight disagreement with Phase One results. Whilst students did not appear to experience anxiety over inconclusive or ambiguous information, they certainly expressed frustration or displeasure in instances when information did not draw clear conclusions for them to access. Open ended and more flexible discussion around information was welcomed. In situations where information was approached orally, these students were definitely relaxed and welcomed the exchange of different ideas and opinions.

5.2.5 Using information purposefully

The cultural dimension of information use *Using information purposefully* suggests that this particular group is positively oriented towards future rewards through perseverance and thrift. Perseverance is evident in the way students are oriented towards focusing on problem solving and an inclination for ensuring the issue being researched is resolved successfully. Thrift is evident in their preparedness to spend time economically using their resources so as to improve their information use experience. The students responded to the question “What strategies do you use to combine all your research findings into one whole idea?” This question addressed the idea of problem solving or how these students synthesise or integrate the pieces of information they find along the way to produce complete pieces of information. More specifically, they were asked about how they negotiated disagreement when using information and about how they bring about a combination of ideas regarding information into a complex whole piece which is essentially their dissertation. Those participants who had not yet begun work on their dissertations used other project work as examples to discuss.

Participants gave insight into how they prioritise when using information in an organisational sense. The following comments reflect how participants approached problem solving, throughout the various stages of their research. Participants likened working with information to “solving a problem”. Identifying the “problem” or aspect of information that was under investigation and understanding the components of that was key. The process of using information is what one participant identified as being most valuable above the answers. The journey which incorporates

understanding others' findings and processes is crucial as evidenced by the following quote:

“So knowing the problem and understanding – it’s crucial. How to solve it, me as a thesis, I’m not asked to solve the problem, I’m asked to try to approach – a different approach than others. This is why we do a literature review. And see how the other guys are doing it and what did they miss out and what did they do so we don’t repeat what they did.” (I 9 p7)

Synthetic thinking surfaced when participants were asked about how they understood and brought all their information together. They shared that their processes were not always smooth sailing. For many, working through the challenges such as understanding articles written in English and then writing in English, can be a source of frustration and difficulty. The data gave insight into the perseverance or grit of the participants as they absorbed and produced information in the course of their studies.

Participants had difficulties with synthesising or combining the information found for their dissertations or projects. The issues ranged from understanding English vocabulary in articles, how to introduce the topic, organising information into a logical framework and deciding which information to use above all. It is important to remember that along with all the other challenges in using information, the entire experience is realised in their second language – English. This quote explains the situation of using information in a second language:

“First of all somehow it will be difficult for me because I have to find as much as I can to come up with understanding what is it is asking and for this I will need more knowledge. I will need more English, I use the dictionary, I have my own dictionary. I will summarise what the author is thinking about, what his idea, then I write the citation also of the document.” (I 4 p2)

Some very clear insights into how information is incorporated into a dissertation or project emerged. Having a framework with an obvious starting point can be difficult

to create for some but once achieved the process becomes more manageable as is seen in this quote:

“Combining information is another challenge for me to be honest... I know what I should write but I don’t know where to start, where should I start off with? What I usually do is I start with something like the history or the introduction part of IT subject then I write like the headlines to know what should I write in each topic and then I start taking ideas from each resources and then put it in my research paper.” (I 2 p9)

Some students are not so aware of having a tangible framework to utilise. Searching for information and writing up their findings is a much more fluid process. Some students simply begin writing knowing that they will change their written findings should they discover a better information alternative later down the track. The following quote explores this concept:

“What I have found, I’m just writing it, then by the end I am seeing which info is more useful or more clear about that topic are and then I have to decide it at the end. So through reading through my research, through my finding information I don’t like to take that information for the first time. I have to write something, sometimes even the old information is better than the latest one so just I decide that, like which information to go at the end.” (I 8pp. 6, 7)

The theme of having a reliable framework to organise information remained strong throughout the interview discussions. Further to this was the capacity to be insightful and work out where information is best placed. The experience is not easy and again is not always enjoyable. The perseverance of one participant is expressed in the following quote:

“One of the struggles also while writing the dissertation, for me I will always do, I will write the outline of the dissertation. So the introduction, what information should go into the introduction, and then what information should

go in the literature review, just ah, rough outlining, then I will ah, whenever I read, I find information that ok this information looks important I should put them in the first section of the introduction so I put it there, of course, the more I read the more I change my mind, so you know, I should maybe move this information down and bring this information up. So it's a struggle." (I 6 p10)

There were many challenges identified with using information. Regardless of the frustrations that occurred when interactions with information did not go smoothly, most participants remained positive. Many of the comments are balanced with references to difficulties faced with using information but they affirmed the benefits of pushing through the information blocks. Staying positive during challenging situations involving working with information was challenging but most remained resolute, as we see in this quote:

"As long as I am having a chance I'll do it. And I did it but you know it was really hard doing the assignments and the work, especially when I came back to work. I have to take care of my classes and do the assignments as well." (I 14 p3)

Some perspectives into the more positive experiences of utilising information were evident. Those who pushed through the difficulties, particularly those who involved using information that contained differing perspectives on an issue, found merit in working with different points of view. We see in the following quote, exploring contradictions amongst published researchers is a positive for some students:

"I will search different articles and if the different articles mention these point of views, then I know that these point of views are important and I should put them in my thesis, or include them. So this is what I will do. And actually, it's really good to show the contradictions between researchers, some people think that and some people think this." (I 6 p8)

Eventually clear points of view emerge and the students are feeling more confident in expressing their results or findings. Distinctive approaches were discernible as

participants explained how they brought their understandings of all the information they encountered into a coherent, complex concept. One student was intent on forging her own perspective, finding her own voice in English language acquisition. She was studying to be an English teacher and wanted to establish her own findings on language acquisition, her intent was to influence her teacher's thinking, as evidenced in this quote:

“First I am going to see what they will write about then in the end I am going to decide what I am going to write about, different from the others. Like you know you have unique from others and I want like to influence my teachers, like ‘Oh this is something different, you are reading about something different speaking, reading writing’ (here she means the strands of English they are learning to teach). No this is something different, that’s why this is my point of view.” (I 8 p8)

Continuing with the idea of influencing others, another participant was keenly aware of the audience of her findings or results. This student was also comfortable with information that remained open ended reflecting low Uncertainty Avoidance. However, she extended this concept to explore how it must be for the readers of her information. With the end in sight, she positions the writing of her information to appeal to “engaged people”, as supported by this quote:

“Ah I love keeping and open end if it was published. This is a way if I did not conclude it, I definitely like open end this is a way of engaging people and having them think, oh yes it could be both, it could be this or it could be that. Engaged people enjoy thinking about what you have written.” (I 17 p8)

The reward is great for those who persevere with grit and determination through their information frameworks or “mind maps”. The final result of using information to produce results or findings to the research problem is edifying. Students are able to see how information links together to create new information. A wonderful example of reaching the end point can be seen in this quote:

“Like when you combine all those information and you find out almost at the end of your study that you find out what you have achieved so far is flourishing the result how all things are linked together, you start to have a mapped mind, ahh mind map like connections, like aha we have this and this of we increase... we have so many ideas you start to think creatively and link those studies or those results what you have done to the community. Ok if we have increased this we find out, ok we can increase the profit, we can do that thing... You know what I mean?” (I 20 p6)

Some students were prepared to approach their information searches more methodically as they realised it would mean less time having to search for missing elements of information down the track. Essentially this reflects a thrifty approach to information use, one student explains this in the following quote:

“How much time ahh it takes me or how much time I’m willing to give? Willing to give...most of the time. Because more time I’m prepared to give here, the less time I spend in the future.” (I 9 p19)

This concept was further explored in terms of being thrifty in information use approaches. The more time persevering with the challenges associated with searching for information will pay off in the future. Able to identify the practical experience gained through using information in a more committed way as a student, will benefit in the future. One student explained that if he spent the time now learning for the future and worked hard now, he would not need to spend so much time later in the research journey. As a result of this line of thinking, elements of learning for the future are evident also, as addressed in this quote:

“The more time I spend now, identifying the key challenges – identifying it. When I go to do the real work, I have almost overcome the hiccups that come my way, so more time now is better than later.” (I 19 p26)

The use of online tools helped expedite production of projects and tasks such as bibliographies and citations, therefore employing thriftiness and making information use much easier. Others embraced Apple technology which was launched in the government colleges in 2010. All students used iPads in their Foundation year. In the context of what information use meant to one participant, she focussed on ease of access of information. She explained it was better to load all her resources on to her iPad to make life easy, as evidenced by this quote:

“Ah it’s better to carry iPad load with e-texts and a place that I can write my notes on my iPad. It’s better than carrying books this big, 2 or 3 all day. Making my life easy!” (I 16 p2)

Some students would prefer to speak with people who were currently working in the field of their subject in order to tap into their expertise. One student believed it was the “easiest” way to accumulate information as we see in the following quote:

“When you are talking to the people who are working on that place, you get all the updated information so no need to wait or ah or it won’t take time basically. For me I agree it’s the easiest way to get the information.” (I 1 p4)

Despite being a group who focuses on *Information for personal needs*, students would support each other in the pursuit of minimising the work load. In one particular instance, one student could save his peers time by telling them the key components they need to do and what not to “waste time” on. He felt a sense of accomplishment when he completed his research goal but added he would be quick to pass on his thrifty information use techniques to get the work done. However, would his friends miss out on the same sense of accomplishment if they heeded his advice? His advice is included in the following quote:

“You feel like it’s flourishing and fruitful. What you have done is really fruitful, and you can ease up, you can recommend something to ease up so

many things, like as a researcher, as I have done my research for example my dissertation, I can ease up so many things in terms of research. Like I can tell my friend, listen don't waste your time. You can do this 1, 2, 3 and tell the other department. You say listen guys if you say you've done this and this and this." (I 20 p6)

Another situation of taking calculated risks to minimise the information workload was evidenced in students' approaches to selecting information from databases. Students identified a high level of confidence in databases to contain quality information. Many identified ways they would further scrutinise a database article for trustworthiness. However, if students are trying to reduce the time constraints, they will assume they are relatively safe randomly choosing articles from databases, as we see in the following quote:

"Participant 15: With databases we have this - Ankabut. The problem... it's not a problem actually, its high quality papers issued and it's keeping adding to those informations (sic) whenever we have a project. Each course, each group will do his best to deliver on project out of this course which demonstrate their understanding of this course in a specific topic. But the problem is that the time giving to finish those projects are not sufficient. So what I will do is select random papers, I'll assume they are good quality.

Interviewer: Why?

Participant 15: I want to finish!!" (I 15 p7)

Participants supported each other in pursuing thriftiness in order to ease information use, if a task can be completed in a more direct timeline they will tell each other how to go about this.

Summary:

The findings in the *Using information purposefully* cultural dimension of information use, suggest students are prepared to use grit and perseverance to push through the complexities of using information in order to reap the long term positive benefits becoming independent, confident researchers.

5.2.6 Enjoyment in the flow of information use

The participants generally indicated a high level of enjoyment in discovering new information. This finding related to Hofstede's notion of Indulgence vs. Restraint, where indulgence incorporates the notion of enjoying life and having fun. In particular, interview discussion explored the concepts of happiness, life control and the importance of leisure. The questions for this cohort were intended to find out how enjoyable the information use experience was and to explore the positives. Questions posed were – how enjoyable is the process of research? How positive do you feel about your research? What are the challenges? The data here was retrieved deductively. Other sub themes tied in with the characteristics of this dimension that came to light inductively were time management, establishing opinions, enjoyment in encountering new information and frustrations.

In the midst of dealing with all types of information in their Master journey, many students still felt they were in control and able to manage external commitments as they pursued their dissertations and project work. Although some time management issues were identified, the feeling of being overwhelmed and out of control was not obvious. They were aware of the demands of their courses and at times complained but they were in control of the situation. It was during these questions that the students expressed a sense of feeling more in control of the information use flow. They were able to enjoy using information more because of the ease of use that students began to experience towards the middle of their degree. As confidence in their research abilities grew they were able to finish tasks and projects with ease and looked forward to time off for leisure. A sense of accomplishment was noted as students felt they were learning more. They became more aware of finding out about new information also. These new information experiences provided much enjoyment also.

Many expressed the desire to be able to finish their studies quickly in order to make way for personal recreation which will be discussed more fully. However, not all were keen to finish their Master degree for recreational reasons. Many were so engaged with their research, that they wanted to continue that involvement to the

next level. A significant number of students wanted to move quickly through their Masters, not because they were disenchanted with study, rather it was so they could begin their PhD. One student was emphatic about continuing on to a PhD, as evidenced in this quote:

Participant 18: Because you know, I want to finish quickly

Interview: Finish to put study behind you?

Participant 18: No I want to continue I want to do PhD. I like education even after finishing my PhD I want to start something about what do you call Diplomatic. (I 8 p11)

Many students expressed the understanding that the further they progressed in their studies, the easier it became to work with information. This was a welcome relief from the information challenges many encountered in their earlier experiences of information use. Despite the research and information demands experienced in the beginning of her Bachelor studies, this participant soon felt information acquisition became easier. The outlook is more positive. Students were able to distinguish relevant information more efficiently as we see in this quote:

“...because we have to do research every semester I finished my Bachelor moving to my Masters it soon became easier for me to find information very, very quickly, with really good quality you know and the relevance.”(I 15 p3)

An example of culture intersecting information use was exemplified in a discussion with a female student who married and gave birth during her Masters studies. These events are major milestones in a young Arabic woman's life and often the festivities and rituals around these events require other commitments to be put “on hold”. Almost all the females interviewed successfully juggled marriage, motherhood and study; some even ran a business. It is important to note that the previous generation of women, the mothers of these students, may not have even completed high school therefore the female students who did marry and have children whilst studying would

be the first in their generation to do so. One student shows her commitment and enthusiasm to acquiring information during her busy wedding preparations:

“Especially in our course it was before my wedding also. So I wasn’t able to see all the lecture with them so the Doctor sent me the link. So I’m sitting in my bedroom and listening and participating with them and definitely I hide my cameras yeah because my room was all stuck with the wedding stuff. So it was hilarious. These kind of days I will never forget.” (I 16 p6)

As described in the *Using information purposefully* cultural dimension of information use, a variety of perspectives were evident on the difficulty associated with the work load of writing a thesis. For most, the Master degree was the first time students had to produce a sustained length of written information. Coming to terms with the level of searching, analysing and writing that is involved can be immense but students generally associated enjoyment in working with information. The following quote demonstrates this:

“No really I always enjoyed working with information and searching for information and then writing this information and my output. And even when I started my thesis specifically, ah this is piece of cake, I can deal with it, lots of projects before (but) it is different. Even if someone has the experience of writing and dealing with information and all these articles, it’s different. Thesis is different because it is huge. One year project and I don’t know how many different pages of writing you have to write, analysing and thinking.” (I 6p 11)

As mentioned earlier, students commented that the further they ventured into their Master degree, the easier it became to work with information. Many felt the benefits of working through the previous information challenges, eventually accessing information with ease which allowed them to really engage with information and become interested in new topics, as well as finalise projects and dissertations. Students genuinely found elements of excitement when dealing with information as

they progressed through their course. As we see in the following quote, struggles and information encounters turned into accomplishments, enjoyment and became interesting:

“It was a quite struggle but everything, every small thing was a huge accomplishment. Because I was learning alone and moving forward in my thesis. So it was really quite experience and I learned a lot, and think that I really enjoyed reading. Because everything was a new topic for me, and really interested me so the more I read about it the more I become really interested more and more and learn more about it.” (I 6 p10)

Following on from the concept of encountering new topics is the idea of enjoyment associated with new information. The enjoyment in encountering new information and in conducting research, has a relationship to the cultural dimension of information use *Ambiguous information*. There is a sense of real gratification in the discovery of new (unknown) information and a desire to keep seeking information as a result. There were some very positive comments based around experiencing new information for the first time. Especially outside the realm of their usual research area. The constraints of exposing classified company information lead one participant to complete a project outside the normal scope of his subject area (Business Management). Instead he looked at the issue of disability in the UAE. As a result his research took on a practical component which allowed him to explore a different, uncertain research experience. The pleasure he found in this experience is evident in the following quote:

“Really because it was really very nice and different for me... it’s something different from my experience, actual experience and I got the resources on the subject from the people. Also and they opened something new for me and I told them I thought there is something in the wheel chair. For example I say in the airport - One handicap told me, yes I have problem with my wheel chair to get on the airplane. I say yeah, yeah. He say he has some difficulty with the chair, he has difficulty with the situation. I called them, the grounds people and I told them about the situation” (I 4 p4)

Following on we see how engaging encountering new information can be. The discovery of new information which “opens their eyes” to significant issues, sparks an ongoing interest in research and a desire to learn more. Participants also discussed how enjoyable it was to “investigate something that people didn’t really notice” (I 10 p8). These responses support the concept of discovering information. Added to this, there were a number who expressed the desire to continue searching for information due to discovering a whole new world of uncharted information, as can be seen in this quote:

“I think it’s enjoyable somehow because you go and investigate something that people didn’t really notice. And sometimes you will expect something and you will find the other way round or something else. I mean you find so many interesting things happening especially in class where you expect things and you don’t really get them and you find something else at the end. So it’s really interesting to see and investigate such things. Especially in the topic you chose, it’s your choice, not anyone else’s choice. I find it very interesting, very enjoyable yes.” (I 10 p8)

Although students often found the process of gathering or researching information enjoyable, they do not always feel confident. As students shift their interdependence of being guided by their teachers when using information they begin to see more opportunities to learn from and discover new information experiences. There is also an awareness of improving research skills whilst enjoying the process of finding information. The following quote illustrates this:

“However, now I believe that I can, yani (Arabic for “you know”), I improve my researching skills. I enjoy finding information. Especially for this part, it’s challenging for me to find information like, for example, some of the projects we need to include the current trends for that specific project. Sometimes it’s really hard to find trends or the future trends for this topic. So I will have to write it by my own, my analyse as in what do I think about this or what do think the future of this program will be. So this is the part I enjoy.” (I 1 p9)

The students that acknowledged enjoyment in using information, also expressed a growing sense of confidence in their role as researchers. Students expressed the idea of “owning” the subject of their research, having a direction and knowing what they want to achieve as a result. When students were finding “good information” they remained positive and knew they were on the right track to building up their research. When asked about their confidence level as a researcher, or how confident they felt about discussing their research, the following quote was elicited.

