

DEPARTMENT OF PSYCHOLOGY

UNIVERSITY OF GHANA

LEGON

ORGANISATIONAL CULTURE, CHANGE READINESS AND SUCCESSFUL

CHANGE IMPLEMENTATION IN UNIVERSITIES IN GHANA

BY

INUSAH ABDUL-NASIRU



**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF
PHD INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY DEGREE.**

JUNE, 2014

DECLARATION

I, Inusah Abdul-Nasiru, do hereby declare that I produced this thesis from studies conducted as a PhD Candidate in the Department of Psychology, University of Ghana, Legon; and that this work has never been submitted in whole or in part for any purpose in this university or elsewhere; and that this thesis was produced under supervision, and all references to the work of other scholars/researchers and/or organisation(s) have been duly acknowledged. With the approval of my supervisors, I present this thesis to the School of Graduate Studies through the Department of Psychology, University of Ghana, Legon.

..... Date:.....
Inusah Abdul-Nasiru
(PhD Candidate)

Supervisory Team:

..... Date:.....
Professor Bill B. Puplampu
(Principal Supervisor)

..... Date:.....
Professor Joseph Y. Opoku
(Supervisor)

..... Date:.....
Professor Samuel A. Danquah
(Supervisor)

..... Date:.....
Dr. Maxwell A. Asumeng
(Supervisor)

DEDICATION

To my lovely daughters, Jamila (Izotu-Kifengi, Kuboni) & Yasmin (Suuru-Tawee, Kumuu);

My Late Dad, Alhaji Nasiru Kasim & Late Mum Zaliya Alhassan

with lots of appreciations;

&

My dear wife

Fatimatu (Zahara) Ibrahim Twene



ACKNOWLEDGEMENT

I am grateful to the Most Gracious, Most Merciful Allah for the protection and guidance in doing this research project! I further acknowledge the various individuals and organisations for the respective roles they played in making this research a success.

I am grateful to the University of Ghana (UG), for the opportunity offered me to pursue this course on Study Leave throughout the course duration; I really appreciate the good work of Prof Yaa Ntiamoah and the Legon team of UG-Carnegie Next Generation of Academics in Africa for the funds in support this study.

I must acknowledge the immense contribution of my supervisory team members: Professor Bill B. Puplampu (Principal Supervisor); Professor Joseph Y. Opoku (Supervisor); Professor Samuel A. Danquah (Supervisor) and Dr. Maxwell A. Asumeng (Supervisor); I am forever grateful for their experienced insight in terms of methodology, statistics and subject matter of industrial and organisation (I-O) psychology.

Thank you my professional friends in the United States of America, especially my advisor Professor Lori Foster Thompson of Department of Psychology, North Carolina State University (NCSU) for her support and resourceful contribution to my professional life, and for allowing me to be part of her IOTech4D Lab during my stay as a Visiting Research Scholar in the university. To all IOTech4D lab members (2012/13) I say a big thank you for your time and willingness to help especially in the validation of my research instrument. Prof Samuel Bob Pond, Prof Kwesi Brookins, Prof Sheila Smith-McKoy, Pastor Ben Ankomah (Osorfo-Soldier), Cindy Bell, Chuck Mayes and Derrick Afrane, thank you all for your sense of oneness and care during my stay in Raleigh as a Visiting Research Scholar.

My colleague lecturers at Department of Psychology, University of Ghana have been very helpful in so many ways. Special appreciation goes to Dr. Akuamoah-Boateng (Senior Lecturer in I-O psychology) for his guidance and care; Professor Charity Akotia, the Dean of School of Social Sciences; the Head of Department, Prof. C. C. Mate-Kole and every member of staff in the department.

I call the following individuals *the concerned professors* for their prompts and 'acceptable pressure': Professor K. Boafo-Arthur (of Political Science Department); Professor A. Alemna and Professor Harry Akussah, (both of Department of Information Studies, University of Ghana); Professor Ama de-Graft Aikins, Vice Dean, School of

Graduate Studies University of Ghana; and Professor John Akokpari of University of Cape Town, South Africa. I wish I can thank them well enough for their encouragement. All the selected academic and non-academic staff and students who served as the research participants, from all the 10 participating public and private universities, namely: the University of Ghana (UG), the University of Cape Coast (UCC), Kwame Nkrumah University of Science/Technology (KNUST), University of Education-Winneba (UEW), University for Development Studies (UDS), Methodist University College (MUC), Central University College (CUC), Islamic University College (IUC), Wisconsin International University College-Ghana (WIUCG) and Valley View University (VVU). Without their responses, it would have been impossible to conduct this study. Thank you very much.

For their immense support, my sincerest gratitude also goes to Messrs Nasiru Adamu Kasim (GNAT Secretary, Madina Area) Eric Dele (UPSA), Kwabena Nkansah Simpeh (WIUCG), Johnny Ando-Arthur, Emmanuel Nii-Boi Quarshie, Elias Kodjo Kekesi, Faruk Froko Ismail, Justice Mensah and Jeremiah Acharibasam all of Psychology Department, University of Ghana; Mrs. Christiana Ammah (UEW), Christian Ackom and Ike Kosi (both of UCC); Dr. Bismark Yaw Sarfo (UG-SPH), Robert Mensah (Methodist University), Dr. Kwesi Amponsah-Tawiah of UG Business School, Edward Abasimi (UDS), Amamah Ahmed Muddy (UG Guest Centre), Mrs. Rita Afful Adjorlolo (Promasidor Ghana Ltd), and Ms Eyram Sogbey (First Atlantic Bank, Accra).

I am really grateful to all loved ones, especially my late loving dad, Alhaji Abdul-Nasiru Kasim, Hajia Jamila Nasiru (Mrs), Madam Zalia Nasiru (Mrs.) of blessed memory, Madam Ayishatu Nasiru (Mrs), and Mr. Kloun Baye Nasiru, all of Chindere-Krachi Nchumuru District; Alhaji Mashud Ibn Musah (former MD of AESL), Alhaji Abdul Rauf Ibrahim; Alhaji Abdul Salaam Bio Great Anyass, Mr. Nasiru Babah Kasim (Education Officer, Ejura Ashanti), Mr. Muhammed Musah, (Education Officer, Chindere) and all my siblings, relations and friends for their joint efforts which brought me this far.

Finally, the household: my lovely wife, Fatimatu (Zahara) Ibrahim Twene, and our two lovely daughters: Jamila and Yasmin, my two nephews Sukaraju Hamzah Nasiru and Mansur Walhaku Nasiru, Akonta Adnan Ibrahim Twene, Memuna Ibrahim, for their constant support, tolerance, care and attention, I say *May Allah bless you all!*

Inusah Abdul-Nasiru

ABSTRACT

Universities have unique features from regular business entities. However, like any other organisation the environment in which they operate is constantly changing, and they need to change not only to survive but to compete successfully to achieve set objectives. This study examines universities and how they achieve success in change implementation, given their culture and readiness for change tendencies. A total of 528 participants made up of academic and non-teaching staff, as well as students were selected from ten (10) public and private universities in Ghana for the study. The mixed method was used for the data collection and analysis. Quantitative data gathered through questionnaires were analysed using the Pearson Product-Moment Correlation, Multivariate Analysis of Variance (MANOVA) and Multiple Regression. For the interviews, Thematic Analysis was used for the analysis. Results show that private universities have significant features of clan and adhocracy cultures compared with public universities. Furthermore, readiness for change mediated the relationship between organisational culture and successful change implementation (measured in terms of technology acceptance). However, data showed that there is no significant difference between public and private universities in terms of change implementation success. The findings were discussed and recommendations made in terms of strategies for achieving successful change implementation.

TABLE OF CONTENTS

CONTENT	PAGE
DECLARATION	i
DEDICATION.....	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF TABLES.....	x
LIST OF FIGURES	xi
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Background	1
1.2 Introduction.....	2
1.3 General Assumptions	3
1.4 Study Objectives	4
1.5 Problem Statement	5
1.6 Scope of Study	6
1.7 Relevance and Value of Study	6
1.8 Rationale for the Study	7
1.9 Key Variables of Interest	8
1.9.1 Change Readiness.....	9
1.9.2 Organisational Culture	9
1.9.3 Learning Organisations	10
1.9.4 Successful Change Implementation (Technology Acceptance).....	11
1.10 Managerialism in Universities	13

1.11 University Education in Ghana: Background, Changes and Challenges	15
1.12 General Reforms in University Education in Ghana	17
1.13 Current Trends: Universities in Ghana	20
1.14 Making a case for “the need for technological change” in universities.....	22
1.15 Preliminary challenges in the use of ICT in universities	24
CHAPTER TWO	26
LITERATURE REVIEW	26
2.1 ORGANISATIONAL CULTURE.....	26
2.1.1 Introduction	26
2.1.2 THE CONCEPT OF ORGANISATIONAL CULTURE.....	27
2.1.3 Organisational Culture: Foundation and Definition.....	27
2.1.4 Organisational Culture: Psychological Considerations	33
2.1.4.1 The Competing Values Framework	36
2.1.5 Dimensions and Types of Organisational Culture	38
2.1.6 Differences and Similarities: Culture and Climate.....	47
2.1.7 Importance of Organisational Culture.....	48
2.1.8 Organisational Culture in Africa and Ghana.....	52
2.1.9 Organisational Culture: The Case of Colleges and Universities	56
2.1.10 Variations in Approaches for Studying Organisational Culture	62
2.2 LEARNING ORGANISATIONS.....	63
2.3 ORGANISATIONAL CHANGE: READINESS AND SUCCESS	64
2.3.1 Introduction	64
2.3.2 Why Organisational Change?.....	65
2.3.3 Models for Understanding Change in Organisations	67
2.3.4 Reactions to change: Resistance vs. Readiness.....	69

2.3.5 Levels of Change Readiness.....	74
2.3.6 Dimensions of Change Readiness	75
2.3.7 Organisational Change: The Case of Colleges and Universities.....	77
2.4 Change Implementation Success: Process and Outcome.....	80
2.4.1 Technology Acceptance	81
2.4.2 Theory of Reasoned Action.....	81
2.4.3 Theory of Planned Behaviour.....	82
2.4.4 Technology Acceptance Model.....	83
2.4.5 Integration of Constructs	84
2.5 THE CONCEPTUAL FRAMEWORK	87
CHAPTER THREE	92
METHODOLOGY.....	92
3.1 Introduction	92
3.2 Research Design and Approach	92
3.3 Research Setting	95
3.4 Sample and Sampling Technique	96
3.5 Basis for Selecting the Stakeholders for the Study	100
3.6 Measurement/Instrument/Scales	101
3.7 Pre-Data Collection Procedure	110
3.8 Main Data Collection Procedure	115
3.9 Ethical Considerations.....	117
CHAPTER FOUR	118
RESULTS	118
4.1 Introduction	118

4.2. Empirical Study 1	118
4.3 Empirical Study 2	128
4.4 Empirical Study 3: Students' Perspective	142
4.5 Summary of findings	148
CHAPTER FIVE	150
DISCUSSION	150
5.1 Introduction	150
5.2 Discussion: Study 1—Employees' Perspectives	150
5.3 Discussion: Study 2—In-depth Interviews with University Employees	163
5.4 Discussion: Study 3—Students' Perspectives	166
5.5 Contributions of the Present Study	170
5.6 Observed model of the relationship between organisational culture, change readiness and successful change implementation	172
5.7 Limitations of the study	174
5.8 Recommendations for Practices in Universities	174
5.9 Future Research Direction	178
5.10 Overall Conclusion	179
REFERENCES	181

LIST OF TABLES

Table 1.1: Public and Private Tertiary Institutions Offering Degree Programmes in Ghana, 2013	22
Table 3.1: Summary of Sample Characteristics: Employees.....	97
Table 3.2: Demographics of respondents interviewed (Employees: By Gender only)	98
Table 3.3: Demographics of Respondents Interviewed (Employee: By Work Category)	99
Table 3.4: Summary of Sample Characteristics: Students.....	99
Table 3. 5: Mean Ratings From Content Adequacy Assessment (Change Readiness) Using Hinkin & Tracey’s (1999) Approach. (One-Way ANOVA, with Duncan’s test of Multiple comparison).....	112
Table 3.6: Summary (Pre-data collection) analysis of responses	113
Table 4.1 : Reliability and Descriptive Statistics of Study Variables.....	119
Table 4.2: Correlation Matrix of the Study Variables	120
Table 4.3: Mean Scores of Public and Private Universities on the Study Variables.....	120
Table 4.4: MANOVA of Type of Institution on: Culture, Change Readiness, Learning Organisation and Technology Acceptance.....	122
Table 4.5: Summary of Hierarchical Multiple Regression for the mediating effect of Learning Organisation on Organisational Culture-Technology Acceptance relationship.....	126
Table 4.6: Summary of Regression Analysis for the mediating effect of Change Readiness on Organisational Culture-Technology Acceptance relationship .	127
Table 4.7: Results from Thematic Analysis of Employee Interviews	131

LIST OF FIGURES

Figure 2.1: Hypothesised Model.....	89
Figure 5.1: The Observed Model: Change Readiness mediating the relationship between organisational culture and successful change implementation.....	172

CHAPTER ONE

INTRODUCTION

1.1 Background

Universities and institutions of higher learning operate in the same environment as other business entities. Today's world of work is characterized by a blend of technology and human resource efforts, in a more advanced form in varied ways than ever before. This is necessary so that organisations could be more productive and remain relevant. Moreover, the environment within which work organisations operate is not stable, and so administrators/managers strategize to catch-up with the effect of global change and advanced technological developments. These are required in order to stay tuned to providing and serving consumers (of services and products) who are sensitive to technological change and quality, and whose needs are increasingly becoming complex. Organisations therefore need to deal with challenges of external adaptation and market relevance while working hard at maintaining internal integration.

These challenges confront all organisations. Institutions responsible for developing the needed human capital to meet the requirements of industry players, business communities, not-for-profit organisations also face these demands. In this regard, an important issue has to do with how organisations change, and respond to change situations. The ability of organisations to manage necessary adaptations may be the difference between those which survive and those which flounder. This study therefore explores the extent to which organisational culture provides the context for readiness for change, adaptation and integration. The study also examines how the interaction between learning organisations and culture can influence successful change implementation in the university sector in Ghana.

1.2 Introduction

This study is an attempt to identify and help address some of the several organisational change related challenges and in the process, selected universities were used as study sites. It has been found that, most of the time, in an attempt to achieve success in change initiatives, organisations directed efforts and attention towards policy related changes, structural and strategic vision/mission modification, sometimes to the neglect of key psychological factors that can influence the extent to which change efforts yield desired outcomes (Armenakis, Berneth, Pitts & Walker, 2007; Lewin, 1947; Lippitt, Watson & Westley, 1958; Schein, 1987). But since organisations are made of people (before structures, systems and strategies), one thing that cannot be down-played or ignored, in an attempt to achieve sustained success in change initiatives is people's reactions to change initiatives in organisations (Burke, 2011; Lewin, 1947). Moreover, it is important to consider the usefulness of values, beliefs and assumptions in terms of how these can influence behaviour in a significant manner.

The thinking is that, in situations where people are change-ready, and given the 'right' cultural environment, it would be relatively easier for organisations to be successful in change implementation. Therefore, issues of behaviour, personal attributes and the environment can be described as a set of important factors in the quest for organisational success (and this forms one of the pillars of psychology). For instance, Kantor (1924) asserts that in an attempt to understand human behaviour, the concentration should be on how individuals interact with all the various types of situations that form their behaviour circumstances. This assertion occupies a vital place in *interactional psychology*, and has been popularized by Lewin's (1935) field theory which reflects the observation that human behaviour is function of the person and the environment.

1.3 General Assumptions

This study makes some general assumptions, and links these assumptions to the specific aims and objectives. The aim of the study is to figure out the relationships and dynamics involved in the processes of implementing technological changes in organisations (such as universities), in view of their organisational cultures. Generally, this study assumes:

1. That it is possible to identify the representative features of university culture. That is, every university, like all organisations, have their unique features that distinguish them from others (Bergquist & Pawlak, 2008; Cameron & Ettington, 1988; Silver, 2003; Tomàs, Bernabeu & Fuentes, 2011);
2. That universities have many cultural elements (Bergquist & Pawlak, 2008; Cameron & Ettington 1988) some of which could be more change-friendly than others;
3. That in an attempt to ensure improvement in organisations, it is possible to directly or indirectly change the culture of organisations (Schein, 2004) using appropriate strategies. This forms the basis for describing some elements of certain cultures as responsive to change, so that steps could be taken to manage those aspects that are found to be mitigating change initiatives in organisations;
4. That several factors influence the success of change initiatives in an organisation and that culture is one such factor (Schein, 2004);
5. That changes that are aimed at moving organisations towards achieving their goals need to be planned and carefully devised (Burke, 2011);
6. That there is no one acceptable strategy for introducing change—it depends on the type of organisation, and the change situation (Burke, 2011), and expected outcomes. Based on this, it is assumed that change strategies especially geared

towards technology acceptance (as conceptualized in this study) may not be the same for private and public universities;

7. That when employees are appropriately made aware before the introduction of a change initiative, there would be the greater likelihood of success (Burke, 2011; Lewin, 1947; Schein, 1987). This could, therefore, contribute to minimizing unintended consequences of non-readiness, including, but not limited to, resistance to imposition of change (Burke, 2011);
8. That universities that demonstrate that they can be 'learning organisations' (Watkins & Marsick, 2003) would have the capacity to be ready for change most of the time; and
9. That with good support from leadership and significant others, there could be significant success in change implementation (Armenakis *et al.*, 2007).

These assumptions (and the study objectives that follow) underlie the hypotheses for this study.

1.4 Study Objectives

Specifically, this study seeks to achieve the following objectives:

1. To assess organisational change readiness of Ghanaian universities, in terms of technology acceptance;
2. To explore aspects of university cultures that encourage successful change implementation and those that tend to inhibit change success;
3. To explore the relationship between organisational culture and stakeholder change readiness;
4. To assess how change readiness influences technology acceptance as a measure of successful change implementation;

5. To comparatively assess differences in change readiness and organisational cultures between public and private universities.

1.5 Problem Statement

Universities are large complex institutions with significant impact on the countries in which they operate. Given the global and societal changes, it is of interest to explore whether universities in Ghana are really positioned for change and how impactful changes are preserved. The assertion that universities go through change is no news (De Zilwa, 2007; Bartell, 2003; Sporn, 1999). The concern is how they go about introducing important change initiatives (such as technology infusion for performance improvement). This study seeks to explore the dynamics involved, with specific focus on change readiness in terms of technology acceptance. Several studies show that for successful implementation of change initiatives, it is important to create adequate readiness (Armenakis *et al.*, 2007; Lewin, 1947; Schein, 1987). But the question that comes up is, within what environment could change readiness be high (or low)? How does culture in organisations such as universities, influence this psychological variable of readiness, and to what extent can readiness for change serve to influence the extent to which people will accept technology, so that there can be successful implementation of change initiatives? For sustainability, and institutionalization, can universities be seen as learning organisations? It is also not clear how private universities compare with public universities in terms of some dimensions of culture and readiness for change. Apart from their identity differences in terms of profit-focus (for private universities) and responding to national policies on developing human resources (mainly as the vision of public universities), do university authorities in these “two main groups” consider readiness for

change prior to implementation of change initiatives? These are the concerns of this study.

1.6 Scope of Study

The study seeks to examine readiness for change among stakeholders (academic and administrative staff, and students in universities) regarding teaching, learning and working with advanced technology. Attention is paid to selected public and private universities in Ghana, which have been in existence for at least 5 years (prior to 2010). It should be mentioned that even though the area of organisational change is broad, the focus of this study is readiness for change and change implementation success, especially in the wake of the numerous private universities being established in Ghana to complement the shortfall in tertiary education delivery in the country. Each university was placed in either public- or private-university group, thereby making this a comparative study of public and private university organisations.

1.7 Relevance and Value of Study

The literature in organisational studies shows that the importance of change readiness has not been reflected in extensive theoretical development or empirical study (Weiner, 2009). As such, examining the concept of readiness for change would help add to the knowledge in the area. Moreover, efforts made in the current study to understand individual and organisational readiness for change could help provide a scientific basis for decision making for purposes of running effective human resource management for organisations, especially universities and other institutions of higher learning. It is interesting to note that organisational culture has been observed to be positively linked to organisational outcomes (such as performance, commitment, satisfaction) but this

concept is still an emerging research area and empirical data are still somewhat rare (Klein, 2008). This has been echoed by several writers, to the effect that organisational culture is gaining popularity, but there is yet to be cogent articulations of organisational culture types observed from non-western countries (Puplampu, 2004). As a result, findings from this study would add to understanding this important concept, for universities' administrators/faculty in their efforts at recognizing the need to create change readiness, for successful outcomes (such as satisfaction, performance improvement, and commitment) resulting from technology acceptance.

It is also expected that this study would help bring about knowledge that contributes to development strategies for successful running of organisations including universities in Ghana, Africa and beyond.

Apart from the practical significance of this study to organisations, findings will help contribute to the body of knowledge in the area of industrial-organisational (I-O) psychology, higher education management, and organisational studies, specifically, to the area of organisational change, organisational culture and organisational learning.

1.8 Rationale for the Study

There is a certain notion that institutions of higher learning have all the expertise needed to be readily prepared to handle challenges that they face regarding change initiatives. However, studies show that it is not always the case (DiMaggio & Powell 1983, Kraatz & Moore 2002). That is, given their settings, it is likely that directly or indirectly, "the challenge of change is even more daunting for organisations embedded in highly institutionalized contexts with strong traditions and well-established norms of behaviour"

(Bercovitz & Feldman, 2008, p 69). This can be applied to universities, since they are among the bodies that have strong values.

Moreover, several theories and conceptions of organisational change and most organisational variables such as organisational culture were propounded to benefit business organisations (Lawler & Woley, 2006) with very few focusing on how people-management elements in universities could differ from the way manufacturing and business oriented organisations deal with human resource issues.

Furthermore, research suggests that even in situations where some organisations are able to handle change related challenges in their own way, there still remains the need for continuous studies to understand how organisations deal with change (Greenwood & Hinings, 2006). This will be interesting to explore given that organisations have their own cultures, and the observation that change is constant in the world of work (Smith, 2011).

Finally, using universities (public and private) in this study would generate some insights into elements of cultures that provide the needed environment for improvement in goal-achievement efforts in the universities, and those cultural elements that need special attention.

1.9 Key Variables of Interest

Even though a detailed review of literature is provided in the next chapter, this section previews the literature on the variables of interest in this study.

1.9.1 Change Readiness

Scholars see change readiness in various ways. Some see readiness as a combination of psychological and behavioural preparedness on the part of organisational members to implement organisational change initiatives (Weiner, Amick & Lee, 2008). To be psychologically prepared and behaviourally ready could also mean that there is a shared belief in, and collective fitness to carry on with the planned change to its success, and can also be termed as change efficacy (Armenakis *et al.*, 2007; Weiner, 2009). Eventually, when this readiness is properly created, it could reflect organisational members' collective resolve to be committed in implementing change (Weiner, 2009). As a psychological variable, readiness for change goes beyond believing and understanding the change, to encompass a collection of thoughts and intentions toward the specific change effort (Bernerth, 2004). Therefore, what is examined in this study is the extent to which readiness can influence change success (Armenakis *et al.*, 2007; Lewin, 1952; Weiner, 2009), that is technology acceptance, and how readiness is influenced by organisational culture to exert some impact on technology acceptance in organisations as representing implementation success. A detailed literature review and the various dimensions of change readiness are provided in Chapter 2 of this study.

1.9.2 Organisational Culture

Different scholars conceptualize organisational culture differently. It can be seen generally as unique concepts, values, ceremonies and rituals that are reflected in behaviours in organisations (Daft, 1983) which is also seen as something that is learned to help in handling internal and external challenges facing organisations (Schein, 2004). There is some consensus in the literature to the effect that culture is one important variable that has some bearing on organisational survival and effectiveness (Deal &

Kennedy, 1982; McKenna, 2012; Schein, 2004). For instance, organisational culture has been cited as having the capacity to control or influencing behaviour (O'Reilly & Chatman, 1996). Research further shows that within organisations, where there is promotion of innovation, there is the likelihood of people engaging in creative thinking, reflecting the observation that organisational culture encourages finer attributes such as creative thinking (McKenna, 2012). There are others who have taken the steps to draw a connection between cultural dimensions and organisational effectiveness (Cameron & Freeman, 1991). They observed how culture type and culture congruence can be linked to effectiveness in organisation, especially in achieving set goals and objectives. Thus, the realization of importance derived from studying culture in organisations, and the observation that culture can be used to explain behaviours in significant ways, possibly account for the increased interest in the construct among researchers.

1.9.3 Learning Organisations

In the world of work, given the turbulent environment that organisations operate in, a learning organisation is one that learns to continuously transform itself (Watkins & Marsick, 1997). Such organisations are usually proactive and tend to use sharing of experiences in an integrated way to support growth at all levels, including “individuals, teams, and other groups, entire organisations, and (at times) the institutions and communities with which they are linked” (Marsick & Watkins, 2003, p.143.). “Learning”, as used in this sense, is not about “learning a courses for Grades.” The term “Learning” here operationally refers to: a process by which an organisation continuously transforms itself through sharing of information and experiences, alongside normal working schedules. According to Marsick and Watkins (2003) not much is known about the application of principles underlying learning organisations when discussing

organisational cultures in different institutions. This observation is true for those organisations with orientation towards profit or not-for-profit, as well as professional associations, and educational institutions. Usually, studies on organisational culture have not considered the concept of organisational learning, let alone on ‘systems-level learning analyses’ (Marsick & Watkins, 2003, p. 129) and so it is worth exploring this concept that cannot be ignored when intentions are to get organisations to institutionalize experiences, such as technology acceptance.

There is no gainsaying, that, learning for organisations has the potential of moving them closer to achieving their goals, and thereby contributing to success (Su, 2006). This is in consonance with Senge’s (1990) assertion that learning organisations, among other things, continually expand their capacity to create results, holistically. It would be interesting to observe how this plays out in university environment, and how this notion can strategically influence technology acceptance as a measure of change implementation success.

1.9.4 Successful Change Implementation (Technology Acceptance)

The measure of change implementation success in this study is technology acceptance. The outcome of initiating technological change is assumed to be the extent to which this change would be accepted. The assumption is that one key component of doing things is the acceptance and use of modern technology, and therefore this aspect cannot be ignored by organisations in their stride to succeed. For instance, experts in information and communication technology (ICT) note that the ICT revolution has affected every sphere of life (work-life and non-work-life) with tremendous benefits in varying ways, especially to those nations which embraced this as a tool to work with (Alemna & Sam,

2006). University education delivery and the use of ICT in the process, is very necessary (Budu, Acheampong & Quartey, 2002; Burke, 2011). This could be because of the benefits involved, in terms of speed, accuracy, and reliability. Therefore, technology acceptance as a measure of successful change implementation in this study is the dependent variable.

1.9.5 Universities as Organisations

Institutions of higher learning, like any other organisation, come face to face with several challenges, among them, advanced technological development. This concern was expressed by Burke (2011) as a wake-up call for all universities, that "...even in the domain of higher education, which includes some of the oldest, most traditional types of organisations in the world, the external environment is changing. Unless colleges and universities adapt, their traditions may not last, at least not for the centuries they have in the past" (Burke, 2011, p.18). It should be noted that in an attempt to respond to calls like this, there is the tendency for university management to emphasize a category of steps, while ignoring certain important (but hidden) factors. The results, mostly, are unintended consequences and avoidable implications. This study is set to draw attention to the usefulness of culture, the often ignored "strands of glue" that hold organisations together (Cameron & Ettington, 1988).

This study was conducted in universities as organisations because they occupy a very strategic place in the preparation of human resource for national and global development. As organisations, they operate as open systems (Burke, 2011; Katz & Kahn, 1978). That is, they greatly depend on, and continue to interact with the environment in so many ways such as taking human resources from the pool of labour, and also releasing "well-

developed individuals” into the system to deliver services to other organisations. As a result, whatever happens in and outside of these institutions of higher learning could have enormous consequences on their continued survival. Moreover, within universities are other sub-systems—faculties, departments, schools and colleges, HR systems, all of which contribute to making universities ‘loosely coupled’ entities (Weick, 1983). In this case the various components in educational institutions are linked to each other and to the overall organisation in a manner that allows interaction with, and possible separation from, each other with relative ease. That is, each has its subcultures and values which guide behaviour of the people within. Therefore, viewed as open-systems and loosely coupled entities, and given that change is constant (Smith, 2011), and that the environment has greater influence on survival of organisations, universities come face to face with general and specific challenges that call for conscious steps to be taken, if they are to continue to be relevant.