“I am very confident (about my research) and comfortable with that because I’ve seen that within the current organisation I’m involved in, so I’m already thinking of sharing it with these entities in the government? So yes I’m really confident.” (I 19 p2)

These comments express a growing confidence in their accumulated information experience. They suggest that students consider *using information* means they can influence others, achieve, accomplish and solve problems. Many participants’ comments suggest that they sense that working with information, ultimately to earn a degree, is strongly connected to learning. The emphasis on purpose driven learning as a result of using information, is evident in the interview discussions. A relationship between information use and learning resulted from the participants’ answers as they were asked about what they enjoyed about research and using information. This is indicated by the following quote:

“Yes, really enjoyable because if I didn’t do a research I wouldn’t learn or understand.” (I 14 p12)

Some participants were explicit when asked about what they found most enjoyable about using information. The link is made between learning and using information. In the following quote, the participant confirms “learning” is the most enjoyable part of using information but there is the added bonus of a sense of accomplishment as seen in this quote:

“Ahh learning....Exactly. And ahh also whenever you are getting information, you are in the process of finalising your project of course that is self-satisfactory as well”

(I 17 p9)

Summary:

The interview data indicates that learning occurs when students are researching, getting information, studying, and engaging in an academic information rich environment. Ultimately a sense of achievement is acknowledged and students attribute their research experiences to learning and understanding.

The experiences around the cultural dimension of information use as reflected in the *Enjoyment in the flow of information use* suggest that the students of this cohort did begin to find great enjoyment in discovering new information. Students who were towards the end of their degree, or who had finished their degree could reflect on their information use experience and recognise that they were more confident researchers as a result of surmounting information challenges and as a result they experienced a real sense of accomplishment in their research achievements. Ranking high on the Indulgence versus Restraint index, this group also placed high importance on leisure and fun. As a result they also looked for “information short cuts” so they could maximise use of leisure time.

5.2.7 Information contributors

The participants in Phase One data collection scored just over the 50th percentile on the index leaning slightly towards Monumentalism as opposed to Self-Effacement. Therefore the very straight forward question regarding, “What is the topic of your research?” was included to discover how many of the sample group grounded their research locally. The interview comments corroborated the findings of Phase One data and managed to elicit the most comments of all the dimensions.

According to Hofstede, cultural groups presenting as Monumentalist are proud and unchanging – like monuments. They have strong beliefs, values and norms (Minkov, 2013, 371). The cohort characterised themselves as *Information contributors*. The students were so proud of the UAE, the values and sentiments they had grown up with that they expressed very clear desires to contribute back to their country by sharing their learnings as a result of using information. One participant began the interview by telling me it was his pleasure to be involved because “anything that we can do to help Emirati society – you are making research for them.” (I20p1)

Another participant who went to work in the broadcast news industry immediately after her Masters, applied her research skills and spoke of her information use as inextricably part of her life. Her ongoing satisfaction with using information on a daily basis is clearly evident. She spoke of the difficulty of tracking down a person who she needed to interview in a very short time frame in order to gather information. There are also elements of *Enjoyment in the flow information use*. The end result was a wonderful sense of achievement as we see here in her quote:

“Where can I get him? And then finally when I find someone I want to interview, having this extra interview, I am so proud of myself, even if I don’t say something, even if no one says thank you. I don’t mind because it’s part of my job, I don’t need anyone to say thank you but when I see the face of the person on the screen, I feel I achieved something today. So finding a research, finding out the information to me is an enjoyable challenge.” (I 17 p5)

Whilst it is a natural response to feel proud in accomplishing the production of a thesis, task or project, there is a tangible sense of accomplishment for these students as a result of producing information. Many of these participants are first generation university graduates and the sense of pride in their achievements is compelling. The information they are producing is ground breaking in the sense that they are contributing to the knowledge economy of the UAE.

A very strong sense of pride for the United Arab Emirates was evident in many discussions based around producing information and acquiring information in the UAE. Nearly all dissertations were based around issues in educational, business and Information Technology issues in the UAE. This did become problematic due to the lack of information available using the UAE as a context. This is referred to over and over within the interviews and the frustration and disappointment was clearly evident, as seen in this quote:

“And especially with sources in regards to UAE context that’s very difficult to find, so I think that’s one of the main difficulties I face.” (I 10 p5)

The participants were all in the position of basing their dissertations on issues of note in the UAE. This was both challenging and rewarding. Challenging because the data suggests contextual published information on the UAE in fields of Business, IT and Education is either non-existent or non-accessible. Rewarding because participants have an insight as to how they can contribute to the knowledge economy of the UAE. Students were actively seeking to publish their research beyond the local level. One student sought to publish in the United Kingdom and one student had already presented her research at a conference in Portugal.

As a result of the sparsity of quality contextual information on the UAE, students struggle to deliver academic work that has a sustainable investigation. This is concerning when producing an in-depth body of research such as a Masters dissertation. A solution is to then generalise information to pad out the word length, or use other countries’ experiences as an example and hypothesise the situation to establish context for the UAE. The following quote explains this scenario:

“Well actually I didn’t find any article, that discuss specifically this mobile crowdsourcing applications developed by government. Maybe I found wide crowdsourcing in general, and government contacts. So it was a very difficult topic for me and obstacle to handle. So what I did, I try to expand. Not only talk about or search crowdsourcing applications but what about m government

(mobile government) in general. What factors can influence people to use m government. And I then compare my results with these results I found in this area. I had to do that.” (I 6 p3)

As previously mentioned in the *Enjoyment in the flow information use* cultural dimension of information use, another solution is to use people as a source of information. So as well as the convenience of talking directly to an “expert”, it became a necessity in many instances. For students studying Business or Information Technology, case studies were an important part of their dissertation or project work. This quote explains the dilemma of many students:

“Either our individual or group projects we find that challenges to get this information. If we don’t have someone working there at that place or organisation, we won’t be able to find the information for the course work. It’s difficult for them to give us information. I need to think about how I am going to find this information do I have people here that will help me and how they are getting this information or no? So I this will be a challenge for us.” (I 1 p9)

Hofstede’s Monumentalism or Self-Effacement does not cater for any negative feelings towards the nation. However, the data associated with Information contributors cultural dimension of information use does contain examples of disappointment at the lack of information available. At times we see more than disappointment, there is an element of resentment at information being withheld. In particular, the students consider that business and government organisations will not divulge information associated with operations due to sensitive information and security. This is especially true of the oil industry. One participant flatly stated, “a problem with us in the UAE, especially in the UAE, like if you will research about a company in the UAE, you will not find any information.” (I 11 p4)

The frustration is compounded when the supervisors continue to set topics contextualised to the UAE. Particularly for students completing Masters in Business

and IT fields, as the context for their applied research is always set in the UAE. One participant explained to his Supervisor, “I say ok Doctor I cannot because my work is in the oil sector, it’s confidential and I can’t give you some information about my work” (I 4 p3). He was then able to investigate another topic outside his area of expertise. Education students are not as vulnerable to this challenge. Many of them are already teaching and have access to information published in the field of education. As mentioned previously in the Literature Review section, there is a considerable amount of information published in language acquisition in the UAE.

This cohort scored in the medium high range of Monumentalism vs. Self-Effacement. Many comments reflected pride but there were expressions of disappointment and resentment which resonate with a lack of flexibility and adaptability characterised by Monumentalists. This conflicts with the view that Monumentalists also avoid duality and inconsistency (Minkov, 2013) but the medium high score may also reveal that this cohort is flexible in recognising inherent deficits (Self-Effacement). There were elements of political security tensions expressed in the responses. Students expressed concerns about multiple instances when they found information related to their search and they could not be sure if it was reliable in currency and content. This concern is clearly evident in the following quote which explains the dilemma of not only a lack of resources, but a lack of quality and reliability in existing resources:

“...limited resources – is one thing. The other thing I, ahhh (sighs) even if we found a good resource ok, it would not be reliable. It would only be ink on papers, it would be just for the sake of showing it to the others. Like we are doing a social responsibility while they are not. It’s like it’s not reliable, you have to dig deep, deep inside and you have to analyse and you have to use any tricky way to find out and if you use that tricky way, you might be charged with getting information unauthorised information.” (I 20 pp.5, 6)

One participant stated that students are looking to their government to “drive the quantum of research that would feed our research context” (I 20 p.4). An apparent positive outcome is that these Master students were committed to contributing to the

body of information in existence. This outcome reflects the cultural dimension of Monumentalism. The students interviewed want the global research community to know about the information contributions of the UAE. There was a sense that by focussing their dissertation topic on an industry in the UAE, they were contributing to the knowledge economy. The following quote provides insight into the motivations of research conducted for dissertation and project work.

“We are studying not only to gain knowledge and experience it’s also for the country.” (I 15 p9)

National pride incorporates consuming the information the rulers of the UAE impart to their citizens. Students acknowledged the contribution of leadership as an information focal point. One student who was not an avid reader, explained that he preferred newspapers as an information source. The national newspapers are a consistent source of information reporting the views of the ruling Sheiks and government officials. Elements of Hofstede’s definition of culture are evident as students tend to regard their rulers as heroes (Hofstede, 2001). Sheik Mohammed bin Rashid is a source of motivation for this student as a researcher:

“Mohammed bin Rashid (Ruler of Dubai) thinks clearly about innovation, that why we need to think as they say “think out of the box”. You should have solid background of research and daily reflection.” (I 4 p3)

It has become a common practice for world leaders to engage in social media; the UAE is no exception. Emiratis will take notice of their rulers’ movements and comments as a source of motivation. This attitude is very different from the more cynical views the Western society has of its leaders but the comments do lack critical perspectives when it comes to discussing their rulers. In this case, Sheik Hamdan bin Rashid published on Snap Chat as a role model for his country and one student expressed the importance of this in the following quote:

“You know like Sheik Hamdan? Hamdan bin Rashid? Hazza - his highness Sheik Hamdan Hazza he really, when you see her (she means him), like a snap, he do horse riding, so you think why I don’t do horse riding? What he feels? So I want to feel like him, so it encourage people to do sport like himself so why like I don’t challenge myself. So this is role model and you want to be like them so this is help people to do more research. So if people from the outside see him, and they want to know more about him, they will Google it. And they will do research about it.” (I 11 p7)

Finally, one participant commiserated that non Arabic people would not be able to access their Arabic books. The solution is not only in translating Arabic books to English as this alone would not capture Arabic vision which incorporates not only pride in the nation but also their religion.

“Participant 11: Like we have a lot of book and we have a lot of, you know very good book. But you cannot read Arabic so it will not benefit you. So we don’t have ...

Participant 11: with Arabic vision.” (I 11 p12)

Religious axioms were dotted all throughout the interview discussions. They suggest sincere declarations of participants’ inclusion of their belief that Allah is present in even the most everyday happenings in their lives, like finding information, completing course work, going on to publish information. This quote was typical of the phrases emitted repeatedly by the students interviewed:

“Ahh even though it will be a challenge for me however I believe for me it will take time but I will be able In’shallah (God willing) to find the information.” (I 1 p10)

Finally rituals such as prayer do not give way to scheduled classes, or even interviews as I experienced in the course of one interview whereby a student excused himself to take a moments leave in order to meet his prayer commitments. In this

case one student removed himself from a course because the teacher did not incorporate prayer time into the class schedule. He explained this in the following quote:

“I attended only 2 classes in the 2nd course with him. Even in the prayer time he said no I will give you the break but not the prayer break, so I pulled myself out.” (I 15 p3)

Summary:

In exploring the relationship with information use and Monumentalism, personal pride is matched with the comments regarding national pride. The data clearly demonstrates personal, national and religious pride go hand in hand. The information proudly generated by these participants has a role in contributing to the body of knowledge slowly mobilising in the UAE. Participants are delighted to consume information generated by their leaders, as this information is considered innovative, encouraging and challenging.

The experiences around information use as reflected in Monumentalism dimension suggest that the students were united in their desire to contribute to the knowledge economy of the UAE. Although they are extremely proud of their nation, there is also a sense of despair over so little reliable academic information available about the UAE. Information that is communicated by the rulers of the UAE is consumed with great enthusiasm but the students' hope is that the global community will also be able to access the information achievements that are developed in the UAE.

5.3 SUMMARY

This chapter set out to explore the data that emerged from Phase Two research – the interviews. More specifically, the intention was to respond to the sub research question of the Sequential Explanatory design – *What is the relationship between these cultural dimensions and the students' information use?* Through exploring the participants' use of information, the researcher identified *cultural dimensions of*

information use among Emirati postgraduate students by using the lens of Hofstede's framework. The findings from the interviews do seem to indicate information use is experienced in a variety of ways that pertain to culture. As a result key findings regarding the cultural dimensions of information use amongst Emirati students in higher education have emerged. These were:

- Information personified
- Information for personal needs
- Information for personal improvement
- Ambiguous information (acceptable in spoken context)
- Using information purposefully
- Enjoyment in the flow of information use
- Information contributors

The findings suggest that UAE students exhibit a deference to authority and power so that in the beginning of their Masters course, students tend to rely on their supervisors to initiate engagement with information. Many students acknowledge that teachers expect them to take initiative in finding information, and ultimately using it to create their dissertations and project work. However, they can be reluctant to do so in the early years of their degrees. It was also clear that students often used industry experts in the fields they were researching to access the most reliable information compared to using written academic information. They looked up to people already working in the industry and because the UAE does not have a lot of published professional information, people were their best source.

The findings also show that students generally worked with online information as it is a way they can personally connect with information. Social media, in terms of YouTube and Snap Chat appeals to them as individuals because it allows them to connect with information they feel is personally relevant and meaningful to the area they are studying or wanting to know more about. It also allows them to understand concepts they have been struggling with due to the fact they are working in English,

which is their second language. Therefore these students can “tailor make” their social media experience to suit their individual information needs.

Furthermore we see that the internet and online information aligns with using information for personal improvement in that they can access their preference for non-fiction and factual resources. There is also a strong sense that students feel they can develop personally through using information. Through using information for study, they expect to see their English vocabulary improve as they commit to the challenge of reading and writing. Ultimately they believe that becoming proficient information users contributes to professionalism in their industry.

These students indicated some uncertainty in their information use. It became apparent that working through open ended or uncertain areas within information was more successful if they had an opportunity to discuss their doubts with their peers or teachers. The findings suggest that students in this Masters cohort preferred to deal with information that was conclusive rather than try to make sense of a number of differing views on a topic.

Students have a good grasp on the long term benefits of working with information. Even though many of them struggled working at being more independent users of information, and the frustrations of using information in their second language, many seemed to understand their perseverance or staying power would bring long term results. They methodically approached using the information they had found to produce dissertations and projects which explored the “whys” of solving information problems. The findings suggest that this is where *using information to learn* occurs.

The *Enjoyment in the flow of information use* findings indicate the students derive great enjoyment in discovering new information. The findings revealed that students tried to take a few “short cuts” so that they could spend a little more quality time enjoying their leisure. It became more apparent that a sense of accomplishment and confidence as researchers was attributed to the realisation that as they were closer to

the end of their research journey, the more they enjoyed and benefitted from using information.

Finally concerning the theme of *Information contributors*, the findings were very clear that these students were proud of the potential of information that is waiting to be published in the UAE. Whilst these students are very proud of their country and their rulers, there is also a disappointment that valuable information which would support their studies and promote the UAE is not freely available. Additionally these findings may help others from outside the UAE understand Emirati information use. As a result, there is a commitment from those interviewed to produce quality information and publish so that the knowledge economy of the UAE will flourish.

5.4 CONCLUSION

This chapter has explored each of the major findings in relation to the data of Phase Two and Hofstede's cultural dimensions framework. This chapter also prepares the way for the thirteen areas of understanding which will be discussed in the following chapter. It will present the contributions of this study to both theory and practice in order to answer the research question, "What is the role of culture in higher education Emirati students' information use?"

Chapter 6: Discussion and Conclusion

6.1 INTRODUCTION

In this final chapter, the contributions of this study to both theory and practice are explored. It begins by presenting an overview of the research and importantly by providing a response to the two research questions. Then the chapter critically explores and discusses the study's contributions to knowledge. The conclusion outlines the study's limitations and suggested future research directions and recommendations for practice.