1.10 Managerialism in Universities

Universities and institutions of higher learning have recently taken to engaging established practices and ideas from the private sector that have stood the test of time in making organisations effective (Deem, 2001). This could be a reflection of globalisation and the interest administrators have to see to it that universities deliver as expected. In a typical university, it is common to have some departments and units running their semi-autonomous budget systems that feed into the overall objectives of the mother body, the university. The use of committees (Daniels, 1996) and boards systems in decision making, control and monitoring mechanisms as found in ordinary business settings are applied to the running of universities, even the public ones which receive some subventions from the government. This has implications for governance. For instance it

was found that in Ghana, both private and public universities tend to incorporate a mixed model of administration, with the use of models that combine business related strategies and traditional ways of running a university based on the systems that established the initial public universities in the country (Tetteh & Ofori, 2010). With the wave of change blowing across organisations which affect work life and survival of doing business, universities cannot help but to put in place measures that will see them in continued service, and remaining relevance in modern times.

However, it is important to note that there are certain attributes of universities that make them different from other business organisations. For instance, universities serve the need of students (and their parents/guardians) in much a different way from what happens in ordinary business organisations, which engage in serving or producing what is “bought” and consumed by the buyer. Universities engage in generating educated human resources, quality individuals who come out as well-developed people to serve humanity, unlike other service and production oriented organisations.

Moreover, the training of people is quite interesting, with its attendant challenges—people are complex, and have needs and values which would have to be respected and considered in the course of bringing them up or serving their educational needs. The environment requires that university teachers and administrators are emotionally and socially intelligent because of the fact that they are dealing with colleagues and students who require to be treated as humans, and not products (as found in non-university organisations).

1.11 University Education in Ghana: Background, Changes and Challenges

The circumstances and struggles surrounding the establishment of the first university in Ghana are themselves worth considering as key factors setting the stage for change. This is because they have implications for culture, policies, and manpower needs of the country. The current globalization and need for internationalization of universities, as well as workforce diversity have compounded the challenges universities face in the 21st century, hence the need for studies that promote management of these institutions at any given time.

For purposes of this study, this section presents a brief historical background on the genesis of university education in Ghana (Agbodeka, 1998) and the West-African sub-region.

As part of the political struggle, the then colonial master, the British Government was petitioned to facilitate the creation of systems and structures towards independence of the country. One of the positive results was the establishment of the first university college in Ghana (then Gold Coast) in 1948, in response to pressure from the people of then British West Africa (colonies), and following the recommendation by the West Africa Commission which was set up for the purpose. The decision at a certain point was to establish a university college for the whole of British West Africa, at Ibadan in Nigeria, but the people of Gold Coast resisted, with the argument that the Gold Coast could support a University College. This resistance yielded a positive result when by Ordinance on August 11, 1948, the British Government reviewed its decision and established the University College of the Gold Coast, to be the first of its kind in Sub-

Saharan Africa. What followed later had political implications, leading to Ghana attaining independence in 1957.

Major Structural Changes: The purpose of a university college by then was to provide and promote education, learning and research. Structurally, the British Government was to provide a body that would be responsible for advising the government on higher education matters especially on the new colonies of the British government. As a result, the Inter-Universities Council was formed to deal with such administrative and quality education issues for the then University College of the Gold Coast (www.ug.edu.gh). With this in place, quality education equivalent to British standard was assured, and the college also benefited in terms of funding from the colonial master, the government of United Kingdom.

Academically, under this scheme, the University College was allowed to provide tuition for the external degree examinations of London University. Recognizing that cultural factors and response to environmental needs for adaptation is crucial, the College was allowed to modify the London syllabuses to suit local conditions, but London University gave final approval to courses and examinations. This continued for several years (even after independence in 1957), until the 1960-61 academic year, when the College Council made a request to the Government of Ghana for legislation to constitute the University College into a full-fledged University with the power to award its own degrees. Therefore, the University of Ghana was set up by an Act of Parliament on October 1, 1961 (Act 79) to be the first national public university in Ghana.

1.12 General Reforms in University Education in Ghana

It should be noted that, following from the struggles that ensued prior to establishment of the first university in Ghana, the processes for establishing the other national public universities (such as the Kwame Nkrumah University of Science and Technology, University of Cape Coast, University of Education-Winneba, University of Mines and Technology, and the University for Development Studies) did not have to go through those forth and back with external political forces, but they (the subsequent universities) also had their internal challenges and circumstances that justify changes in their systems from time to time.

As expected, since the establishment of the first university in Ghana, things have changed and will continue to change. Social systems and procedures are changing, with technology and development being the key drivers; human resources have their needs and expectations affected, positively or negatively; requirements for employment and promotions keep on changing, so as to maintain and improve standards. To ensure quality delivery, and still remain relevant in delivering their mandates, universities in Ghana have their own structural systems, but they are faced with challenges which are complex in nature, sometimes reflecting policy directions and strategies. For instance, it has been observed that universities in Africa are overwhelmed with issues such as reduction of government funding, deficient physical structures and sometimes overcrowding in terms of student numbers (Sawyerr, 2004).

Conscious efforts are therefore being put in place to have the work processes done using acceptable technologies, including on-line dissemination of information for staff, students and the general public. The introduction of these may have repercussions for

work life and attitudes of workers, in so many ways. Work behaviours would be affected and general living conditions would likely be improved.

Private Universities in Ghana: Background and Trend

A combination of internal and external factors resulted in the establishment of the Valley View University, the first private university in Ghana, established in 1979. It was granted the status of a university in 1997 (www.vvu.edu.gh: Accessed on 27th January, 2013), as one of the numerous faith-based universities currently operating in Ghana. It should be mentioned that a significant majority of private universities and university colleges in Ghana are faith-based, but they serve students from all walks of life, irrespective of their religious affiliation provided such students qualify (academically) and accept the principles and lifestyle on which basis the universities operate. This description invariably applies to all the faith-based universities in the country, but each has their own religious principles, which guide work life and progress.

Studies show that there is pressure on higher education institutions to adapt (Bartell, 2003) in a manner that would make them relevant in contemporary society in their efforts at delivering quality service. There is also the observation that "... the demands of global capitalism hinder the university's ability to fulfill its cultural mission" (Readings, 1996, cited in Bartell, 2003, p.44). Increasingly, such scenarios have the capacity to transform circumstances in universities and eventually go to reflect the capacity of these institutions globally, and Ghana is no exception.

In Ghana, some of the universities are built and run on Western principles and cultural values, and the literature shows that lessons from Asia and the West have demonstrated

that cultural values, be they organisational or living cultures, are influential in the development of universities (Gungwu, 1992). As a result, there is the need to continuously explore the influence of cultural factors on universities.

It is important to state that, study after study has explored university-external environment relations and adaptation in so many ways, based on the orientation of researchers involved. Five of such were identified (De Zilwa, 2007). In the first place, there are those who believe that in analyzing the relationship between universities and external environment, the focus should be on determining cause-and-effect, and so they concentrate on establishing some of the reasons why it is important for a university to adapt to external environmental changes (Gornitzka, 1999; Maassen & Gornitzka, 1999). This approach is likely to yield results that would be beneficial to the extent that it results in the understanding of the motivation for behaviours. However, it is not just enough to determine cause-and-effect relationship, hence the attention shifted to how, the processes, the procedures universities go through, or use in response to external changes (Kezar, 2001; Kezar & Eckel, 2002; Sporn, 1999). This has methodological implications on outcome, because the outcome of an initiative could be affected negatively or otherwise by how the change initiative was introduced and managed. The concern, however, with this focus, is that even when one has an excellent approach or strategy, and the goal is not right or the personalities involved have questionable management styles, it becomes difficult to achieve success. As a result of this challenge, there is the third group, which calls for a combination of how and why universities adjust to environmental pressures (Cameron, 1984; Clark, 2004; Jongbloed, Maassen, & Neave, 1999; Krucken, 2003; Marginson & Considine, 2000; Slaughter & Rhoades, 2004). In another development, there is the argument (captured as the fourth group) that universities should resist environmental pressures such as marketisation,

entrepreneurialism and managerialism (Coady, 2000; Cooper, Hinkson, & Sharp, 2002; Miller, 1998) which eventually are likely to affect the traditional role of universities in delivering their mandate. However, this is like asking for the impossible, for universities to be removed from the world, while change takes place in other institutions, including business organisations. The wave of change that sweeps across entities does not discriminate against organisations, not even universities which are noted to have deep-rooted values that guide their operations. There is also the fifth viewpoint that for higher education studies, there should be a set of approaches that can help them to smoothen their plans to change in order to operate in the dynamic world of work (Clark, 1998; Sporn, 1999). The current study, however, assumes that culture is unique, and depends on several factors and thus, could have differential influence on universities' efforts at changing. Therefore the idea of having 'a set of strategies' is considered a suggestion, rather than a 'prescription' for universities to use in adapting.

1.13 Current Trends: Universities in Ghana

The educational terrain in Ghana reveals that some public universities have started offering 'non-traditional' services (e.g. distance education, sandwich programmes, Degree top-ups, weekend courses) and optional full-fee-paying education for students. Some of these universities have taken the steps to strengthen research capacities and postgraduate education, compared with some 2-3 decades ago. Some of these are among the strategies for responding to the changing terrain in university education globally. A further observation reveals an intensive effort at strengthening the university library systems, with several online journals and e-resources, aimed at improving research, teaching and learning. It should be noted that these are policy issues, affecting the universities. However, there are some psychological variables that come with these

developments, which could easily be ignored, and that is where this study steps in to look at issues from psychological perspective—are the people within these universities ready for the changes going on?

In order to ensure standardization in tertiary education in Ghana, there are regulatory bodies set up in line with international criteria. For instance, the Civil Service Law 327 and PNDC Law 1993 established the Ministry of Education (MoE) which has the overall mandate of providing quality education for the people of Ghana, in conjunction with the Ghana Education Service (GES). Moreover, the National Accreditation Board, (NAB) was established by Act 2007, Act 744, and is mandated to engage in systematic regulation and quality education assurance of institutions of higher learning in the country. In a related endeavor, the National Council for Tertiary Education (NCTE) was established by Act 454 1993 to have oversight responsibility over institutions of higher learning in the country. These are the key bodies responsible for managing the quality of service delivery by the tertiary institutions and the number of institutions that are qualified to operate as universities, colleges, or polytechnics.

In Ghana, there is also a rise in the number of private universities, all in an attempt to complement an increasing need for tertiary education in the country. For instance, by 2013, the number of private universities was about six times that of public universities, as detailed in Table-1.

Table 1.1: Public and Private Tertiary Institutions Offering Degree Programmes in Ghana, 2013

Types of Institution	Universities	Polytechnics	Total
Public	9	10	19
Private	54	0	54
Total	63	10	73

Source: National Council for Tertiary Education (NCTE, 2013) Statistical Digest of Tertiary Institutions.

Table 1.1 details the overall number of universities, polytechnics and other post-secondary institutions in Ghana around the year 2013. It should be noted that even though some polytechnics in Ghana are degree awarding institutions, the focus of this study is universities which have been in existence at least for five years (as of 2012). It is interesting how public and private universities operate with diverse strategies and visions, but focusing on the same goal of producing well-developed human resource.

To what extent would their cultural environments be influential in individual readiness for change, and how this affects technology acceptance in these organisations?

1.14 Making a case for “the need for technological change” in universities.

Even though computers have been in use for a very long time in Ghana (somewhere in the 1960s), information and communication technologies (ICTs) in recent times have undergone a lot of changes in terms upgrading and relevance (Manuh, Gariba, & Budu, 2007). Further to this is the observation that Ghana has in place the required legal frameworks in the ICT industry (Alemna & Sam, 2006), having promulgated the ICT policy in 2003 (Manuh *et al.*, 2007) as a step towards adapting to global policy changes affecting technological development and use. Universities in Ghana usually would need ICT for several purposes, in line with the provisions contained in Ghana’s policy on ICT,

such as to help improve the delivery of educational by using ICT for both teaching and learning, among others. Specifically, most universities would use ICT for preparing teaching materials, accessing the library, send information via the intranet or Internet, and for other uses (Budu, Acheampong & Quartey, cited in Manuh *et al.*, 2007). This would be in an attempt to satisfy the education needs of the constituent students, and the quest for user-friendly work environment by the employees. It also would place the institution in a good light in the world of tertiary education and relevant stakeholders, as well as prospective clients of the universities.

In addition to the constant changes in the use of technology, different factors, internal and external, such as changes in academic leadership and vision, negative/positive university reputations, under-enrolment (or over enrolment), faculty dissatisfaction with current working conditions, meeting accreditation standards, demand for accountability and value for money, need for quality assurance and assessment (in both teaching and research) could drive the need for change within universities (Gamson, Kanter, & London, 1992; Taylor, 2006). There is also a worldwide drift towards fee-based funding of student education and recruitment/retention of the best staff (Taylor, 2006). In the midst of all these, universities are expected to find new ways to efficiently adapt to the changeable environments, internal and external, to continue making their impact felt in their communities (Tomàs *et al.*, 2011).

In Ghana, some of the universities have taken the steps to introduce online procedures, which make use of advanced technology. Some of these (as observed from preliminary data collected for this study) are: Online application platform for admission of fresh students, online registration of academic courses, posting of students' results online (instead of printing out hard copies and posting same on specially designed wooden

notice boards for students to check), the use of projectors in classroom lecture delivery, the use of relevant software packages by the administrative staff to minimize delays and mistakes (and to strengthen administrative procedures), the dissemination of information through the intranet and electronic mails (e-mails) (instead of hard-copy circulars for announcements to employees and students), to mention but a few. These come with some challenges, as observed in the next section.

1.15 Preliminary challenges in the use of ICT in universities

It should be noted that, the above examples are typical of a few universities in Ghana, the success of which are yet to be determined. Initial observations (resulting from the preparation towards developing the data collection instrument for this study) reveal that most of the time, the smooth running of these advanced technology platforms depend heavily on availability of electricity supply, adequate capacity and speed of the Internet. These conditions are at rudimentary stages, and electricity supply in Ghana has been intermittent, erratic, and sometimes frustratingly absent for days. This affects Internet speed (though the upgrading of Internet bandwidth itself has some challenges). What lessons are there for the various universities? Are these experiences shared within the universities? Are the other universities aware of the challenges, so as to learn from them? What role does culture have in this? Would these have any impact on the extent to which people can be ready for change?

Next, Chapter 2 presents a comprehensive review of the literature and builds the conceptual model for the study and the hypotheses for this study.

In Chapter 3, attention is paid to the methodology used in the study. This describes the participants, the instruments, and the procedure for data collection.

Chapter 4 details the results of the analysed data using tables and figures .

Chapter 5 presents the discussion of the findings, bringing out the implications, challenges, recommendations, and future research direction and conclusions.

CHAPTER TWO

LITERATURE REVIEW

Background

This chapter presents a review of the literatures on organisational culture, change readiness and change implementation success, and concludes with the conceptual model for the study. The area of organisational culture is examined, discussing the various dimensions and usefulness of the concept. This is followed by review of organisational change, readiness for change and change implementation. It then looks at the matter of technology acceptance and models advanced in that area. The hypotheses for the study are then stated after the review of related literatures.

2.1 ORGANISATIONAL CULTURE

2.1.1 Introduction

Studies abound in the area of organisational culture. This chapter reviews literature associated with this variable of interest, focusing mainly on definition, psychological foundations and dimensions of organisational culture. It also reviews literature on organisational learning, and in the process, providing the basis for linking these two variables. The chapter also discusses studies and theories associated with the variables. Considering that it is a challenge to arrive at generally accepted definitions for concepts in organisational studies, and bearing in mind that this challenge has varying effects on the measures often used for the variables of interest, this study will provide operationalization for all the concepts in this chapter.

Eventually, the theoretical foundations of the variable will be explained, therefore providing the foundation for the study's conceptual framework.

2.1.2 THE CONCEPT OF ORGANISATIONAL CULTURE

Organisational culture is one of the relevant factors that can make or unmake an organisation. Where there is a well-aligned culture within an organisation, there is the tendency for the people and systems to work well together towards achieving set goals (Denison, 1984), just as a wrong culture will minimise the tendency to adapt to a fast-changing world of work. As a result, the need for understanding what organisational culture is, especially for organisational psychologists, cannot be overemphasized (Schein, 1990). Invariably, this need is tied to the search for platforms on which to explain behaviour in organisations. Studies show that organisational culture, to a large extent, has the capacity to mediate how the systems and people in an organisation handle internal and external forces (Chaffee & Tierney, 1988). However, there is no agreed upon conceptualization of culture, and this debate is compounded further by the different definitions coming up whenever organisational culture is being researched or discussed, and the extent to which culture and other related concepts (like climate) are used, compared and contrasted. It is therefore important to discuss the context within which culture is used and analysed in this study, followed by the importance and dimensions to which culture can be put.

2.1.3 Organisational Culture: Foundation and Definition

Historically, the root of studying culture has been traced to anthropology (Cameron & Ettington, 1988; McKenna, 2012). Research shows that Edward Tylor is the first anthropologist to have introduced the term 'culture' in 1871 (Brown, 1998, cited in Khan, Usoro, Majewski & Kuofie, 2010). Tylor (1871) used the term to describe knowledge, beliefs, art, morals, law, custom, and any other capabilities and habits acquired by a human being as a member of a society. Following from this, different

individuals and fields of studies/orientations (anthropology, sociology, management science, psychology) have generated various definitions to suit their frameworks and to allow applicability, though without consensus.

In a related development, Ouchi and Wilkins (1985) indicate that organisational culture as a concept has its root in sociology than in any other discipline. The observation was that in the early twentieth century, Max Weber, a sociologist, introduced the idea of charismatic leadership (Brown, 1998) as a critical factor relevant for to organisational success, and this might have led to a number of sociologists identifying other features (e.g., norms, folkways, ambiguity) that could be relevant for organisational life (Brown, 1998). Because of the relationship these terms have with behaviour, this contention probably further deepens the interest in organisational culture, and for several years, sociologists and anthropologists have devoted time and resources in studying societal and community culture, until around the 1970s when the concept of culture began to attract attention in organisations (Cameron & Ettington, 1988).

Among the initial anthropological studies to have set the stage for discussions on organisational culture is the work of Geertz (1973). With a background in anthropology, Geertz (1973) sees culture to be a kind of system which guides a people, their attitudes towards life and can be passed on from generation to generation. With this, culture can be seen as a way of life, important for behaviour and as a guide for work life. Narrowing down to organisational studies, Bellot (2011) indicates that it was Pettigrew who first mentioned the term 'organisational culture', and this generated further interests in the concept, drawing the attention of other researcher such as Deal and Kennedy (1982), Ouchi (1980), and Peters and Waterman (1982) who contributed to making the

concept a popular one in organisation circles. At the initial stages the purpose of such studies and research was to contribute towards finding solutions, serving the interest of managers in organisations and therefore not necessarily theory oriented. This has in a way contributed to generating several studies by researchers with interests in organisational culture. As a result, different people conceptualise culture differently. In the process, the meaning and measurement was also affected. For purposes of this study, a few definitions are further considered, bearing in mind that there will be no best definition, but a working definition for this study. That is, in this study, assessing the definitional issues of organisational culture is an attempt to provide some clarity leading to a focused basis and foundation, which then guide the use of this term throughout the study. The variation in definitions (provided in this study) probably demonstrate, in part, what the concept 'culture' is about—a term that shows how unique a group of people can be from other groups. Despite the differences in conceptualizing culture, the literature points to how important culture is (McKenna, 2012), and the tendency for culture to hold an organisation together and inspire employees to perform well and feel committed to their organisation (Van den Berg & Wilderom, 2004).

McKenna (2012) discusses culture as “historically created guides for living and collective mental programming, and these are derived from deep assumptions that are not directly accessible but may be reflected in the values, attitudes, and behaviour of individuals and group” (McKenna, 2012, p.526). This is one of the concerns of social anthropology; making attempts to establish the extent to which behaviour is a reflection of shared meaning and values of a group of people in a given society.

Following from the basis on what general culture is, different organisational studies have conceptualized organisational culture as consisting of values and beliefs (Schein, 2004),

as well as being symbolic, capable of expression through stories and narratives (Jackson, 2011). Viewed similarly, Pettigrew (1979) conceptualises organisational culture as a system which should be regarded as collectively accepted meanings that operate uniquely for a people, and that it should be agreed upon by the affected people, usually for at a time period (Pettigrew, 1979). Symbol, language and ideology are among the important elements associated with culture (Pettigrew, 1979) and each plays a role in making culture an active ingredient for human life. Therefore, in discussing culture at the corporate level, values, norms, beliefs and assumptions are basic (McKenna, 2012; Schein, 2004). Peoples' social settings have also been seen as a very important cultural variable that wields great influence (Wilkins, 1983) and this can be a reflection of where a people live, what they do and the progress they make in terms of development in their lives.

In another perspective, the variable culture is described as a set of commonly held attitudes, values, and beliefs that guide the behaviour of organisational members (Martin, 1992). Psychologically, behaviour is paramount, and worth considering. It should be mentioned that behaviour in this sense would be beneficial if it is productive and not counterproductive within an organisation. Others (e.g., Denison, 1990) link culture to management philosophy, taking the concept a step further by associating it with an organisation's capacity to manage, and engage in other relevant managerial practices and behaviours that tend to further perpetuate the values and principles considered very basic to what goes on in the organisation.

In what can be seen as a summary of the elaborate role that culture can play, Schein (2004) defines culture of a group as “a pattern of shared basic assumptions that was learned

by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (Schein, 2004, p.17). That is, “one can think of culture as the accumulated shared learning of a given group, covering behavioural, emotional, and cognitive elements of the groups members’ total psychological functioning” (Schein, 2004, p.17). With this definition, Schein’s conception can be seen as a kind of knowledge sharing, and it has been established in recent times that knowledge sharing is one of the facilitating factors among organisational members used to enhance organisational effectiveness (Stair & Reynolds, 2008). It is important to note that conceptualizing culture this way facilitates behaviour analysis that brings out factors that influence behaviour significantly, especially in organisational settings. That is, Schein’s definition has some bearing on psychological variables of teaching new things to newcomers within organisations, and this could go a long way to point them (i.e., new members) to the ways of the organisation, for purposes of achieving organisational goals. Granted that new members need guidelines to be effective in going about their business in organisational settings, they may have differences in thoughts and values which may be at variance with organisational values, therefore, it is in order to consider steps to get members acculturated. Learning and reactions to *exposé* within organisations play a role because culture is not formed or created overnight (Schein, cited in Boan, 2006, p.51). Schein’s definition is reflected in several studies in the literature (e.g. Boan, 2006; Linnenluecke & Griffiths, 2010). However, it is important to point out that even though the conception of culture in this way (by Schein) is elaborate, there is an implied imposition of organisational values on new members, in the sense that there is the tendency for incumbents to want new organisational members to behave in a certain way suitable to the thinking of the experienced members (not necessarily in the interest of the organisation). It further

presupposes that organisational members should have a history, to be able to share experiences of what has worked well within an organisation. However, in reality, longevity alone is not enough to generate knowledge of what works well, and what does not; involvement and consistency could be important ingredients, external experience could also play a major role in successful performance in new work setting, therefore, when discussing matters as complex as culture of organisations, history could be combined with other attributes, such as knowledge, skills, and ability of the persons involved.

From the foregoing, it can be realized that even though organisational culture has been conceptualised and defined in many different ways, many of these definitions have certain key elements running through them, and these include the view that culture consists of some combination of artifacts (such as practices, expressive symbols, or forms), values and beliefs, and underlying assumptions that organisational members share about appropriate behaviour (Cooke & Rousseau, 1988; Denison, 1990; Gordon & DiTomaso, 1992; Rossman, Corbett, & Firestone, 1988; Rousseau, 1990; Sathe, 1983; Schall, 1983; Schein, 1992; Schwartz & Davis, 1981).

For the purpose of this study, organisational culture is defined as the aggregate of values, assumptions and philosophies of an organisation that serves to guide the behaviour of its members in a manner that generate achievement of organisational goals, and individual members' wellbeing. That is, whatever the purpose of organisational existence, there is the need for guidelines regarding acceptable and unacceptable behaviours of people within the organisation, so as to drive success in a manner that is desirable in the eyes of members and non-members, and of course, for the benefit of the entire organisation.

2.1.4 Organisational Culture: Psychological Considerations

The observation that organisational culture has its root in anthropology and other social sciences could be one reason for providing psychological basis for studying culture within the context of I-O psychology. Despite this observation that culture has some relevance for behaviour within organisations (Denison, 1984; McKenna, 2012; Saffold, 1988), there is the need to establish the psychological “understructure” of culture (Cameron & Ettington, 1988, p.369; Cameron & Freeman, 1991, p.25). In the process, and for purposes of this study, a distinction is also made between culture as a dependent and independent variable.

In organisational studies, because culture is mostly seen as a reflection of basic assumptions and values (Cameron & Ettington, 1988; Cameron & Freeman, 1991; Schein, 2004), the tendency is to consider these elements as being “beneath the conscious level” of individuals (Cameron & Freeman, 1991, p. 25). As a result, to get to the bottom of these taken-for-granted assumptions and values, there are suggestions that one needs to adopt strategies including observation of artefact, analysis of language use, stories, and norms “that emerge from individual and organisational behaviour” (Deal & Kennedy, 1982; Schein, 1983; cited in Cameron & Freeman, 1991, p.25).

Moreover, discussions of behaviour, personal attributes and the environment within the context of organisations form key bases of I-O psychology. This stems from the realization that studying behaviour is important in psychology and this remains salient in the various subfields of psychology. Usually, discussions on behaviour in psychology brings to the fore issues of environment and situational factors. In this regards, Kantor’s (1924) assertion deserves attention, for the argument that situational factors, or the

environment plays very important roles by interacting with the individual to generate outcomes. Based on this, and referring to the core essence of interactional psychology, one can see value in Lewin's (1935) field theory, represented by the basic equation: $B = f(P, E)$ —that is, behaviour is a function of the person and environment (where 'B' is behaviour, 'P' is person or personality or personal attributes, and 'E' is environment or situation). As the name goes, interactional psychology is one of the approaches to the study of behaviour that emphasizes a continuous and multidirectional relationship or interaction, between person and situation characteristics (Magnusson & Endler, 1977). That is, the interaction between the individual's attributes and the environment, has been observed to influence behaviour (e.g. Judge & Kristof-Brown, 2004; Kantor, 1924; Lewin, 1935). Therefore, the outcome of a behaviour, per this premise, would be dependent on complex interaction, to influence the individual's decision to "select, interpret, and change situations" (Terborg, 1981, p.569). Therefore, in the current study, the environment is represented by *organisational culture*, which is proposed to have some influence on the individual's decision to be (or not to be) *ready for change* and this could result in 'B' which is the behaviour of interest, the dependent variable, in this case *technology acceptance* (as a measure of successful change implementation). This relationship is further detailed in the model and conceptual framework of this study.

There are those who argue that the foundation of culture can be analysed by considering the strategies people use to interpret reality, and how these strategies play a role in organizing the underlying assumptions and values base on which organisational culture is grounded (Cameron & Ettington, 1988). Some of the basic conceptions proposed to be helpful in considering these mode of interpretation are Jung's (1973) "psychological archetypes" and a more social cognitive perspective called "schemas" (Harris, 1994).

The argument put out there is that in individuals, there are similar archetypes lying deeply in the subconscious (Newmann, 1955), which play critical role in the process of conceptualising reality. Though debatable, this thinking has been grounded in psychological archetypes, a concept intended by Jung to be used in analysing personality. This “Jungian framework can be used to shed light on organisational and institutional differences” (Mitroff, cited in Cameron & Ettington, 1988, p. 370) which have bearings on culture. Given that there are several ways to organize and interpret organisational variables, and that there is no one acceptable framework, it is important to contextualize, in order to remove ambiguities likely to characterise the study of culture in organisations (Cameron & Quinn, 2006).

Furthermore, organisational culture, together with related concepts such as climate, decentralization, organisational structure, and organisational effectiveness, have been observed as topics worthy of study at organisational level in I-O psychology (Beehr, 1996). Perhaps this is because of the supporting studies and assumptions that, most of these organisational level variables have influence on individual level variables, such as behaviour (Beehr, 1996). That is, organisations can have significant influence on the individuals working in these settings, (Beehr, 1996). Therefore, the role of I-O psychology in this regard cannot be overemphasized.