6.2 RESEARCH OVERVIEW

The aim of this thesis was to explore the relationship between culture and information use in higher education Emirati students through the question "What are the cultural dimensions of information use among post graduate Emirati students?" The United Arab Emirates is a country that has a strong national identity as posited by Burden-Leahy (2009) and its national culture has not been diversified in the way that many other nations have. As Emiratisation is currently being implemented, there has been a trend for many Emiratis to further their education at tertiary level to better equip themselves in the workplace. Understanding how these Emirati higher education students might use information is extremely important for understanding their capacity to use information to learn in higher education given that previous information use has varied extremely depending on the schooling systems they had previously encountered, as was noted in the Chapter 2 Literature Review.

The research used a mixed methods approach to gain a deeper understanding of whether cultural sentiments and values form part of the relationship that exists between the individual and the information they are engaging with. Using the cultural dimensions framework of Geert Hofstede, a quantitative online questionnaire based on the VSM08 was completed by 100 Emirati Masters students and this was followed up by twenty interviews in a qualitative research phase. As discussed in

Chapter 3, mixed methods affords a “fuller picture” (Erzberger & Kelle, 2003, p.469) of the intended research, combining the best possible outcomes of quantitative and qualitative methods. As a result of using mixed methods, cultural values and sentiments were examined in more detail and small inconsistencies were noted between the Uncertainty Avoidance scores of Phase One data and the *Ambiguous Information (acceptable in spoken context)* cultural dimension of information use from Phase Two data. Furthermore, the questions developed for Phase Two were developed with the knowledge gained from Phase One data collection, enabling Phase Two data to produce distinct, observable and meaningful findings. At any time I could check and compare either of the data findings for clarification if there were any concerns but most importantly the findings combined or *mixed* produced resilient, focussed and multilayered results because the two types of data collection were employed.

The research has made a significant contribution to new understandings about Emirati students’ use of information to learn. This is partly due to using a mixed methods approach. This framework allowed culture and information use to be fully explored but also due to the thirteen findings which emerged illuminating the way information use is experienced by higher education Emirati students. These findings pave the way for further work to be explored firstly in culture and information use within nations which have united cultures similar to the UAE’s situation; and secondly around cultural influences on information literacy in other less similar contexts.

6.3 SUMMARY OF KEY FINDINGS

Two sub research questions were employed in order to answer the main research question which is “What are the cultural dimensions of information use among post graduate Emirati students?” The first sub research question was “What are the cultural dimensions of Emirati post graduate students?” and the findings of this phase were the assigning of cultural dimensions according to Geert Hofstede’s framework.

The quantitative Phase One of this research used the 2008 version of the Values Survey Module developed by Hofstede. This instrument was used to determine the scores of these students within the dimensions. The following scores were revealed:

Power vs. Distance 95.2

Individualism vs. Collectivism 52.10

Masculinity vs. Feminine 75.98

Uncertainty Avoidance 18.15

Long Term Orientation vs. Short Term Orientation 57.78

Indulgence vs. Restraint 100.32

Monumentalism vs. Self-Effacement 54.25

I then used this data to explore components of this cohort's information use experience in light of these cultural values and sentiments in Phase Two.

Having understood how this cohort presented culturally, the Phase Two sub research questioned went on to determine the cultural characteristics of these Emirati students' information use. The second sub question is "What is the relationship between these cultural dimensions and the students' information use?" Clear intersections around cultural values and sentiments and information use are evident for this Emirati Masters cohort these are described by the seven themes presented in Chapter 5.

Information personified – This cultural dimension of information use involves the information users accessing information via people. In the case of the Emirati students, there was a reluctance to take control of their information use - especially in the early stages of their degree. As a result they would tend to rely on their teachers or supervisors to make decisions on their behalf regarding their information use. This same characteristic showed that students tended to approach people with industry

experience as they are seen to be more authentic and reliable due to their corporation experience and more available than written academic information sources.

Information for personal needs – This cultural dimension of information use encompassed the sense that students were fulfilling personal information needs when using information. Information use should have a clear purpose when applied to learning. This was evidenced in the data by connecting with key information online; using information to fill personal information gaps and equating value with information.

Information for personal development – The cultural dimension of information use reflects assertive and focussed information users. The data showed the students preferred to use non-fiction or factual information for both study and personal use. The students indicated they preferred to access this information online.

Ambiguous information (acceptable in spoken context) – This cultural dimension of information use identified how students preferred to draw clear and well-formed conclusions when working with written information. Open ended situations within written information frustrated and confused them. However, in oral discussions, the situation was different. Most students were quite comfortable if open ended or even unclear, as in an oral situation they welcome differences of opinion.

Using information purposefully – This cultural dimension of information use indicated that the students showed grit, determination and general staying power when using information to learn. This cohort uses information in their second language which is English. Students recounted that it was difficult to work with at times especially when using information to produce their dissertations as they were dealing with processing information, using dictionaries to understand terminology and finally creating a written work to reflect their learning. Also there were frustrations with not being able to find published academic information in their field of study, so the challenges associated with using information to learn were detailed

by the participants. However, those who pushed through these challenges applying staying power and determination found the experience very rewarding. They expressed that they could see the long term benefits of becoming confident and independent researchers.

Enjoyment in the flow of information use – This cultural dimension of information use reflected students as expressing their enjoyment in using information in two main ways: the ease with which they used information and when they discovered new information. As students became more confident in their information use towards the end of their Master degree, they found ways to use information more effectively which eased the challenges of using information. Also students expressed a deep enjoyment in the discovery of new information which they felt increased their learning. An added advantage for this cohort was the increase in leisure time as a result of being able to use information with ease.

Information contributors – This cultural dimension of information use characterised these students as extremely proud of their nation and culture. The students looked to their leaders as inspirational sources of information as they followed their information they shared on Snap Chat. At the same time they expressed disappointment and frustration with the lack of published academic resources and the limited accessibility to government or company information often needed to reference the dissertation work they produced. This reinforced the desire to contribute to the knowledge economy of the UAE. They communicated the desire to publish their dissertation and project work as well as share their knowledge at a global level.

Whilst Hofstede's cultural dimensions did contribute to the understanding of each cultural dimension of information use summarised above, it is important to note that different perspectives were presented in Chapters 4 and 5. Just as there are some elements that relate to Hofstede's cultural dimensions, there are many unique cultural elements related to information use, as well as differences in the findings. Further exploration will continue by considering the contributions to knowledge.

6.4 CONTRIBUTIONS TO KNOWLEDGE

Thirteen areas of understanding emerged from the thematic data. Each point of understanding and how they will contribute to forming new learnings and knowledge will be discussed in detail below.

6.4.1 Reluctance to take control of information

Student reluctance to take control of using information was a key understanding gained when considering the themes that emerged from the research. The data showed that students are aware and accepting of the power imbalance between themselves and their teachers, as seen in the results of both Phase One and Phase Two data around the *Information personified* cultural dimension of information use. This causes them to expect teachers to initiate a range of information experiences for example, information searches and topic selection. However, they are acutely aware that teachers are trying to encourage them towards an independent pathway of information use. The students are struggling with this and there is a reluctance to redefine the power imbalance as this is what they have been used to for so long. As one student explained, “It’s like teachers think differently so I’m not sure if it’s correct or not, even if it’s correct I don’t know how to write or how to start unless I talk to the teacher.” (I 14 p6)

Sections 2.3 and 2.5 of the Literature Review confirmed that Emirati students enrolled in public education systems have had less exposure to information professionals who could support their use of information in education leading up to their higher education experience. Upon entering higher education, they struggle to meet the expectations of teachers and supervisors who are usually Western trained and are used to working in an independent information use experience with their students. This comment from a student reflects the assumptions students have about the level of dependence upon teachers and supervisors in undergraduate and post graduate education:

“...so like here in the bachelor you know they will teach you, you have a little experience. But in the master level it’s like, no, they will not teach you any more you will teach them.” (I 11 p8)

The research identifies an information inertia in the beginning of the Masters course where students seem reluctant to take initiatives around using information without support from their teachers. There are instances of teachers continuing to cater to the expectations of the students within UAE colleges and universities, although it is not known why this occurs when the majority of faculty are directing their students towards information independence. There is data to suggest that the dependence does tend to slacken off towards the end of the course and this will be discussed during the progress of this chapter.

6.4.2 People are quality information sources

The cultural dimension of information use *Information personified*, highlighted the trend of students seeking out people to resource the information needed to produce their projects and dissertations. Students viewed people as quality and reliable sources of information. People provide the knowledge because industry knowledge in print form is virtually non-existent. Students approach industry professionals and attribute their information as quality and reliable information. Teachers also are treated as information sources. This tendency is associated with an apparent belief that the ‘exact details’ they wished to access were not as available on company websites or publications. The data has established that contextual, current information on the UAE in the students’ topic choice is not available in the usual locations such as library databases or organisation websites. As many of the participants were studying their degrees in the area they were employed, they were motivated to turn to their professional colleagues as a “really rich resource of information. You know their experience also, they are all very professional and have worked around the world so they are very, very reliable resources.” (I 10 p3)

The students’ recognition of other people as important information sources reflects the findings of Bruce (1997), Lupton (2008b) and Maybee (2006) related to using

information to learn. Lupton's work with tax-law and music students revealed that people were a valued resource. Information was found by asking people. Tax-law students found that asking people or using people's opinions was more authentic over using academic resources, especially in a work place situation (Lupton, 2008a). Similarly, the current research reveals that the human resources that were sourced throughout the course of study were considered to be almost superior to other resources that were available. There was an element of practicality as human resources were also more accessible because the students enrolled in Masters Courses were already in the work place and often studying in their area of work. Asking colleagues or more experienced peers about issues, theories or practice was a very practical extension of information use. However, for most students, using people as information sources simply came down to the fact that no usable written or documented information was available.

Supervisors and teachers were also approached as providers of information. As part of the dependency on teachers to initiate the information use process, students still relied upon their teachers to provide information of them to use. Bruce suggests (1997), that knowing where to find or who to approach to find sources is evidence of being information literate. This may be the case with this particular cohort but this aspect of their information literacy may have not been as obvious due to the tendency to defer to their teachers thus taking less control over their information use.

The data supported the students' perception that teachers have resources and will provide the students with them. Students offered statements like this:

“... so if I am having some challenges with that I can ask my professor. I think most of our teachers, professors have lots of sources even they can provide online links for online books.” (I 8 p7)

This tends to be the trend in the early stages of the Masters' degree. Whilst it is positive that students find their supervisor's supportive during times when it is a challenge to find information, it is evident that these students were very comfortable

in the knowledge their teachers might provide a safety net by providing the resources they needed to fill the information gaps.

6.4.3 Information is valuable

The value of information was a further understanding which contributes to knowledge emerged from the *Information for personal needs* cultural dimension of information use. The data showed that the value students placed on information is very personal and reflects the specific information needs of each student. In many cases the information needed to conduct the research students were doing on a topic or area was perceived as unavailable because of the difficulty of finding it or lack of currency. Thus information was considered valuable to students especially those studying IT or Business. For example this student states:

“And to us knowing how difficult it is and important it is, that gives a huge value to obtaining information.”(I 17 p2)

In the cases of the IT and Business industries it would be unfair to suggest that no information at all was available, students suggested that it was more the case that information was off limits, unpublished or not updated. Maina (2013) supports this suggesting that even though information may be available, it may not be accessible when and where needed. It also may not be used effectively even if it is available. The demand for information is perceived differently by users or consumers of information. There are no global standards by which we can value information, in fact the same information may well have differing value for different users. This notion is supported by the following comment:

“All is important – information is valuable for either I can apply it for use on my own application, either for my own knowledge or to be used in a further stage. It may not have a value but it may suit you.” (I 9 p25)

Fenner (2005, p.3) further supports the idea that assuming information is non-existent or scarce. He suggests that the issue is not that information is scarce, but well analysed, well presented and well disseminated information is not always available. Furthermore “information has become an element of commerce” (Fenner, 2005, p.2). So again the frustrations students tended to feel around the perceived *scarcity* of information may have been more of a quality of information issue. However, there were students who expressed a concern that no information at all was available on their preferred topics of research.

So it was key to discover comments which mentioned the “worth” of information and “richer” information within the data; as this student summed up: “I think value (ing) information is really important.” (I 9 p25) It is difficult to know if this finding is associated with limited availability of certain resources. However, there is a significant appreciation for information in its academic form as well as for personal use.

6.4.4 Social media fills in the information gaps

Data from *Information for personal needs* cultural dimension of information use revealed UAE students view social media as a respected and highly valued information source. However, their use is closely connected to the lack of information and the fact that English is their second language. Students’ use of Social Media such as You Tube, Wikipedia, Snap Chat and Google allows easy access of information due to wide sharing; finding solutions or how-to instructions; extracting opinions; comprehensibility and convenience alongside or even over traditional information sources (Head, & Eisenburg, 2010; Kim, Sin & Yoo-Lee, 2014; Usher, Woods, Casellac, Glass, Wilson, Mayner & Irwin, 2014).

Social media supplements information gaps as well as misunderstood information, as this student explained:

“In general for example in my life what I didn’t know about it, I put in You Tube because there’s lots of videos that showing step by step. So it will be perfect that we’ll know anything in the world just you Google it and it will explain in brief, even the courses that we take in the Master even from outside the country.” (I 13 p1)

Social media tools provided a wider range of access of information to students and as so much of this information is spoken, it is more easily consumed by this oral culture. The literature suggests that people from oral cultures tend to prefer the face to face forms of communication, and direct channels of communication and even though Steinwachs’ study suggests this precludes electronic resources prior to social media. Social media in fact affords precisely this kind of communication.

Whilst this practise is not unique to the UAE, the motive for using social media is unique. Students who are ESL, tend to find the visual nature and informal language may help their understanding and acquisition of language.

6.4.5 Information contributes to personal development

The data emerging from *Information for personal improvement* cultural dimension of information use showed that there came a point when students began to feel successful about using information. With that success came the desire to better oneself. Although it was established that these students weren’t overly competitive with each other, they were inwardly competitive - trying to improve aspects of their writing, achieving beyond the scope of the task description, conducting personal research regarding how to improve their research approach were listed amongst many aspects which drove the desire to excel inwardly in their research journey.

The theme of personal development continued throughout the findings which were described as the *Information for personal improvement* cultural dimension of information use whereby interacting with information was perceived to have favourable impact on your personal development. The data showed that when students engaged with information, they were encouraged to think about aspects of

lifelong learning such as, going on to further study, publishing and generally feeling more professional in their outlook is evident. As one student explained, she will read anything in order to use information because:

“I think to be qualified more and look more professional... yeah I need to for example anything about the world, about the environment about anything that you take like from each story one point that you put it in your mind, you develop yourself on it right?” (I 13 p8)

6.4.6 Factual information preferred

The study shows that students prefer non-fiction or factual resources. This finding aligns with Hofstede’s dimension of Masculinity that claims societies determined to be high scoring on that integer scale are likely to read more nonfiction or factual information. The data about UAE students confirmed not only this but a connection with factual information and online access of this information type. The data showed that the students interviewed in this research preferred to read factual information in their spare time and preferred to access it using mobile devices such as iPads or phones. With regard to the other types of information students liked to use apart from their study area, following a personal interest unrelated to their studies seemed to be the key. The common denominator was non-fiction information. Many stated that they like to read about health or medicine, as seen in this quote about reading for personal use:

“I’m doing informally that has nothing to do with study or work, is one of the things I like to find information about is medical information and life style information, in the sense of health.” (I 17 p10)

6.4.7 Inconclusive information

Inconclusive information outcomes are a source of frustration among these UAE students. The data around *Ambiguous information (acceptable in spoken contexts)* cultural dimension of information use, revealed anxiousness around new and

uncertain situations. When students were asked to explain how they felt when they encountered information that had differing opinions on a topic, many concurred that they preferred to find clear and final conclusions when working with and producing information. Only one student stated that she liked to use open ended conclusions. Students were often frustrated if they could not reach a conclusion in their work. This comment explains how students managed inconclusive information to complete their dissertation or project work:

“I can’t draw a conclusion based on the findings if I don’t find an answer. So the only thing I can do is to draw a conclusion on a combination of the findings that I found, plus my own opinion or own experience.” (I 10 p7)

In spoken discussion, different opinions were acceptable. Most students felt comfortable expressing their point of views on a subject even when their peers may hold different ideas about the same subject rendering a situation that may be inconclusive because of differing opinions. Students were more comfortable discussing unknown or different scenarios around opinions, as seen in this quote:

“Well it’s not necessarily right or wrong but they might be right for some people anyway even if I didn’t agree with them. So I would just you know, have a discussion, you know. It would be really interesting to see if they agree or why do I disagree with them. Why do I not like for such reasons. And present in such ways as I bring my rationale in and they bring their rationale in it will be interesting to see the points of view, but that doesn’t mean that they’re wrong.” (I 10 pp.6, 7)

6.4.8 Perseverance

The students demonstrated significant perseverance and grit when using information to conduct research in their Masters courses. In particular the students operated in their second language which is English, when using information. They have also experienced the disadvantages of having been educated in government secondary systems and as a result, students are not always as prepared for the challenges of

using information in a higher education environment. These students used their second language and often experienced a lack of quality and complete contextual information about the UAE topics they were researching for their courses. However, this cohort did understand the end benefits of persevering through the challenges encountered and worked through them in order to synthesise their information into a finished project or dissertation. This phenomenon is associated with Hofstede's Long Term Orientation dimension where this cohort scored high medium.