However, there are those who prefer that I-O psychologists take a holistic approach. They suggest that I-O psychologists be given interdisciplinary training (Offerman & Gowing, 1990). This holistic capacity is observed to be very necessary especially when dealing with concepts that require a blend of knowledge in various ways. For instance, Schein (1990) notes that in studying a very important but complex concept like

organisational culture, the traditional I-O psychologist alone may not play any “unique role”, and that there is the “great potential for the psychologist to work as a team member with colleagues who are more ethnographically oriented” (Schein, 1990, p.118). This argument does not downplay the role of psychologists in studying culture; it rather seeks to emphasise that psychologists can, and should be made to, study culture, but in the process it is important to blend psychological approaches with other methods, because of the unique nature of culture as a variable. These submissions all tend to point to the role I-O psychologists can play studying culture in organisations. This study uses the *competing values framework* (Quinn & Rohrbaugh,(1981), to discuss the extent to which cultures of universities can be analysed.

2.1.4.1 The Competing Values Framework

From psychological perspective, organisational culture can be studied using several frameworks, based on the orientation of the researcher. One prominent framework designed for organisational analysis, and which brings out culture as one of the embedded variables of interest, is the *competing values framework* (CVF). This framework has been observed to have some basis in the archetypes argument (Cameron & Ettington, 1988). It has been used by researchers in examining and analysing several organisational phenomena, including organisational culture types (Cameron & Quinn, 2006).

Briefly, the *competing values framework* (CVF) developed by Quinn and Rohrbaugh (1981) represents a synthesis and combination of the various values dimensions, assumptions and orientations that help in explaining effectiveness. In organisational analysis, such as studying organisational culture, the framework can be explained using three value dimensions: focus, structure and means/ends (Quinn & Rohrbaugh,1983).

What is the focus of the organisation? This value orientation reflects the extent to which individual organisational members are placed first, as against the organisation itself, in terms of well-being and development. Secondly, the structure in terms of flexibility or otherwise, that is, within an organisation, there could be emphasis on flexibility such that innovation, or change is encouraged, instead of stressing the need for there to be order and control, to the exclusion of everything else. The final value dimension regarding the CVF refers to processes, as against outcome. Which is more important: how people within the organisation do things, or what the end result is going to be?

It is important to note that inasmuch as the competing values framework has been observed to be a very useful and widely used guiding principle in organisational analysis, the “approach does not emerge from the observation of actual organisations” (Quinn & Rohrbaugh, 1983, p.363). As a result, it can be used in analysing any type of organisation, and this is what makes it flexible in applying this framework to studying not only business/profit oriented organisations, but also institutions like universities. Moreover, the CVF has been derived through rigorous statistical techniques, and is one of a few frameworks that have psychological basis. It also has a realistic view of the world of work; it considers organisations as having competing values, and not one static principle, that they need to use in achieving their set goals, irrespective of the type of organisation. Based on this thinking, it can be argued that culture is multifaceted (Schein, 1986), reflecting the various values inherent in the way people put meanings to what we see, hear and feel, especially in organisations.

2.1.5 Dimensions and Types of Organisational Culture

The literature shows how extremely broad culture is, and how culture manifests itself in different ways (Bergquist & Pawlak, 2008; Cameron & Quinn, 2006; Schein, 1990). This throws up different definitions, and so a discussion on dimensions of culture can be seen as an extension of the debate on the varied views on defining organisational culture. One of the challenges that come with this realization is that researchers have differing views as to whether culture should be discussed as a one-dimensional or multidimensional construct (Schein, 1986). Interestingly, it is becoming clear that, there can be no one culture that should be viewed as being better than others (Kuh & Whitt, 1988). At best, there can be a way of comparing cultures through analysis, and for these purposes, the strategy is to describe the various dimensions. This will further help in organizing the core attributes of culture and to help in measuring the various components appropriately (Cameron & Ettington, 1988), and for comparison purposes (van den Berg & Wilderom, 2004).

It is common to read about cultural typologies (Cameron & Freeman, 1991; McKenna, 2012; Schein, 2004), and/or cultural dimensions (McKenna, 2012; van den Berg & Wilderom, 2004), and *aspects* of culture (McKenna, 2012). This seemingly free-style manner in describing *types* as *dimensions*, and *levels* as *types* often generate confusion. As a result, there are those who make conscious efforts to bring out the differences in labelling types and dimensions, and this may be a manifestation, and reinforcement of the observation that culture is “...inclusive in scope” and “comprises a complex, interrelated, comprehensive and ambiguous set of factors” making it practically impossible and theoretically difficult to consider including every relevant element in

discussing culture (Cameron & Quinn, 1999, p.29). One noteworthy point is that ‘typing’ culture, and providing dimensions paves the way for measurability of the construct. The purpose of this section is, therefore, to contextually provide brief explanations in labelling and addressing the issues relating to types and dimensions, followed by a clear direction of what this study considers relevant in achieving the study objectives.

The literature shows how notable individuals with interest in organisational culture research have comprehensively studied and discussed culture in terms of *types*, *dimensions*, and *levels* (Schein, 2004), pointing out that the three are not the same, even though some use them interchangeably. The argument is that “dimensions” of culture is used to refer to “what culture consists of—what an observer would view as the *content* of culture” (Schein, 2004, p.85). This presupposes that culture has several dimensions (and not just one), and that culture seems to reflect almost everything that a group cares about, from internal integration, external adaptation, to the nature of truth, human nature (Schein, 2004). Other researcher argue in support of dimensionality of culture, (van den Berg & Wilderom, 2004), that the dimensions “must cover the broad scope of the culture construct, and they must refer to the dynamics of work groups” (van den Berg & Wilderom, 2004, p.573). Therefore, Schein argues that to make meaning out of the possibly wide range of relevant cultures, and to provide the platform that makes it possible and convenient to put organisations into different categories, a strategy is adopted by discussing culture in terms of the types, such that each type could have dimensions.

Dimensionality in studying culture is common but this varies depending on the aims and objectives of researchers involved. A few have been looked at, as follows.

Some studies (van den Berg & Wilderom, 2004) propose five set of distinct cultural dimensions, namely autonomy, external orientation, interdepartmental coordination, human resource orientation and improvement orientation. They argue that in analysing organisational culture, autonomy is considered a key dimension representing the extent to which organisational members have some leeway in decision making or are limited in the extent to which they can contribute in terms of decision making within the organisation. Secondly, the argument for external orientation could probably be based on the argument that organisations are key part of the environment within which they operate, and therefore this dimension seeks to reflect the extent to which an organisation is opened to the influence of the world outside of it. This is in line with assumptions underlying organisations as open system. Moreover, the third, interdepartmental coordination, seems to consider the level of dependency that could exist among the various units within an organisation. This cultural dimension could be a reflection of teamwork, and at the same time departmentalisation, such that organisations play their relevant parts toward achieving organisational goals. The next dimension they proposed, human resource orientation has to do with the extent to which the organisation focuses on the development and full utilization of the knowledge, skills and abilities of the people working in the organisation). The final one, improvement orientation, implies the extent to which the organisation as a whole is ready and willing to achieve set objectives, and even do better than they anticipate.

In a related study, Cooke and Szumal (1993) argue that within organisational settings, there could be three (3) types of cultures, namely constructive, passive-defensive, and aggressive-defensive cultures. They conceptualize that culture can be described as constructive if it is influential in encouraging organisational members, and getting them

inspired to be flexible and adaptive, especially when interacting and reacting to environmental conditions that are changeable as most organisations find themselves in today (Cooke & Lafferty, 1987). One reason this type of culture is functionally relevant is that “members are encouraged to interact with others and approach tasks in ways that will help them meet their higher-order *satisfaction* needs”, and these cultures are often “characterized by Achievement, Self-actualizing, Humanistic-Encouraging, and Affiliative norms” (Cooke & Szumal, 1993, p. 1302). The second type is what was described as *Passive-Defensive* cultures, which tends to demonstrate how people in organisations engage in behaviours believing they need approval, and must be conventional and dependent on each other in order not to “threaten their own security” (Cooke & Szumal, 1993, p.1302). The third type is what they describe as *Aggressive-Defensive*, in which members are expected to “approach tasks in forceful ways to protect their status and *security*”, but with this category, there are unspoken elements of “power, competition and opposition” especially where individuals believe they have to be guided by “perfectionistic norms” and “avoidance norms” (Cooke & Szumal, 1993, p.1302).

In another development, Denison (1990) groups culture into four related dimensions, which were also referred to as the four basic traits of culture– mission, adaptability, involvement and consistency. Mission, in this sense can be regarded as reflecting the strategic and clear sense of purpose and direction that has the potential of leading the organisation toward success. The second dimension, adaptability, is that trait which describes the extent to which there is flexibility and responsiveness, in other words, the tendency to be focused on processes that make it possible to achieve the desired goals. In this regard, Denison mentioned attributes such as creating change, being customer focus and exuding organisational learning principles as some of the characteristics of

adaptability that make organisation remain functional, and focused. The third, *involvement*, represents the dimension that touches on the extent to which organisations empower and engage the people within, in terms of how the people feel their input can be said to be connected to the overall goals and objectives of the organisation. As a sign of having a culture that values involvement, an organisation is likely to create an environment which provides empowerment, team orientation and capability development (Denison, Hooijberg, Lane & Lief, 2012). For there to be holistic results, there is the need for the cultural dimension which has its roots in values, agreement, and coordination/integration, such that organisations will be consistent and well-integrated (Denison *et al.*, 2012).

It is important to note that, with Denison's model, organisations could be described as having cultures which broadly are either externally- or internally-focused, and flexible or stable in orientation. One key strength of this model is how it has been used in diagnosing cultural problems in organisations (Denison *et al.*, 2012), and the extent to which the various sub-dimensions reflect the current reality of changing world of work which calls for strategising in terms of adaptation, and the need to direct attention to goal attainment. However, it should be noted that organisations, and for that matter, culture in organisations, are too diverse to be limited to only four dimensions as proposed by Denison *et al.* (2012). Perhaps, this categorisation, though scientific in approach, could be seen as a convenient way to enable measurement of the culture.

In a related development, several other studies on culture attempted looking at the construct from the perspective of organisations. For instance, Edgar Schein's work has enormous impact on many discussions that take place with regard to organisational culture. Schein (2004) asserts that the culture of an organisation is one of the most

difficult attributes to change, because it has the capacity to last longer than the existence of organisation in terms of its products, services, founders and leadership and all other physical attributes of the organisation. Schein developed a model describing three cognitive levels of organisational culture: artifacts, values and basic assumptions.

The first component is collectively called *artifacts*, and according to Schein (2004) these are the aspects that could be seen, felt, touched, and are found in institutions. Practically, they may include the facilities, offices, furnishings, visible awards and recognition, and sometimes dress code of organisation members. Broadly, they could be put in (i) physical environment, (ii) social environment, (iii) technological output of the group, (iv) written and spoken language, (v) overt behaviour of the members, and (vi) symbols (Bess & Dee, 2008). In terms of discussing university culture, one could consider that physical environments include both exterior and interior space, which have some meaning regarding the kind of atmosphere, and this goes to reflect what Coaldrake (1996) notes: “that architecture affects thoughts and actions, both as a tangible expression of ideas and as a tool for ordering the places where human activity and interaction occur” (Coaldrake, 1996, p.4, cited in Bess & Dee, 2008, p.365). In a related view, Denison (1990) explains that artifacts are the tangible features of culture jointly held by organisational members.

Another level, values, describes individuals’ preferences regarding certain aspects of the organisation’s culture (e.g. loyalty, customer service). Schein suggests that values are those aspects of culture touching on deeply held feelings of people with regard to certain things, people or actions. He further observed that this part of culture is not directly observable, but can be realised through a careful observation and analysing the physical aspects of culture, the artifacts (Schein, 2004) and by interviewing the organisation’s

membership and using questionnaires to gather attitudes about organisational membership. In university environment, outward behaviours such as having a chat at lunch time with colleagues, faculty Deans forwarding funding opportunities to mid-career teaching staff, end-of-lecture advice given by lecturers to students, all go to portray caring and development-orientation as values in the system. When this goes on for some time, members begin to know the values and these, according to Schein then constitute '*belief*— the cognitive side of value' (Schein, cited in Bess & Dee, 2008, p. 369). Schein further notes that values that become embodied in organisational belief system 'can serve as a guide and as a way of dealing with the uncertainty of intrinsically uncontrollable or difficult events' (1992, p.20, cited in Bess & Dee, 2008).

At the third and the core level of Schein's culture typology, are the organisation's tacit *assumptions*. These constitute what can be described as the unconscious driving forces that direct behaviour. These cultural elements are not only invisible but are also the aspects often not present cognitively, in the daily interpersonal activities. In explaining the third of the trio-concept-model, Schein (1983, 1992) has outlined five basic underlying assumptions that are manifested in organisational culture:

(a) the organisation's relation to its environment, describing how members or an organisation view its involvement with its economic, political and social environment. For instance, is there serious competition between the university and other institutions of higher learning, or there is peaceful coexistence?

(b) the nature of reality and truth, which touches on the extent to which members attempt to solve its problems. For instance, do members engage in dialogue, or empirical investigation in an attempt to handle a challenge?

(c) the nature of human nature, attempting to ask questions as to whether people are basically good or bad. Does the organisation have to protect itself against people and their self-interests? Or it can be assumed that all will be honest and committed towards achieving the good of the organisation.

(d) the nature of human activity, to explain the extent to which people engage in working and developing, and the role of the organisation in facilitating the professional development of the people within.

(e) the nature of human relationships, and this describes the extent to which organisations structure its authority relationships. For instance, are there a fixed hierarchical reporting lines, is there collaboration, or competition in the organisation.

There is also a school of thought, that, culture could be described in terms of what an organisation wants to be known for. For instance, when speaking of an organisation having a culture of innovation, evidence might be realized in the extent to which there is idea development system within the organisation, or rewarding of new ideas generated by individuals, and how much brainstorming there is in the organisation. It could also be manifested in the extent to which there is general encouragement in idea generation and relevant professional development, and above all, the extent to which changes are seen as normal in the work processes of the organisation.

Along these lines, the CVF brings out four types of cultures, namely, clan, market, hierarchy and adhocracy. These are adopted for use in this study because they are consistent with what has been used to study cultures in some universities (Cameron & Ettington, 1988; Cameron & Freeman, 1991) and also for the simple reason that they

have scientific basis (Cameron & Freeman, 1991) which can be utilised in discussing change in organisations, irrespective of their orientation (that is, business, education, for- or not-for profit organisations, etc.).

The argument is that organisations with clan type of culture are characterised by attributes such as shared values and goals, participation, sense of family but at the same time individuality (Cameron & Ettington, 1988). In such organisations, there is the tendency for the people within to see each other as part of the family, and would be involved in what concerns others, to the extent that the leadership in such an organisation is that of a father figure, someone willing and ready to serve the interest of others who look up to the leadership for direction, sanctions and rewards.

In hierarchy cultures, the emphasis within the organisation is usually on following set rules and regulations, which also means that there are clear lines of authority, making it mandatory for each and every individual to obey or be sanctioned. The overall objective within such cultures is to ensure uniformity of procedures and systems so as to be efficient and effective. According to Cameron and Freeman (1991), organisations with such cultures are characterised by formal ways of doing things. Such organisations are mostly structured places where people and systems are “held together by formal rules and policies” (Cameron & Freeman, 1991, p.36) which help to ensure stability and predictability. This is similar to bureaucratic culture as described by Birnbaum (1988). Organisations with such cultures tend to have some level of difficulty in responding to ‘actions’ and ‘reactions’ from within and outside of the organisation (Birnbaum, 1988).

The third type, adhocracy cultures tend to place emphasis on entrepreneurship, creativity, adaptability, and dynamism (Cameron & Ettington, 1988). Organisations whose dominant cultures are described as such are likely to engender tolerance and flexibility

in dealing with challenges, and could be seen as growth oriented which also makes them to display “a commitment to innovation” (Mintzberg, cited in Cameron & Ettington, 1988).

In market cultures, which is the fourth, the focus is usually on competition and the need to accomplish set goals, usually through such strategies as customer focus, and all the attributes that make for professional marketing orientation.

2.1.6 Differences and Similarities: Culture and Climate

There are concerns about the differences between culture and climate, with some ambiguity in the boundaries between the two concepts (Schneider, 1985). There are some studies that see these boundaries as artificial, arbitrary, and largely unnecessary on the basis that the two concepts are related and can even be said to be the same (Denison, 1996); but there are still others who argue that they are not the same (Schein, 1992; Rousseau, 1990), and that there can be lines of demarcation between them. For instance, Rousseau (1990) views organisational climate as more or less descriptive beliefs and perceptions that individuals hold of the organisation, whereas culture is considered the shared values, beliefs, and expectations that usually develop from social interactions within the organisation. Similarly, some scholars argue that organisational climate can be described as representing the predominant air of closeness or otherwise, the care and friendly atmosphere that exist in organisations (Farmer (1990) whereas organisational culture is understood as the sum total of the assumptions, beliefs, and values that its members share and is expressed in many ways reflecting everyday behaviour (Farmer, 1990). However, there are those who think that one is a subset of the other, that is, organisational climate can be described as being a cultural phenomenon (Schneider,

1975). For purposes of this study, the focus is on organisational culture, and sometimes, mention is made of climate as one of the elements that can affect culture and the environment in which stakeholders find themselves.

2.1.7 Importance of Organisational Culture

There are several benefits to be derived within organisations that have established the appropriate culture (Hofstede, 1991). Thus, interests in studying organisational culture to some extent is a reflection of various attempts to identify favourable and unfavourable cultures (or cultural elements), so as to attempt changing unfavourable ones to improve organisational performance and make the organisation competitive. As a result, one of the observations is the attempt to link culture and effective functioning of social organisations (Denison & Mishra, 1995). In the process of bringing out the relevance of this concept, Denison and Mishra (1995) report that several disciplines especially in the social sciences, including sociology, social anthropology and social psychology have taken the conscious steps to demonstrate that among the various factors which are important ingredients for effective functioning of a group of people, mention can be made of culture, and that is how important the concept of culture can be.

The overall goal therefore, in studying culture in organisations can be summed up in the extent to which culture could exert control on people's behaviour within, and behaviour relevant to attaining organisational goals. Therefore, if culture has been observed to support the extent to which behaviour can be regulated and guided (Van den Berg & Wilderom, 2004) in different ways, this importance requires attention through further research.

Firstly, Pettigrew (1979) notes that culture serves as “social tissue” that gives meaning to tasks performed in organisation, even though these are often ignored (p.574). This observation is important especially when it was at the instance of analysing the usefulness of certain cultural elements, including symbols, as very important aspects for organisations and the members, that cannot be taken for granted.

In a related analysis, culture has been observed to have a strategic link to organisational success, especially where culture supports the strategy and kind of business the organisation is in (Deal & Kennedy, 1982; Tichy, 1982). That is, irrespective of how success is defined, the usefulness of organisational culture can be felt in the extent to which it is conceptualized, and the influence it has on relevant behaviours within organizations. Further, Ravisi and Schultz (2006) argue that culture is useful to the extent that it is a reflection of shared mental assumptions that *guide* interpretation and action in organisations, and it does so by *defining* appropriate behaviours for various situations. That is, culture’s role in influencing behaviour is pronounced here, and in this case, falls in line with the role of environmental factors in either predicting behaviour or getting people to engage in certain behaviours.

Moreover, culture has been linked with control of behaviour in diverse ways. It does not only serve the purpose of internal integration and external adaptation (Schein, 2004), but it is also considered as a collection of values and norms shared by people and groups in an organisation, with the capacity to control the way they interact with each other and with stakeholders outside of the organisation (Hill & Jones, 2001). It is also seen as a control mechanism that is potent in regulating individual and organisational behaviour (O’Reilly, 1989; O’Reilly & Chatman, 1996; Ouchi, 1980). Culture therefore plays the functional role,

emphasising the usefulness of human relations in organisations, as observed by Schwartz and Davis (1981) that culture encompasses the set of beliefs and expectations that people in an institution collectively share to the extent that this has the tendency to generate strong influences on their behaviours. Therefore, in situations where there is deviation from expectations and values then there is the need for adjustments to be made to realign behaviours and values appropriately.

The literature also has it that culture within organisations can be seen as source of normative order (McKenna, 2012; O'Reilly, 1989). Norms within social systems represent what constitute acceptable or unacceptable attitudes and behaviours (O'Reilly, 1989). That is, norms can be seen as central to culture, playing the checking role, established to help gauge consistency of behaviour for purposes of ensuring effective control system for people (McKenna, 2012). There are often unspoken norms, which tend to guide important aspects of organisational life, such as interpersonal relations, quality of delivery, and the extent to which grievances are aired in organisation. For instance, it has been observed that whereas open discussions are encouraged, it is considered impolite in some organisations to engage in disagreements publicly, as a result of which such interactions for purposes of resolving any dispute are encouraged to be done behind the scenes (O'Reilly, 1989). What this implies is that where the norms exude counterproductive tendencies, this can negatively affect the organisation, therefore, it is not always encouraging to accept norms holistically without critical examination.

It has also been observed that culture plays a critical role to the extent that it can appropriately generate and promote innovation within organisations (McKenna, 2012). It

was found that organisational culture can encourage creative thinking especially where steps are taken to generate appropriate platforms that seem to encourage innovation (McKenna, 2012). This thinking is expected especially in the era of technological advancement, competition, and the need to be proactive in scanning the environment for new services orientation. Accepting and promoting the tendency of being innovative, proactive and creative is what modern organisations need for external adaptation (Schein, 2004), and universities are no exception in this regard. Possibly, this can be an avenue for readiness creation, for people to accept technology as a pathway to improving upon working strategies.

The survival and continued performance of an organisation can be said to be dependent on the type of culture it has, especially when it is also found that culture has the capacity to influence a group's behaviour and attitudes regarding external adaptation and internal integration (Schein, 2004). Interestingly, culture can also be implicated in negative behaviours and attitudes of people in organisations, especially in educational settings (Peterson & Deal, 1998), and so may not necessarily be positive.

Every organisation, regardless of its orientation (service, manufacturing, profit-making, non-profit institutions, etc.) has its unique culture, reflecting the setting of the sector/system of which it forms a part. Moreover, cumulative results of several years of studies in organisational culture provides strong support for the notion that "culture matters", and cannot be ignored, if organisations would have to succeed in what they do, especially in this era of constant change (Klein, 2008; Schein, 2004). This concept has been cited as being capable of playing a key role in performance improvement in organisations, hence the need for series of studies on this variable.

2.1.8 Organisational Culture in Africa and Ghana

Discussions on regional and national cultures are often discussed in relation to the behaviours, values and expectation of the people therein, for purposes of creating a linkage with organisational culture. This is a clear indication that in discussing organisational cultures, one important element that cannot be ignored is the notion of national cultures, which has been found to affect the behaviour of organisations in varied ways (Badu, 2001; Hofstede, 1980; Puplampu, 2012). This is critical because discussions on regional and national cultures serve the duo purpose of ensuring relative balance in presentation; and minimize imposition from other cultures, especially on African nations and the developing world. A look at the literature shows that research on culture is dominated by Western conceptualisations (Puplampu, 2004, 2012) and this development has the tendency of inadequate representation of what really constitute African values and needs which influences relevant work behaviour. Therefore, there is the need to look at Ghana as a nation with its culture, in line with Hofstede's observation that at any given moment, a nation could be described in one way or the other as having predominantly an attribute that sets it apart from other nations (Hofstede, 1980, 2000).

Scholarly discussions on national culture and how relevant it can be have been made popular when Hofstede came out with four dimensions of national cultures, namely power distance, uncertainty avoidance, individualism-collectivism, masculinity-femininity and later on, together with Bond, they proposed a fifth dimension, long-term orientation versus short-term orientation (Hofstede & Bond, 1988).

First, views on culture and the useful role organisational and national culture play towards improving organisational performance (through appropriate values and work behaviours) have been demonstrated in a few studies (Badu, 2001; Hofstede, 2000;

Puplambu, 2012). For instance research shows that most organisations in developing countries such as those in Africa are likely to take things for granted in terms of observing systematic organisational and work procedures (Kuada, 1994; Puplambu, 2005, 2012) to the extent that some may allow personal and family systems to interfere in formal procedures set to ensure organisational effectiveness. This perhaps has something to do with the collectivist tendencies and values of the African (Hofstede, 1980). Ghanaians, like most Africans are more collectivist than individualistic. That is, the Ghanaian is more likely to put a group's (family's) goals first, before personal interests. In other words, in collectivistic cultures as Hofstede (1980) describes, people individually prefer interdependent relationships, and so personal goals are likely to be seen as secondary to group objectives. This is different from individualistic cultures where independence from others is valued and in-group goals are second to their own personal goals, (Hofstede, 1980, 2001; Triandis, 1994). If the Ghanaian is collectivist (based on Hofstede's assumption of Africa) it would be common for this thinking to dominate the Ghanaian worker to the extent that it can influence their work behaviours, and could get them view the workplace as a family setting with others around, and the leadership considered a father-or mother-figure, as described in clan culture types (Cameron & Quinn, 2006). Based on this, and by virtue of the realization that family sizes are smaller compared with community in which they are a part, it is predicted that private universities (relatively small in size in terms of numbers) are likely to demonstrate more characteristics of clan culture than the public universities (which are usually large communities in terms of student numbers and workforce). One factor that cannot be downplayed is the influence of globalization on people's life style and thinking; the Ghanaian is likely to blend the virtues of collectivism and individualistic, instead of remaining purely collectivist.

For instance, Hofstede describes Power distance to mean the degree to which a society expects differences in the levels of control or influence. That is, at different points in time, there are some individuals wielding larger amounts of power than others, and this can influence the extent to which they behave, and this makes them different from other nationals. In Ghana, there is a governance system which recognizes chieftaincy as a revered institution which plays critical roles through traditional leadership in terms of behavioural development though concepts like conventions, taboos, tradition and moral standards of living. The Ghanaian brought up in this system is likely to have respect for authority irrespective of whether they (authorities) are right or not, and this has the tendency of influencing their work behaviour.

Like in the business world of work in Africa, there is dearth of studies pointing at university cultures, a situation which can impede directly or indirectly relevant efforts at intervening for development of teaching, learning and knowledge dissemination in the institutions of higher learning. The current study therefore sets in to contribute towards bridging this knowledge gap, by looking at university cultures and readiness for change in a manner that affects change implementation success.

What Hofstede observed tends to indicate that at any given moment, a nation could be described as having predominantly an attribute that sets it apart from other nations. For instance, Hofstede describes Power distance to mean the degree to which a society expects differences in the levels of control or influence. That is, at different points in time, there are some individuals wielding larger amounts of power than others, and this can influence the extent to which they behave, and this makes them different from other nationals. On the dimension of uncertainty avoidance, Hofstede observed that there are differences in how different societies accept uncertainty and risk. From the perspective

of psychology, this could have some bearings on people's willingness and readiness for change, because where individuals seem to be strong on avoiding ambiguous situations in which they are not certain about the outcome, the tendency is to remain resistant to change, compared with others who may be tolerant of ambiguity (Judge, Thoresen, Pucik, & Welbourne, 1999). Moreover, individualism and collectivism was used to define how people differ in achieving personal goals or putting group's goal first, before personal interests. In other words, it could imply that in individualistic cultures, independence from others is valued and in-group goals are second to their own personal goals, whereas in collectivistic cultures, people individually prefer interdependent relationships to others, and personal goals are secondary to in-groups objectives (Hofstede, 1980, 2001; Triandis, 1994). According to Hofstede (1980), Asia, Africa and Latin America have strong collectivistic values. Oyserman, Coon & Kimmelmeier (2002) further show that individualism tendencies reflect personal independence and uniqueness, and as much as possible, people who display individualist tendencies are also likely to be described as having interest in competition, personal achievement and emphasis on internal attributes. On the other hand, collectivist tendencies include seeking other people's opinions, interdependence, a sense of duty and obligation towards the group.

The next of the dimensions by Hofstede is Masculinity vs Femininity, which touches on the extent to which people emphasise male-female values. For example, male values include competitiveness, assertiveness, ambition, and the accumulation of wealth and material possessions, while female values relationship and quality of life, which could include love, caring, etc. Then there is the long term orientation vs short term orientation, to describe societies' time horizon. With this, Hofstede observed that societies which are

long term oriented tend to emphasize the future, are likely to focus on planning toward achieving something or preventing danger in the future. Where the focus is short-term orientation, there is emphasis on what happened in the past, what is happening currently, and attention is likely focused on taking steps to preserve the status quo.

Hofstede's model might have several practical implications. For instance, given that the world is now 'smaller' and more interconnected than ever before (thanks to advanced technology), it is important to know a little about people with whom individual's work, and one of the things that cannot be ignored is culture. However, these itemised dimensions make it simpler than what could be put in a nutshell as culture. For instance, to describe only individualistic and collectivist tendencies, looks like these are the only sub-dimension, ignoring the role of mid-point in the continuum. Moreover, the discussion of culture in terms of uncertainty avoidance is acceptable but the extent to which it goes to affect risk-taking behaviours of people should have been stressed, and brought out clearly.

2.1.9 Organisational Culture: The Case of Colleges and Universities

In the area of education, discussions of organisational culture is not entirely new (Bergquist & Pawlak, 2008; Cameron & Ettington, 1988; Clark, 1972; Silver, 2003) but the focus has always been debated (Schein, 1990). It may appear that there is a set of agreed-upon elements of culture for all organisations, irrespective of their orientation, but studies show otherwise. For each organisation, there are unique cultures and universities are no exception—they have been observed to have their own cultures (Bergquist & Pawlak, 2008; Cameron & Ettington, 1988; Cameron & Freeman, 1991). But it is important to further note that the notion of individual differences comes in here,

when discussing organisational culture. For instance, it has been observed that within institutions of higher learning, there can be more than one culture and several other subcultures (Bergquist & Pawlak, 2008; Van Maanen & Barley, 1985). This could be as a result of the micro-level observation, that people differ in terms of how they see situations, and that within universities, faculty, administrators and students may have different perspectives about their organisation (Martin, 1992).

Interestingly, there are those who have made observations worthy of note in terms whether universities have cultures. For instance, the catchy title-question by Silver (2003): “Does a university have a culture?” is worth exploring. With this, Silver (2003) focuses on knowing how academic staff and reformers in teaching and learning consider the reality of a ‘culture’ in their universities. In the study, Silver (2003) notes that within the university environment:

“...‘Organisational culture’ has been used in relation to higher education to attempt the impossible task of representing its ‘collections’ as unitary and explicable. Universities do not now have an organisational culture.” (Silver, 2003, p. 167).

This observation notwithstanding, organisational culture and values in higher education settings have for a long time been studied, drawing upon conceptions of culture and values from anthropology, organisation and management studies (Deal & Kennedy, 1982; Hofstede & Hofstede, 2005; Ouchi, 1981; Peters & Waterman, 1982; Schein, 2004). Very few studies focus on linking culture to success in change efforts in universities (Cameron & Ettington, 1988; Cameron and Freeman, 1991). In their study,

Cameron and Freeman (1991) explain how they compared cultures of 334 institutions of higher learning in an attempt to find out the relationship between organisational effectiveness on one hand, and culture congruence (fit), culture strength and the culture type. They observed significant relationship between the type of culture within universities, and how effective these institutions can be. They considered effectiveness among selected dimensions, some of which include faculty and administrator employment satisfaction, professional development and quality assurance, system openness and community interaction, among others.

Usually, such studies are carried out in different locations to establish the role of culture in proper functioning of organisations. For instance, Meek (2003) reports of universities in Australia which have gone through very important administrative and institutional changes that tend to have implications for their culture. In Europe, universities reportedly continue to face the difficulty in finding other ways that could lead to adjusting well enough to the continuously changing world without compromising the core values of what makes them special institutions (Tomàs, Bernabeu & Fuentes, 2011). These and several other bases set the stage for continued scientific discussion on organisational culture, to which this study seeks to make a contribution especially in higher education arena.

Before even the concept of organisational culture became popular, Clark (1972) has observed how universities develop norms and values which guide their professionals.

It was observed that from the mid-1980s, experts in research have been discussing higher education and how it has been affected by managerial and market-driven policies. There is also the focus on how the various departments or other basic units within academic

institutions shape the way academic staff define and locate themselves in a 'culture' or a 'subculture' of a sort (Clark, 1984; Evans, 1990). All these point to the interest in universities and the culture therein. Moreover, attention has also been drawn to the manner in which research outcomes from industry and other sectors (regarding culture) could be appropriately transferred onto entities such as universities and colleges which are becoming more centralised and market-oriented (Silver, 2003) than ever before. One interesting thing is the question of whether culture in university should be seen as a global construct, or there could be subcultures. Once universities are made of people with values and norms, there is the tendency of having culture, and considering whether to uphold their individual cultures or be committed to the unspoken norms within their institutions. One thing that comes up is shared values (Silver, 2003). People from varied backgrounds working together on same themes need to have values, to help achieve the objectives.

Bergquist (1992) initially identified four subcultures in United States universities but later, together with a colleague, they identified six (6) types of academic cultures, which include the initial four, and these are Collegial Culture, Managerial Culture, Developmental Culture, Advocacy Culture, Virtual Culture and Tangible Culture (Bergquist & Pawlak, 2008).

McNay (1999) observes that in UK, cultures in universities could be described as collegium, bureaucracy, enterprise and corporation, especially when using conceptualisations of universities being 'loosely coupled organisations' (as propounded by Weick, 1983).

In a related effort, Birnbaum (1988) suggests four (4) typologies of culture for institutions of higher learning, namely collegial, bureaucratic, political and anarchical culture, to indicate the extent to which individual's behaviour within organisations can be influenced by one or other of these models.

Collegial culture, according to Birnbaum, characterises an environment of shared power and non-hierarchical relationship, in which interactions and engagement take place in an atmosphere of consensus. With this culture, tradition and precedence within institutions of higher learning heavily influence organisational behaviour. The second type is what Birnbaum describes as *bureaucratic culture*, in which there is emphasis on formal rules, guided by a system of specified roles and pronounced superior-subordinate relationships. Institutions that emphasis this culture have the objective of minimising uncertainty and ambiguity for the organisation.

Then there is *political culture* which describes the tendency for people in the organisation to use negotiation and bargaining as tools within the organisation to engage in social exchange, with regard to supporting or rejecting certain initiatives, policies, etc. The fourth of Birnbaum's conceptions is what has been described as *anarchical culture*. This reflects the characteristics of organised anarchy as described by Cohen and March (1974). In such a situation, there are concerns and several questions need answers. For instance, individuals would want to know whether the goals and policies are ambiguous, and in conflict with each other; there is also the concern about whether transformation processes are well understood, and as to whether the decision to participate are well informed.

Birnbaum argues that one of the four models could have relevance than others but each institution's culture has at least some of the elements of the other three.

In Ghana, even though the universities are built and run on principles, there are some cultural values imported as a result of globalization and need for standardization in the world of higher education. This is not too different from their lower level systems (the High School system), which until recently had very little consideration of the cultural setting and people they are serving. From the forgoing, culture has the capacity to affect behaviour as well as the psychological orientation of people and their performance. How does culture affect employees' perception and values, and to what extent does it impact behaviour, especially stakeholders of university education? These are of interest to this study, among others objectives.

The degree of affiliation is so critical that it was once observed in higher institutions:

“the tribes of academe...define their own identities and defend their own patches of intellectual ground by employing a variety of devices geared to the exclusion of illegal immigrants. ...To be admitted to membership of a particular sector of the academic profession involves not only technical proficiency in one's intellectual trade but also a proper measure of loyalty to one's collegial group and adherence to its norms” (Becher & Trowler, 2001, p. 47).

What is the situation in universities in Ghana, and what role would the descriptions '*public*' or '*private*' play on the extent to which universities operate within their cultures? This study explores these, together with other relevant concepts.

2.1.10 Variations in Approaches for Studying Organisational Culture

Like several concepts in the social sciences, the disagreement in definitions for organisational culture sometimes contributes to making it relatively difficult to study culture (Davison & Martinsons, 2003). As a result, several concerns have been raised about how to study (or conduct research with) organisational culture, in terms of the method to be used, and levels of analysis (Cameron & Ettington, 1988; Martin, 1992; Schein, 1990). The magnitude of such concerns have been expressed in varied ways, with some observing that studying organisational culture is quite challenging because of different perspectives regarding theory and sometimes the appropriate method to adopt, making it appear as if there is a particular method acceptable to all (Martin, 1992). Therefore, this section is devoted to the background of the various approaches to investigating organisational culture, thereby preparing the ground for linking culture to other variables as presented in the model of this study later in this chapter.

When one looks at the concepts and processes (such as history, mission and vision) that are related to the creation of an organisation, then to study the culture of organisations, it appears convenient to consider using purely interviews, as the obvious approach. Then following from that, the thought of employing longitudinal methodology comes to mind, so as to get the “before, during and after analysis” (Pettigrew, 1979, p.570). However, the challenge with this thought, and the hindrance is imminent when it becomes clear that it is not all studies that have the benefit of witnessing changes within organisations just before beginning the study of culture.

2.2 LEARNING ORGANISATIONS

In order to survive and remain in competition, especially in the era of turbulent work environment, organisations are taking steps to adopt strategies that make for growth, enhanced capability for innovation and expansion. One of the ways that have been identified as a process that can help meet this target is for organisations to continuously learn to transform themselves, and that such learning usually occurs at various levels and is in such a way that there is purpose and continuity in the learning process (Watkins & Golembiewski, 1995). In bringing out the functional bit of learning organisations, Garvin (1993) maintains that such an organisation should have the needed capacity to undertake problem solving by learning from what works well for other institutions in their bid to be successful (Garvin, cited in Sudharatna, & Laubie, 2003). Such is the learning culture that can be said to reflect organisational behaviour in line with learning and development tenets (Yang, 2003) that characterize successful organisations.

Senge (1990) considers learning organisations as those in which members continually develop their capacity in order to generate steps that lead to set objectives they truly desire, and in which there is a directed pattern of thinking that results in attaining common goal. It should be noted that in this, there is an element of sharing, care and concern that is characteristic of successful organisations. Organisations which want to survive and make the mark they set for themselves take steps to learn and change, failure of which may lead to their degeneration, and death. One question that this study seeks to address, among other things, is whether universities learn.

With the kind of competition that is going on in all sectors, it is imperative that learning organisations should strive beyond mere survival, as indicated by Senge (1990).

Given the rate at which the world of learning is being influenced by technological advancement, it will be desirable for universities to be proactive in sharing experience, to help identify what works well or badly towards achieving set objectives. To this extent, studies have been done on learning organisations, but few have linked this to change efforts in universities (Holyoke, Sturko, Wood & Wu, 2012). In universities, it is expected that in their zeal to be responsive to change they would learn, but studies show that university faculty have been traditionally skeptical about the concept of learning organisations (Holyoke *et al*, 2012). For them to be successful in getting the people they educate to be transformed appropriately, institutions of higher learning need to be able to adapt to changes, which requires flexibility and learning (Holyoke, *et al*, 2012).

2.3 ORGANISATIONAL CHANGE: READINESS AND SUCCESS

“...it’s not the strongest of the species that survive, nor the most intelligent, but the ones most responsive to change”- Charles Darwin

2.3.1 Introduction

Organisational change is an area that is well read in I-O psychology and management studies. However, the focus has not been on educational institutions. That is, even though some research has gone on in educational institutions regarding organisational change (Eckel, Hill & Green, 1998; Eckel & Kezar, 2003; Keller, 1983; Silver, 2003), most of the time the focus of change initiatives has been on businesses and manufacturing industries. There is therefore the need to have a research conducted in educational

settings such as universities, to help solve some of the people management issues and challenges these knowledge-generating institutions go through.

2.3.2 Why Organisational Change?

The literature on organisational management is clear about the extent to which change is seen as constant (Smith, 2011). It is common to read “the only constant factor in (organisational) life is the need to change” Smith, 2011, p.114) and this observation dates back to the days of the Greek Philosopher, Heraclitus (536-470BC). But since organisations differ in so many ways, including mission/vision and strategy, change is not the same for all organisations. It has been observed that the pace and scale of change are rapidly increasing, especially in the spheres of social, politico-economic and technological change (Smith, 2011).

Therefore, several qualities would be needed for leadership to be able to provide direction to successful change management. For instance, it has been noted that factors like globalization and advancement in technology are important factors among others that cannot be ignored when discussion change in organisations (Graetz, Rimmer, Lawrence, & Smith, 2000).

Organisations would have to respond to the many complex controlling settings, and in the process engage the services of ever increasing workforce which is mobile, from different cultural backgrounds. Within the environment of institutions of high learning, change champions, like their counterparts in the business world today go through a world characterized by successive and rapid changes more than ever before (Conner, 1992).

There is no arguing, that institutions of higher learning provide livelihood for millions of people the world over. People from different backgrounds and with varying values render services in varied forms, most notably teaching, administrative work and support services that all go to fuel universities, and propel them to achieving their set goals and objectives. So whatever challenges that affect universities are (or should be) of great concern for the people whose lives depend on the survival of efficiency of their institutions. Therefore it should be expected that members of organisations would react to change initiatives in different ways (Armenakis *et al.*, 2007; Lewin 1951). Whereas some may be willing and ready to work with strategies to improve ways of operating, there are others who, for various reasons would want to resist change (Lewin, 1951) and would do all they can to ensure that they maintain how things are done using the same old ways of doing things. This is what makes reaction to change a very important sub-area in organisational change, and this can be viewed in two broad sub-themes: resistance to change and/or readiness for change.

The focus of this study is readiness for change. There are various dimensions of this variable, which operate within the context of culture in institutions of higher learning, to influence successful change implementation.

This section is devoted to the description of organisational change as a broad concept, with some indicators of understanding organisational change generally; the levels and types of change are explained within the context of organisational development; issues of resistance and readiness for change are also discussed, as well as change implementation success.

2.3.3 Models for Understanding Change in Organisations

Every day, all the time, organisations change (Burke, 2011), either gradually and in an unplanned manner, or planned, on a large/small scale. It is the element of planning that necessitates the creation of readiness for change, and how this can have effect of the success of any change initiative.

Therefore, in discussing change readiness, it is important to explain contextually what change in organisations is, and to specify the perspectives of organisational change relevant for this study. It has been established that organisations change every now and then, and this is a reflection of the current and future trends in the extent to which the external environment varies, making organisations to play catch-up (Burke, 2011). It is argued that it is advisable for organisations to be built in a manner that make them anticipate change, and get them to encourage, not avoid change (Lawler & Worley, 2006). This should be done in such a way that they would not be expecting permanent stability because organisations are open systems (Katz & Kahn, 1978) and they should not expect everything around them to remain constant all the time; change should be seen as the norm. As a result, changes in organisations are to be expected. For instance, in their book, *Built-to-change: How to achieve sustained organisational effectiveness*, Lawler and Worley (2006) have observed that even though organisations find themselves in changing business environments this is not news; the element likely to be 'news' is how fast organisations change and how rapidly change is occurring.

Difference scholars define organisational change differently. For instance, Zaltman and Duncan (1977) see change as an alteration within a system that reflects important elements like the structures, processes, and/or behaviours. To facilitate the objective of

this chapter, key models are used, firstly, for purposes of creating a representation, to show the construction or appearance, and, secondly, for purposes of clarity, direction and interpretation of the concepts used. It is important to note that one commonly used metaphor in organisational studies is *organism*, a borrowed term from the life sciences, in which an organisation is described as an *open system* (Burke, 2011). That is, like a living organism, an organisation has inputs, which go through a process and finally generates outputs. The rationale for conceptualizing organisations as open systems rests on the understanding that organisations do not exist in isolation; that there is interdependency between organisations and the environment, and they continue to interact with elements of the environment including resources such as money, labour and relevant material for processing and transforming into output (including goods and services), for continual existence. What this means is that whatever affects the environment has the potential of affecting the organisation, and the degree of severity depends on context factors and capacity to handle external turbulence. This has implications for boundaries of organisations (Katz & Kahn, 1978). Bess and Dee (2008) argue that systems theory focus on stability, not change, and that change is seen as a kind of interruption of state of equilibrium. There is however, a school of thought, that for organisations (as systems), change should be seen as a normal thing, ongoing, and that organisations should be regarded as undergoing constant change with intermittent states of equilibrium in temporary conditions (Bees & Dee, 2008; Luhmann, 1995). When this argument is taken further, it implies that the challenge will then be for leadership of institutions to simultaneously strike a balance in terms of strategizing all the time to handle issues of change (which is constant) in their everyday business, and attempt to maintain (or create states of equilibrium as they struggle to ensure stability (Bess & Dee 2008). This interesting observation in the form of a model would present a more

challenging trend in universities where it is important to ensure more stability and institutionalization of what 'works well', for continuity/survival, competitiveness and success instead of constantly changing procedures. However, for private universities (especially those which are profit oriented) this may be the basis for scanning the environment constantly for signals that will inform decisions to either continuously use the same processes and structures or adapt their ways of doing business. Given that the environment is fluid, changing all the time, and given the rate at which technology and global development are fast pacing, and with the changing needs of people for education, it is important to know something about change, and how useful it can be for organisations.

2.3.4 Reactions to change: Resistance vs. Readiness

Several studies have paid attention to the extent to which *organisations* prepare themselves for change, and this reflects how they implement and react to change initiatives (Armenakis & Bedeian, 1999; Oreg, Vakola & Armenakis, 2011; Porras & Silvers, 1991; Weick & Quinn, 1999). Change situations are likely to generate reactions that will differ from situation to situation, person to person, and can be dependent on several factors. It is believed though debatable, that most people are likely to seek new experiences, but it has been established that there are others who may resist whatever comes to disturb the status quo (Cook & Hunsaker, 2001; Lewin, 1951). A renowned social scientist, William Isaac Thomas identifies what he describes as the four basic personality forces or wishes of people: *The wish for (i) new experiences, (ii) security, (iii) recognition and (iv) the wish for responses* (cited in Costley & Todd, 1987, p 448). Therefore, it will be important to consider some of these ideas when analysing people's reactions to change, especially when the opinion people have can affect the success of

change initiatives significantly. For instance, studies show that people become dissatisfied and could leave or be absent from work consistently when they are made to perform repetitive jobs, or are assigned jobs with limited scope such as counting forms, filing reports, changing bottles for cracks, sorting coupons, or any other jobs, consistently show high rate of (Costley & Todd, 1987). In such cases, employees may seek, and possibly welcome change initiatives, and in situations where management fails to take steps to bring about the needed change, dissatisfied employees may indirectly react in so many ways, such as disrupting work and staging accidents, or in some cases developing resentment towards management.

Overall, it boils down to determining the extent to which any change can succeed (Oreg, Vakola & Armenakis, 2011), and one factor that cannot be ignored in an attempt to understand organisational change is how change recipients react to introduction, implementation and sustaining the gains (if any) of organisational change (Fugate, Kinicki, & Prussia, 2008; Oreg, 2006). It is common and understandable for different people to think and behave differently towards the same situation because they may have different values and interests, and so would evaluate the same situation differently. *Individual differences*; this is one basic principle in psychology and is critical but often ignored when discussing reactions to change. Some authors discuss reaction as one coin with two sides: *resistance to*, and/or *readiness for*, change (Armenakis *et al.*, 1993). It has been observed that in considering these twin-variables, the presence of one can have direct implication for the absence of the other, but this relationship is not a causal one. Whatever the strength of the relationship, these (often ignored) variables have significant influence on success or failure of planned change initiatives (Walinga, 2008). In discussing attitudes towards change in organisational studies, scholars use several

terminologies, common among these are resistance to change, willingness to accept change, openness to change, reaction to organisational change and readiness to change (Oreg *et al.*, 2011). The current study focuses on readiness for change, but to discuss this variable, it is important to mention briefly what resistance is, and the possible implication for readiness.

2.3.4.1 Resistance to change

Readiness for change could just be one very important way of minimizing employee resistance to change (Walinga, 2008), but the two concepts are not necessarily directly opposite (Burke, 2011). Apart from individuals who frequently seek risks as a way of obtaining recognition, self-esteem, or self-fulfillment, it has been observed that most people have a negative attitude towards change that can be a threat to status, influence, pay or job security (Cook & Hunsaker, 2001; Dent & Goldberg, 1999; Robbins, 1993). That is, when in an organisation, the introduction of change initiative is perceived as a potential threat, it is frequently resisted. One of such forms that have been cited as constituting resistance to change is the situation in which employees willingly deceive authorities, for example, staging an “intentional” accident, to draw attention to the need for change (Piderit, 2000). Some studies describe resistance to change as a cultural variable that plays important roles especially in institutional transformation.

2.3.4.2 Readiness for Change: Theoretical Basis

Organisations dread resistance from employees but few may not be taking the necessary steps to assess readiness before introducing change initiatives. Among numerous authors (Armenakis, Harris, & Mossholder, 1993; Lewin 1951), there is a concern about determining the extent to which people in organisations are ready for change, so as to provide direction for leaders of change to identify any significant gaps that could exist

between their expectations of the change initiative, and those of other employees, with the intention of instituting measures to ensure change implementation success (Armenakis *et al.*, 1993).

Change readiness as a construct has been described differently by different authors. It is common to find in the literature constructs that have been used interchangeably, such as readiness for change, degree of buy-in among organisational change recipients (Armenakis *et al.*, 2007), commitment to organisational change (Herscovitch & Meyer, 2002), openness to change, and cynicism about organisational change (Choi, 2011). Choi (2011) further indicates that even though there are similarities in the meanings of the various construct that describe change readiness, each has slightly different meaning, and the use of a concept usually provides varied details regarding the extent to which organisational members evaluate and feel about introduction and implementation of change efforts.

Some scholars argue that change readiness is a reflection of people's belief and the attitudes to adopt together with their intentions of ensuring that change efforts which affect them directly would succeed given the organisational capacity and support from significant others (Armenakis *et al.*, 1993). In psychology, this can be described as a "cognitive precursor" to two critical reactions to change, namely resistance to, or readiness (support) for change (Armenakis *et al.*, 1993, p.682).

Moreover, there are those who see change readiness (or readiness for change) as organisational members' collective resolve to be committed in implementing change (Weiner, 2009) and also their shared belief in their collective fitness to carry on with the

planned change to its success, what can also be termed as change efficacy (Armenakis *et al.*, 2007; Weiner, 2009). Other researchers (Weiner, Amick & Lee, 2008) describe the concept as a combination of psychological and behavioural preparedness on the part of organisational members to implement organisational change initiatives. This can be more or less present at the individual level (Choi, 2011), group, unit, departmental or at the organisational level (Vakola, 2013; Weiner, 2009). There is organisational readiness for change when individual members in an organisation or group have a certain positive or negative perception or attitude towards a change initiative, and this coincides with other members' views and perception (Holt *et. al.*, 2007; Vakola, 2013).

It has been found that where change readiness is often neglected prior to introducing change intervention, the result could be resistance to change (Armenakis *et al.*, 1993; Walinga, 2008) though the two are not necessarily directly opposite. In some situations, there can be readiness for change, but people will still display some resistance to the same change initiative (Burke, 2011) or the approach adopted in the process of change implementation. Even though there is some evidence to the effect that greater readiness relates to more successful change implementation (Weiner, 2009), there is dearth of studies supporting evidence on the mediating role of readiness between culture and implementation.

It is important at this stage to distinguish between change-readiness assessment, and creating readiness for change in organisations. These are two important related steps taken usually as strategies to achieve success in change implementation. The first, readiness assessment, refers to those activities undertaken to evaluate the extent to which individuals, groups, and systems within organisations are prepared (ready) for change

initiative, and this assessment can take place at the initial stage, or in the course of change implementation, or even at the tail-end of the programme (Armenakis *et al.*, 2007). On the other hand, the process of creating change readiness refers to the set of steps and strategies usually undertaken as part of the planning and initiation of change initiative, getting the people to be psychologically and behaviourally prepared before, during and after change initiative (Lewin, 1952; Schein, 1964). The current study is focused on the former, assessing readiness for change, which will inform the recommendation on the effectiveness of creating readiness. It has been observed that when organisations fail in creating enough readiness, or what is described as effective unfreezing, then they are running into outright failure or resistance from members, regarding change initiatives (Armenakis *et al.*, 2007; Weiner, 2009)

2.3.5 Levels of Change Readiness

The literature shows there are various levels at which readiness can be conceptualised. Readiness for change can be created, observed and evaluated at individual level, in which case, it is seen as “the extent to which an individual believes that a change at the individual level is needed and whether he or she has the capacity for it”(Choi, 2011, p 481). Disciplines that usually are keen on studying individual level of readiness vary but prominent ones are psychology, and medicine (Block & Keller, 1998; Prochaska *et al.*, 1997) especially where these efforts are geared towards helping individuals to deal with behaviours such as smoking, drug addiction that pose threats to healthy life. However, sometimes an individual can be assessed in terms of readiness, to help establish healthy behaviours including physical exercise weight management, and following well-thought nutritional meal plan (Choi, 2011).

On the other hand, readiness at the group and organisational level can be looked at as the extent to which organisational members collectively resolve to be committed in implementing change (Weiner, 2009) and can also be seen to reflect how members in organisations tend to believe and adopt attitudes regarding the changes in the organisation and the feeling that they have what it takes to achieve change results (Armenakis *et al.*, 2007). It is also a reflection of their shared belief in their collective fitness to carry on with the planned change to its success, what can also be termed as change efficacy (Armenakis *et al.*, 2007; Weiner, 2009).

2.3.6 Dimensions of Change Readiness

The value of people in organisations has been constantly echoed, and this assertion is stressed in so many ways. Regarding organisational success, and the processes involved in change implementation, some researchers (Judge, Thoresen, Pucik, & Welbourne, 1999) indicate that organisations do not change, people do, and that the success of change initiatives in organisations is dependent on the extent to which individual members in organisations vary their work-related behaviours (Jones, Jimmieson, & Griffiths, 2005) and attitudes to work, and strategies aimed at achieving success through transformation of some sort.

It is worthy of note that the extent to which the focus is on the individual, is likely a reflection of the orientation of researchers involved. For instance, if success is expected regarding change initiatives the tendency from sociological perspective is to focus mostly on the role of society, whereas from psychological perspective, the emphasis seems to go beyond social context, to the role and importance of the individual members

of the organisation (Porras & Robertson, 1992; Tetenbaum, 1998). What describes the individual's characteristics regarding their readiness for change?

There are different dimensions of change readiness depending on the model in use. Several authors have proposed different approaches to creating change readiness, pointing to the realization that it is important to get people to be change-ready, before implementing the initiative if success is to be expected (Schein, 1964). Beginning with Lewin (1951), several attempts have been made to get to the bottom of the challenges institutions face when planning change initiatives. One of such challenges is change readiness, a critical variable of concern to this study. Lewin's (1947) model: unfreezing, change and refreezing is popular in the literature of organisational change, emphasizing the need to engage in psychologically getting individuals to be ready before the introduction of change, and insitutionalising the changes after successfully achieving the set objectives. Moreover, there are those who propose that in discussing change readiness three dimensions should be considered: the content, context and process (Holt & Vardaman, 2013; Self *et al.*, 2007) because these are all important elements that could affect the outcome.

Change readiness, when looked at as psychological and behavioural preparedness renders it a useful precursor for behaviour (Armenakis *et al.*, 2007). But what are some or the arguments made as basis for readiness creation, especially when discussing organisational change? For purposes of introducing change which is likely to generate mixed reactions, it is important to gauge readiness, and this can also provide the lead to determining progress, and possibly take corrective steps to ensure success (Armenakis *et al.*, 2007). Studies show that readiness is based on several factors, including belief

(Armenakis *et al.*, 2007) and the salient ones, most significant in determining the reactions of change recipient to an organisational transformation are: discrepancy, appropriateness, efficacy, principal support and valence.

The dimension labeled ‘principal support’ reflects the extent to which the change recipients’ readiness is dependent on, or influenced by the support or concern of ‘principal other’ (e.g., the change agents, immediate superior, colleagues, opinion leaders, etc). Next, discrepancy refers to the difference between current and desired state (e.g. performance), and this helps legitimize the need for change, setting the stage of the next dimension, appropriateness which Armenakis *et al.* (2007) describe as the appropriate corrective action that is likely to be taken to help eliminate the discrepancy identified. The role of the individual in readiness is felt when there is mention of the perceived capability of implementing the change initiative, or the belief that they are capable of executing the new behaviours required by the change initiative. This is termed change efficacy (Armenakis *et al.*, 2007). The last but not the least dimension, valence, refers to the attractiveness (from the change recipient’s perspective) that is associated with the perceived outcome of the change (e.g. benefits, rewards, gain-sharing). To some extent, valence addresses the concern regarding ‘what is in it for me’. For purposes of this study, these dimensions proposed by Armenakis *et al.* (2007) have been adopted.