Many students created frameworks, used tools, set goals and visions in order to complete their research tasks which they experienced in English as a Second Language. As a result they developed a confidence in their abilities as researchers. Quite a few expressed their desire to continue to study further and aimed for a Ph.D. As a result, much of the data reflected the measured pursuit of working with information, as seen in the following quote:

“...you have a vision to finish somewhere right, like me after four years I looking to finish or start my PhD. But I give myself a little bit more long time because I try to give myself experience and knowing more information around people and know more life. So I'll try to participate in some training and something to take more qualifications to develop myself then I will trust the PhD and more confidence way” (I 13 p8)

The psychology of “grit” is a relative new comer to the research arena (Duckworth & Gross, 2014). Although, “staying power” and the ability to persevere is a determinant of success for these students. They pursued information in spite of its limited availability, as well as using it within the realm of their second language. Part of this resilience in working with information is seen in a willingness to develop the processes of using information. This is a trait linked to Long Term Orientation. By making measured decisions, students focussed on problem solving and a desire for ensuring the issue being researched is resolved successfully. By placing emphasis on how a research problem can be approached, many students came to a realisation that they would be better prepared if they should ever encounter a similar situation in

using information. Here we see the formation of a relational approach to using information. The following quote exemplifies this:

“So knowing the problem and understanding – it’s crucial. How to solve it, me as a thesis, I’m not asked to solve the problem, I’m asked to try to approach – a different approach than others. The more time I spend now, identifying the key challenges – identifying it. When I go to do the real work, I have almost overcome the hiccups that come my way, so more time now is better than later” (I 9 p7)

These students have learned to commit to their information use journey regardless of the challenges of using information, focussing on the long term goals. As a result they were able to enjoy the positives of using information or information literacy, for example encountering new information, growing in confidence, personal development and becoming relational users of information. From a relational perspective it can be argued that *informed learning* is evident as students adopt the characteristics of grit and perseverance when using information to learn. Students are wrestling or struggling with their frustrations around using information and as a result a change or new awareness about the information they have found was experienced.

6.4.9 Information short cuts

The Phase One data revealed that this cohort of students rated at the highest integer scale for Hofstede’s Indulgence vs. Restraint - 100.32% - indicating they were a society enjoying opportunity for leisure, happiness and being in control of their life. As a result of delving further into this with a focus on information use, the data revealed that these students did look for “short cuts” when using information so that they could enjoy that sense of life control and leisure time. Students cited the use of online tools; speaking directly with experienced professionals in their field of study; and randomly accepting articles found in databases preferring to “trust” the reputation of the database rather than waste time personally scrutinising them for poor quality as ways to save time when using information.

Using information short cuts in no way reflects a dislike for using information, it is more about making the experience uncomplicated. One student identified this plainly. He was grateful for the experience of using information in his project work and dissertation but he also enjoyed that feeling of being able to “ease up” in his research; so much so that he wants his friends to share the same experience so he was happy to provide ‘information short cuts’. This is exemplified in the following quote:

“... you can recommend something to ease up so many things, like as a researcher, as I have done my research for example my dissertation, I can ease up so many things in terms of research. Like I can tell my friend, listen don’t waste your time. You can do this 1, 2, 3 and tell the other department.” (I 20 p6)

There is an acceptance that studies do need to be time managed and previous comments leave no doubt that using information in their Masters studies is a valuable experience but there is no doubt that if there is a way to produce the required information task sooner than later, participants will take those short cuts in so as not to compromise leisure experiences. Participants will support each other in this venture, if a task can be completed in a more direct time line they will tell each other how to go about this.

6.4.10 Staying positive and growing confident

The data reflected staying positive during challenging situations involving encountering information. This is affiliated with Hofstede’s Indulgence versus Restraint dimension. The challenges using information described earlier in this chapter underwent perspective changes. Also within *the Enjoyment in the flow of information use* cultural dimension of information use, the data revealed that even though there were difficulties associated with writing dissertations, students associated enjoyment in working with information as identified by the literature found in the Arab Knowledge Reports (2010, 2014). The information demands experienced earlier in the Bachelor years and the beginning of the Masters course, subsided as students gained more confidence in finding ways to gather quality information, analyse and synthesise that information into an established product of

original information. Students reflected the following response when it came to summing up their information experience, as seen in this quote:

“No really I always enjoyed working with information and searching for information and then writing this information and my output.” (I 6 p11)

One of the most absorbing points of data captured was the story of the student who related preparing for her wedding whilst connecting with her class online. Traditionally mainstream day to day events in Emirati culture give way to special occasions such as weddings, religious celebrations other cultural observations, more so than usual in western society. However, this student allowed us to glimpse culture intersecting information use when she related her story of listening in to the classroom discussions whilst attending to the time consuming business of wedding preparations. It is important to revisit her quote as it captures the positivity she experienced regarding using information at that time:

“So I’m sitting in my bedroom and listening and participating with them and definitely I hide my cameras yeah because my room was all stuck with the wedding stuff. So it was hilarious. These kind of days I will never forget.” (I 16 p6)

The data showed many of the female students interviewed made small departures from traditional cultural practices in favour of pursuing their information use goals - ultimately to complete their dissertations and Master’s degree. There was a sense of accomplishment from remaining positive in their outlook when using information was at times difficult or intersected with cultural practises which traditionally demand time.

Furthermore the literature reviewed earlier in Chapter 2 does focus very much on the skills Emiratis are bringing with them into higher education. These skills in effect support information use and the outcomes of the abilities of students to employ critical thinking skills; searching for information; using the technology effectively

and conveying information through writing, which is rated average to low in the Arab Knowledge Reports of 2012 and 2014. However, it is interesting to note that information use is viewed through a skills based lens here, or what Bruce refers to as the Content or Competency Frame (2008). The literature does not discuss Emirati information use in a relational sense, which does incorporate Content and Competency along with the other ways of interacting information. However, understanding that even though students are struggling with content and skills yet all the while persevering and slowly gaining confidence whilst using information is relational. This is something that documents like the Arab Knowledge Report will not allude to.

6.4.11 Enjoyment in encountering new information

The data continued to affirm a further theme emanating from the *Enjoyment in the flow of information use* cultural dimension of information use, this being enjoyment in encountering new information. This continued to enable confidence and enjoyment in using information. There was also a sense that when they encountered new information, students were learning which naturally gives a sense of accomplishment. There was a sense of fulfilment in the discovery of new (unknown) information and as a result it propelled students to keep seeking information. There were some very constructive insights associated with experiencing new information for the first time. Students reported incidences where they really felt like pioneers of information finding, as reflected in this quote:

“I think it’s enjoyable somehow because you go and investigate something that people didn’t really notice. And sometimes you will expect something and you will find the other way round or something else.” (I 10 p8)

Examples like this, reflect the core of Informed Learning, which is using information to learn about a topic in a new way (Bruce, 2008; Maybee, 2014). Added to this, there were a number who expressed the desire to continue searching for information due to the discovering a whole new world of uncharted information. Litman (2008) describes this kind of enthusiasm for acquiring information as epistemic curiosity

which serves to introduce the user of information with new ideas, problem solve and eliminate information gaps which in turn motivates them to continue to acquire more knowledge and information.

6.4.12 Disappointment in the lack of information in the UAE

The data revealed that there was a concern regarding the lack of academic contextual information in the UAE as embodied by the following quote:

“And especially with sources in regards to UAE context that’s very difficult to find, so I think that’s one of the main difficulties I face.” (I 10 p5)

This comment related to both quality and quantity. This was problematic for a variety of reasons. The course these Masters students were enrolled in was an applied degree. This means that the course work and final dissertation they produced focussed on practical elements as well as academic. Students were asked to discuss on practical issues in their field of study. Thus the dilemma is that if there is no academic information to support the practical area of their study the students’ feel they can’t move forward due to the perception that there is “no information”. The data was very clear on this point. Students felt there was no published written information they could access through the normal or widely used entry points.

Any information that did exist caused some of the students to question its reliability. Students commented that even company websites could not be relied upon to accurately report information that could be used in their dissertations. Other students alluded to the worthlessness of information even if it was found, as seen in this quote:

“...limited resources is one thing. The other thing I, ahhh (sighs) even if we found a good resource ok, it would not be reliable. It would only be ink on papers, it would be just for the sake of showing it to the others.” (I 20 p5)

Students studying Business and IT were already working in their field of study, due to Emiratisation as discussed in the Literature Review Chapter 2. However, many were unable to access information in their fields due to secrecy of information. Oil and Gas companies, government departments cannot release information for public access. This is a huge point of frustration for the students as their professors can often be unaware of the constraints involved accessing industry information and to do so would be a company violation. As a result students continue to research outside of their industry, or use industry information from another country and “cobble together” a hypothesised version of a UAE context.

As was learned earlier in this discussion, students turned to industry professionals to support their information needs. In fact, most of the information for IT students is articulated by people. This does fill a necessary information gap but as a result, students need to identify the reliability and quality of this information. Furthermore it is not clear how this spoken information would be referenced. Personal communication can be cited within the written text but not in the reference list or bibliography. Therefore what happens when the most poignant information sources cannot be included in their bibliographies? The issue is a bitter sweet experience for these students who rate medium high on the Monumentalism scale. This cohort is extremely proud of the UAE. Yet to see the sparsity of information available is a source of disappointment. Their openness in discussing disappointment may be a factor as to why they profiled as medium on the integer scale. The students are well aware that there is a resource deficit situation. However, it makes them more determined to be contributors to the UAE knowledge economy.

6.4.13 Wanting to contribute to UAE information

Having understood the strain of lack of academic contextual resources to support the practical side of project work and dissertations, there is a positive outcome related to this issue. The data showed that the lack of academic information made students more determined to become contributors to the academic information pool in the UAE, as was identified in the *Information contributor's* cultural dimension of information use. This cohort wants the rest of the world to know what the academic

contributions of the UAE are to the global community. The following quote explains the overall consensus of opinion regarding contributing information to show their allegiance to the UAE:

“I wish I had the opportunity to write a research paper because as I say there’s a lack of research here in the UAE, you know UAE people they don’t write a lot of published journals articles and I think about it and I find that people are stuck in their job. They don’t write a research paper when they see new things in the UAE and if we wrote a research paper about new things in the UAE I will say we will benefit from it because we will have new things and new topics and we don’t have anything related to the UAE to help. I am working with my advisor to publish my dissertation at one of the universities in the UK.” (I 16 p4)

Whilst some of the students interviewed believe it should be the governments’ priority to “drive the quantum of research that would feed our research context” (I20 p.4), many realise they have the opportunity to make significant contributions to the knowledge economy. As this cohort scored high in Power vs. Distance integer scale, this could be a block to taking the initiative to do so. However, their enthusiasm in their desire to publish their work, or make their findings known to the appropriate regulatory authorities was admirable, as this quote suggests:

“We are studying not only to gain knowledge and experience, it’s also for the country.” (I 15 p9)

6.5 CONTRIBUTIONS TO PRACTICE

There are significant implications for teachers, supervisors and library staff who support the information use and learning of the UAE students.

6.5.1 Exploring the possibilities of a relational approach to information literacy earlier in student education

This research has identified that Emirati students experience many challenges when encountering information in the early stages of their degrees. The findings suggest that these challenges may be associated with differences in cultural values and sentiments of Emirati students and western trained higher educators. The premise is that this cohort demonstrated a slow progression from being dependent information users to independent users of information. As this cohort scored highly in the Power Distance dimension, most noticeable was the reluctance to take control of initiating information use. Aligned to a Content or Competency frame approach to experiencing information (Bruce, 2008), this cohort identified as reliant on teachers or supervisors to help find resources, create research questions and an overall acceptance of the power imbalance between themselves and the faculty. However, if teachers want to encourage students across the great divide of dependence to independence, supporting students with an inquiry approach would be worth considering, rather than supporting the notion that teachers have all the answers by giving them the “key words” and a list of resources to read.

Higher education students in the UAE do eventually use information in a variety of ways and contexts in their Masters courses. This can be both frustratingly challenging, as well as surprisingly enjoyable. It appears that this familiarisation is arbitrary in nature and there is much groundwork for information professionals to foster meaningful and consistent information use experiences. As for the students, their information use resulted in feelings of confidence and enjoyment and a fervour to make the information that they have produced, available to appropriate organisation, institutions and the community within the UAE and globally. If this latter experience could be created earlier on in their information use journey by accommodating a relational approach to using information, then it follows that the Emirati information use experience would be far richer and more rewarding.

6.5.2 Supporting student publishing

Further to this, the research discovered limited print resources based on the UAE context did pose difficulties for students who needed to access academic resources. As a result students turned to industry professionals for the information they needed to support their research. Students expressed the desire to contribute to the academic information about the UAE because of dual purpose – a noticeable lack of academic resources and a deep pride for their nation. National institutions may well consider utilising librarians to develop digital repositories to store theses and significant project work. Supervisors could support the publishing of student work in academic journals.

6.5.3 Transitioning through the gateway of learning

Staying power or perseverance is a key characteristic when faced with the frustrations and struggles of using information, students can be made aware that they are *informed learners*. They are changing or widening their awareness (Gunton, Bruce & Davis, 2016) which eventually rewards them with experiences of enjoyment when finding new information and personal development because they feel their knowledge is growing. The research shows that by the end of their degree, students are becoming more positive and confident when using information. At this stage of their degree they are more likely to respond to the Learning to Learn and Personal Relevance frames (Bruce, 2008). Information professionals can certainly support students grappling with information use as they transition into a new awareness or a change of perspective.

6.5.4 Technology

The research confirmed that these Emirati higher education students were enthusiastic users of non-fiction information and they preferred to access it online. Social media was used to access information that was not understood during class time. Students relied on YouTube to “fill in” information gaps and Snap Chat was very popular as students found inspiration from messages posted from members of the royal family or others who held positions of power. Martin (2013) also concurs that Emirati higher education students are voracious users of technology when

accessing information, although they did tend to use technology at basic level. Therefore information professionals should encourage empowering open dialogue and sharing of these online resources instead of students defaulting to technology because information knowledge needs are not catered for adequately in courses.

6.5.5 Ambiguous information

Finally the mixed methods design of this research revealed that although this cohort presented as low on the Uncertainty Avoidance dimension as a result of the questionnaire delivered in Phase One; in the Phase Two interviews it was discovered that these results may not have been conclusive. Whilst these students welcomed the exchange of ideas and respected different opinions in oral contexts, the research suggested that when it came to their written information, these students liked to form very clear conclusions. Open ended information situations made them feel confused, they preferred to read information that contained clear findings which in turn guided their research. An ongoing awareness that Emiratis are an oral culture and contextually these higher education students were more comfortable in spoken discussions where intertextual clues are more clearly available than in written textual information should be noted.

6.6 CONTRIBUTIONS TO THEORY

Information literacy offers a pedagogical model that integrates critical, creative and ethical information use. This study adds to the growing body of research that suggests culture be considered as part of that model. These experiences formed around using information for students may be connected to Emirati culture and are useful in factoring into the information literacy model. The study contributes theoretically to the *relational approach* of information literacy as exemplified by the Six Frames of information literacy. By considering the relationship between culture and information use involving Emirati postgraduate students theoretical insights into the framework, this study has demonstrated that information can be experienced through a cultural lens. It recognises that information use can be experienced through cultural dimensions.

The relational perspective of information literacy considers people's experiences in using information to learn. The study adds to the "evolving theoretical perspective of informed learning" (Bruce, Somerville, Stoodley & Partridge, 2014, p182) by considering the cultural experiences of Emirati postgraduate students underpinning information use. To highlight some specific examples:

- Using information through people, visual and audible sources as explained in Information personified and Information for personal needs, supports the oral nature of this Emirati postgraduate cohort. Additionally, students placed a value on information because of its perceived scarcity and as a result people became the embodiment of information and were perceived as a valued information source.
- The values and sentiments of cultural pride inherent in contributors of information, motivated students to contribute to national information resources.

This study also supports Bruce's relational framework because when students were using information holistically to learn, their experiences embraced a much different perspective, compared to the lock-step skills based approach of the Content and Competency based frames that faculty may prefer due to traditional ESL teaching. Enjoyment, confidence and a sense of purpose became part of the fabric of their information use as suggested in *Information for personal improvement* and *Enjoyment in the information use flow*. When using information to learn in a variety of ways, the Emirati students found that information became adaptable, and information use became a phenomenon that changes and grows rather than a static set of skills. Therefore a gradual shift in understanding was discernible and "troublesome knowledge" (Meyer, Land & Baillie, 2010), or experiences where they struggled when they were conceptually challenged, gave way to experiencing new knowledge allowing *Enjoyment in the information use flow*.

The literature does not discuss Emirati information use in a relational sense, which does incorporate content and competency frames along with the other ways of using

information. This research shows that Emirati students are experiencing information in complex ways and contexts. They are using information to learn – making their experience relational. This is something that documents like the Arab Knowledge Report will not allude to.