2.3.7 Organisational Change: The Case of Colleges and Universities

Several variables have been cited to have contributed to the growing need for institutions of higher learning to consider changing their ways of doing things. Among other things that have been observed to account for this condition, include knowledge-based

economy, the increasing demand for enhanced quality education, the constant need to rebuild and develop change processes, and to a large extent, the focus of attention and interest on learning, as a shift from emphasis on teaching (Tomàs, Bernabeu & Fuentes, 2011).

It is common for university administrators to attempt responding to changing environmental factors by focusing on strategies, structures, and style, while ignoring (or not placing much emphasis on) behavioural and psycho-socio-cultural factors that could contribute significantly towards the success or otherwise of change initiatives.

In terms of education development, the likely challenges facing countries in the developing world are inadequate technological infrastructure, such as telecommunication networks, and even where these are in existence, institutions of higher learning often contend with limited or irregular electricity generation and supply (Uys, Nleya & Molelu, 2004), to run these systems. The unintended consequences are the negative effects these have on education delivery by faculty and support staff, the quality of education received by students, and the eventual danger to national development in terms of poorly prepared human resources. There could be the financial cost, but the often ignored is what Drucker (1998) noted, that an organisation's decision processes and management structure are also affected once an organisation decides to engage in technological change. The intention, like many organisations, would be to improve performance, and be in tune with realities, but how it is done, is as important as what is done to achieve these objectives.

There is also an upsurge in the need for higher education leading to a surge in the number of private tertiary institutions, and the need for governments to consider

revamping existing institutions (and even creating new universities) as an attempt to help develop human capital of the nation. This also calls for strategizing to take care of these challenges. Perhaps, in line with this argument, there is a call by researchers for higher authorities to consider establishing a new university every week (Daniel, 1998) if really the world over, nations want to meet that demand for tertiary educations. Practically, this would be a burden, not only in getting the infrastructure in place but also getting the needed human resources (faculty and administrative staff) to man these structures. Technology therefore could help in a way, serve the increasing need for education in varied ways, hence the benefits associated with technological transformation in universities. Virtual universities, distance education programmes, and online university systems are some of the options that are currently rolled out (or being considered) as a way of mitigating the challenges facing the world of higher education.

Several other driving forces could account for the need for technological changes in universities, and might influence expected results. For instance, internal and external factors, such as changes in academic leadership and vision, sagging university reputations, under-enrolment (or over enrolment), faculty dissatisfaction with current working conditions, meeting accreditation standards, demand for accountability and value for money, need for quality assurance and assessment (in both teaching and research) could drive change within universities (Gamson, Kanter, & London, 1992; Taylor, 2006). There is also a worldwide drift towards fee-based funding of student education, recruitment/retention of the best staff (Taylor, 2006). In the midst of all these, universities are expected to find new ways to efficiently adapt to the changeable

environments, internal and external, to continue making their impact felt in their communities.

2.4 Change Implementation Success: Process and Outcome

For there to be lessons learnt, and as a way of ascertaining that value is achieved from change initiatives, it is practically important to evaluate change initiatives. Like training, it is through evaluation that there can be specific assertions as to whether change initiatives have been effective or not. Ideally, for a programme to be said to have failed or succeeded, three key steps are recommended: measurement of the situation ‘as it is’ prior to introduction of change initiative, implementation of the change programme and post-programme evaluation. It is important to assess the grounds prior to implementation so that possible challenges could be corrected, and to serve as creating the awareness before, during and after the change initiatives.

Therefore, the burden of responsibility on administrators of technological change is awesome because a little mistake could cause problems to those who will be affected by the change initiatives. It is important therefore, that the change agent (administrator) needs to sharpen the skills and judgement in order to generate cooperative human relations and to better the lives of several people.

There is an element of evaluation of programmes. Organisational studies indicate that change initiatives that fail to materialize outnumber those that succeed (Beer & Nohria, 2000; Burnes, 2004) and the observation is that the intended change initiatives may be well thought of and planned, but the failure could be attributable to implementation failure (Kotter, 1995; Schein, 1999).

Determining what constitute success is quite challenging. It can include different ratings from various perspectives such as quantity, quality and pace of change (Pettigrew, 2000 in Beer and Nohria: 'breaking the code of change'). There is the possibility of achieving quantitative success though with very little concern for 'how' the implementation is carried out. For instance, according to Pettigrew, there can be a situation in which "a poor-quality process may deliver change in a particular episode, but at the expense of reducing the capability and willingness of that part of organisation to contemplate further change in the future. If the goal is sustainable change, the notional success may in reality be a failure" (Pettigrew, as cited in Beer & Nohria, 2000, p.248).

2.4.1 Technology Acceptance

For purposes of this study, change implementation success has been operationalized as technology acceptance. In reviewing literature relating to technology acceptance, some of the relevant theories discussed include the Theory of Reasoned Action (TRA), Theory of Planned Behaviour, (TPB) and the Technology Acceptance Model (TAM). These help throw some more light on the central concept technology acceptance as a measure of successful change implementation.

2.4.2 Theory of Reasoned Action

Readiness for change is a psychological and cognitive variable (Armenakis *et al.*, 1993) that has the tendency of getting people prepared for an outcome. Within the context of this study, technology acceptance can be seen as a voluntary behavioural outcome. Therefore, for individuals to arrive at such a decision as to accept or not to cooperate with technological changes, several factors come into play. In the analysis of situations

such as what this study seeks to explore, Ajzen and Fishbein's (1980) theory of reasoned action (TRA) can be invoked, to a large extent. The theory, among others, suggests that an individual's intention to engage in a particular action is a key determinant of a person's behaviour, and to a large extent, intentions and attitudes vary subjectively. TRA has proven to be a very useful and influential theory of human behaviour studies, and has been used to predict behaviours of people in different environments (Sheppard *et al.*, 1988; Venkatesh, Morris, Davis & Davis, 2003). For instance, TRA has been used to study the extent to which people accept technology (Davis *et al.*, 1989). The thinking grounded in this analysis has been improved upon, and has become known as the *theory of planned behaviour*.

2.4.3 Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) is an extended version of TRA. The TPB is useful in predicting deliberate behaviour, especially where such a behaviour is planned, based on the argument that an individual's attitude towards a particular behaviour has the tendency of predicting that behaviour. It has been observed that one factor that serves as a differentiating factor between the TRA and TPB is what Ajzen (1991) and Ajzen and Fishbein (1980) describe as perceived behavioural control, which refers to the perception people have about how capable they are or can be, in performing a given behaviour. Venkatesh *et al.* (2003) have further observed that several studies have been done to ascertain the successful application of TPB to the understanding of the way individuals tend to accept and use many different technologies (e.g. Harrison *et al.*, 1997; Mathieson 1991; Taylor & Todd 1995). In university setting, the introduction of technology, and the subsequent acceptance to use technology are both planned behaviours. Therefore, the

extent to which staff, academic and administrative workers, as well as students, take decisions to accept (or not accept) to use computers is, and should be a source of concern for the various human resources outfits. And so to narrow such decisions as pertaining to technology, specific theories have been developed, and the prominent among these is the *technology acceptance model* (TAM).

2.4.4 Technology Acceptance Model

Straub, Keil & Brenner (1997) argue that the technology acceptance model (TAM) can be said to be a strong and appropriate model that can be used to understand how people use IT, and that users have the tendency of thinking about how easy it will be, and how useful technology can be for purposes of delivery, before accepting technology when introduced in an organisation. Some studies have been done and the observation is that among the various factors that affect acceptance of technology are an individual's perceived usefulness as well as the extent to which they perceive how easy (difficult) it would be to use the platform or technology related devices such as digitized libraries (Thong, Hong & Tam, 2002). The role of libraries in university education has been enormous and so steps taken to introduce digitized version of reading materials are in the right direction especially in this era of advanced technology. With this, it is useful not only to the teaching staff but students who may be eager and willing to explore further how they could benefit from the internet world and web-based learning platforms. It is therefore not surprising to have a lot of investment going into information technology based research since 1980s (Westland & Clark, 2000). The objectives of most of these researchers are focused on how to improve productivity using advanced technologies, and it is for this reason that they argue for the need for technology acceptance

(Venkatesh, Morris, Davis & Davis, 2003) alongside having the thoughts of improving service delivery with this important tool. The psychology behind getting people to accept technology can better be served with appropriate models in place, and this is expected to have broader outlook, covering a combination of different fields, such as psychology and information systems (Venkatesh *et al.*, 2003).

2.4.5 Integration of Constructs

It has been observed that situations and expectations of others have the tendency to constrain and/or shape behaviour in varied ways, such as using information and norms (O'Reilly, 1989). Similarly, Bandura (1977) argues that almost every learning situation that takes place through direct observation, is actually as a result of vicarious learning—a learning situation in which the individual observes others' behaviours and consequences so as to decide to engage in (or refrain from) such a behaviour. When there is a culture in which people interact frequently with each other, whatever goes on has the tendency to influence the decisions and behaviour regarding what is acceptable and what is not.

There is also the observation that readiness for change is one of the many factors that can contribute to success or failure of change initiatives (Armenakis, Harris, & Mossholder, 1993; Bartunek, Rousseau, Rudolph, & DePalma, 2006). This can be likened to what Lewin (1951) refers to as unfreezing, one of the three conceptions which have become popular in change literature and organisational studies. Readiness can be seen and conceptualized in different ways.

2.4.5.1 Organisational Culture and Change Readiness

Organisational culture has been cited for the role it plays in organisational effectiveness (Cameron & Ettington, 1988; Cameron and Freeman, 1991) and also in change implementation success (Jones, Jimmieson & Griffiths, 2005). Studies show that organisational culture to a large extent has the capacity to mediate how the systems and the people in the organisation handle internal and external forces (Chaffee & Tierney, 1988) that could be as a result of changing dynamics in the world of work.

There is also the argument that universities need to do a lot to create an environment that promotes change. This view expresses the necessity with which institutions of higher learning, to not only build but also adopt strategies relevant to meeting the challenges that come with education in recent times (Hanna, cited in Tomàs *et al.*, 2011). When this is done effectively, universities as institutions of higher learning stand well prepared for the changing terrain of world of education. Given this importance, it becomes imperative that institutions of higher learning need to set organisational cultural platforms likely to promote the willingness on the part of the people to accept change, and to change (Tomàs *et al.*, 2011).

The challenges of modern times compel educators and administrators of institutions of higher learning to strategize in handling issues of standards, reputation and relevance of university education. Therefore it is important that some schools think of investing in their people and encouraging innovative thinking and generating cultures that promote hard work (Taylor, 2011).

Studies indicate that there is the need to strategically combine a number of critical factors to get what can be described as a well-adapted university (Sporn, 2001). Among other

things, Sporn (2001) observed that a university with clear mission and good definition of goals, as well as organisational culture stands the chance of making progress. Clear mission could get everyone on board, trying to help achieve success; clear mission could be a motivating factor that gets people to be committed to executing their itemized job descriptions, and this will go a long way in contributing directly or indirectly to the progress of the institution. Management practitioners have it that when goals are clear, and are tied to the overall mission and strategy of an organisation, they become reasonably achievable, because such goals are likely to be specific, measurable, achievable, relevant and with time frame (Latham, 2003). As a result, when situations surrounding the achievement changes, and there is the need for adjustment to be made, individuals may be willing to do so. This is in line with what Meyer and Maltin (2010) observed about commitment to organisation, and by implication, change efforts (Herscovitch & Meyer, 2002). This can also be a reflection of the type of leadership, and the extent to which there is effective interpersonal relations.

There is also the observation that it is important to understand that human change is a psychological and dynamic process that sometimes requires one to restructure their thought processes and take the steps to unlearn and relearn relevant elements (Schein, 1996).

Some studies indicate that where employees place much emphasis on human relations, they are likely going to demonstrate signals of change readiness, and this has the tendency of predicting successful system change implementation (Jones, Jimmieson, & Griffiths, 2005).

2.5 THE CONCEPTUAL FRAMEWORK

2.5.1 Introduction

This section summarizes the relationship among all the critical variables in a meaningful way, thereby generating the conceptual framework for this study (refer to Figure 2.1). The objective is to establish further bases for exploring the relationships, pointing out key lines of connection in a meaningful manner that informs data analysis and also in line with study objectives.

2.5.2 The Concept

The concept of the study could be situated in Lewin's (1935) field theory, represented by the basic equation: $B = f(P, E)$ —that is, behaviour is a function of the person and environment (where 'B' is behaviour, 'P' is person or personality or personal attributes, and 'E' is environment or situation). That is, behaviour will be dependent on the extent to which personal attributes will interact with environmental factors. For purposes of this study, the environment is represented by *organisational culture*, which can affect the thinking of individuals to be (or not to be) *ready for change* and this could result in 'B' which is the behaviour of interest, in this case *technology acceptance* (i.e. representing successful change implementation).

Therefore, following the equation: $B = f(P, E)$, this study can be situated in the frame as follows:

$$\textit{Technology Acceptance} = f(\textit{Readiness for change}, \textit{Organisational Culture}).$$

That is, since the interaction between the individual's attributes and the environment has been observed to influence behaviour (e.g. Judge & Kristof-Brown, 2004; Kantor, 1924; Lewin, 1935), this study seeks to explore the extent to which readiness for change

(which is a psychological concept) would be influenced by the various cultural elements, to predict the outcome behaviour (technology acceptance). That is, how does culture affect employees' preparedness for change, and to what extent will successful change implementation (i.e. technology acceptance) be seen as being the result of the psychological variable of change readiness, brought about by the culture of organisations?

That is, behaviour will be dependent on the extent to which personal attributes will be influenced by environmental factors. For purposes of this study, the environment is represented by *organisational culture*, which can affect the thinking of individuals to be (or not to be) *ready for change* and this could result in 'B' which is the behaviour of interest in this case *technology acceptance* (i.e. successful change implementation).

Therefore, following the equation: $B = f(P, E)$, this study can be situated in the frame as follows:

$$\text{Technology Acceptance} = f(\text{Readiness for change}, \text{Organisational Culture}).$$

That is, since the interaction between the individual's attributes and the environment, has been observed to influence behaviour (e.g., Judge & Kristof-Brown, 2004; Kantor, 1924; Lewin, 1935), this study seeks to explore the extent to which readiness for change which is a psychological concept (Armenakis *et al.*, 2007) would be influenced by the various cultural elements, to predict the outcome behaviour (which is technology acceptance). That is, how does culture affect employees' preparedness for change, and to what extent will successful change implementation (i.e. technology acceptance) be seen as resulting from the interaction between psychological variables of change readiness, and the culture of organisations?

Substituting the key variables of this study in the equation, this can be represented in the hypothesized model as found in Figure 2.1:

2.5.3 Hypothesised Model

The study model is presented below in Figure 2.1 that follows

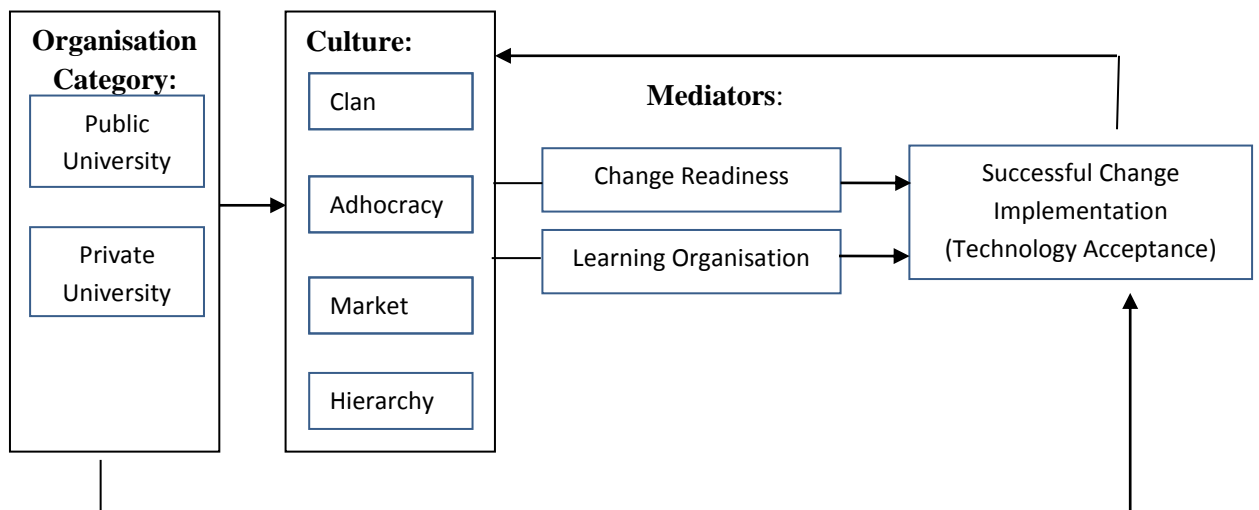


Figure 2. 1: Hypothesised Model

Figure 2.1 details the key variables of interest in the study, in the form of hypothesised model. The thinking is that public and private universities are expected to have different cultures, and these culture types: (clan, hierarchy, adhocracy and market cultures) are proposed to influence success in change implementation through change readiness and organisational learning. In other words, readiness and learning are considered mediators in the relationship between culture and technology acceptance. The model also suggests that there would be a form of relationship between the type of university and technology acceptance; and technology acceptance is likely to further influence the culture of the institutions.

These relationships are further stated in the hypotheses of this study as follows.

2.5.4 Hypotheses

From the model above, but based on review of related studies and study objectives, the following hypotheses were tested:

H1: There will be a significant positive relationship between change readiness and successful change implementation.

H2: Private universities will show higher readiness for change than public universities.

H3: Public universities will display characteristics as learning organisations and this will be significantly different from private universities

H4: Private universities will display significantly more characteristics of clan culture than public universities.

H5: Private universities will display significantly more characteristics of adhocracy culture than public universities.

H6: Private universities will succeed more in change implementation as compared to public universities

H7: Organisational learning will mediate the relationship between organisational culture and successful change implementation.

H8: There will be a significantly positive relationship between organisational culture and change readiness

H9: Readiness for change will play a mediating role in the relationship between organisational culture and successful change implementation

2.5.5 Research Questions

In addition to the hypotheses listed in the preceding section, the research sought to address the following research questions, which guided the qualitative component of the research:

Research Question 1: How different (or similar) are students' perception of change readiness from that of employees?

Research Question 2: To what extent can change readiness be said to be a relevant factor for successful change implementation in organisations?

With this, the researcher spent some time interviewing employees, and taking open-ended responses from students to help provide answers that would serve the objectives of the study. Eventually, the responses from this perspective were integrated in the final model in terms of supporting the relevant variables.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents a detailed description of how the study was conducted. It begins with a detailed account of the research design and approach, the study setting, followed by a description of the key components such as the population of interest, sample frame, and actual sample used. It also describes the instrument used and processes involved in developing the various scales, with examples of some of the items found in the data instrument. Further, the chapter details the procedure adopted for data collection and a breakdown of preliminary studies as well as activities that led to collection and preparation of the data for analyses.

3.2 Research Design and Approach

The nature of the study, and the variables of interest in this study determined the adoption of unique strategies in line with methodology and approaches used in psychology that allow for structure and flexibility in collection, analysis, interpretation of data, as well as discussion.

The cross-sectional survey design was used in this study. Data collection was in phases, beginning with quantitative surveys and ending with qualitative (interviews), in a manner that allowed for flexibility, clarification and that which led to achieving study objectives. With this approach, the intention was to test the variables of interest using large sample of participants, and follow up with a more in-depth consideration of a few cases for purposes of triangulation using interviews in the last phase of data collection. Because quantitative techniques were dominant, and sequentially preceded the less-dominant

qualitative techniques in this study, the design can also be described as the QUAN→qual design (Johnson & Onwuegbuzie, 2004; Morse, 1991). That is, the study made use of quantitative techniques as the main technique for data collection and analysis (represented by upper-case QUAN), compared with qualitative (represented by lower-case, qual).

Generally, it has been observed that scientific studies are carried out using two distinct approaches based on polarized schools of thought: post-positivist quantitative and constructive qualitative research (Bartholomew & Brown, 2012). However, there are others who advocate the use of mixed methods, which can be said to have emerged from blending the polarized thoughts in such a way that the weaknesses of one is offset by the strength of the other (Molina Azorín & Cameron, 2010; Tashakkori & Teddlie, 1998). The current study was conducted using the mixed method because this helps in addressing the research problems of this study. Moreover, one of the variables in the current study is organisational culture, which can be studied using either qualitative or quantitative approach (Cameron & Ettington, 1988; Cooke & Rousseau, 1988; Rousseau, 1990; Schein, 1990). This was one of the reasons for choosing a flexible method, the mixed method.

It should also be noted that the use of qualitative approach in this study does not in any way suggest that it is a requirement, but probably because it is sometimes a little complicated to quantify culture as a construct (Cameron & Ettington, 1988). As an example, interviews can be used together with questionnaires, in studying how structural change could influence aspects of climate of relationship in British boarding school (Pettigrew, 1979).

The literature on organisational culture reveals that most studies conceptualize culture in a manner that makes it relatively easy to link studies with qualitative approaches and tools (Bellot, 2011). Several studies on organisational culture used some form of qualitative approaches (Puplampu, 2004, 2012) and strategies that usually dominate in the process are observations and interviews. Some of the reasons often cited for the use of qualitative methodology were attempts to make for the lapses inherent in the use of the other opposing method (quantitative approach). For instance, some researchers argue that the use of quantitative instrument in studying and measuring the construct of culture may not be appropriate for the reason that very important details that form key parts of understanding culture are likely to be lost (Bellot, 2011). To take care of such a challenge, it is important to use some qualitative approach to get the participants who are knowledgeable about their culture to describe it in detail by responding to in-depth interviews. It should however be noted that using strictly qualitative approach is likely to pose some threat to comparing different institutions which may have entirely unique cultural elements.

Basically, the mixed method is an integral means to asking complex psychological questions without imposing Western norms and ignoring contextual factors (Bartholomew & Brown, 2012), and the rationale is to serve as the bridge between strictly quantitative and purely qualitative approaches. This choice has nothing to do with taking-sides in the seemingly world views about “the best approach” for research. The present study has taken cognisance of the view that the choice of an approach and of methodology for data collection has some influence on the choice of test for data analysis, interpretation and discussion of the study.

Furthermore, some researchers have proposed utilising multiple methods in studies in order to engender more complete understanding of variables especially within cultural contexts (Church & Katigbak, 2002; Diaz-Loving, 2005; Kim & Berry, 1993). For instance, Duncan (1989) reportedly used a combination of observation, interview and questionnaire in studying culture. It is also common to find several other sub-disciplines in psychology (and related fields) using the mixed methods (Gelo, Braakmann, & Benetika, 2008). Some of these include, cross-cultural psychology (Harkness *et al.*, 2006; Karasz & Singeli, 2009), and developmental psychology (Harkness *et al.*, 2006; Yoshikawa, Weisner, Kalil, & Way, 2008). It is interesting to note further that a stalwart in psychology and cognitive development in children, Jean Piaget, is reported to have made use of relevant research methods such as interviews, observations and quasi-experiments, in the course of his groundbreaking investigations (Müller, Carpendale, & Smith, 2009).

Basically, the flexibility it provides, and the need to engage in deeper exploration of issues concerning the culture variable constitutes the reasoning behind the combine use of the qualitative and quantitative approaches in the current study.

3.3 Research Setting

The study was carried out in ten (10) universities made up of five (5) public and five (5) private universities in Ghana. These are institutions of higher learning, with key objectives of engaging in services that reflect teaching, learning, research as well as consultancy services. The two main groups involved are:

- (i) Public universities (universities under Government of Ghana subvention)
including University of Ghana, University of Cape Coast, Kwame Nkrumah

University of Science & Technology, University of Education Winneba, and the University for Development Studies.

(ii) Private universities (selected) include: Valley View University, Central University, Methodist University, Islamic University, and Wisconsin International University.

The inclusion criteria: Affiliation and religious background of these universities were held constant, that is, selection was not based on religious orientation or affiliation with other institutions; the major variable of concern is sector: either public or private. Moreover, for inclusion, a university should have been in existence for at least ‘five (5) years’ as an accredited University/University College in Ghana. This is because the study is about culture and change, and so it is assumed that an organisation should have a history and a people who can be said to be knowledgeable insiders, to relay information about culture and change (Cameron & Ettington 1988; Schein, 1990). Finally, one criterion is the willingness of the university to participate in the study. This is because it is possible for a university to have all the above mentioned attributes but may not have the interest to take part in the study. Therefore, following informed consent, those universities willing to participate gave the go-ahead for this study to be carried out using the employees and students.

3.4 Sample and Sampling Technique

Using a combination of convenient and stratified sampling techniques, a sample of public and private universities in Ghana, made of five (5) public universities and five (5) private universities. It should be noted that for this study, the unit of analysis is the two groups of universities: public and private. The targeted individuals came from academic

staff, non-teaching staff, and students. The inclusion rule was for each university to have been in existence for at least five (5) years, and individual participants should have spent at least 2 years in the university on the basis that in some instances, culture can be said to be a reflection of society (Hofstede, 1980) and historical events (Cameron & Ettington, 1988). This at least ensures that the participants have some knowledge of what their institutions are about, in terms of the mission and vision, and operations of the entire institution. What this means is that, institutions of higher learning and the people within should have created some history in the course of time, to have been selected for the study, making them knowledgeable insiders enough to provide responses to questions in the course of data collection.

The use of stratified and convenient sampling was to ensure adequate representation of these stakeholders of the institutions. For the surveys, out of the targeted participants of about 700 males and females, the researcher expected 350 from public universities and about the same number (350) from the private universities. Of the 700 questionnaires that were administered, 468 were returned and used in the study. This represents a response rate of approximately 67%. This excludes the personal interviews of 60 employees. The following table summarises the distribution of participants who actually took part in the studies:

Table 3.1: Summary of Sample Characteristics: Employees

Dimension	Gender		Age		Tenure		Staff		Employees (by Type of Univ.)	
	M	F	Min	Max	Min	Max	Academic	Admin	Public	Private
Frequency	128	57	32	71	2	27	92	93	111	74
Percentage	69%	31%	-	-	-	-	50%	50%	60%	40%

Total number of employee respondents: 185 (This category excludes 60 employees interviewed)

In Table 3.1, a total of 185 employees responded to the questionnaires, and this exclude interviewees. Specifically, 128 males and 57 females were involved, and the age range was 32 years to 71years. For purposes of the study, the inclusion criterion in terms of number of working years in the university is 2years, and it was observed that some of the respondents worked for a maximum of 27 years. In terms of category of workers in the universities, there were 92 teaching staff and 93 non-teaching staff among the respondents, constituting 50% each from these categories. For the type of university, the respondents were 111 representing 60%, and 74 representing 40% for public and private universities respectively.

For purposes of running the interviews, sixty (60) male and female workers of public and private universities were selected purposively. Participants have been working in their respective universities for at least two years (i.e., in line with the inclusion criterion for all participants of this study). In terms of categories, there were 30 teaching- and 30 non-teaching staff, across faculties, departments and institutes and for both public and private universities. These have been presented in Tables 3.2 and 3.3 that follow.

Table 3.2: Demographics of respondents interviewed (Employees: By Gender only)

Gender	Public Universities (Total of 5)	Private Universities (Total of 5)	Total
Males	15	15	30
Females	16	14	30
Total	31	29	60

In table 3.2, fifteen (15) males each were interviewed in the public and private universities. With respect to female interviewees, sixteen (16) were selected from the

private universities and fourteen (14) from public universities. The demographics for the ranks and work categories of the interviewees are displayed in Table 3.3 that follows.

Table 3.3: Demographics of Respondents Interviewed (Employee: By Work Category)

Work Category	Public Universities (Total of 5)	Private Universities (Total of 5)	Total
Teaching Staff	15	15	30
Admin. Staff	17	13	30
Total	32	28	60

In Table 3.3, irrespective of gender and type of university (public or private), a total of 15 teaching staff were each interviewed in both public and private universities. These included lecturers, senior lecturers and professors, who have spent at least two (2) years of working life in their respective universities, either public or private.

Table 3.4: Summary of Sample Characteristics: Students

Dimension	Gender		Age		Student Level		Faculty		Students (by Type of Univ.)	
	M	F	Min	Max	Undergrad	Grad	Humanities	Science	Public	Private
Frequency	165	118	23yrs	41yrs	187	96	195	88	152	131
Percentage	58%	42%	--	--	66%	34%	69%	31%	54%	46%

Total number of student respondents: 283

With regards to students, a total of 283 students from both public and private universities participated by completing open-ended questionnaires. Of this number, the ratio was 165 (58%) and 118 (42%) for males and females respectively. There were 187 undergraduate students, and 96 graduate students, constituting 66% and 34% respectively. This generally gives 152 and 131 students for public and private universities respectively,

making it 54% students from public universities as against 46% from their private counterparts.

3.5 Basis for Selecting the Stakeholders for the Study

The stakeholders in this study are academic/research staff, administrative staff and students. It is important to mention that assessing change readiness and evaluating change implementation success can be done in so many ways. Studies show that very few models have been developed for predicting the extent to which organisational change outcomes could be successful or not. Therefore, it is the practice for some consultants to engage mainly top management (and rarely non-managerial employees) in their attempt to assess the extent to which a particular change programme is successful or not. This has its own shortcomings, resulting in hue and cry among practitioners and theorists, leading to the conscious search for a more comprehensive approach for assessing success. One of such strategies is what Freeman (1984) called the stakeholder theory, which resonated with several researchers in diverse fields such as corporate (social) responsibility (Buchholz & Rosenthal, 2004), and business ethics and project management (Turner & Simister, 2000). To establish some bases that success in organisational change implementation could be depended so much on the support that comes from various stakeholders, studies further show that in the area of change management, the stakeholder theory has found favour (Peltokorpi, Alho, Kujala, Aitamurto, Parvinen, 2008; Trader-Leigh, 2002), hence the choice to engage not only managerial staff in the current study, but also the administrative, academic staff and students, as key stakeholders of university education.

What constitutes 'stakeholder' is relative, but in a change project, a stakeholder could be seen as "any group or individual who can affect or is affected by the implementation of

the change project” (Freeman, 1984, as cited in Peltokorpi *et al.*, 2008, p.419). Therefore, the current study draws on Freeman’s (1984) and Peltokorpi *et al.*’s (2008) conception, and considers the key stakeholders in university education as important in both the assessment of readiness for change, organisational culture and successful change implementation.

Moreover, Savage, Nix, Whitehead, and Blair (1991) have it that within organisational contexts, especially where the stakeholders involved are active, knowledgeable and interdependent, it is important to observe practical stakeholder relationship management. This is a reflection of what the case is in university environment, especially when it has to do with change initiatives in these knowledge generating institutions.

For this study therefore, three (3) stakeholders, namely (i) lecturers/researchers, (ii) administrative/support staff, and (iii) students, were identified and sampled for the study across the two broad categories of public and private universities.

3.6 Measurement/Instrument/Scales

The instruments used for data collection had a blend of qualitative and quantitative characteristics. Mainly, interviews and questionnaires were used for data collection sequentially, and complementarily.

This study used two different sets of questionnaires: one for a group of university employees made of lecturers, researchers and administrative/support staff members. The other set was designed purposely for soliciting information from students. However, there were some similarities between these two separate sets of instruments, which are detailed later in this section.

3.6.1 Survey for Employees

The questionnaire designed purposely for employees was made of five (5) sections. The first, **Section A**, sought the demographics of participants, including gender, age, type of institutions (that is, public- or private-university), employment type (that is, whether full- or part-time), section (that is, humanities or sciences), tenure, job role (academic/administrative), and frequency of meetings within a duration in academic year (semester or trimester).

Section B of the survey instrument presented the subscale on organisational culture. This scale measures four types of institutional cultures, and was developed by Cameron and Freeman (1991). It has been used in previous studies on institutional effectiveness (Cameron & Ettington, 1988; Fjortoft & Smart, 1994; Smart & Hamm, 1993; Smart, Kuh & Tierney, 1997; Smart & St. John, 1996; Zammuto & Krakower, 1991). The four culture types captured in the subscale are *clan*, *adhocracy*, *hierarchy* and *market cultures*. In all, the scale contains 16 items, with each culture type having four (4) items. Each item is a reflection of the various core elements such as the institutional characteristics, institutional leadership, institutional “glue”, and institutional emphases. Some of the items include the following (refer to Appendix A for the full scale):

- (i) *This institution emphasizes human resources. High cohesion and morale are important.*
- (ii) *The glue that holds this institution together is formal rules and policies. Maintaining a smooth-running institution is important here*
- (iii) *This is a very formalized and structured place. Bureaucratic procedures generally govern what people do*

The Cronbach alpha values for the subscales are as follows: Clan Culture= .76; Adhocracy Culture = .78; Hierarchy Culture = .78; and Market Culture = .50.

This scale was originally administered in a way that asked participants to rank four items, by dividing 100 points among the four statements, based on the extent to which each item describes their institution. However, for purposes of this study, the Likert-type scale was used.

Respondents were asked to respond to the statements based on a rating scale ranging from 1=Strongly Disagree to 7=Strongly Agree.

Section C presents the measure for learning organisations. In order to assess the extent to which universities can be said to be learning organisations, the Dimensions of a Learning Organisation Questionnaire (DLOQ) was used. The principles of DLOQ informed the choice of questionnaire by Holyoke *et al.* (2012) when they did a study on selected public and private colleges and universities in the United States. It is a 7-item scale on Organisation's Learning Culture developed by Marsick and Watkins (2003), and assesses the extent to which members in the various universities engage in sharing experience among themselves, and how this can facilitate institutionalization especially before and after change implementation. It has items that reflect three main levels: individual level, team/group level, and organisational level. Some of the items include: (i) In my organisation, people spend time building trust with each other; (ii) My organisation recognizes people for taking initiative; (iii) In my organisation, leaders continually look for opportunities to learn. The Cronbach alpha was .88.

Respondents were asked to respond to the statements based on a rating scale ranging from 1=Strongly Disagree to 7=Strongly Agree.

Section D presents the change readiness measure. Change Readiness in this study was assessed using the Organisational Change Recipients' Beliefs Scale developed by Armenakis, Berneth, Pitts and Walker (2007). There are 24 items and 5 dimensions in the scale, defined below:

1. **Appropriateness:** The appropriate corrective action taken to help eliminate the discrepancy identified. This subscale has 5 items.
2. **Efficacy:** The perceived capability of implementing the change initiative, or the belief that they are capable of executing the new behaviours required by the change initiative. There are 5 items in this subscale.
3. **Discrepancy:** A difference between current and desired state (e.g. performance). This helps legitimize the need for change. This is made of 4 items.
4. **Valence:** The attractiveness (from the change recipient's perspective) associated with the perceived outcome of the change (e.g. benefits, rewards, gain-sharing). This subscale is made of 4 items.
5. **Principal Support:** The influence of, or support from, change agents (e.g. immediate superiors, colleagues, etc.) and opinion leaders on people who are affected by a change situation introduced in the organisation. One basis for including this dimension to this study is the thinking that leadership and their beliefs/mind-sets have been observed to have significant influence on what they choose and the approach they may adopt when thinking and solving problems (Hambrick & Brandon, 1988). And so where they decide to provide the necessary support, or where the people to be affected by the change initiative believe that they will get the support they deserve from the leadership, the tendency is for

them to be ready, and subsequently accept the change initiative. There are 6 items in this subscale.

Participants were given options to choose from the changes that reflect technology acceptance, and which have direct bearing on their work (or in the case of students, their studies). Specifically, they responded to the items in the questionnaire based on one or more of the following change situations in their universities at least in the past two years:

(1) The use of computer system and the Internet in teaching and learning efforts, as well as for administrative work; (2) the use of computer system and Internet for student admissions, sharing information within (and outside of) the institution; (3) using information and communication technology to change administrative procedures so as to remove “administrative bottlenecks” (e.g. regarding procurement, promotion/tenure procedures, salary issues, etc.); (4) using information technology for expansion of university’s overall objectives for wider coverage and strategies reflecting income-generation (e.g. Distance Education, Weekend/Sandwich programmes, Short-Courses for ‘non-academic people’, etc.).

The intention was to get change paradigms that would be seen as common to the participating universities, and the above change descriptions were arrived at following personal observation about the universities, and informal discussions the researcher had with individuals in the participating institutions, prior to designing the instrument. Some of the items in the scale include:

- i. *I believe the change initiatives would have a favorable effect on our procedures of doing things.*
- ii. *We have the capability to successfully implement changes in this university.*
- iii. *The majority of my respected peers were dedicated to making the changes succeed.*

Respondents were asked to respond to the statements based on a rating scale ranging from 1=Strongly Disagree, to 7=Strongly Agree.

From the responses, a global score was computed for the analysis. This is in line with the views of the scale developers (Armenakis, Berneth, Pitts and Walker (2007) when the authors indicated that the scale can be used together with other subscales, or the individual dimensions can be taken to stand alone. In developing the Change Recipient's Belief Scale, the authors observed that for internal consistency, the coefficient alpha was 0.89 for the scale.

Section E of the questionnaire details items on technology acceptance as a measure of successful change implementation. The scale was developed along two perspectives: content and process. The content aspect focuses on technology acceptance model (since the study specifies technological changes). This brings out the behavioural and cognitive construct dimensions. This scale is made up of a key variable reflecting behavioural intention to use technology. The three (3) key items for technology acceptance are:

- i. *I intend to continue to use the new technology in the future.*
- ii. *I expect that I would use the new technology in the future.*
- iii. *I plan to use the new technology in the future.*

The Cronbach alpha was .92 for this scale.

Respondents were asked to respond to the statements based on a rating scale ranging from 1=Rarely True, to 5=Always True.

Interview Guide Used for Employees.

In addition to the survey questionnaires, interviews were conducted using qualitative techniques. These and other questions used for the interviews were generated as a

sequence, that is, after the quantitative data was analysed. The rationale is that the findings from qualitative analysis will serve as a form of triangulation. Among others, the specific questions used in the interviews include:

1. What would you say is the **culture** in this university, generally? (I mean the critical behaviours or issues defining the way and manner people do things in this university)
2. Given the **culture you just described** and the way ICT/IT is advancing everywhere, how is the university **ready** to embrace any technological changes? (that is using ICT for teaching, administrative work, etc.).
3. For the number of years that you have been working here, what specific **readiness programme** has been carried out by university authorities, prior to introducing change programmes (like ICT use etc)
4. To what extent do the people in this university share experiences about **what works well** OR **what does not work well** for them? Please explain your response.

(Refer to the Appendix for the full set of questions)

3.6.2 Survey for Students

Like the questionnaire for employees, that for students was designed in five (5) sections. The first, **Section A**, sought the demographics of participants, including gender, age, type of institutions (that is, public- or private-university), level, section (that is, humanities or sciences), and number of years in university.

Section B presents the cultural aspects, from students' perspectives. This requested that each student indicates (in an open-ended questionnaire) the extent to which they see their universities as cultural entities. Some of the questions include:

1. I see my university as (PLEASE CHOOSE ONE):

- i. a much formalised place where everything must go through particular procedures (which can take a lot of time to complete).
- ii. a personal place where people interact freely.

2. If there is something you have observed about your university, what would that be, in terms of:

- i. What holds the people together (lecturers, administrators, students)?
- ii. What does your university predominantly care about? (Choose one):
 - a. *People*
 - b. *Formal rules and policies*

Section C of the students' instrument sought to find out about organisational learning issues in universities, using open-ended questioning style. Some of the questions included:

(i) *Do you see anything in your university which points out to you that workers in the university (lecturers and administrative staff) **communicate with each other**, concerning the things that 'work well' and those that 'do not work well'?* Yes or No?

Explain your response:

(ii) *Are there any mistakes that have been repeatedly occurring in the university, which you think should not have been the case?* Yes or No?

Explain your response:

In **Section D**, students were given some guidelines in terms of how they should think about change situations, and based on that, assess the readiness of their respective universities. For instance, the following provides the guidelines, and the line of questioning:

Guidelines: *Thinking about your university, provide responses that reflect the extent to which your university is ready for change, and provides a conducive environment for innovation to take place, especially in the area of:*

- i. *Using computer system and the Internet in teaching and learning efforts, as well as for administrative work;*
- ii. *Using computers and Internet for Admission, sharing information within (and outside of) the institution;*
- iii. *Using information technology to change administrative procedures so as to remove “administrative bottlenecks” (e.g. to improve the process of academic registration, viewing statements and examination results online, etc.).*

The following are some of the questions each student was asked to respond to, and provide explanations for:

1. *With respect to any of the above, how do you see the university as a whole in terms of how people are willing and **ready to accept change**?*
2. *Is your university **well-prepared for the future**, given the advanced technological changes taking place in the world? Yes or No
Explain your response*

They were provided adequate writing space to respond to the questions freely but focusing on the guidelines provided them.

The final section, **Section E** sought to find out the level of technology acceptance from the point of view of students, regarding their respective universities. The scale is the same as the one used for the employee participants. It sought to bring out the behavioural

and cognitive construct dimensions, and is made up of a key variable reflecting behavioural intention to use technology. The items are:

- i. *I intend to continue to use the new technology in the future.*
- ii. *I expect that I would use the new technology in the future.*
- iii. *I plan to use the new technology in the future.*

The Cronbach alpha was .92 for this scale.

Similarly, participants were asked to respond to the statements based on a rating scale ranging from 1=Rarely True, to 5=Always True.

3.7 Pre-Data Collection Procedure

Data collection was done through different means, but basically using the mixed method (i.e., a combination of qualitative and quantitative methods, sequentially and simultaneously). At this stage, different sets of data were collected: pre-data collection, and the main data collection (using survey questionnaires and interviews).

3.7.1 Instrument Standardization and Validation Process

The readiness scale as developed by Armenakis *et al.* (2007) was validated using the Hinkin and Tracey's (1999) approach. With this, the respondents, made of 18 PhD students were purposively selected to rate each of the 24 items on the proposed scale. The idea was for the respondents to provide objective ratings on the extent to which the various items make relevant contribution to the dimensions as found in the scale, that is, to indicate whether the individual statements are consistent with the intentions of the scale developers. These responses were then subjected to analysis for significance, as suggested by Hinkin and Tracey (1999) and Hinkin (1998). The response alternatives for rating were on a Likert-type scale, ranging from 'not at all' to 'completely' consistent

with the dimension for which the item was initially developed. In line with what Hinkin and Tracey (1999) suggested, the items were defined to have the same meaning as the original developers intended, placed strategically on each page to provide a kind of guide for the respondents, but the arrangement of the items were randomised such that the respondents would have to read them and based on their understanding and expertise in defining variables, indicate the consistency of the item with the dimension of their choice. In the process, the data were analysed using the one way analysis of variance (ANOVA) to establish the content validity of the items “by comparing the item’s mean rating on one conceptual dimension to the item’s ratings on another comparative dimension” so as to find out the extent to which the mean of an item is “statistically significantly higher on the proposed theoretical construct” (Hinkin & Tracey, 1999, p 181). The validation process showed that the scale is a good one, hence the decision to use it. The details are given in Table 3.5 that follows.

Table 3. 5: Mean Ratings From Content Adequacy Assessment (Change Readiness) Using Hinkin & Tracey's (1999) Approach. (One-Way ANOVA, with Duncan's test of Multiple comparison).

Scale	1 (PS)	2 (D)	3 (A)	4 (E)	5 (V)
PS1	4.33	1.28	1.72	1.89	1.94
PS2	4.11	1.50	2.56	1.28	1.28
PS3	4.78	1.39	1.44	1.28	1.17
PS4	3.94	1.39	1.44	1.67	2.00
PS5	4.94	1.44	1.56	1.61	1.33
PS6	5.00	1.39	1.33	1.94	1.72
D1	1.33	4.28	2.83	1.50	1.72
D2	1.17	4.61	2.28	1.50	1.78
D3	1.28	4.33	2.50	1.78	1.94
D4	1.67	4.35	3.22	1.94	2.06
A1	1.67	2.50	4.56	2.11	3.22
A2	1.67	2.33	4.26	1.78	3.19
A3	1.44	2.11	4.78	1.50	2.11
A4	1.50	2.22	4.56	1.44	1.72
A5	1.28	3.11	4.17	1.78	2.33
E1	1.22	1.00	1.33	4.78	1.50
E2	1.28	1.39	1.33	4.72	1.67
E3	1.33	1.50	1.94	4.61	1.61
E4	1.67	2.33	1.94	3.89	1.78
E5	1.78	2.00	1.78	4.78	1.50
V1	1.17	1.89	2.72	1.78	4.17
V2	1.28	1.39	1.33	1.61	4.50
V3	1.22	1.78	1.67	2.33	3.83
V4	1.11	2.33	1.83	1.83	4.89

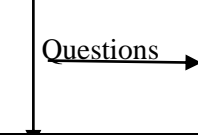
N=18 PhD students.

In Table 3.5, bold items indicate consistency with the original construct. PS=Principal Support; D=Discrepancy; A=Appropriateness; E=Efficacy; V=Valence. It should also be mentioned that the number attached to an item (e.g, 1 in PS1) indicates the order (in this case, 1st) in terms of arrangement in which it appeared in the questionnaire.

With respect to the subscales for measuring culture, preliminary data were collected using interviews and open ended questionnaires. The objective was to talk with selected stakeholders in order to establish which cultural variables to be included in the survey

(questionnaire). Separate preliminary data were collected from the various participating universities for purposes of gaining an insight into their respective cultures, and to help in fine-tuning the culture scale in preparation for the main data collection. This gave the researcher an understanding of what dimensions to include in terms of culture, and what change initiatives to envisage that could run through all the participating universities, for purposes of the study. With this in mind, the researcher avoided imposing a particular change initiative from any particular institution; rather, selected members from each of the participating institutions, presented their versions of what changes were going on, and how the culture is like (in their views) at the time of data collection. These were direct interviews and a minimum of 5 individuals were interviewed in each of the institutions, generating a total of 75 for the preliminary data collection. Participants were contacted in their various institutions. Their responses were analysed and the summary is as follows:

Table 3.6: Summary (Pre-data collection) analysis of responses

Stakeholder Category	Key culture items identified	Change Initiative Observed	Remarks
 Questions	<i>Name any three (3) things associated with your university in terms of culture:</i>	<i>What change situations do you currently find yourselves in, as a university?</i>	
Students	Official; personal; bureaucratic approaches; foreign influence; belief; delays in getting information; lack of maintenance; attitude.	ICT development; internet; Wi-Fi development; physical structures; systems and policies.	Common items were considered in designing the questionnaires for use in the main data collection
Employees	One family; values; morals; bureaucracy; collaboration with parents/guardians; belief; administrative bottlenecks.	Lecture presentation formats; need for constant power supply.	

N=75

Following from the analysis of the pre-data collected, a set of scales were selected and modified to suit the study objectives. This was how the process unfolded in establishing

the validity and reliability coefficients of the instruments (the respective coefficients are reported above, in this chapter).

For the main data collection, introductory letters were then prepared and sent to the various administrative authorities, to seek consent for data collection. Specifically, the Registrars of the universities were contacted and consent was sought from the administration/management of individual universities, after which questionnaires were administered to the participants.

After the questionnaires were administered, and data analysed, another set of interviews were conducted to capture issues that were missing from the questionnaire administration stage. It was also to triangulate and to seek to reveal deeper meaning in the data (Patton, 2002).

Since issues of culture are better handled with inclusion of the people concerned, in addition to the data gathered using questionnaires, separate interviews were scheduled and held with selected employees, as a way to add some richness to the main data collected.

The qualitative process which lasted for (averagely) an hour, involved voice-recording of semi-structured interviews. The participants responded to questions on the culture of their respective universities, and how this affects change readiness of the people and the university. This was also related to technology acceptance in the various universities. Efforts were made to get a diversified set of respondents, cutting across different disciplines and geographical locations.

A strategy was further adopted in the process of interviewing, for instance, to ask the participants questions that seek elaboration or better explanation in cases of ambiguities or inconsistencies in the responses. This went on till it became very clear what the respondents wanted to say, and the interviewer was satisfied with the responses.

3.8 Main Data Collection Procedure

For purposes of data collection for this study, two main areas were discussed in this section: sequentially, quantitative data were collected before the qualitative aspects. For the quantitative data, questionnaires were used and the duration spanned three (3) months. Employees in the various universities were contacted in their offices to complete the instruments instantly (for those who are willing). Many were those who requested to return the questionnaires at a later date, and this dragged on for weeks per participant. Generally, the average time participants used in responding ranged from a day to two weeks, especially for the private universities which are all based in one region, the Greater Accra region. The contact persons in the private universities were mainly the Registrars, who assisted by giving the consent, and giving the lead as to who the academics and administrative staff were. For instance, in a typical private university, the Registrar would mention one academic, who then gets the others (per the request of the researcher), so that there is representation in terms of the departments, orientation (Arts, Science, Business etc.).

For the public universities, the researcher travelled to the locations, outside of the capital. For instance, the employees of the University for Development Studies (UDS) were contacted by the researcher visiting Tamale, and spending ten working days in the process of data collection. The same process was adopted for data collection from

employees in the Kwame Nkrumah University of Science and Technology (KNUST) in Kumasi, University of Cape Coast (UCC) in Cape-Coast and the University of Education, Winneba (UEW). The University of Ghana, Legon was one location where it took several days to collect data. The challenges were much felt in Legon compared with the rest of the universities. It must be mentioned that concurrently, students were contacted for them to complete the open-ended questionnaires designed for them.

Three (3) months after the quantitative data were collected were analysed, the researcher proceeded to collect qualitative data (in the form of interviews) in all the participating universities. The essence of conducting the qualitative study in this study is to make a follow up on issues arising from the quantitative data analysis. Approximately one (1) month was used in the interviews of participants in public and private universities located in Accra. That is, thirty-six (36) participants were interviewed in Accra, made of employees in five private universities and one public university. The remaining, twenty-four (24) participants were the four public universities outside of Accra: UDS, KNUST, UCC and UEW. This makes a total of sixty (60) interviews from all the ten (10) universities—six (6) employee interviews conducted per university. It should be mentioned that these interviewees had not taken part in the initial study (i.e., the completion of the questionnaires).

For the interviews, voice recorders were used and the data transcribed for analysis using thematic analysis procedures as described in the results section of this study. Each participant was contacted, and agreed on the process: recording the interview for purposes of this research. Each interview lasted averagely 60 minutes

3.9 Ethical Considerations

The study observed the basic principles involved in treating participants and the research community fairly and honestly. It began with seeking the consent of the participating universities and the respondents prior to data gathering exercises. Participants were also assured confidentiality and their rights to quit the study without any cost to them. Their identities and privacy were kept under anonymity, asking them not to indicate their names or any codes that could be linked to their names when completing the questionnaires. Regarding the interviews, their consents were sought, individually, and their biographical introduction in terms of their names, and positions of work, were all done prior to using voice recorders for the interview sessions. The research material used, in terms of journals, books, and articles were duly acknowledged and properly referenced in line with American Psychological Association (APA) requirements and the guidelines of the School of Graduate Studies, University of Ghana. In reporting the findings no mention was made in reference to any particular university, instead, the universities were put together as belonging to either public or private universities.

CHAPTER FOUR

RESULTS

4.1 Introduction

The study seeks to determine the extent to which change readiness would relate organisational culture, and how this relationship will affect technology acceptance (which, in this study, is the measure of change implementation success in universities). This study combined qualitative and quantitative techniques in data collection and analysis. For the quantitative aspect, all the well-completed questionnaires 432 (submitted by 184 employees and 248 students across public and private universities in the country) were statistically analysed using the Statistical Product and Services Solution (SPSS) version 20. Below are the findings and related interpretations.

4.2. Empirical Study 1

The analyses were done separately for three related studies: Study 1 on employees using quantitative data, Study 2 using qualitative data from employees and Study 3 done on students, using qualitative data. They are related because the variables were the same, but the content of the instruments differed, and the strategy for collecting responses from these groups slightly varied from each other. As a result of using a combination of qualitative and quantitative approaches in data collection, the analysis deployed selected statistical tests from either side. With the quantitative analysis, the initial descriptive statistics (means and standard deviations) preceded appropriate inferential statistics, such as Pearson's Product-Moment Correlation, Hierarchical Multiple Regression and Multivariate Analysis of Variance (MANOVA). Further, with the qualitative data, a separate set of interviews conducted were analysed using Thematic Analysis following the suggested steps provided by Braun and Clarke (2006).

4.2.1 Descriptive Statistics

Table 4.1 : Reliability and Descriptive Statistics of Study Variables

Variable	Means	SD	Cronbach α	Skewness	Kurtosis
Learning Organisation	31.85	8.91	.88	-0.67	-0.47
Change Readiness	128.39	16.42	.89	-0.61	-0.19
Technology Acceptance	12.40	2.22	.92	-0.37	-0.85
Organisational Culture:	75.25	16.92	.91	-0.71	0.00
Adhocracy Culture	17.64	5.38	.78	-0.55	-0.31
Market Culture	18.92	3.88	.50	-0.47	-0.37
Hierarchy Culture	20.62	4.75	.78	-0.74	0.89
Clan Culture	18.21	5.35	.76	-0.53	-0.30

Sample Size=185, S.E of Skewness = 0.36

To test for reliability of the scales, Cronbach alpha (α) values were calculated for all the subscales, and results range from .50 to .92 as found in Table 4.1. These values are strong enough to conclude that there is high internal consistency in the responses of participants concerning constructs. The skewness and Kurtosis are in the acceptable levels.

The following table presents a Pearson's Product-Moment Correlation matrix for all the study variables. From the Table 4.2 that follows, it is observed that only change readiness that has a significant positive relationship with successful change implementation, measured as technology acceptance ($r = .217, p < .05$). The other variables did not show significant relationship with technology acceptance. All the other variables indicated a positive relationships with each other.

Table 4.2: Correlation Matrix of the Study Variables

	1	2	3	4	5	6	7	8
1. Clan Culture	1							
2. Adhocracy Culture	.781**	1						
3. Hierarchy Culture	.629**	.648**	1					
4. Market Culture	.625**	.697**	.687**	1				
5. Org. Culture	.891**	.906**	.840**	.838**	1			
6. Org. Learning	.647**	.670**	.429**	.506**	.648**	1		
7. Change Readiness	.434**	.458**	.446**	.468**	.503**	.491**	1	
8. Tech. Acceptance	0.028	0.061	0.131	0.022	0.119	0.028	.217*	1

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

* Correlation is significant at the 0.05 level (2-tailed).

The following table presents the mean scores on the variable for both public and private universities.

Table 4.3: Mean Scores of Public and Private Universities on the Study Variables

Variable	Institution Type	Mean	SD
Learning Organisation	Public University	30.94	9.22
	Private University	32.86	8.25
Change Readiness	Public University	126.34	18.05
	Private University	130.45	14.16
Technology Acceptance	Public University	12.45	2.29
	Private University	12.02	2.27
Organisational Culture:			
Adhocracy Culture	Public University	16.82	5.98
	Private University	18.77	4.33
Market Culture	Public University	18.37	4.18
	Private University	19.73	3.26
Hierarchy Culture	Public University	20.32	5.62
	Private University	21.08	3.53
Clan Culture	Public University	17.34	6.20
	Private University	19.60	3.87

In Table 4.3, descriptive statistics show some differences in the scores obtained by respondents in both public and private universities. For instance, with respect to learning organisation, the *mean* score for respondents in public universities is 30.94 ($SD=9.22$) and that of their counterparts in private universities is 32.84 ($SD=8.25$). For change readiness, the mean for public universities is 126.24 ($SD=18.05$) whereas the score for private universities is 130.45 ($SD=14.16$). For organisational culture, there were different mean scores on the various culture types, as obtained by the respondents in public and private universities. For instance, the means for *adhocracy culture* were 16.82 ($SD=5.98$) and 18.77 ($SD=4.33$) respectively for public and private universities; and those for *clan culture* were 17.34 ($SD=6.20$) and 19.760 ($SD=3.87$) respectively for public and private universities.

It should be noted that the differences observed may not necessarily be statistically significant, and so to determine whether these differences are enough to warrant any decision as to support the hypothesis or not, a multivariate analysis of variance (MANOVA) was conducted, and the results displayed in Table 4.4.