6.7 LIMITATIONS

As with all research, there are contributions and there most certainly will be limitations. In the case of this research the limitations were:

Limitation 1: Working with students using their second language. Although English is the language of instruction and communication in tertiary institutions, there was always the potential for confusion or misunderstanding from both parties. This concern was more heightened at the survey stage (Phase One) of the research where students could not ask clarification questions. The pilot study was crucial in mitigating any potential misunderstandings. The participants were carefully questioned around whether this survey should be delivered in Arabic or English. The participants were very clear that they found the survey in English clear to follow.

Limitation 2: During the interviews, I was careful to check for understanding and ensured that the participant understood that it was perfectly acceptable to ask questions. Again, I was careful to ensure that all of the participants felt comfortable enough so that at any stage they could ask for the question to be rephrased. There are instances where it was clear intentions of the questions were not understood and in those cases the responses were set to the side of the data and not considered overall.

Limitation 3: Using a small cross section of society to explore information use through the lens of national culture. Hofstede's model was used as a data collection and analysis framework. Whilst the study did not intend to study national culture the Master cohort (297 students) was a very small section of the overall Emirati higher education students. They were selected because I considered them to be using information in sustainable periods.

Limitation 4: Three of the cultural dimensions in Phase One findings scored around the 50th percentile range on their indexes. In Chapter 4 I noted that Individualism vs. Collectivism scored 52, Long Term Orientation vs. Short Term Orientation scored 57 and Monumentalism vs. Self-Effacement scored 54. Therefore a limitation was knowing whether to assign a high, low or medium descriptor to each of these. It also followed that there was a choice as to which characteristics to use to describe how the student cohort profiled. Hofstede has described countries that have received similar rankings as “upper-medium and medium” (Hofstede, Hofstede & Minkov, 2010, p.80) and gone on to discuss the characteristics associated with scoring on the high end of the index. I chose to err towards the high end descriptors but remained aware that other lower end characteristics might also be present.

6.8 RECOMMENDATIONS

The recommendations for this research include the following:

Recommendation 1: That further research be conducted examining the relationship of culture and information use. This would be useful in contexts where national cultural groups are evident in higher education contexts and as a result may be a contributing factor as to why students experience information use in particular ways. In this way, the necessary support in using information and enhancing information literacy could be given.

Recommendation 2: That faculty and library staff in UAE higher education institutions explore ways to move students beyond the Content and Competency based stages of experiencing Information Literacy. Whilst students still need to develop research skills, attention could be given to extending their experience of confident information use in early stages of their degrees in a variety of contexts, for a variety of purposes. This would enable students to lessen their reliance on faculty for each step of the way through their information use process and therefore experience serendipitous growth opportunities throughout rather than in the latter stages of their Master’s degree.

Recommendation 3: That quality academic research on the UAE context be encouraged by the UAE government and universities so that it is published and made available through tertiary institutions where students can access it with ease.

Recommendation 4: Faculty of the UAE universities encourage research that can realistically be achieved. Academic staff should apprise themselves of “no-go zones” in data collection and enable appropriate alternatives for students who cannot research their specific industry due to government regulations.

Recommendation 5: That research opportunities for Emiratis are made more available by the UAE government, corporations and universities. In this way research is authentic and contextualised. Emiratis should be encouraged to study beyond their Bachelor degrees across a variety of disciplines within the UAE, encouraging a rich body of research by Emirati researchers thus *Emiratising* the academic and research sectors of the UAE.

Recommendation 6: That faculty seek to create learning environments and information use opportunities which accommodate the cultural dimensions of information use highlighted throughout this research and which foster awareness and appreciation of diverse cultural values and practices.

6.9 CONCLUSION

This chapter set out to connect the major themes around cultural dimensions of information use amongst Emirati students enrolled in higher education with understandings and contributions to knowledge, theory and practice. Using the data that emerged from the questionnaire of Phase One research and the interviews of Phase Two, this research attempted to explore the relationship between culture and information use. There are many ways researchers can seek to explore where information literacy and culture intersect amongst those who use information in academic environments. Yet little has been done to analyse culture and information use experience within this growing population of Emirati researchers. Combined

with the knowledge that information involving UAE contexts is slowly becoming available but not always accessible for academic use, understanding how Emirati students experience information is crucial to encourage growth in their knowledge economy and strengthen positive statistical growth in at risk areas identified within government documents like the Arab Knowledge Reports.

More widely, in the context of globalisation and international education, the findings contribute to cross cultural understandings. As western trained educators seek out teaching opportunities overseas, and particularly the UAE, an awareness of the information use amongst postgraduate Emirati students will better prepare teachers to support these students in using information to learn. From time to time federal departments like the Police will provide opportunities for their employees to study post graduate courses for limited periods internationally. Educators who work with Emirati students in these situations may understand their information use more meaningfully by taking into account the cultural dimensions of these students' information use.


To reinforce the previous point further, much of the literature on culture and higher education revolves around international students interacting with a host nation's faculty (Dahl, 2010). In the case of the United Arab Emirates the situation regarding culture is reversed. Most of the faculty are multicultural and seek to work with a homogenous Emirati culture. Therefore many of the issues addressed in the literature regarding international students transitioning to higher education may not apply on the same scale but are still relevant in the context of the UAE.

In addition to supporting Emiratisation, the information literacy needs and opportunities for Emirati students can be realised by acknowledging the cultural dimensions of information use within the context of the UAE and internationally. When both the challenges of using information such as perceived limited resources, using a second language to use information and knowing how to take control of your information use are understood - ethical, creative and critical use of information will become a key part of the information literacy experience. Similarly the experiences

that encourage learning when using information, such as encountering new information; enjoying the experiences around being a confident researcher and contributing to a national resource bank of information; all contribute to ethical, critical and creative information use.

Chapter 7: Appendices

Appendix A: Request to participate in research

	<h2 style="margin: 0;">PARTICIPATE IN RESEARCH</h2> <h3 style="margin: 0;">Information for Prospective Participants</h3>
<p><i>The following research activity has been reviewed via QUT arrangements for the conduct of research involving human participation. If you choose to participate, you will be provided with more detailed participant information, including who you can contact if you have any concerns.</i></p>	
<h3>How do higher education Emirati students experience information?</h3>	
<p>Research team contacts</p>	
Principal Researcher:	Helen Weston, PhD student, Queensland University of Technology
Associate Researchers:	Professor Helen Partridge, QUT and Professor Christine Bruce, Queensland University of Technology
<p>What is the purpose of the research?</p>	
<p>The purpose of this project is to test a pilot study questionnaire for a main research project which will explore the information use experience of higher education Emirati students aged 18 years and over. Part of the research involves exploring the cultural values and sentiments of the Emirati culture and this is the section that the pilot study questionnaire is based on.</p>	
<p>Are you looking for people like me?</p>	
<p>The research team is looking for Emirati students currently studying in Applied Masters programs. You are being invited to test the questionnaire which will be used as part of a study that will provide an insight into Emirati culture which in turn will inform the researcher as to how to explore how Emirati students use information. You are being asked to participate in this project because you are a national student currently studying at the Higher Colleges of technology. Your input would be valuable in helping the researcher understand the characteristics of Emirati culture.</p>	
<p>What will you ask me to do?</p>	
<p>You will complete a questionnaire and then take part in a short interview where you will be asked to provide feedback. Participation will involve completing a one anonymous questionnaire with likert scale answers (strongly agree – strongly disagree) that will take approximately ten minutes of your time. Following the completion of the questionnaire, you will be asked to give feedback on the usability of the questionnaire and your overall experience.</p>	
<p>Are there any risks for me in taking part?</p>	
<p>The research team has identified the following possible risks in relation to participating in this study: It is possible that you may feel slight discomfort at having to give a rating to a cultural sentiment or personal value. Strategies are in place to manage these risks and full details will be provided should you choose to participate. It should be noted that if you do agree to participate, you can withdraw from participation at any time during the project without comment or penalty.</p>	
<p>Are there any benefits for me in taking part?</p>	
<p>It is expected that this project will not benefit you directly. However, information professionals and teachers working with Emirati students will gain a better appreciation of your culture.</p>	
<p>Will I be compensated for my time?</p>	
<p>To recognise your contribution, should you choose to participate; the researcher will give the participants a Starbucks voucher to thank them for their time.</p>	
<p>I am interested – what should I do next?</p>	
<p>If you would like to volunteer for this study, the researcher will visit the class again at the end of a lesson to check if you would like to participate. If you would like to volunteer you can stay back at the end of that lesson to find out more and let me know if you are willing to volunteer. Alternatively you can contact the researcher via email hweston@hct.ac.ae or office phone 024048386 to let her know you are interested in volunteering. At the second point of contact details of the study will be outlined again and you will be provided with further information to ensure that your decision and consent to participate is fully informed.</p>	
<p>Thank You!</p>	<p>QUT Ethics Approval Number: 14000161</p>

Appendix B: Participant information for questionnaire



Queensland University of Technology
Brisbane Australia

PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT
– Questionnaire/interview –

How do higher education Emirati students experience information use?

QUT Ethics Approval Number 140000161

RESEARCH TEAM

Principal Researcher: Helen Weston, PhD student, Queensland University of Technology/ Abu Dhabi Colleges Library Supervisor Higher Colleges of Technology
Associate: Professor Helen Partridge; Professor Christine Bruce, Queensland University of Technology (QUT)
Researchers:

DESCRIPTION

This project is being undertaken as part of a PhD study for Helen Weston.

The purpose of this project is to explore the information use experience of higher education Emirati students aged 18 years and over. Part of the research involves exploring the cultural values and sentiments of the Emirati culture.

You are being invited to test a questionnaire to be used as part of a study that will provide an insight into Emirati culture which in turn will inform the researcher as to how to explore how Emirati students use information. You are being asked to participate in this project because you are a national student currently studying at the Higher Colleges of Technology. Your input would be valuable in helping the researcher understand the characteristics of Emirati culture.

PARTICIPATION

You will complete a questionnaire and then take part in a short interview where you will be asked to provide feedback on the questionnaire. Participation will involve completing an anonymous questionnaire with likert scale answers (strongly agree – strongly disagree) that will take approximately ten minutes of your time. Following the completion of the questionnaire, you will be asked to give feedback on the usability of the instrument and your overall experience which will take approximately ten minutes also. Types of questions will include:

Please think of an ideal job, disregarding your present job, if you have one. In choosing an ideal job, how important would it be to you to ... (please circle one answer in each line across):

- 1 = of utmost importance
- 2 = very important
- 3 = of moderate importance
- 4 = of little importance
- 5 = of very little or no importance

01. have sufficient time for your personal or home life	1	2	3	4	5
02. have a boss (direct superior) you can respect	1	2	3	4	5
03. get recognition for good performance	1	2	3	4	5

Your participation in this project is entirely voluntary and can take place in a location suitable to you – the following locations may suit – the library, an adjoining classroom next to your home classroom, the cafeteria (in a quiet area). If you agree to participate you do not have to complete any question(s) you are uncomfortable answering. Your decision to participate, or not participate will in no way impact upon your current or future relationship with HCT for example your grades. If you do agree to participate you can withdraw from the project at any time without comment or penalty. Any identifiable information already obtained from you will be destroyed. However, as the questionnaire is anonymous once it has been submitted it will not be possible to withdraw.

EXPECTED BENEFITS

It is expected that this project will not directly benefit you. However, it may benefit students and teachers at HCT or other national higher education institutes.

To recognise your contribution should you choose to participate the research team is offering participants a Starbucks voucher.

RISKS

There are minimal risks associated with your participation in this project. These include possible discomfort at having to give a rating to how much you value an aspect of your culture or beliefs. The researcher is not interested in your personal beliefs, nor are they interested in judging them. The focus is on gaining an understanding of the Emirati culture so the researcher can better explore the information experience of the Emirati student.

PRIVACY AND CONFIDENTIALITY

All comments and responses are anonymous and will be treated confidentially unless required by law. The names of individual persons are not required in any of the responses.

Any data collected as part of this project will be stored securely as per QUT's Management of research data policy.

CONSENT TO PARTICIPATE

Completing and submitting the consent form is accepted as an indication of your consent to participate in this project.

QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT

If have any questions or require further information please contact one of the research team members below.

Name – Helen Weston, Abu Dhabi Colleges Library Supervisor
 Phone 024048386
 Email hweston@hct.ac.ae

CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT

QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Unit on [+61 7] 3138 5123 or email ethicscontact@qut.edu.au. The QUT Research Ethics Unit is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

Thank you for helping with this research project. Please keep this sheet for your information.

Appendix C: Consent Form for Questionnaire

How do higher education Emirati students experience information use?

QUT Ethics Approval Number 140000161

RESEARCH TEAM CONTACTS

Name – Helen Weston

Phone 024048386

Email helen.weston@hct.ac.ae

Name – Professor Helen Partridge

Phone

Email h.partridge@qut.edu.au

STATEMENT OF CONSENT

By signing below, you are indicating that you:

- Have read and understood the information document regarding this project.
- Have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the research team.
- Understand that you are free to withdraw at any time, without comment or penalty.
- Understand that you can contact the Research Ethics Unit on [+61 7] 3138 5123 or email ethicscontact@qut.edu.au if you have concerns about the ethical conduct of the project.
- Understand that non-identifiable data collected in this project may be used as comparative data in future projects.
- Agree to participate in the project.

Name

.....

Signature

.....

Date

.....

Please return this sheet to the investigator.

Appendix D: Pilot Questionnaire

Section 1: To begin: some FACTS about YOU

Please place a tick in the appropriate box. For example ✓

1. Are you? Male Female
2. How old are you? 17-20 21-30 31-40 41-50
3. What is your **highest completed level** of education?
 Primary school High school Technical college
 Bachelor degree Masters PhD
 Other, please specify
4. What **level of study** are you currently enrolled in?
 Foundations Bachelor - CIS Bachelor - Business
 Bachelor - Engineering Bachelor - Applied Media Bachelor – Health Sc.
 Master of Business A Masters of Applied Sc. in Information Systems Mgmt.
 Master of Sc. In Education Mgmt. and Policy
5. What is your **employment status**?
 Unemployed Full Time Employed Part-time
 Employed Contract Employed Job Share
 Casually Employed Retired Full time student Other, please specify:
specify:
6. If you have or have had a paid job, what **kind of job is it / was it**?
 Unskilled or semi-skilled manual worker
 Generally trained office worker or secretary
 Vocationally trained craftsperson, technician, IT-specialist, nurse, artist or equivalent
 Academically trained professional or equivalent (but not a manager of people)
 Manager of one or more subordinates (non-managers)
 Manager of one or more managers
8. What is your **nationality**?

9. What was your **nationality at birth** (if different)?

Section 2: Cultural Values

Section 2: Cultural Values

Please think of an ideal job, disregarding your present job, if you have one. In choosing an ideal job, how important would it be to you to ... (please circle one answer in each line across):

- 1 = of utmost importance
- 2 = very important
- 3 = of moderate importance
- 4 = of little importance
- 5 = of very little or no importance

01. have sufficient time for your personal or home life	1	2	3	4	5
02. have a boss (direct superior) you can respect	1	2	3	4	5
03. get recognition for good performance	1	2	3	4	5
04. have security of employment	1	2	3	4	5
05. have pleasant people to work with	1	2	3	4	5
06. do work that is interesting	1	2	3	4	5
07. be consulted by your boss in decisions involving your work	1	2	3	4	5
08. live in a desirable area	1	2	3	4	5
09. have a job respected by your family and friends	1	2	3	4	5
10. have chances for promotion	1	2	3	4	5

In your private life, how important is each of the following to you: (please circle one answer in each line across):

11. keeping time free for fun	1	2	3	4	5
12. moderation: having few desires	1	2	3	4	5
13. being generous to other people	1	2	3	4	5
14. modesty: looking small, not big	1	2	3	4	5

15. If there is something expensive you really want to buy but you do not have enough money, what do you do?
1. always save before buying
 2. usually save first
 3. sometimes save, sometimes borrow to buy
 4. usually borrow and pay off later
 5. always buy now, pay off later
16. How often do you feel nervous or tense?
1. always
 2. usually
 3. sometimes
 4. seldom
 5. never
17. Are you a happy person ?
1. always
 2. usually
 3. sometimes
 4. seldom
 5. never
18. Are you the same person at work (or at school if you're a student) and at home?
1. quite the same
 2. mostly the same
 3. don't know
 4. mostly different
 5. quite different
19. Do other people or circumstances ever prevent you from doing what you really want to?
1. yes, always
 2. yes, usually
 3. sometimes
 4. no, seldom
 5. no, never
- 20 . All in all, how would you describe your state of health these days?
1. very good
 2. good
 3. fair
 4. poor
 5. very poor
21. How important is religion in your life ?
1. of utmost importance
 2. very important
 3. of moderate importance
 4. of little importance
 5. of no importance
22. How proud are you to be a citizen of your country?
1. not proud at all
 2. not very proud
 3. somewhat proud

- 4. fairly proud
- 5. very proud

23. How often, in your experience, are subordinates afraid to contradict their boss (or students their teacher?)

- 1. never
- 2. seldom
- 3. sometimes
- 4. usually
- 5. always

To what extent do you agree or disagree with each of the following statements? (please circle one answer in each line across):

- 1 = strongly agree
- 2 = agree
- 3 = undecided
- 4 = disagree
- 5 = strongly disagree

- | | | | | | |
|---|---|---|---|---|---|
| 24. One can be a good manager without having a precise answer to every question that a subordinate may raise about his or her work | 1 | 2 | 3 | 4 | 5 |
| 25. Persistent efforts are the surest way to results | 1 | 2 | 3 | 4 | 5 |
| 26. An organisation structure in which certain subordinates have two bosses should be avoided at all cost | 1 | 2 | 3 | 4 | 5 |
| 27. A company's or organisation's rules should not be broken - not even when the employee thinks breaking the rule would be in the organisation's best interest | 1 | 2 | 3 | 4 | 5 |
| 28. We should honour our heroes from the past | 1 | 2 | 3 | 4 | 5 |

Thanks very much for your co-operation

Appendix E: Request for participation of Interviews

Dear Student

My name is Helen Weston from the Abu Dhabi Colleges HCT and I'm doing a PhD on the information use experience of higher education Emirati students.