Table 4.4: MANOVA of Type of Institution on: Culture, Change Readiness, Learning Organisation and Technology Acceptance

Source	Dependent Variable	Sum of Squares III	df	Mean Square	F	Sig.
Institution	Learning Organisation	109.309	1	109.309	1.402	0.239
	Change Readiness	502.084	1	502.084	1.836	0.178
	Technological Acceptance	5.516	1	5.516	1.06	0.305
	Adhocracy Culture	112.605	1	112.605	3.928	0.05
	Market Culture	54.84	1	54.84	3.746	0.055
	Hierarchy Culture	16.896	1	16.896	0.715	0.399
	Clan Culture	150.284	1	150.284	5.245	0.024
Error	Learning Organisation	9357.814	120	77.982		
	Readiness	32824.515	120	273.538		
	Technological Acceptance	624.558	120	5.205		
	Adhocracy Culture	3439.796	120	28.665		
	Market Culture	1756.636	120	14.639		
	Hierarchy Culture	2835.236	120	23.627		
	Clan Culture	3438.24	120	28.652		

From Table 4.4, analysis shows that the hypothesis *Private universities would show higher readiness for change than public universities* is not supported [$F_{(1,120)}= 1.84$, $p=0.18$]. This means that there is no significant difference between public and private universities in terms of change readiness. *Eta square* (.015) shows that type of university contributed about 1.5% of variance in terms of change readiness. *Pillais' Trace* value of 0.075 also shows that no significant difference in change readiness existed between public and private universities.

It was further revealed from the data that there is no significant difference between public and private universities regarding the extent to which they are seen as learning organisations [$F_{(1,120)}=1.40$, $p=0.24$]. Therefore, the data did not support the hypothesis

which states that *there would be significantly higher tendency of organisational learning in public universities than in private universities*. *Eta square* (.012) shows that type of university contributed about 1.2% of variance in terms of learning organisations. *Pillais' Trace* value of 0.075 also shows that there is no significant difference between public universities and private universities on this variable.

However, public and private universities were found to differ significantly on two types of organisational culture: adhocracy and clan cultures. It was observed that public and private universities were significantly different in terms of clan culture [$F_{(1,120)}=5.25$, $p=0.02$]. Therefore, the hypothesis that *Private universities will display significantly more characteristics of clan culture than public universities* was supported. *Eta square* (.042) shows that type of university contributed about 4.2% of variance in terms of clan culture, and this is statistically significant.

Similarly, statistically significant difference was observed between public and private universities in terms of adhocracy culture [$F_{(1,20)}=3.93$, $p=0.05$]. This is an indication that the data support the hypothesis that *Private universities will display significantly more characteristics of adhocracy culture than public universities*. *Eta square* (0.032) shows that the type of university contributed about 3.2% of variance, in terms of adhocracy culture.

Data analysis further reveals no significant difference between public and private universities [$F_{(1,20)}=1.06$, $p=0.31$] on technology acceptance (that is, change implementation success). *Eta square* (0.009) shows that the type of university

contributed about 0.9% of variance, in terms of technology acceptance, and this does not support the hypothesis that *private universities would succeed in change implementation as compared to public universities*.

As shown in Table 4.2 (that is the correlation matrix), a statistically significant positive relationship was observed between organisational culture and learning organisation ($r=0.648$, $p<0.01$). Based on Cohen's (1988) interpretation of strength of correlation, a significantly large correlation was observed between organisational culture and learning organisation. This correlation indicates 42% of shared variance, meaning that organisational culture explains 42% of the variance in respondents' score of learning organisation.

Further, it was observed that there is a significant positive relationship between organisational culture and change readiness ($r=0.503$, $p<0.01$), reflecting a significantly large correlation (Cohen, 1988) between the two variables. This supports the hypothesis which states that *Organisational culture would significantly influence readiness for change in public and private universities*. This correlation indicates about 25% shared variance, that is, culture explains about 25% of the variance in respondents' score of change readiness. This indicates that the culture of an organisation could play a role in the extent to which people in the organisation are ready for change. It could also indicate that readiness for change can influence the culture of an organisation.

Analysis further shows significant positive relation between learning organisations and readiness for change ($r=0.491$, $p<0.01$), reflecting a significantly medium correlation

(Cohen, 1988) between the learning organisation (as a variable) and change readiness. This correlation indicates about 24% shared variance, that is, readiness for change explains about 24% of the variance in respondents' score on learning organisations. This shows that these two variables influence each other—change readiness could be said to have significant influence on the extent to which organisations learn, and vice versa.

Again, it was observed that there is a significant positive relationship between change readiness and technology acceptance ($r=0.217$, $p<0.05$), reflecting a significantly small correlation (Cohen, 1988) between the two variables. This correlation indicates about 4.7% shared variance. This indicates that the where readiness is created before the introduction of change initiative, such as the use of technology in work settings, there is the tendency for the people to accept such a change and work with it. It could also mean that where a people have accepted technology, it makes them ready for future change situations in organisations.

To further explore the mediating role of change readiness and learning organisation, between the independent variable, organisational culture and the dependent variable, technology acceptance, a series of regression analyses were conducted, and the results displayed in Table 4.5 and Table 4.6.

Table 4.5: Summary of Hierarchical Multiple Regression for the mediating effect of Learning Organisation on Organisational Culture-Technology Acceptance relationship

Model		B	Std. Error	β	Sig
1	(Constant)	11.024	0.834		.000
	Organisational Culture	0.018	0.011	0.134	.103
2	(Constant)	11.074	0.856		.000
	Organisational Culture	0.02	0.014	0.153	.156
	Learning Organisation	-0.008	0.028	-0.03	.78

Dependent Variable: Technology Acceptance

From Table 4.5, the first model was not significant [$F_{(1,148)}=2.60$, $p=0.103$] indicating that organisational culture did not significantly predict technology acceptance ($\beta=0.134$, $p=0.103$). When learning organisation was introduced, no significant relationship was observed between organisational culture and technology acceptance. Thus, learning organisation did not significantly mediate the relationship between organisational culture and technology acceptance ($\beta=0.153$, $p=0.156$). In terms of contribution, the mediator accounted for 0.1% ($\Delta R^2=0.001$) of the variance in organisational culture and technology acceptance relationship. Thus, the mediation model was not significant [$F_{(2,147)}=1.38$, $p=0.255$]. Therefore, the hypothesis that *Organisational learning would mediate the relationship between culture and change implementation (technology acceptance)* was not supported.

In testing the mediating effect of change readiness on the relationship between organisational culture and technology acceptance, (see Table 4.6) a three-step procedure was followed as suggested by Baron and Kenny (1986).

Table 4.6: Summary of Regression Analysis for the mediating effect of Change Readiness on Organisational Culture-Technology Acceptance relationship

Step	Predictor	Criterion	B	S.E.	Beta	Sig.
1	Organisational Culture	Change Readiness	.488	.074	.503	.000
2	Organisational Culture	Technology Acceptance	.016	.012	.123	.171
3	Organisational Culture	Technology Acceptance	.001	.013	.007	.946
	Change Readiness		.032	.014	.231	.025

Note: *Sobel Test* for significant mediation shows: $Z=6.25, p<0.00$

At Step 1, change readiness (the mediator) was regressed on organisational culture (the independent variable). Organisational culture was found to be positively related to change readiness ($\beta=0.503, p=0.000$). At Step 2, technology acceptance (the dependent variable) was regressed on organisational culture. At this step, organisational culture failed to significantly predict technology acceptance. Although the procedures suggested by Baron and Kenny (1986) require a significant relationship between the independent variable and the dependent as a condition for mediation analysis, other scholars have recently argued that such a condition is not necessary (Hayes, 2009; Rucker, Preacher, Tormala, & Petty, 2011). Hence, the analysis proceeded to the third step, where technology acceptance was regressed on both organisational culture and change readiness. At this step, change readiness ($\beta=0.231, p=0.025$) positively predicted technology acceptance, while the standardized beta for organisational culture decreased compared to the beta value at Step 2, which suggests the presence of the mediating effect. *Sobel Test* for significant mediation shows that the mediator, change readiness significantly transmits the influence of organisational culture to the dependent variable which in this case is successful change implementation ($Z=6.25, p<0.00$). Given that the

relationship between the independent variable (organisational culture) and the dependent variable (technology acceptance) was not significant at the final step, these results indicate that change readiness fully mediated the relationship between organisational culture and technology acceptance. These are displayed in Table 4.6.

Therefore, the hypothesis that *readiness for change would play a mediating role in the relationship between organisational culture and successful change implementation within organisations* was supported.

4.3 Empirical Study 2

The interviews conducted with employees were analysed using the thematic analysis, and this constitute empirical study 2 of this study. The analysis of qualitative data proceeded in the six-phase outline guide for thematic analysis articulated by Braun and Clarke (2006), and these are explained here. First, there was familiarisation with data. At this phase, all the recorded individual interviews were transcribed verbatim, the transcripts read vis-a-vis listening to the recorded interviews so as to correct possible problems of omissions and typographical errors in the transcripts. The transcripts were read and re-read, and initial ideas were noted, creating necessary background for the analysis. In the next phase, the initial codes were generated. Here, the interesting features were coded systemically, collating data related to each code. Next, the researcher engaged in searching for themes, during which all the generated codes were collated into potential themes, and all relevant data brought together under each potential theme. Then the themes were reviewed. That is, the researcher verified if the themes work in relation to the coded extracts and the entire data set. This led the researcher to generate a thematic ‘map’ of the analysis. In the phase that follows, that is, defining and naming

themes, the researcher continued with the analysis by refining the specifics of each theme and the general story the analysis was telling, which culminated in the generation of clear definitions and names for each theme. The last phase as advocated by Braun and Clarke (2006) is for the report to be produced. With this, the researcher selected vivid and compelling extract examples, analysed the extracts and related the analysis to the research questions and literature.

4.3.1 Summary of Responses

The qualitative aspect of this study was sequentially carried out in order to provide confirmation (or otherwise) of some of the findings obtained in the data analysis resulting from the responses to the quantitative survey instruments. From the initial (quantitative) data analysis, it was observed that readiness for change plays a mediating role in the relationship between organisational culture and technology acceptance, and this was set to be triangulated by interviewing selected participants across all the participating institutions. This was confirmed after the interviews. For instance, it was found that where employees are made aware of a particular change initiative, there is a greater tendency for success in implementing this change, compared to situations where no awareness was created, and therefore the people to be affected by the change initiatives are not ready for the change. This was captured in the responses by some of the participants in both public and private universities. For instance, in a public university, it was found that readiness is created in the form of workshops organised to introduce change initiatives, by way of implementations.

“Personally, for example ... I know [that] workshops are organized for lecturers and administrators...on how to search for information... and based on that if [one has] any difficulty [they] can contact [the] coordinators [to be] told what to do.

...So the readiness [creation] is there [and] occasionally there are workshops to update [us]" (T3).

In a different public university, a common response to the question about readiness creation and the relationship with change implementation was

"...I'm aware that there are constant capacity building workshops organised by the ICT Directorate for certain segments of the university, like the secretaries, heads of department, [for them] to be able to use [ICT] for online admissions, do online result submission etc... If a workshop is not organized, a brochure or [an appropriate] template is prepared to show the procedure or an online forum is created and a number of emails are exchanged on the internet platforms to enable people understand [what to do]...therefore to that extent, there is some measure of preparation [prior to change introduction] (Interviewee : A Public University).

The response pattern is not different regarding private universities. In response to a question requiring a specific example of change readiness programme undertaken, the following was given:

"I would talk about the ICT sector as an area for change. We used to process students' results in excel, however, there is a system called "post" – a programme that a software developer was contracted to develop for us. So you key in the results, after which you press a button, then it goes to the head of department, then he also forwards it to the dean, then it is vetted before it is pasted. ... before that was implemented, all staff [members] were taken through a training programme to get us to be familiar with the software so that there wouldn't be complaints or there would be minimal complaints. ... occasionally, members of

staff are taken through ICT training especially on how to browse in respect of research and publication, right? – where to get what and how to do it. ... So there are a lot of programmes and efforts to really catch up with the world, yeah (Interviewee: (T6) A Private University).

Moreover, between public and private universities, it was observed from the quantitative data that there were significant differences in terms of clan and adhocracy types of organisational culture. The interviews further confirmed these findings. Moreover, following the qualitative data analysis, it was observed that culture has a role to play in technology acceptance.

Table 4.7: Results from Thematic Analysis of Employee Interviews

Theme	Cluster	Theoretical explanation of the clusters
1. Indispensability of ICT in Universities	<ul style="list-style-type: none"> ICT and Nature of Work in Universities ICT and learning in Universities 	<p><i>Organisations (e.g. universities) need to change the way they do things, using advanced technology especially in this era: Burke (2011); Lewin (1947); Schein (1987).</i></p> <p><i>Technology Acceptance Model: Straub, Keil & Brenner (1997)</i></p>
2. Creating Change Readiness in Context	<ul style="list-style-type: none"> Role of leadership Human Resource Readiness 	<p>Armenakis <i>et al.</i>, (2007); Salancik and Pfeffer (1978); Lam and Schaubroeck (2000); <i>Principal support, role of opinion leaders in change initiatives could influence attainment of change goal</i></p>
3. University culture and change implementation	<ul style="list-style-type: none"> Perceived facilitating cultural factors Perceived inhibiting cultural factors (e.g. delays by practice and procedures) 	<p>Cameron & Freeman, 1991; Denison & Mishra, 1995; McKenna, 2012; Pettigrew, 1979; Schein, 2004; Van den Berg & Wilderom, 2004.</p> <p>Bureaucracy and performance</p>

4.3.2 Descriptions of Major Themes

Data analysis of the 60 respondents generated 3 major themes as described below.

(i) *Indispensability of ICT in Universities:*

This theme reflects the awareness of the complex connection between ICT and the nature of work in the universities in contemporary times. The incorporation of ICT in the work of universities has become important so much that today, one of the key indicators for rating universities include penetration of ICT in the core organisational work schedules in participating universities worldwide. The awareness of this link by the workers interviewed provided an important premise for how they perceive their universities in readiness for change and innovation. In one excerpt, the interviewee explains: “...if you are not using ICT much, your programmes won't be up to standard (T4). Another excerpt captures this succinctly: “All the administrators of the universities certainly know that technology is something we cannot do without” (Interviewee: A Public University). “.... a university without well-functioning Internet connectivity—how would you expect staff to conduct research?. Yeah, that is the backbone of what we do as academicians”. (Interviewee: A Private University).

To emphasize the importance of ICT in facilitating all aspect of the nature of the work in the universities, another participant mentioned “Being an academic institution, majority of the systems and structures are enhanced by ICT infrastructure” (Interviewee: A Public University)

(ii) *Creating Change Readiness in Context:*

The awareness of the link between ICT and the nature of University work in the contemporary world is followed by a more important orientation towards creation of the

right context and setting to welcome this new paradigm of ICT inspired university work culture. The expression of views on the need for readiness creation is found in the extracts in the following perspectives: readiness in terms of physical ICT Infrastructure and Human Resource.

Infrastructure: Readiness in terms of ICT infrastructure can be noticed in ICT architectures; laboratories, computers, laptops, projectors and internet installations as captured in these extracts: *“Here we are with a laptop which is used to process examination results.....so you have your projector, you have your laptop, you prepare notes in PowerPoint, you deliver.....”* (Interviewee (T6): Private University). *“We have student application for admissions online, student’s records, student’s results are published online”* (Interviewee (T3): A Public University). *“We have a modern lab with a number of computers all hooked online”* (Interviewee (T8): A Public University). *“We have modern computer lab, we are also about finishing a network installations in all offices”,....* (Interviewee (T7): A Public University. All these extracts describe the material efforts put in by university authorities in an attempt to get advanced technology introduced into the universities to ensure actualize the change vision but also practically demonstrate technology acceptance in the work culture.

Human Resource: This subtheme describes programmes and actions that are geared towards increasing the capacities of staff; both academic and administrators in creating readiness for the ICT driven change. An illustrative voice emphasized *“well, for us we have been having workshops. Recently we had a workshop on assessing information online or something [we were trained] by the librarian...Somewhere this year there was*

also a workshop for assistant registrars, on presentation skills, how we can use PowerPoint and those things to deliver (Interviewee (T3): A private University).

(iii) University culture and change implementation

Perceived facilitating cultural factors: This theme looks at aspects of the organisational culture that supports the ICT driven change. Sub themes generated under this theme include democratic setting and welcoming worker initiative drives. The democratic setting is about what happens about the prevailing culture of the institution in terms of how decisions are made and the leadership style adopted by the top hierarchy in taking and implementing decisions. Democratic culture reflects openness, transparency, people centeredness and participation. The existence of such a culture was found to facilitate the needed change towards Technology acceptance. This democratic culture is further strengthened by ICT mediated platforms for sharing of information. For example; *“I think in this university, because of our intranet systems, email platforms, things are always discussed. People encounter problems and raise them on this platform”*.....(Interviewee: (T4), Public University). *“There are, yeah for instance we have email systems that we use a lot and now for sudden information, we quickly pass them through the email system”* (Interviewee: (T1), Private University). The democratic setting is also found to be aided by the use of committee system in decision making process where people get to participate at various level in the decision making and implementation process as captured by this illustrative voice. *“You know the University is a committee system. So basically everything is based on committee decision and when the committee decides then the information is passed onto the departments and then the various heads of department, various deans would meet to find a way of going around and how to implement those decisions”* (Interviewee: (T1), Private University).

Regarding established orientation practice, the subtheme reveals the availability of institutional procedures that are formalized and aimed at orienting hired staff about the culture and practices of the school. Gleaning from this is the assumption that an organisation ready to accept technology in its operations would incorporate ICT programmes and policies and programme underlying their operation into its orientation programmes. This view is elucidated clearly by some of the voices; *Once we receive appointment letters for the teaching staff, the quality assurance unit of the university organizes a full week course during which the appointed teaching staff gets equipped to do his job.* (Interviewee: (T5), Public University).

It is worth noting however that such programmes also target current staff members when new programmes are being introduced as illustrated below.

I know that the ICT Directorate...I am aware there are constant capacity building workshops organized for certain segment of the University like secretaries, heads of department to be able to use online admissions, online results submission....(Interviewee: (T4), Public University).

Well I know my university organizes training for the teaching staff especially when they wanted to introduce Kewell software which was supposed to be used for outside lecture room, assignment and submissions and the like. (Interviewee: (T4), Public University)

Welcoming worker initiative drives: This subtheme touches on aspect of the culture of the universities that encourage, support and encourage individual initiatives. That is in an era where technology has become the order of the day and individuals are being innovative in the use of technology to promote wellbeing, productivity, efficiency etc, it

was the view that existence of such a culture could facilitate the technology acceptance and implementation. For example a participant admitted; “ *people are allowed, individuals are allowed to take initiatives so as to generate or come up with innovative ideas about how to do things*” (Interviewee: (T6), Private University).

One of the things that we do is to organize workshops, not only teaching, but organize workshops for people in industry so if you are an expert in a particular area, just put together a module to be advertised by the school after which you would deliver and have a percentage; you have a percentage from that (Interviewee: (T6), Private University).

ii. Perceived Inhibitory Cultural Factors

This sub-theme encompasses the perceptions of both academic and administrative staff of the public and private universities (involved in the present study) as to those elements of the organisational culture of the universities which inhibit successful change implementation. Specifically, respondents identified two main factors in this regard: undue delays in practice and procedures, and inadequate key performance indicators.

Undue Delays by Practice and Procedures: Although the need for change is identified and planned, undue delays inhibit the successful implementation of the change. According to an informant, “*sometimes there are delays in the way things are done: you have to wait for certain decisions to be taken and you have to go strictly by that. So things are not done as fast as it should be*” (Interviewee: (T2), Public University). As to the basis of this delays, another informant had this to say, “*bureaucracy, I think that is the order of the day, everything here would have to go through a certain channel and we respect it a lot*” (Interviewee: (T1), Private University). These assertions point to the red tape situation that is usually associated with bureaucracy in universities. Before an

organisational change is accepted and implemented, practices and procedures in terms of decision making, resource allocation among others must go through various levels of the organisational hierarchy. Consequently, undue delays ensue thereby inhibiting the successful implementation of change within time.

Inadequate Key Performance Indicators: This refers to inadequate or the unavailability of systems of measurement on the basis of which workers can assess their own performance on an organisational change programme. “*Sometimes workers themselves are not even able to assess their own performance because they don’t even know the indicators. So sometimes they try to work ... but then you’re not sure whether you’re on the right track*” (Interviewee: (T1), Private University). The indication here is that when workers involved in an organisational change programme implementation are not aware of the key performance indicators (guiding the change of interest) with which they can fairly and meaningfully assess their performance, they become uncertain as to the extent of their individual contributions to the change implementation process.

Differences between Private and Public Universities in terms of Change Readiness and Organisational Culture.

Four subthemes naturally emerged from the data pointing out the differences between private and public universities in terms of change readiness and organisational culture: governance system, organisational structure, capitalization and alienation.

Governance System: The subtheme of governance system covers the leadership and decision making process which exists in the private and public universities involved in this study. According to an interviewee in a public university:

“The university [operates] a committee system. So basically everything is based on committee decision and when the committee decides the information is passed onto the departments and then the various heads of departments and deans will meet to agree a way of going around how to implement those decisions. So it is assumed that if a head of department or a dean attends a meeting and a decision is taken he is supposed to be the spokesperson for management ... So if he comes down and the department has reactions they can write back to the chairman of the academic board and then the views will be taken again at the academic board committee meeting (Interviewee: (T3), Public University).

Similarly, another interviewee in a public university mentioned that:

“The university system is segmented into committees so that in whichever committee you find yourself or even where you do not belong to any committee you still have your department so that anything you see which you think needs to be improved upon, you can channel it to the central administration through your head of department. Then the central administration would identify the appropriate committee to look at it. So once the committee accepts it, normally they’ll even call you to come and throw more light on it” (Interviewee: (T1), Public University).

That public universities operate on committee system implies that in public universities leadership and decision making processes are shared between top management and lower rank staff. Every staff is a member of a committee or at least belongs to a department and as such has a stake in participating meaningfully in the decision making process.

However, in private universities the leadership and decision making process appears to be the preserve of top management and unit heads. Organisational leadership and decision processes are not shared. According to an interviewee:

“You know, we have classes: the management at the top and we the staff, down. It has always been from top to bottom and not from bottom to top. If it comes from top, it will work but if it is from down then it won't work” (Interviewee: (T10), Private University).

Another interviewee in a private university said, *“...most of the people 'up there' who take the decisions are very old, yeah ... most of our professors, very old and there is a gap”* (Interviewee: (T6), Private University). It appears that on the hierarchy of private universities, workers (often constituted by young people with academic qualification less than PhD) occupy the base and are not permitted to contribute to or share in the leadership and decision making processes of the university while top management (often made of the relatively old with PhD qualifications and professorial statuses) occupy the peak of the hierarchy and are solely in charge of leadership and decision making processes. Therefore, unlike the case of public universities, the approach of leadership and decision making processes in private universities is non-shared and top-down in nature.

Organisational Structure: Closely linked to the issue of governance system is the theme of organisational structure. Organisational structure in this context relates to the various formal procedures, pathways and channels through which information (regarding organisational change and change initiatives) are circulated within the hierarchy of the organisation. The absence of formal organisational structure and procedures for initiating change (especially by workers) appears to inhibit change readiness in private universities. A private university worker mentioned that:

“unfortunately we don’t have formal procedures for presenting ... ideas ... but the thing is that the ideas will work best if there are procedures to present them to the authorities or the board to analyse them. The truth is that sometimes we have innovative ideas and the ideas die in our heads because they don’t go far because we don’t have process for presenting them” (Interviewee: (T7), Private University).

The foregoing assertion suggests that in private universities workers with innovative ideas are unable to channel their ideas to the appropriate quarters for consideration (and possible implementation) because formal structures and procedures for such purposes are non-existent. The implication is that such ideas are only discussed informally among workers or that such organisational change innovative ideas remain unshared between workers and the organisation.

In contrast, another interviewee stated that, *“when you go to the public universities the structure you see will convince you”* (Interviewee: (T9), Private University). Formal structures and procedures are not a problem in public universities largely because they operate on the committee and decentralization system where formal avenues exist to welcome organisational change novel and innovative ideas of workers.

Capitalization: This refers to how universities are able to fund organisational change (ICT) programmes. The emphasis is on internally generated funding and external financial support. According to a respondent,

“For the private universities, in as much as they wish to have the architecture and ICT installation, they are also constrained by the cost involved. However, for the public universities because they are subsidised by the government, they have a better way of acquiring some of these things” (Interviewee: (T8), Private University).

Similarly, another interviewee lamented as follows, “*our student population is not even up to 2000; it is about 1300 or 1500...our fee is also very low*” (Interviewee: (T9), Public University). These excerpts appear to suggest that with regard to financing organisational change programmes, especially those related to ICT, public universities are able to achieve much success because they have government subventions and budgetary support, plus, they are able to internally generate enough funds through fees paid by their large numbers of students. However, meeting the financial cost of installing ICT facility and implementing an organisational change in the area of ICT in general is a challenge to private universities. Private universities are, to a large extent, unable to internally generate enough funds in addition to their inability to attract constant external support from government or other sources.

Alienation: The theme of alienation is another basis for distinguishing public universities and private universities in terms of organisational culture and change readiness. Interviewees, particularly staff in private universities involved in this study, shared opinions on how they feel with respect to the relationship between top management and staff at the lower end of the hierarchy. According to an interviewee in a private university,

“They are there! And we are here! We find ourselves detached from those at the top, so when it comes to issues like ICT and some other things, yes, avenues are created for them to listen but as to its implementation, problem” (Interviewee: (T6), Private University).

The working relationship gap between lower rank staff and top management in private universities appears to have created a sense of alienation on the part of the lower rank

staff thereby making the lower rank staff further develop and express apathy with respect to taking initiatives at work.

On the other hand interviewees at the public universities expressed more positive working relationship between top management and lower rank staff. In response to a question regarding the nature of the working relationship between top management and lower rank staff at public universities, an interviewee stated that:

“...It’s cordial ... The system that we generally run here doesn’t even create that kind of separation. Although we respect the ranks, it doesn’t in any way create a division... So I can go to the prof at any time” (Interviewee: (T1), Public University).

4.4 Empirical Study 3: Students’ Perspective

The focus of Study 3 is on students’ views of what the cultures of their universities are, and how they see their respective universities as either being ready for change or not, and the extent to which the universities accept technology. This is set to leverage readiness for change among employees.

4.4.1 Formalized Organisational Culture

This theme is related to the lived experiences of students of the culture of their respective universities. Analysis of the various responses by students in respect of questions relating to the culture of their universities reveals that, generally, public universities are seen as organising and arranging their processes and procedures within a fixed, formalised structure. Thus, the university work environment can be described as a much formalized place where everything is done through particular procedures (which can take a lot of time to complete, sometimes). This type of culture prevails in most of the universities

and was characterized by a more formal interpersonal relationship guided by strict adherence to formal regulations. A number of the respondents in public universities (about 75%) gave the indication that *“The university is a much formalized place so interaction among people is very formal”* (Respondent: Public University, R 8). A student in another university describes the culture as *“extremely formal and regimented”* (Respondent: Public University, R 6). The suggestion here is that various segments and stakeholders within the university community are held together by formal rules and policies. This culture is found generally to be characteristic of most of the public universities and the influence of bureaucracy becomes very apparent in some aspects of school life as revealed again in one of the voices: *“My school has a formalized culture, there is no free interaction among staff and students, there is undue delay in the release of examination results and preoccupation with emphasis on maintenance of the rules and policies of the school more than the people”* (Respondent: Public University, R 190).

In a related development, this type of culture was re-echoed by other respondents from a public university: *“Ours is a formalized culture; life can be boring in school, internet connectivity is very slow, the only thing that sustains life and makes it exciting at times is academic and religious activities. There is more emphasis on rules than on people”* (Respondent: Public University, R 063). The demerits of such a culture was found to be degenerative to the relationship between the staff and students due to over reliance on rules, to the extent that people-issues are not given the needed attention, as illustrated in a voice that follows: *“We have a formalized culture, there is increased gap between teachers and students, slow information dissemination and more emphasis on formal rules and not the people”* (Respondent: Public University, R 081). The implication,

however, is that due to the regimented nature and the ‘red tape’ associated with this culture, official processes (including communicating change initiatives) can be slowed down due to the various mandatory stages involved. Although relationships are established in an atmosphere of cordiality, undue bureaucracy militates against speedy and judicious exploitation of the benefits that come with the use of ICT. Where available, ICT and more especially internet connectivity is slow. As a result, information dissemination is also slow. For example, a student acknowledged that *“getting official information is very slow as one has to go through a lot of pain before getting the information of interest”* (Respondent: Public University, R 8). Another student puts it more vividly, thus, *“getting hold of information is very difficult, for instance, when it comes to getting your result slip and other related academic documents as a student”* (Respondent: Public University, R 7). *“There are delays and problems associated with student results, transcripts and registration for re-sit examinations. It is just too difficult to get through all these kinds of problems, delays and pressure”* (Respondent: Public University, R 11).