If you'd like to help me in this study I'm looking for Emirati Masters students to participate in a 40 to 60 minute interview about your experiences when using information.

Please view the attached recruitment flyer for further details on the study and how to participate.

Should you wish to participate in the study please reply to this email and I will follow up to organise a time and place where I can interview you. If a Skype session is easier, I am happy to organise that too.

Please note that this study has been approved by the QUT Human Research Ethics Committee (approval number 1400000161).

Many thanks for your consideration of this request.

Helen Weston
PhD Student
hweston@hct.ac.ae

Helen Partridge
Supervisor
hpartridge@qut.edu.au
Adjunct Professor
Science and Engineering Faculty, Information Systems School
Queensland University of Technology

Appendix F: Participant Information – Interview



Queensland University of Technology
Brisbane Australia

PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT – Interview –

How do higher education Emirati students experience information use?

QUT Ethics Approval Number 1400000161

RESEARCH TEAM

Principal Researcher: Helen Weston, PhD student, Queensland University of Technology/ Abu Dhabi Colleges Library Supervisor Higher Colleges of Technology
Associate Researchers: Adjunct Professor Helen Partridge, Queensland University of Technology (QUT); Professor Christine Bruce, Queensland University of Technology (QUT)

DESCRIPTION

This project is being undertaken as part of a PhD study for Helen Weston.

The purpose of this project is to explore the information use experience of higher education Emirati students aged 18 years and over.

You are being invited to be part of a study that will provide an insight into Emirati students' information use and to explore your experience as an information user. You are being asked to participate in this project because you are a national student currently studying at the Higher Colleges of Technology. Your input would be valuable in helping the researcher understand your experience of information use as you engage in research.

PARTICIPATION

Your participation in this project is entirely voluntary. If you agree to participate you do not have to complete any question(s) you are uncomfortable answering. Your decision to participate, or not participate will in no way impact upon your current or future relationship with HCT, for example your grades. If you do agree to participate you can withdraw from the project at any time without comment or penalty. Any identifiable information already obtained from you will be destroyed. However, as the interview is anonymous once it has been transcribed it will not be possible to withdraw.

Your participation will involve an audio-recorded interview at a location suitable to you that will take approximately 40 to 60 minutes of your time. It is possible to participate in the interview via Skype if you prefer. The following questions are representative of the ones you will be asked during the interview:

- Which Masters course are you enrolled in?
- Tell me about the topic you have chosen for your research?
- How did you decide on the quality of information you were finding?
- What sources did you find most useful and why?
- What sort of criteria determine whether you have found the best information?

- *How important is it to have produced work using only your own efforts and abilities?*
- *Is the research process fun? Which parts do you like the most and which not?*
- *Has using information helped you understand how you learn or build your knowledge? Can you share examples?*

EXPECTED BENEFITS

It is expected that this project will not directly benefit you. However, it may benefit students and teachers at HCT, HCT libraries and other information agencies, or other national higher education institutes.

To recognise your contribution should you choose to participate the research team is offering participants a 50 AED CentrePoint voucher or similar.

RISKS

There are minimal risks associated with your participation in this project. Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue and discomfort over analysing your own practices. However, participating in this project will not cause risk to your safety or wellbeing. The focus is on gaining an understanding of how you use information so the researcher can better explore the information experience of the Emirati student.

PRIVACY AND CONFIDENTIALITY

All comments and responses will be treated confidentially. Any data collected as part of this project will be stored securely as per QUT's Management of Research Data Policy. Any information obtained in connection with this project that can identify you will remain confidential. We plan to publically present and publish the results of this research; however information will only be provided in a form that does not identify you. Your interview will be recorded:

- It is not possible to participate in this research without being audio recorded
- You will not be given the opportunity to verify your comments and responses prior to final inclusion.
- Audio recordings will be destroyed at the conclusion of the project.
- Only the project team members listed above and a transcriber will have access to your recorded interview.
- Audio recordings will not be used for any other purpose.
- All responses provided by participants will be made anonymous on transcription.

Please note that non-identifiable data collected in this project may be used as comparative data in future projects or stored on an open access database for secondary analysis.

CONSENT TO PARTICIPATE

Completing and submitting the consent form is accepted as an indication of your consent to participate in this project.

QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT

If have any questions or require further information please contact one of the research team members below.

Helen Weston, Abu Dhabi Colleges Library Supervisor
ADMC/ADWC/KCWS
024048386
hweston@hct.ac.ae

Adjunct Professor Helen Partridge
Queensland University of Technology
Information Systems School
Science and Engineering Faculty
0061746312795
h.partridge@qut.edu.au

Professor Christine Bruce
Queensland University of Technology
Information Systems School
Science and Engineering Faculty
0061731389047
c.bruce@qut.edu.au

CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT

QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Unit on [+61 7] 3138 5123 or email ethicscontact@qut.edu.au. The QUT Research Ethics Unit is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

Thank you for helping with this research project. Please keep this sheet for your information.

Appendix G: Consent Form

 Queensland University of Technology Brisbane Australia	CONSENT FORM FOR QUT RESEARCH PROJECT – Interview –
How do higher education Emirati students experience information use?	
QUT Ethics Approval Number 1400000161	

RESEARCH TEAM CONTACTS

Adjunct Professor Helen Partridge	Professor Christine Bruce	Helen Weston
Information Systems School Science and Engineering Faculty 0061746312795 h.partridge@qut.edu.au	Information Systems School Science and Engineering Faculty 00617 3138 9047 c.bruce@qut.edu.au	Abu Dhabi Colleges Library Supervisor 024048386 hweston@hct.ac.ae

STATEMENT OF CONSENT

By signing below, you are indicating that you:

- Have read and understood the information document regarding this project.
- Have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the research team.
- Understand that you are free to withdraw at any time, without comment or penalty.
- Understand that you can contact the Research Ethics Unit on [+61 7] 3138 5123 or email ethicscontact@qut.edu.au if you have concerns about the ethical conduct of the project.
- Understand that the project will include audio recording.
- Understand that non-identifiable data collected in this project may be used as comparative data in future projects.
- Agree to participate in the project.

Name

.....

Signature

.....

Date

.....

Please return this sheet to the investigator.

Appendix H: Table 5 Interview questions related to Cultural Dimensions

Information Use experience of Emirati students in higher education
(Informed by results of Cultural Dimensions Values Survey)

Interview (face to face, online, phone) discussion guide

Setting up for the interview

If face to face, do location-specific housekeeping – drink of water, cup of tea, location of toilets and evacuation process, clarify max time 60 minutes.

If online or phone, check the participant is comfortable to start and clarify expected max time 60 minutes (will probably be shorter when online/phone).

At the start of the interview

Turn recorder on

Greeting

Restate purpose of the project

Restate consent parameters and clarify agreement to participant.

Remind participant that the questions are meant to stimulate their thinking. They can answer or not as they wish.

They can add to or address aspects not directly in answer to the question but which come to mind.

Check the recorder is working properly.

Preamble

You are currently studying at a Masters level and are therefore regulating using information as part of undertaking research and writing your dissertation.

We will start out with some questions about your degree and then move into some questions about your information use experiences. The following questions are typical of the ones to be asked during the interview:

The Interview Questions

Scene-setting

1. Which Masters course are you enrolled in?
2. How far into the course are you eg 1 year, 2 years or 3 years?
3. What courses or subjects have you covered so far?
4. Tell me about the topic you have chosen for your research?
5. What were the reasons for choosing your topic?

General information use:

6. What does “information use” mean to you?
7. How did you go about finding information?
8. How did you decide on the quality of information you were finding?
9. What types of information did you use?
10. Please describe how you used that information in your research?
11. What sources did you find most useful and why?
12. How confident do you feel about researching information?

Interview use based on cultural dimensions:

13. When selecting your research topic for this course, how much guidance did you seek from your lecturer?
14. How important was your lecturer’s input?
15. When you search for and decide on the information you will use, how reliant are you on your lecturer or other education professionals for assistance?
16. Were there any challenges you faced in the process? If so what were they?
17. What sort of criteria determine whether you have found the best information?
18. How long are you prepared to search for information?

19. When you are looking for information, how do you feel if you don't find a conclusive or final answer?
20. What if there are a number of points of view on the subject you are seeking information for? How do you decide what to use and what not to use?
21. How important is it to have produced work using only your own efforts and abilities?
22. What do you do if you find information you disagree with? What about if the teacher says something you are not totally convinced about?
23. What is strategies do you use to combine all your research findings into one whole idea?
24. Is the research process fun? Which parts do you like the most and which not?
25. How capable do you feel to express your opinion about the direction of the project you are working on?
26. How positive and confident did you feel throughout the process of your research? What were the things that made you feel positive and confident? Were there ever any times you felt negative about your research? What things made you feel negative?
27. Has using information helped you understand how you learn or build your knowledge? Can you share examples?
28. When you are not working on your formal study, what other types of information do you like to find out about?

Probe questions:

29. These are typical of further questioning which may be useful, at any point of the interview, to clarify, extend or deepen the nature of responses:
30. Could you explain what you mean by that?

31. Could you tell me more about that?
32. Do you have an example of that?
33. Could you explain what would have countered that?

Conclusion

Ask the participant if there is anything they wish to add.
 Thank the participant for their time and contribution to the project.
 Remind the participant that their contribution will be of direct benefit to future students, and therefore very valuable.
 Offer the student a Gift Voucher as recognition of this contribution.
 Remind the participant of the contact details on the information sheet should they have any queries or concerns in the future.
 If face to face, show the participant out.
 If online/phone, wish the participant a nice day and close down the Skype or other instance.

Finish the interview

Ensure the sound file is saved as soon as practicable to the agreed online repository for safe keeping.

Hofstede expands his dimensions to discuss the various sectors of society in his work “Cultures Consequences”. He details how the dimensions might manifest in the area of education. Therefore the questions have been based on Hofstede’s findings of the role of dimensional characteristics in Education. The table below shows how the interview questions connect with Hofstede’s findings.

(Hofstede, G., Hofstede, G.J., Minkov, M., 2010, pp.72, 124, 170, 208, 243, 291,297; Pylypenko, A., Voloshenuk, V., & Lytvynenko, N., 2012, p.198).

Dimension Characteristics	Questions related to Cultural Dimensions and Information Use
<p>Power Distance</p> <ul style="list-style-type: none"> • Students give teachers respect, even outside class • Teachers should take all initiatives in class • Quality of learning depends on excellence of the teacher • Teachers are gurus who transfer personal wisdom 	<ul style="list-style-type: none"> • When selecting your research topic for this course, how much guidance did you seek from your lecturer? (Q13) • How important was your lecturer’s input? (Q14)

<ul style="list-style-type: none"> • More educated and less educated persons show equally authoritarian values • Educational policy focuses on universities 	<ul style="list-style-type: none"> • When you search for and decide on the information you will use, how reliant are you on your lecturer or other education professionals for assistance? (Q15) • Were there any challenges you faced in the process? If so what were they? (Q16)
<p>Individualism versus Collectivism</p> <ul style="list-style-type: none"> • Students are expected to individually speak up in class. • The purpose of education is learning how to learn. • Diplomas increase economic worth and/ or self-respect. • The internet and e-mail hold strong appeal and are frequently used to link individuals 	<ul style="list-style-type: none"> • Has using information helped you understand how you learn or build your knowledge? Can you share examples? (Q27)
<p>Masculine versus Feminine</p> <ul style="list-style-type: none"> • Best student is the norm; praise for excellent students • Competition in class; trying to excel • Failing in school is a disaster • Competitive sports are part of the curriculum • Aggression in children is accepted • Students overrate their own performance: ego boosting. • Brilliance in teachers is admired • Job choice is based on career opportunities • Men and women study different subjects • Women teach young children • More nonfiction (factual information is read • • The internet is used for fact gathering 	<ul style="list-style-type: none"> • What sort of criteria determine whether you have found the best information? (Q17) • How long are you prepared to search for information? (Q18) • When you are not working on your formal study, what other types of information do you like to find out about? (Q28)

<p>Uncertainty Avoidance</p> <ul style="list-style-type: none"> • Students are comfortable with open-ended learning situations and concerned with good discussions • Teachers may say “I don’t know” • Results are attributed to a person’s own ability • Teachers involve parents • Children get gifts for education and development 	<ul style="list-style-type: none"> • When you are looking for information, how do you feel if you don’t find a conclusive or final answer? (Q19) • What if there are a number of points of view on the subject you are seeking information for? How do you decide what to use and what not to use? (Q20) • How important is it to have produced work using only your own efforts and abilities? (Q21)
<p>Long Term Orientation</p> <ul style="list-style-type: none"> • Priority is given to common sense • Disagreement does not hurt • Synthetic thinking 	<ul style="list-style-type: none"> • What do you do if you find information you disagree with? What about if the teacher says something you are not totally convinced about? (Q22) • What is strategies do you use to combine all your research findings into one whole idea? (Q23)
<p>Indulgence versus Restraint</p> <ul style="list-style-type: none"> • A perception of personal life control • Freedom of speech • Higher importance of leisure • Positive attitude 	<ul style="list-style-type: none"> • Is the research process fun? Which parts do you like the most and which not? (Q24) • How capable do you feel to express your opinion about the direction of the project you are working on? (Q25) • How positive and confident did you feel throughout the process of your research? What were the things that made you feel positive and confident? Were there ever any times you felt negative about your research? What things made you feel negative? (Q26)
<p>Monumentalism</p> <ul style="list-style-type: none"> • Pride in self • National pride • Making parents proud • Believing religion to be important 	<ul style="list-style-type: none"> • What is your topic of research? (Q4) • What were the reasons for choosing your topic? (Q5)

Appendix I: Final Codes and Frequencies

A-Z Codes	Frequency (bracketed numbers show discrepancy)
Monumentalism vs. Self-Effacement Cultural Dimension	51
Masc vs. Feminine Cultural Dimension	42
Long Term Orientation vs. Short Term Orientation Cultural Dimension	30
Individualism vs. Collectivism Cultural Dimension	37
Power Distance Cultural Dimension	28
Uncertainty Avoidance Cultural Dimension	26
Indulgence vs. Restraint Cultural Dimension	44
Types of Information used	46
Bringing info together	43
Preference for websites/online resource	34
Preference for Print resources	7
Finding information	33
Information provided by people	31
Researcher - Practitioner	30
Teacher and other professional guidance important	30
Personal interest information	26
Time management challenge	25
Gauging quality of info	25
Criteria used to assess quality of info	24
Avoiding dated resources	13
Establishing an opinion	21
Enjoyment in encountering new information	21
Research Impressions	21
Using info in a group environment	20
Using information increases learning	20
English skills important for understanding	19
Making decisions about info	19

Reading experiences	18
Being selective	17
Comparing information experience between BA and MA	17
Sharing information	17
Finding info a challenge	17
Limited resources is a challenge	10
Finding info can be time consuming	25
Responding to the Challenge to find info with UAE context	22
Teacher input important	16
Confidence growing as a researcher	15
Concerned about confidence as a researcher	10
Meaning of information use	15
Constraints of obtaining govt. & commercial info in the UAE	15
Dissertation topic	15
Using Social Media to fill in info gaps	14
Personal development	14
Lifelong learning	7
Blending job and study	13
Seek out other points of view	13
Open to exploring other points of view	11
Gauging quality of info found through people	12
Enjoyment in research	11
Value of information	10
Contributing to knowledge economy of UAE	4
Info found multiple ways	9
Info found in multiple places	6
Ethical use of info	9
Focus of research can change	4
Arabic Info	3
Internet has improved info access	2

Sharing experience	2
Tools to support info use	2
Tools to support research	1
Ability to communicate knowledge is more important than knowledge itself	1
Academic dishonesty is dangerous but still exists	1
Assessment driven	1
Believes problems may not be solved but approaches are applied	1
believes work has been used without credit	1
Builds terminology by using info	1
Disadvantages of smart technology in teaching & learning	1
discussion is an info tool	1
Does not like using info	1
Doesn't like analysing statistics – questionnaires and surveys	1
Enjoyed working with info	1
Frustration with not being able to use all findings	1
Guidelines support info use	1
Importance of referencing	1
Independent work engages at every level	1
Insight into different roles of info use	1
Intrigued or inspired or motivated by biographical info	1
lucky to be able to access so much info	1
Opportunity to reflect	1
personal feelings were challenged with some of the data results – very hard	1
Positive feedback about presentation	1
Quantitative researcher	1
Relies on friends to fill in info gaps	1
Statistic work not enjoyable	1
Understanding terminology challenging	1
Using information is not interesting	1
Writing is done independently	1

References

Abu Dhabi Government (2015). Khalifa declares 2016 "Reading Year".

Retrieved from

<https://www.abudhabi.ae/portal/public/en/abu-dhabi-emirate/government/news/khalifa-declares-2016-reading-year;jsessionid=Qq1bZghZ5f1zLj4vLfDPTy3Y8G2rSpNjSdhx6LBtknjx14FGnplm!-1187126191!-38064825!1495325305133>

Abu Dhabi Educational Council (ADEC) (2012). Abu Dhabi education reform: The road to 2030. Retrieved from https://centres.insead.edu/innovation-policy/events/policy-breakfasts/documents/ad_edu_ref_pres-2012april.pdf

Akerlind, G., McKenzie, J., & Lupton, M. (2011). A threshold concepts focus to curriculum design: Supporting student learning through application of variation theory. Sydney, NSW: Office for Learning and Teaching.

Retrieved from

<https://eprints-qut-edu-au.ezp01.library.qut.edu.au/69603/>

Al Fahim, M. (1995). *From rags to riches: The story of Abu Dhabi*. London, United Kingdom: The London Centre of Arab Studies.

Al Sharhan, A.A. (1999). Foreword. In Welch, G., Mawgood, E. A. *Educational reform in the United Arab Emirates: A global perspective*. (pp.1-3) Dubai, United Arab Emirates: Ministry of Education and Youth.

Alkailani, M., Azzam, I.A., & Athamneh, A.B. (2012). Replicating Hofstede in Jordan: Ungeneralized, reevaluating the Jordanian culture. *International Business Research*, 5(4), 71-80. Retrieved from <http://www.ccsenet.org/journal/index.php/ibr>

Arab Knowledge Report 2010/2011. (2010). Dubai, UAE: Mohammed Bin Rashid Al Maktoum Foundation (MBRF) and The United Nations Development Programme / Regional Bureau for Arab States (UNDP/RBAS). Retrieved from http://www.arabstates.undp.org/content/rbas/en/home/library/huma_development/arab-knowledge-report-2010-2011.html

Arab Knowledge Report 2014. (2014). Dubai, UAE: Mohammed Bin Rashid Al Maktoum Foundation (MBRF) and The United Nations Development Programme. Retrieved from http://www.arabstates.undp.org/content/rbas/en/home/library/huma_development/arab-knowledge-report-20140.html

Arnold, T. (2013, May 20). Year of Emiratization: Low private sector pay and long hours remain obstacle. *The National*. Retrieved from <https://www.thenational.ae/business/year-of-emiratisation-low-private-sector-pay-and-long-hours-remain-obstacle-1.273118>

Association of College and Research Libraries Information Literacy Standards (2002). Retrieved from <http://www.ala.org/acrl>

Association of College and Research Libraries (ACRL) (2016). Framework for Information Literacy for Higher Education. Retrieved from http://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/infolit/Framework_ILHE.pdf

Bahgat, G. (1999). Education in the Gulf monarchies: Retrospect and prospect. *International Review of Education* 45(2), 127-136. Retrieved from <http://www.springerlink.com/content/102914/?MUD=MP>

- Barberà, E., Gómez-Rey, P., Fernández-Navarro, F. (2016). The impact of cultural dimensions on online learning. *Journal of Educational Technology & Society*, 19(4), 225-238. Retrieved from <http://www.jstor.org/stable/jeductechsoci.19.4.225>
- Baskerville, R. F. (2003). Hofstede never studied culture. *Accounting, Organizations and Society*, 28(1), 1-14. doi:10.1016/S0361-3682(01)00048-4
- Bazeley, P. (2006). The contribution of computer software to integrating qualitative and quantitative data and analyses. *Research in the Schools*, 13(1), 64-74. Retrieved from <http://search.proquest.com/docview/211030668?accountid=13380>
- Bergman, M.M., (Editor) (2008). *Advances in mixed methods research: Theories and applications*. Los Angeles, CA: Sage.
- Bodycott, P., & Walker, A. (2000). Teaching abroad: Lessons learned about intercultural understanding for teachers in higher education. *Teaching in Higher Education*, 5(1), 79-94. doi:10.1080/135625100114975
- Bond, M. H. (1996). *The handbook of Chinese psychology*. Hong Kong, China: Oxford University Press.
- Brannen, J. (2008). The practice of a mixed methods research strategy: Personal, professional and project considerations. In Bergman, M.M., (Editor) (2008). *Advances in mixed methods research: Theories and applications*. (pp.53-65). Los Angeles, CA: Sage.
- Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. ISSN 1478-0887 Retrieved from: <http://eprints.uwe.ac.uk/11735>
- Bruce, C. (1997). *The seven faces of information literacy*. Adelaide, Australia: Auslib Press.

- Bruce, C. S. (1998). The phenomenon of information literacy. *Higher Education Research & Development*, 17(1), 25-43. doi:10.1080/0729436980170102
- Bruce, C. (2008). *Informed learning*. Chicago, IL: Association of College and Research Libraries.
- Bruce, C., Edwards, S., & Lupton, M. J. (2006). Six frames for information literacy education: A conceptual framework for interpreting the relationships between theory and practice. *Innovation in teaching and learning in information and computer sciences*, 5(1), 1-18. Retrieved from http://www.heacademy.ac.uk/italics/vol5-1/pdf/sixframes_final%20_1_.pdf
- Bruce, C., & Hughes, H. (2010). Informed learning: A pedagogical construct attending simultaneously to information use and learning. *Library and Information Science Research*, 32(4), A2-A8. doi:10.1016/j.lisr.2010.07.013
- Bruce, C., Hughes, H., & Somerville, M. M. (2012). Supporting informed learners in the twenty-first century. *Library Trends*, 60(3), 522-545.
- Bruce, C., Somerville, M., Stoodley, I. & Partridge, H. (2014). Diversifying information literacy research: An informed learning perspective. In C. Bruce, H. Partridge, K. Davis, H. Hughes & I. Stoodley (Eds). *Information experience: Approaches to theory and practice* (pp.169-186). Bingley: Emerald (Library and Information Science; vol. 9). Retrieved from <https://eprints.qut.edu.au/75072/>
- Bryman, A. (2007). Barriers to integrating quantitative and qualitative research. *Journal of Mixed Methods Research*, 1(1), 8-22. doi: 10.1177/2345678906290531
- Bryman, A. (2008). *Social research methods* (3rd ed.). Oxford, NY: Oxford University Press.

- Bryman, A. (2012). Alan Bryman, University of Leicester in Baker, S., & Edwards, R. How many qualitative interviews is enough? Expert voices and early career reflections on sampling and cases in qualitative research. Retrieved from http://eprints.ncrm.ac.uk/2273/4/how_many_interviews.pdf
- Bystrom, K., & Jarvelin, K. (1995). Task complexity affects information seeking and use. *Information Processing & Management*, *31*(2), 191-213.
doi:10.1016/0306-4573(95)80035-R
- Burden-Leahy, S. (2009). Globalisation and education in the postcolonial world: The conundrum of the higher education system of the United Arab Emirates. *Comparative Education*, *45*(4), 525-544. Retrieved from <http://www.jstor.org/stable/40593193>
- Caracelli, V. J., & Greene, J. C. (1993). Data analysis strategies for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, *15*(2), 195-207. doi: 10.2307/1164421
- Clearly Cultural. (2012). Geert Hofstede's cultural dimensions. Retrieved from <http://www.clearlycultural.com>
- Central Intelligence Agency. (2012). *The CIA world fact book 2013*. New York, NY: Skyhorse Publishing.
- Conteh-Morgan, M. E. (2001). Empowering ESL students: A new model for information literacy instruction. *Research Strategies*, *18*(1), 29-38.
doi:10.1016/S0734-3310(02)00064-2
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.
- Cresswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.

- Cresswell, J.W., & Plano Clark, V.L. (2011). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Cresswell, J.W., Plano Clark, V.L., Gutmann, M.L., & Hanson, W.E. (2003). Advanced mixed methods research designs. In Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social & behavioural research*. (pp.209-239). Thousand Oaks, CA: Sage.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. London, United Kingdom: Sage.
- Cronjé, J. C. (2011). Using Hofstede's cultural dimensions to interpret cross-cultural blended teaching and learning. *Computers & Education*, 56(3), 596-603. doi:10.1016/j.compedu.2010.09.021
- Dada, R. (2011). Teacher leadership in the Arab gulf: Expatriates and Arab educators mentor each other. In Gitsaki, C. *Teaching and learning in the Arab world*. (pp.203-228). New York, NY: Peter Lang.
- Dahl, M. (2010). *Failure to thrive in constructivism: A cross cultural malady*. Rotterdam, Netherlands: Sense.
- Dellinger, A. B., & Leech, N. L. (2007). Toward a unified validation framework in mixed methods research. *Journal of Mixed Methods Research*, 1(4), 309-332. doi:10.1177/1558689807306147
- DeWaelche, S. (2015). Critical thinking, questioning and student engagement in Korean university English courses. *Linguistics and Education*, 32, 131-147. doi:10.1016/j.linged.2015.10.003
- Dewald, N. H. (1999). Web-based library instruction: What is good pedagogy? *Information Technology and Libraries*, 18(1), 26 – 31. Retrieved from <http://www.ala.org/lita/ital/>

- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education*, 40(4), 314-321. doi:10.1111/j.1365-2929.2006.02418.x
- Dorner, D.G., & Gorman, G.E., (2006) Information literacy education in Asian developing countries: Cultural factors affecting curriculum development and programme delivery. *IFLA Journal*, 32(4), 281-293. doi:10.1177/0340035206074063
- Dorner, D. G, Gorman, G. E. & Gaston, M. E. (2012). Developing contextual perceptions of information literacy and information literacy education in the Asian Region. In A. Spink & D. Singh (Eds.) *Library and Information Science Trends and Research: Asia-Oceania* (pp.151-172). Bingley: Emerald. (Library and Information Science, vol. 2). doi: 10.1108/S1876-0562(2011)002011b009
- Drogendijk, R., & Slangen, A. (2006). Hofstede, Schwartz, or managerial perceptions? The effects of different cultural distance measures on establishment mode choices by multinational enterprises. *International Business Review*, 15(4), 361-380. doi:10.1016/j.ibusrev.2006.05.003
- Duckworth, A., & Gross, J. J. (2014). Self-control and grit: Related but separable determinants of success. *Current Directions in Psychological Science*, 23(5), 319-325. doi:10.1177/0963721414541462
- Elo, S. and Kyngas, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107-115. doi: 10.1111/j.1365-2648.2007.04569.x
- Entwistle, N. J. (1981). *Styles of learning and teaching: An integrated outline of educational psychology for students, teachers and lecturers*. Chichester: Wiley.

- Erzberger, C. and Kelle, U. (2003). Making inferences in Mixed Methods: the rules of integration. In A. Tashakkori & C. Teddlie (Eds). *Handbook of mixed methods in social & behavioural research* (pp.457-488). Thousand Oaks, CA: Sage.
- Eysenbach, G. (2004). Improving the quality of Web surveys: the Checklist for Reporting Results of Internet E-Surveys (CHERRIES). *Journal of Medical Internet Research*, 6(3). Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1550605/>
- Ezzy, D. (2013). *Qualitative analysis*. Florence, SC: Routledge.
doi:10.4324/9781315015484
- Feilzer, M. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research*, 4(1), 6-16. doi:10.1177/1558689809349691
- Fenner, Audrey. (2005). Placing Value on Information. *Library Philosophy and Practice (e-journal)*. Paper 21. Retrieved from <http://digitalcommons.unl.edu/libphilprac/21>
- United Arab Emirates. (2017). Emiratisation. *Government.ae: the official portal of the UAE Government*. Retrieved from <https://government.ae/en/information-and-services/jobs/vision-2021-andemiratisation/Emiratisation->
- Fincham, J.E. (2008). Response Rates and Responsiveness for Surveys, Standards, and the Journal. *American Journal of Pharmaceutical Education*, 72(2), 1. doi.org/10.5688/aj720243
- Fischer, O., & Al-Issa, A. (2012). In for a surprise piloting the Arab version of the VSM 94. *International Journal of Intercultural Relations*, 36(5), 737. doi:10.1016/j.ijintrel.2012.04.007

- Freshwater, D. (2013). Taking the time and trouble with mixed methods research. *Journal of Mixed Methods Research*, 7(4), 299-301.
doi:10.1177/1558689813504161
- Gage, N. (1989). Paradigm wars and their aftermath: A 'historical' sketch of research and teaching since 1989. *Educational Researcher*, (18), 4-10.
- Gardiner-Hyland, F. (2014). The impact of teacher education pedagogy on EFL reading teacher identities. In K.M. Bailey & R.M. Damerow, (Eds.) *Teaching and learning English in the Arabic-speaking world*. (pp.83-100). New York, NY: Routledge.
- Gauvain, M., Beebe, H., & Zhao, S. (2011). Applying the cultural approach to cognitive development. *Journal of Cognition and Development*, 12(2), 121-133. doi:10.1080/15248372.2011.563481
- Gitsaki, C. (Ed.) (2011). *Teaching and learning in the Arab world*. New York, NY: Peter Lang.
- Godwin, S.M. (2006). Globalization, education and Emiratization: A Study of the United Arab Emirates. *Electronic Journal on information Systems in Developing Countries* 27(1), 1-14. Retrieved from <http://www.ejisd.org/ojs2/index.php/ejisd>
- Greene, J.C., & Caracelli, V.J. (eds). (1997). *Advances in mixed method evaluation: The challenges and benefits of integrating diverse paradigms* (New Directions for Evaluation, no. 74). San Francisco, CA: Jossey-Bass.
- Greene, J. C. (2008). Is mixed methods social inquiry a distinctive methodology? *Journal of mixed methods research*, 2(1), 7-22.
doi:10.1177/1558689807309969

- Gunton, L., Bruce, C., & Davis, K. (2016). Information literacy research: The evolution of the relational approach. In Management Association (Eds.) *Professional Development and Workplace Learning: Concepts, Methodologies, Tools, and Applications* (pp.1943-1963). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-8632-8.ch106
- Haines, C. (2011). Value added by mixed methods research: a multiphased mixed methods design. PhD dissertation, University of Nebraska, Lincoln, NE. *Public Access Theses and Dissertations from the College of Education and Human Sciences*. Paper 114. Retrieved from <http://digitalcommons.unl.edu/cehsdiss/114>
- Hall, E.T. (1976). *Beyond Culture*. New York, NY: Anchor Press.
- Hanif, N. (2017, March 14). Education reform needed to meet future challenges, Dubai conference hears. *The National*. Retrieved from <http://www.thenational.ae/uae/education/education-reform-needed-to-meet-future-challenges-dubai-conference-hears>
- Hashem, M. (2009). Impact and implications of new information technology on Middle Eastern youth. *Global Media Journal*, 8(14). Retrieved from <http://lass.calumet.purdue.edu/cca/gmj/sp09/gmj-sp09-hashem.htm>
- Hayes, J., & Allinson, C. W. (1988). Cultural differences in the learning styles of managers. *Management International Review*, 28(3), 75-80.
- Head, A., & Eisenberg, M. (2010). How today's college students use Wikipedia for course-related research. *First Monday*, 15(3). doi:10.5210/fm.v15i3.2830
- Heinström, J. (2005). Fast surfing, broad scanning and deep diving: The influence of personality and study approach on students' information-seeking behaviour. *Journal of Documentation*, 61(2), 228-235. Retrieved from <http://www.emeraldinsight.com>

- Heinström, J. (2010). *From fear to flow: Personality and information interaction*. Oxford: Chandos.
- Hingston, J. (2012). The influence of cultural orientations on cross-cultural negotiation (PhD thesis, Deakin University, Victoria, Australia). Retrieved from <https://dro.deakin.edu.au/eserv/DU:30048425/hingston-influenceofcultural-2012A.pdf>
- Higher Colleges of Technology. (2012). *Strategic plan 2012-2017- An ambition for more: Going the distance through learning by doing*. Retrieved from <http://www.hct.ac.ae/content/uploads/HCT-Strategic-Plan-2012-17.pdf>
- Hofstede, G. (2001). *Culture's Consequences: comparing values, behaviors, institutions and organizations across nations*. (2nd ed.). Thousand Oaks, CA: Sage.
- Hofstede, G., & Hofstede, G.J. (2005). *Cultures and organizations: Software of the mind*. New York, NY: McGraw Hill.
- Hofstede, G., & Hofstede, G.J. (n.d.). Geert Hofstede. Retrieved from <http://www.geerthofstede.nl/>
- Hofstede, G., Hofstede, G.J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind: Intercultural cooperation and its importance for survival*. New York, NY: McGraw Hill.
- Hofstede, G., & Minkov, M. (2010). Long-versus short-term orientation: New perspectives. *Asia Pacific Business Review*, 16(4), 493-504. doi: 10.1080/13602381003637609
- Hofstede, G., Hofstede, G.J., Minkov, M. & Vinken, H, 2008. Value Surveys Module 2008. Retrieved from <http://geerthofstede.com/research-and- vsm/vsm-08/>

- Horton, F. W. Jr. (2008). *Understanding information literacy: A primer*. Paris, France: UNESCO. Retrieved from <http://unesdoc.Unesco.org/images/0015/001570/157020e.pdf>
- Hughes, H. (2009). International students using online resources to learn. PhD Thesis, Queensland University of Technology.
- Hughes, H. (2013). International students using online information resources to learn: Complex experience and learning needs. *Journal of further and Higher Education*, 37(1), 126-146. doi:10.1080/0309877X.2011.644778
- Hunt, F. & Birks, J. (2004). Best practices in information literacy. *Portal: Libraries and the Academy*, 4(1), 27-39. doi:10.1353/pla.2004.0010
- Igo, L.B., Kiewra, K.A., & Bruning, R. (2008). Individual differences and intervention flaws: An explanatory sequential study of college students' copy-and-paste note taking. *Journal of Mixed Methods Research*, 2(2), 149-168. doi:10.1177/1558689807313161
- Inglehart, R. F. (2008). Changing values among western publics from 1970 to 2006. *West European Politics*, 31(1-2), 130-146. doi: 10.1080/01402380701834747
- Ivankova, N., Creswell, J. & Plano Clark, V.L. (2006). Using mixed-methods explanatory sequential design: From theory to practice. *Field Methods*, 18(1), 3-20. doi:10.1177/1525822X05282260
- Jain, A., & Ogden, J. (1999). General practitioners' experiences of patients' complaints: Qualitative study. *BMJ: British Medical Journal*, 318(7198), 1596-1599. doi:10.1136/bmj.318.7198.1596
- Jang, S., & Kim, N. (2004). Transition from high school to higher education and work in Korea, from the competency-based education perspective. *International Journal of Educational Development*, 24(6), 691-703. doi:10.1016/j.ijedudev.2004.04.002

- Johns, S. K., Smith, M., & Norman, C. S. (2003). How culture affects the use of information technology. *Accounting Forum*, 27(1), 84-109.
doi:10.1111/1467-6303.00097
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112-133.
doi:10.1177/1558689806298224
- Johnston, N., Partridge, H., & Hughes, H. (2014). Understanding the information literacy experiences of EFL (English as a foreign language) students. *Reference Services Review*, 42(4), 552–568. doi:10.1108/RSR-05-2014-0015.
- Jones, M. (2007). *Hofstede – culturally questionable?* Oxford Business & Economics Conference, 24th June, 2007. Oxford, United Kingdom. Retrieved from <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1389&context=commpapers>
- Kaufman, D. (1996). Constructivist-based experiential learning in teacher education. *Action in Teacher Education*, 18(2), 40-50.
doi:10.1080/01626620.1996.10462832
- Kemper, E.A., Stringfield, S., & Teddlie, C. (2003) Mixed methods sampling strategies in social science research. In A. Tashakkori, & C. Teddlie (Eds.). *Handbook of mixed methods in social & behavioral research*. (pp.273-296). Thousand Oaks, CA: Sage.
- Kim, K., Sin, S. J., & Yoo-Lee, E.Y. (2014). Undergraduates' use of social media as information sources. *College & Research Libraries*, 75(4), 442-457.
doi:10.5860/crl.75.4.442
- King, M. (2011). Implementing problem-based learning in the Gulf. In Gitsaki, C. (Ed.) *Teaching and learning in the Arab world*. (pp.357-376). New York, NY: Peter Lang.

- Kirk, D., & Markaz al-Imārāt lil-Dirāsāt wa-al-Buhūth al-Istirātijīyah. (2010). *The development of higher education in the United Arab Emirates*. Abu Dhabi, United Arab Emirates: The Emirates Center for Strategic Studies and Research.
- Kuhlthau, C. C. (1991). Inside the search process: Information seeking from the user's perspective. *American Society for Information Science, Journal*, 42(5), 361-371. Retrieved from <http://www.asis.org/jasist.html>
- Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, Calif: Sage.
- Leedy, P.D., & Ormrod, J.E. (2010). *Practical research planning and design*. (9th ed.) Boston, MA: Pearson Educational International.
- Limberg, L. (2000). Is there a relationship between information seeking and learning outcomes? In C. Bruce & P. Candy (Eds.), *Information literacy around the world. Advances in programs and research* (pp.193-207). Wagga Wagga, Australia: Centre for Information Studies.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Li Wang. (2008). Sociocultural learning theories and information literacy teaching activities in higher education. *Reference & User Services Quarterly*, 47(2), 149.
- Litman, J. (2008). Interest and deprivation factors of epistemic curiosity. *Personality and Individual Differences*, 44(7), 1585–1595.
doi:10.1016/j.paid.2008.01.014
- Littrell, R.F. (2012). Cultural Value Dimension Theories: Hofstede – A Work in Progress. *Insights*, 12(4), 3-6. Retrieved from https://www.academia.edu/31638184/Littrell_2012_Value_Dimension_Theories-Hofstede_A_Work_in_Progress.pdf

- Lloyd, A. (2005). Information literacy: Different contexts, different concepts, different truths? *Journal of Librarianship and Information Science*, 37(2), 82-88. doi:10.1177/0961000605055355
- Lupton, M. (2008a). Evidence, argument and social responsibility: First-year students' experiences of information literacy when researching an essay. *Higher Education Research & Development*, 27(4), 399-414. doi:10.1080/07294360802406858
- Lupton, M. (2008b). *Information Literacy and Learning*. Queensland University of Technology, Faculty of Information Technology.
- Madison, D. S. (2012). *Critical ethnography: Method, ethics, and performance* (2nd ed.). Thousand Oaks, CA: Sage.
- Maina, Charles, K. (2003). Valuing information in an information age: The price model and the emerging information divide among individuals, societies, and among nations. *Canadian Journal of Information and Library Science*, 27(3), 139. retrieved from <http://www.cais-acsi.ca/ojs/index.php/cais/article/download/405/575>
- Martin, J.M. (2013). Technology, education and Arab youth in the 21st century: A study of the UAE (PhD Thesis, University of Queensland, Brisbane, Australia). Retrieved from <https://espace.library.uq.edu.au/view/UQ:312030>
- Mastenbroek, E., & Doorenspleet, R. (2007). Mind the gap! On the possibilities and pitfalls of mixed methods research. Paper presented at the 4th European Consortium for Political Research (ECPR), Pisa, Italy, 6-8 September 2007.
- Maybee, C. (2006). Undergraduate perceptions of information use: The basis for creating user-centered student information literacy instruction. *The Journal of Academic Librarianship*, 32(1), 79-85. doi:10.1016/j.acalib.2005.10.010

- Maybe, C. (2014). Experiences of informed learning in the undergraduate classroom. In C. Bruce, H. Partridge, K. Davis, H. Hughes & I. Stoodley (Eds.) *Information experience: Approaches to theory and practice*. (pp.259-271) Bingley: Emerald (*Library and Information Science*; vol. 9). Retrieved from <https://eprints-qut-edu-au.ezp01.library.qut.edu.au/75072/>
- Mayoh, J., Todres, L., & Bond, C.S. (2011). Exploring the online health information seeking experiences of older adults. *Indo - Pacific Journal of Phenomenology*, 11(2), 1.
- McSweeney, B. (2002). The essentials of scholarship: A reply to Geert Hofstede. *Human Relations*, 55(11), 1363-1372. doi:10.1177/00187267025511005
- McGuire, J. M. (2007). Why has the critical thinking movement not come to Korea? *Asia Pacific Education Review*, 8(2), 224-232. doi:10.1007/BF03029258
- Mertens, D. M. (2012). What comes first? The paradigm or the approach? *Journal of Mixed Methods Research*, 6(4), 255-257. doi:10.1177/1558689812461574
- Meyer, J. H., Land, R., & Baillie, C. (Eds.). (2010). *Threshold concepts and transformational learning*. Rotterdam: Sense Publishers.
- Minkov, M. (2013). *Cross-cultural Analysis: The Science and Art of Comparing the World's Modern Societies and Their Cultures*. Thousand Oaks, CA: Sage.
- Minkov, M., (2007). *What makes us different and similar: A new interpretation of the world values survey and other cross-cultural data*. Sofia, Bulgaria: Klasika i Stil.
- Mohammed, S. (2011). Policy in action: The UAE in the global knowledge economy fast-forwarding the nation. Retrieved from <http://www.ecc.ae>

- Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research, 1*(1), 48-76. doi: 10.1177/2345678906292462
- Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing research, 40*(2), 120-123.
- Mulhall, A. (2003). In the field: Notes on observation in qualitative research. *Journal of Advanced Nursing, 41*(3), 306-313. doi:10.1046/j.1365-2648.2003.02514.x
- Newman, I., & Benz, C. R. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum*. Carbondale, IL: Southern Illinois University Press.
- Ng, S. I., Lee, J.A., & Soutar, G.N. (2007). Are Hofstede's and Schwartz's value frameworks congruent? *International Marketing Review, 24*(2), 164-180. doi:10.1108/02651330710741802
- Nicholson, D.J., Knapp, P., Gardner, P., & Raynor, D.K. (2011). Combining concurrent and sequential methods to examine the usability and readability of websites with information about medicines. *Journal of Mixed Methods Research, 5*(1), 25-51. doi:10.1177/1558689810385694
- Nizam, A.S., Normazidah, C.M., & Wahi, W. (2010). Information literacy abilities in esl classrooms. *ASEAN Journal of Teaching & Learning in Higher Education, 2*(1), 52-65.
- Noblitt, G. W., & Hare, R. D. (1988). *Meta-ethnography: Synthesizing qualitative studies*. Newbury Park, CA: Sage.
- Nulty, D. D. (2008). The adequacy of response rates to online and paper surveys: What can be done? *Assessment & Evaluation in Higher Education, 33*(3), 301-314. doi:10.1080/02602930701293231

- O'Leary, Z. (2010). *The essential guide to doing your research project*. London: Sage.
- Onwuegbuzie, A. J., & Johnson, R.B. (2006). The validity issue in mixed research. *Research in the Schools, 13*(1), 48-63. Retrieved from <http://gateway.library.qut.edu.au/login?url=https://search-proquest-com.ezp01.library.qut.edu.au/docview/211030483?accountid=13380>
- Ormerod, R. (2006). The history and ideas of pragmatism. *The Journal of the Operational Research Society, 57*(8), 892-909. doi:10.1057/palgrave.jors.2602065
- Oshlansky, L., Cairns, P. & Thimbleby, H. (2006). A cautionary tale: Hofstede's VSM revisited. In B. Fields, T. Stockman, L. Valgerour Nickerson & P. Healey (Eds). *People and computers XX: Proceedings of the 20th Human Computer Interaction (HCI) Conference 2006, London, 11-15 September 2006, vol 2* (128-132). Swindon: BCS Learning & Development.
- O'Sullivan, C. (2002). Is information literacy relevant in the real world? *Reference Services Review, 30*(1), 7-14. doi:10.1108/00907320210416492
- Pennington, R. (2016, August 30). Education reforms put UAE pupils on track for better learning. Retrieved from <http://www.thenational.ae/uae/education/education-reforms-put-uae-pupils-on-track-for-better-learning>
- Pylypenko, A., Voloshenuk, V., & Lytvynenko, N. (2012). Regional map of mentality after G. Hofstede: Lessons from Ukraine. *Journal of US - China Public Administration, 9*(2). Retrieved from <http://search.proquest.com/docview/1465055951?accountid=1215>

- Raven, J. (2010). Emiratizing the education sector in the UAE: Contextualization and challenges. In M. O'Brien (Ed.), *HCT Teacher Education Series, Book 3. Developing a nation through educational Emiratization: Reflections on the development and implementation of a transformational teacher education program in the UAE*. (pp 13-22). Abu Dhabi, United Arab Emirates: HCT Press.
- Raddawi, R., (2011). Teaching critical thinking skills to Arab university students. In Gitsaki, C. (Ed.) *Teaching and learning in the Arab world*. (pp.71-92). New York, NY: Peter Lang.
- Reichardt, C.S., & Cook, T. D. (1979). Beyond qualitative versus quantitative methods. In T. D. Cook & C. S. Reichardt (Eds.), *Qualitative and quantitative methods in evaluation research* (pp.7-32). Beverly Hills, CA: Sage.
- Rokeach, M. (1973). *Nature of human values*. New York, NY: Free Press.
- Rosenberg, A. (1988). *Philosophy of social science*. Boulder, CO: Westview.
- Ryan, G., & Bernard, H. (2003). Techniques to Identify Themes. *Field Methods*, 15(1), 85–109. doi:10.1177/1525822X02239569
- Sands, R., Bourjolly, J., & RoerStrier, D. (2007). Crossing cultural barriers in research interviewing. *Qualitative Social Work*, 6(3), 353-372.
- Sandiford, C. (2014). The enculturation of pre-service Emirati English language teachers. *Education, Business and Society: Contemporary Middle Eastern Issues*, 7(1), 2–16. doi:10.1108/EBS-09-2013-0036
- Schilling, J. (2006). On the pragmatics of qualitative assessment designing the process for content analysis. *European Journal of Psychological Assessment*, 22(1), 28-37. doi:10.1027/1015-5759.22.1.28

- Schmidt, D. (2007). Writing in the international classroom. In J. Ryan & J. Carroll. *Teaching international students: Improving learning for all.* (pp.63-75). London: Routledge.
- Schwartz, S. H. (1994). Beyond individualism and collectivism: New cultural dimensions of values. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications* (pp.85-199). Newbury Park, CA: Sage.
- Silverman, D. (1993). *Interpreting qualitative data: Methods for analysing talk, text and interaction.* London: Sage.
- Smith, J. K. (1983). Quantitative versus qualitative research: An attempt to clarify the issue. *Educational Researcher*, (12), 6-13.
- Søndergaard, M. (1994). Research note: Hofstede's consequences: A study of reviews, citations and replications. *Organization Studies*, 15(3), 447-456. doi:10.1177/017084069401500307
- Sowa, P.A., & De La Vega, E. (2009). One corner at a time: Collaborating for educational change in the UAE. *Childhood Education*, 85(2), 102-104. Retrieved from <http://www.acei.org/>
- Steckler, A., McLeroy, K. R., Goodman, R. M., Bird, S. T., & McCormick, L. (1992). Toward integrating qualitative and quantitative methods: An introduction. *Health Education Quarterly*, 19(1), 1 – 8.
- Steinwachs, K. (1999). Information and culture - the impact of national culture on information processes. *Journal of Information Science*, 25(3), 193-204. doi:10.1177/016555159902500303
- Sundin, O. (2008). Negotiations on information-seeking expertise: A study of web-based tutorials for information literacy. *Journal of Documentation*. 64(1), 24-44. Retrieved from <http://www.emeraldinsight.com>

- Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social & behavioral research*. Thousand Oaks, CA: Sage.
- Triandis, H. C. (2001). Individualism-collectivism and personality. *Journal of Personality, 69*(6), 907-924. doi:10.1111/1467-6494.696169
- Trompenaars, A., & Hampden-Turner, C. (1998). *Riding the waves of culture: Understanding cultural diversity in global business* (2nd ed.). New York: McGraw Hill.
- Tubaishat, A., Bhatti, A., & El Qawasmeh, E. (2006). ICT experiences in two different Middle Eastern universities. *Issues in Informing Science and Information Technology, 3*(3), 667-678.
- Usher, K., Woods, C., Casellac, E., Glass, N., Wilson, R., Mayner, L., & Irwin, P. (2014). Australian health professions student use of social media. *Collegian (Royal College of Nursing, Australia), 21*(2), 95-101. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/25109207>
- Van den Hoven, M. (2014). The use of English in the Arab world. In K.M. Bailey & R.M. Damerow. *Teaching and learning English in the Arabic-speaking world* (pp.65 – 82). New York, NY: Routledge.
- Van Oudenhoven, J. P. (2001). Do organizations reflect national cultures? A 10-nation study. *International Journal of Intercultural Relations, 25*(1), 89-107. doi:10.1016/S0147-1767(00)00044-4
- Viadero, D. (2005). 'Mixed methods' research examined. *Education Week, 24*(20), 1-4. Retrieved from <https://www.edweek.org/ew/articles/2005/01/26/20mixed.h24.html>
- Wagie, D., & Fox, W. (2006). Transforming higher education in the United Arab Emirates (UAE). *International Journal of Learning, 12*(7), 277-286. Retrieved from <http://www.ijl.cgpublisher.com>

Walliman, N.S.R. (2011). *Research methods: The basics*. London: Routledge.

Wiesemes, R., Murphy, R., & Signorini, P. (2009). Developing alternative frameworks for exploring intercultural learning: A critique of Hofstede's Cultural Difference Model. *Teaching in Higher Education*, 14(3), 253-264. doi:10.1080/13562510902898825

Williamson, D. (2002). Forward from a critique of Hofstede's model of national culture. *Human Relations*, 55(11), 1373-1395. doi:10.1177/00187267025511006

Yamazaki, Y. (2005). Learning styles and typologies of cultural differences: A theoretical and empirical comparison. *International Journal of Intercultural Relations*, 29(5), 521-548. doi:10.1016/j.ijintrel.2005.07.006