Another interesting dimension is the observation that although formalized cultural atmosphere may exist in the private universities, it is quite open, more congenial with a focus on the people and not on rules as in the public. The following is an illustrative view by a respondent that captures it succinctly: *“Yes we have a formalized culture, but it’s a free atmosphere, internet connectivity is sometimes fast, love is shared and there is a lot more focus on the people rather than rules”*. (Respondent: Private University, R 54). This is further buttressed by other voices in the private university category: *“our culture is more personal, it’s a friendly environment and people-centred”* (Respondent: Private University, R 159). Although some private universities are rule oriented, their

atmosphere nurtures positive interpersonal relationships. For example, this is reflected in the voice: *“Our culture is formalized, it’s a free and peaceful atmosphere but focus is on the rules* (Respondent: Private University, R 156).

It can be gathered from the foregoing that by students, that culture of using ICT has not fully been deployed by many universities in dealing with students-related issues (e.g., results, certificates and other academic records). As mentioned by a student, *“some things are still done manually”* (Respondent: Private University, R 12) in some of the universities thereby resulting in undue delays in formal processes and procedures. As a solution, some suggested that universities should *“use information technology for admission, sharing of information, and to change the administrative procedures so as to remove the administrative bottlenecks”* (Respondent: Private University, R 4). This opinion suggests that some public and private universities have not tapped the full potential of ICT to manage the interface between students and university administration so as to minimize (or eliminate) the delays and other challenges associated with the completely-manual system.

4.4.2 Change Readiness for Technology Acceptance

Generally, the students interviewed affirmed the prime importance of ICT. They have also revealed their willingness and readiness to embrace ICT driven change. This is reflected in the positive attitudes even within the context of limited or no ICT infrastructure.

This theme covers students’ assessment and appreciation of the readiness of their universities with regard to accepting technology, that is, embracing ICT and the change

and advancement it brings. The theme further touches on some indicators of ICT change readiness (i.e., existing ICT infrastructural context, the pace of ICT change process and the planning of ICT change initiatives).

The Pace of ICT Change Process: In response to how people are willing and ready to accept ICT change in the university, a student responded that in her university, “*they are willing to adopt ICT but at a rather slow pace*” (Respondent: Private University, R 12). Similarly, a student in another university observed that in his university, “*people are receptive to ICT change but very slowly*” (Respondent: Public University, R 6). It can be inferred that the various universities appreciate the role and potential benefits the adoption of ICT can accrue to a university, thus, the need to change in favour of ICT. However, the universities’ response to the call for ICT change and the pace of the change response process are perceived as slow by students. Against this background, a student recommended as follows: universities should, “*pursue ICT aggressively by fixing broken ICT networks on campus and employ only people with ICT background to man it*” (Respondent: Public University, R 12). The foregoing assertion suggests that universities should put in place forceful action and strategies towards a sustained ICT change process by adopting a maintenance culture and by employing personnel with the requisite skills and knowledge to manage the ICT infrastructure and IT resources in general.

Planning ICT Change: Students’ responses in respect of questions regarding how university authorities should go about introducing change initiatives pointed at a sense of alienation on the part of the students. The views of students are not solicited and as such excluded in the planning and initiation of ICT change process. The change initiative process is not shared (to include students). According to a student, university authorities should “*take responses from students too in planning ICT change*” (Respondent: Public

University , R 1). To another student, “*broad-based consultations should be done before any ICT policy change is introduced*” (Respondent: Public University , R 6).

Learnable but un-listening orientation

Organisations have a duty to learn in order to be innovative and remain alive. This tendency orients organisations to be more responsive to the needs and concerns of its people as well as those outside. Respondents have indicated that there is regular communication among employees in the various universities. However, it is not translated into positioning the universities as listening organisations. That is, although there is an admission of good relationship between the universities and the outside constituents, the inward constituents, made up of the students are not listened to. For example, majority of student-respondents in 4 of the 5 participating public universities (about 63%) have indicated that: There is good communication going on between my university and outside, but the authorities continue not to pay attention to the concerns [we usually raise] about short duration for our examinations; a concern which we have repeatedly expressed” (Respondent: Public University, R 085). Another voice revealed that “*although frequent meetings are held among staff, the school repeatedly commits the problem of delay in the release of our examination results*” (Respondent: Public University, R 188). Another voice reveals further: “*the staff work together and a very good relationship exists between the school and the outside people, but there is poor information management*” (Respondent: Public University R 191), indicating a lack of learning and sharing of experiences among staff and with the students.

The situation is not different in the private universities. About 51% of the student respondents indicated that “*proper communication channels exist for the staff and an excellent relationship exists between the school and the outside world [but] the*

communication channels between staff and students is very poor” (Respondent: Private University, R 53). This is relational issues, and is a matter of concern in private universities. Another voice from a private university asserts that “*communication is regular between staff and [there is] a very good relationship exists between the [university] and the outside, [but] our concerns for hostels [to be constructed] to accommodate students is yet to be given attention”* (Respondent: Private University, R 080)

In summary, respondents have expressed concern about the repetitive mistakes the universities continue to commit in spite of concerns raised by students. The students have however indicated that there is regular communication among staff and an average good relationship with the outside world. The form of communication going on between staff could not be work-related. What form of communication goes on between the staff, and does not translate into sharing knowledge about what works well, and what does not work well? The conclusion that can be drawn is that though there is the tendency to become learnable, these features outlined from the voices detract from their potentials for being learning organisations.

4.5 Summary of findings

Analysis of data shows that 5 of the hypotheses were supported, while 4 were not. The following summarises the results:

4.5.1 Data supported the hypothesis which states that *there will be a significant positive relationship between change readiness and successful change implementation.*

- 4.5.2 It was observed that the hypothesis which states that *private universities will show higher readiness for change than public universities* was not supported.
- 4.5.3 Data did not also support the hypothesis which states that *public universities will display characteristics as learning organisations and this will be significantly different from private universities*
- 4.5.4 However, data supported the hypothesis that *private universities will display significantly more characteristics of clan culture than public universities.*
- 4.5.5 Similarly, the data supported the hypothesis that *private universities will display significantly more characteristics of adhocracy culture than public universities.*
- 4.5.6 It was further observed that data did not support the hypothesis that *private universities will succeed in change implementation as compared to public universities.*
- 4.5.7 The hypothesis that *organisational learning will mediate the relationship between culture and change implementation (technology acceptant)* was also not supported.
- 4.5.8 The study supported the hypothesis that *there will be a significantly positive relationship between organisational culture and change readiness*
- 4.5.9 Finally, the hypothesis that *readiness for change would play a mediating role in the relationship between organisational culture and successful change implementation within organisations* was supported.

CHAPTER FIVE

DISCUSSION

5.1 Introduction

This chapter provides detailed discussions of the findings, and the implications thereof. It looks at the combined studies using surveys and interviews for employees, followed by the qualitative discussion of students' responses, and then blends the two within the theoretical model of the study. It goes on to discuss the limitations and makes relevant recommendations for interventions, and for future research. The chapter ends with a summary and conclusion on the study.

5.2 Discussion: Study 1—Employees' Perspectives

The present study investigates culture and readiness for change in public and private universities in Ghana. Specifically, the study explores organisational change readiness in universities (in terms of technology acceptance), and aspects of university cultures that tend to either encourage or inhibit successful change implementation. It further seeks to examine how change readiness mediates the relationship between organisational culture and technology acceptance as a measure of successful change implementation. Finally, a comparative assessment of differences in change readiness and organisational cultures between public and private universities was done, and the extent to which public and private universities can be said to differ from each other as learning organisations was also examined.

In all, nine (9) hypotheses were tested out of which five (5) were supported by the data from this study, and the other four (4), not supported.

5.2.1 Discussing the Hypotheses

H1: There would be a significant positive relationship between change readiness and successful change implementation.

It was observed from the study that the first hypothesis was supported, implying that a positive relationship exists between change readiness and successful change implementation (measured as technology acceptance). This is in line with the observation by Lewin (1947) and Schein (1964) that it is important to have change readiness in place if change implementation is expected to succeed. In other words where the people to be affected by the change initiative are made aware and are prepared psychologically and behaviourally, there is the greater likelihood of success (Armenakis *et al.*, 2007). It is also possible that when there is success in the implementation of change initiative, then the people affected by this success are likely to be willing and ready to accept future change proposals that can further influence the success of these initiatives. With this observation, the study supports the findings made by some scholars, to the effect that when employees are appropriately made aware before the introduction of a change initiative, there would be the greater likelihood of success (Burke, 2011; Lewin, 1947; Schein, 1987). This has the tendency of minimizing unintended consequences of non-readiness likely to be witnessed if they were not ready (Burke, 2011; Lewin, 1947). It is a two-way phenomenon—the relationship could go either way, implying that in universities, and other organisations, the individuals and groups of people in the institutions are most likely going to be ready for future change initiatives as a result of history in achieving success in implementing similar change programmes. In the case of the universities, and for purposes of this study the change in question is technological change. Therefore, this observation, that the participants' readiness for

change is positively related to technology acceptance is indicative of the possibility of accepting future technology-related change initiatives. It could also imply that in future, technology and the perceived benefits to be derived from using advanced technology in work and studies would make them ready for change, that is, the staff and students in future are likely to accept change. Acceptance to use technology is in terms of the staff and students using technology related devices and platforms such as computers, the Internet, and relevant devices (projectors, mobile phone applications, etc.) for purposes of teaching and administrative work, as well as using these as learning tools to achieve desired objectives. There is an element of motivation in this regard, as proposed by some scholars. There is the tendency for, people who are thinking of accepting technology to be motivated intrinsically or extrinsically. That is, extrinsically because of their intention to benefit from using this useful instrument, for performance improvement and its attendant benefits such as pay rise or promotion; intrinsically because of the comfort they may enjoy, or just for purposes of using the platform without any attached motive of gaining external reward (Davis *et al.*, 1992).

Being ready for change in itself could be seen as a form of motivation and commitment (Armenakis, Harris, & Feild, 1999; Herscovitch & Meyer, 2002) to accepting the proposals of leadership to introduce planned change initiatives, and this is likely going to elicit in the people the energy and resources they require to engage in acts and deeds that can reflect in the successful implementation of the change programme.

H2: Private universities would show higher readiness for change than public universities.

In another development, it was observed that the study did not support the hypothesis which states that *private universities would show higher readiness for change than public universities*. One factor that differentiates public and private organisations such as universities, is their profit-motives. Private universities are usually owned and managed by individuals (or group of individuals) and are run (sometimes) like private business enterprises for profit, or run as value-based organisations (e.g. religious-based universities), compared with public universities which are run on public purse to satisfy governments' need for building the manpower of the nation. As a result, it was predicted that the employees of such private entities like private universities would display more readiness for change than public university employees especially where the change initiative has to do with work. However, data did not support the hypothesis.

It is important and interesting to note that from the data, public and private universities (irrespective of their orientation) displayed relatively high levels of readiness for change, though without significant difference between the two groups. That is, they both showed willingness and readiness psychologically and behaviourally to accept technological change to the extent that no significant difference was observed between the two groups. For the public universities, the implications could be that the level of readiness could be as a result of individuals' personal efforts at developing themselves especially in this era of globalisation and technological advancement, and the constant calls for the need for individuals to add value to themselves. Teaching and learning in universities, irrespective of their orientation, is now done mostly with the use of ICT devices such as the computer, and other platforms like the web-based learning and the use of the Internet for lesson preparation, course delivery and learning. Therefore, individual employees and

students in the various universities think they should be ready for the change that is taking place in the world of learning, hence the relatively similar levels of readiness for change observed in both public and private universities.

H3: Public universities will display characteristics as learning organisations and this will be significantly different from private universities

Furthermore, data did not also support the hypothesis which states that *public universities will display characteristics as learning organisations and this will be significantly different from private universities*. Learning organisations take the steps to share experiences in the things and procedures that work well. Even though there were some differences regarding the extent to which the various public and private universities could be described as being learning organisations, interestingly, the scores from data analysis show that this difference is not statistically significant. This implies that even if the two groups are seen as successful in their change implementation efforts, it would have been a little difficult for them to institutionalise and sustain the success because they were not learning organisations, which, as argued by some scholars (e.g., Marsick & Watkins, 2003) usually will share experience and knowledge in a manner that show support for growth. This finding implies that the things that work well are not strategically shared among members, departments and other units in a way that would move them towards achieving their goal of successful change implementation (Su, 2006). The lack of significance in the difference is indicative of the need for the universities to take steps towards consciously getting the people to share theory experiences in what works well and what does not work well. When this is promoted within the university setting, it could lead to avoidance of mistakes other might have

made, and also get those who have succeeded in their line of duties to share in the details for the benefit of other members within the organisation. Eventually, it is the organisation that benefits, and when this is replicated, it could ensure sustainable development.

H4: Private universities will display significantly more characteristics of clan culture than public universities.

Furthermore, the study supported the hypothesis that *private universities will display significantly more characteristics of clan culture than public universities*. Even though issues of culture in organisations are discussed not necessarily with the intention of indicating that one is better than the others (Martin, 1992), it helps bring out the unique differences that exist among organisations that facilitate the process of exploring the types of cultures that may promote successful change implementation, and those that tend to inhibit success when change initiatives are introduced. That is, it is possible to have organisations displaying differences in terms of culture types but overall culture has minor elements from all the four culture types (Birnbaum, 1988). Data analysis from the current study indicates significant differences between the two groups, public and private universities, in terms of clan culture but each may have little aspects of the other culture types. For a university to have dominant features of this type of culture it implies the environment encourages the interaction of members to reflect a sense of family, emphasising participation and shared values, to the extent that everyone knows a little about everyone else. The responses from participants in private universities are characterized by what has been described as the spirit that fosters affiliation likely to drive them towards achieving institutional goals (Smart, Kuh & Tierney, 1997). Within these universities, the tendency is to have members relating well with each other, and

this is likely to translate to higher levels of performance using internal morale as the basis (Cameron & Freeman, 1991). Employees and students alike engage in behaviours driven by the motivation to trust one another, and see members as belonging to one family. This might have been made possible because of the thinking that they agreed to work for an organisation with a particular value system and so the least they can do is to agree to be bound together by loyalty, values and traditions so they can achieve set objectives. For this study, four (4) out of five (5) of the private universities that participated are faith-based universities, and perhaps their orientation might have influenced the people (who are not necessarily of the same faith as the universities they work for, or study in). The responses suggest that the individual employees and students tend to feel they belong to the same family. It could also be due to the observation that physically there are 'smaller' sizes of the overall structures of private universities, with members likely to be physically seeing and meeting each other often, interacting and sharing office spaces and structures with one another, as compared with the relatively large sizes of the public universities. It could also be as a result of conscious efforts put in place by management to have members interact as much as possible, creating the collegiality needed in an environment that is conducive for effective academic exercises. Significantly, responses to the items that made up the survey and the interview guides for this study reveal that the participants in private universities are of the view that their universities can be described as personal settings of work and learning, just like the extended family where people share information, experience and personal details. Within the private universities, the responses further indicate that there is high cohesion and morale, which are very important features of clan cultures than there is in public universities. They also believe that their leadership represents various descriptions that reflect mentorship, maternal-caring and paternal-control system such as what happens in

clans/families in African setting. For the public universities, it was observed that the participants indicated low agreement with the statements which sought to describe their universities as a personal place like a family. The numerical sizes of the public universities, the varying areas and disciplines of study as found in public universities could have played a role in getting participants not to recognize their place of work and study as exhibiting characteristics reflecting clan cultures. For instance, in one of the public universities, the staff-strength is more than 2,000, with over 30,000 students. It is therefore realistic to consider the characteristic of the size as a major contributor to this observation.

H5: Private universities will display significantly more characteristics of adhocracy culture than public universities.

The study further supported the hypothesis that *private universities will display significantly more characteristics of adhocracy culture than public universities*. It has been found that culture has a role to play in institutions' attempt to engage in solving challenges that they confront in their response to external adaptation and attempts to deal with whatever pressure there is that emanates from within (Chaffee & Tierney, 1988; Schein, 1985). To show that an organisation has an adhocracy culture, is to indicate that the features of this organisation reflect descriptions such as dynamism and entrepreneurial tendencies, where the people display the willingness to stick their necks out and take relevant risks to ensure that the organisation achieves set goals. In this study, it was observed that private universities, having their orientation as mainly private enterprises, display attributes reminiscent of profit making organisations. They charge tuition fees, and engage in strategies that result in earning more than enough income to

be able to pay workers in those universities, unlike their counterpart public universities which receive government subventions, to cover cost of running the universities in the form of salaries, and related expenditures. The private universities in Ghana might be using business approaches and their leadership has been described in this study as displaying qualities of entrepreneurs and risk takers, in their effort to innovate for success in running the universities (Cameron & Freeman, 1991). For such an environment, it is possible the people see their work, learning place and management as facilitating commitment to innovation and development as a kind of glue that holds the universities together (Smart, Kuh & Tierney, 1997). It has been observed that it is also possible that because running public universities fall under public sector activities, they cannot be easily equated with productive activities in the private sector as a result of the inherent high levels of inter-organisational coordination that needs to be considered and sometimes the negotiation and conflict resolution that could be features of public organisations (Considine, 1990; Ramachandran, Chong & Ismail, 2011).

H6: Private universities would succeed more in change implementation as compared to public universities

Data analysis show that this hypothesis was not supported. The responses show that there is no significant difference in terms of the level of success in change initiatives between public and private universities. What this means is that in the first place, there was no success achieved in change implementation, that is, there is low level of technology acceptance in both groups of universities (i.e., the means are 12.45 and 12.02 for public and private universities respectively). The responses show that given the current situation, both public and private universities are yet to succeed in achieving the aims of

technological change, perhaps because of several reasons, including the observation that ICT infrastructure is yet rudimentary in most of the universities, and not having the right culture that could create the environment for success. Even though there was some readiness registered in both public and private universities, and there are indications that readiness to change is related to change implementation success, other factors could be accounting for the lack of success in change implementation. The result also implies that the difference observed in both public and private universities was not significant perhaps because the relationship observed between change readiness and successful change implementation is correlational, it does not necessarily mean that readiness for change will cause technology acceptance. This observation of failure to succeed in implementing the change is supported by earlier findings by some studies that it is not always the case to think that universities have what it takes for success in change implementation given their expertise in handling challenges. That is, it is not always the case, that universities will all the time achieve success in handling change initiatives (DiMaggio & Powell 1983, Kraatz & Moore 2002). It takes more than readiness to succeed; other variables could be implicated. For instance, leadership and inter personal relationship are possible factors especially when dealing with people in organisations.

H7: Organisational learning would mediate the relationship between organisational culture and successful change implementation.

The results from this study do not support the hypothesis which states that *Organisational learning would mediate the relationship between organisational culture and successful change implementation*. That is, the proposal that organisational culture could exert some influence on successful change implementation through learning

organisation as a middle variable was not supported. It was evident from the analysis that there was no significant relationship between learning organisation and successful change implementation, which implies a lot. In the first place, it was found that respondents representing their various universities did not show their universities are learning organisations, and this could be one of the reasons.

Hypothesis 8: There will be a significantly positive relationship between organisational culture and change readiness

The study supported the hypothesis which states that *there will be a significantly positive relationship between organisational culture and change readiness*. This means that in situations where organisational culture is conducive and provides the right environment, the people within a particular organisation are most likely going to be ready for change, which has the potential of influencing how successful the change initiative will be. For instance in a culture where the people see the organisation as a family setting, and see the leadership as parent-figures, where there is emphasis on people, such as found in clan culture type (Cameron & Ettington, 1988), there is the likelihood that the people and the organisation would be psychologically and behaviourally ready for change on the basis that the leadership and significant others are likely to show concern and support in the process of introducing the change (Armenakis *et al*, 2007). The thinking processes and the consideration that go into the decisions to be ready for change at the individual level to some extent can be influenced by one's environment, and cannot be separated from that of the organisation (Hatch, 1993). And because one of the key elements of environment is cultural setting, issues of culture, the norms, values, and beliefs directly or indirectly have the tendency of influencing the readiness for change of a people and

the organisation as a whole, which is likely going to lead to successful change implementation.

Specifically in educational terrain, culture has been observed to be influential to the extent that it has the tendency of influencing almost everything, including the willingness to change (Deal & Peterson, 1994). So the implication is also that where there is 'negative culture' or what Peterson and Deal (1998) describe as poisonous or toxic cultures, there is the tendency for behaviors in educational settings to be negatively influenced. This study focuses on technology acceptance, and therefore with a university that has priorities of introducing and implementing technological changes, the culture of innovation would prompt them to create the necessary readiness for the change which then would have the potential of generating the desired outcome, technology acceptance to mark success in change implementation.

H9: Readiness for change would play a mediating role in the relationship between organisational culture and successful change implementation

The hypothesis which states that *readiness for change would play a mediating role in the relationship between organisational culture and successful change implementation* was supported. One of the key assumptions in this study was that appropriate cultures would serve as conducive environment to get people ready for change, else if the people who are to be affected by change initiative are not ready, it can negatively affect success in the change programme. This informed the formulation of the hypothesis, and this was supported, meaning that organisational culture through readiness for change, would have effect on successful change implementation. The implication is that with the appropriate

organisational culture type in an institution, appropriate readiness would be created prior to the introduction of a change initiative, and this increases likelihood of successful change implementation. This finding is consistent with what has been observed by Jones *et al.* (2005) who noted in their study that change readiness may be one variable through which organisational culture could influence the success of change initiatives. That is, readiness for change can be seen as a variable that plays a mediating role when considering strategies to understand the effectiveness of change initiatives such as implementing a new information system. In this case, the individual to be affected by the change initiative needs some form of readiness in the form of one's perceived capability of implementing the change initiative, or the belief a person has that they are capable of executing the new behaviours required by the change initiative (Armenakis *et al.*, 2007). Readiness could also be established in the form of belief that the introduction of the change in question (technology in the universities) is the appropriate and corrective measure taken to help eliminate the discrepancy identified, and to solve problems associated with the absence of technology. Moreover, this finding lends support for the observation that culture plays a role as a control mechanism that is potent in regulating individual and organisational behaviour (O'Reilly, 1989; O'Reilly & Chatman, 1996; Ouchi, 1980). In this case, with the appropriate culture, the thinking is that the right platform can be created for creating change readiness which will then influence the extent to which success would be achieved. The role of culture as an environment cannot be emphasised, in terms of the pivotal role culture plays when it comes to creating readiness for change (Schein, 2004) with the intention of achieving set goal for the change initiatives in organisation. Readiness in itself is influential in achieving success in change programmes (Armenakis, Harris, & Mossholder, 1993; Bartunek, Rousseau, Rudolph, & DePalma, 2006; Lewin, 1951; Schein, 1964) and so with the appropriate

culture, readiness will act as the medium through which the effect of culture can be felt on change implementation, in this case, technology acceptance.

5.3 Discussion: Study 2—In-depth Interviews with University Employees

The analysis of quantitative data reveals that change readiness mediates the relationship between organisational culture and successful change implementation measured as technology acceptance among in the various universities. It should be mentioned that data from the in-depth interviews, qualitative data, confirmed this observation, pointing to the critical role that change readiness can play when success is the target of change agents, and promoters. The implication is that in situations where within an organisation, the employees are involved, in an attempt to make them prepare their minds before the introduction of change initiatives, the tendency is for them to be willing and committed to the implementation and this can result in success in the implementation. This is the observation across universities, irrespective of their orientation. For instance, for the respondents, readiness creation in their respective campuses come in the form of organising workshops to brief people on the intended change, and they believe that when this is continued, and done properly and constantly, it would impact the change outcome positively.

For others, readiness creation in the form of capacity building is a right step with the potential of getting employees to be able to handle future change challenges. Specific mention was made of using ICT for online admissions and submission of examinations results by academic staff, among others. It is interesting to note that some of the respondents even mentioned the extent to which they need constant updates given the speed of technological advancement, and the benefits to be derived when one is ready for

change. For instance, if the use of ICT would relieve workers of the challenges involved in processing students' examinations results in Microsoft Excel, and printing out for the notice board, then it is to the benefit of the workers.

Moreover, using data of responses from the quantitative analysis, it was observed that public and private universities differ significantly on two important cultural dimensions, clan and adhocracy cultures. This was confirmed from the qualitative interviews, that, in private universities, perhaps due to the small size structurally, and the numbers in terms of human resources, there seems to be closeness, cohesion and feeling of being a family, a clan, and the assumption that the authority figures there represent parent figures, and having all the attributes as found to relate to clan culture (Cameron & Freeman, 1991), compared with what pertains in public universities.

Even though the quantitative data suggests that private universities display characteristics of clan culture and adhocracy culture, this observation does not translate into making them different compared with public universities in terms of successful change implementation. Therefore, the hypothesis which states that private universities would succeed more in change implementation as compared to public universities was not supported. The lack of support could be accounted for by the fact that it takes more than having the appropriate culture to succeed; several other factors could account for achieving the objectives of change initiatives, including readiness, availability of required resources, support from change champions and the timing of introduction of the initiative. Issues of technology acceptance (representing successful change implementation in this study) can be seen as on-going processes. It is possible to indicate readiness for acceptance, and have the environment conducive for implementing

technology-related change but if the motivation is not there, it becomes difficult to achieve any meaningful success. In any case, success can be measured at the end of a programme but in the case of technology acceptance, as conceptualised in this study, success is measured in accepting, using and having the intention to continue using the technology platforms provided as a result of the change initiatives (which themselves are on-going).

It is important to further note that there is *no contradiction* in the observation that private universities display more clan culture tendencies than the public universities. For instance, the hypothesis which states that Private universities will display significantly more characteristics of clan culture than public universities was supported, and one of the attributes of clan culture is cordiality among between members; one would expect that with this attribute, the findings would paint a different picture regarding public universities, but this was not the case. Rather, the data from qualitative data indicate that there is cordial working relationship between lower rank staff and top management in public universities largely. This could be due to the committee (Daniels, 1996) and decentralized system of governance adopted by the public universities, in which there is consultation, and sharing of information at meetings both at the faculty and departmental levels. Further, it appears suggestive from the data that the governance system in public universities allows an open-door policy practice on the part of top management and high ranking staff in their interaction with lower rank staff members, hence the basis for cordiality, not necessarily clan culture in public universities.

5.4 Discussion: Study 3—Students' Perspectives

From students' perspective, the culture in universities is crucial for academic life. For public universities, the observation is that they seem to organize and go about their work behaviours in a framework that can be described as fixed and formalized structure, where almost every activity, in terms of decision, disbursement of funds and interaction with lower level constituents like students are dictated by a formalized system, with little flexibility, depicting attributes of hierarchical culture or bureaucratic culture (Cameron & Ettington, 1988). That is, a more formal interpersonal relationship is what obtains in public universities, compared with their private counterparts. This is the case to the extent that some would describe the culture of public universities as extremely formal and regimented. Probing further, the indication was that the environment in which specifically lecturers deal with student-related issues is too formal, perhaps because of the concern about rewards and punishments. Students on their parts also have the feeling that they would want to avoid being victimized, and so respond appropriately, staying in their shells, but respond to a few academic staff who are outgoing and willing to engage in some form of 'socialization' (going for drinks, and occasional visits for guidance, etc.). This clearly indicates that to a large extent, the glue that holds the various units and stakeholders together is that of formal rules, policies, sanctions, and all the attributes associated with a hierarchical culture as described in Cameron and Ettington (1988). This has the tendency of negatively influencing social life on campuses, as indicated in the data, that because the culture is formalized, life can be boring in school, and coupled with the slow internet connectivity, the frustration is high and so some of the students decide to take to other activities that could make life a little entertaining or rewarding, such as religious activities. The fact that rules are made to guide behaviour cannot be overemphasized in public universities, but the views of some students represent the need

for some flexibility in dealing with people. Another dimension is the actual work processes in the public universities. There were concerns that due to the hierarchical nature of the systems and formalized procedures that one needs to follow, the demerits associated with bureaucratic tendencies are likely to dominate the good side of this process. For instance, it is a good thing to be organized, planning-oriented, engage in monitoring and controlling of behaviours and performances using the appropriate cultural background and laid down procedures as found in hierarchical culture. However, the concern of most of the students is the possibility of and reality of 'red tape' associated with this culture. It affects speed, and generates failure of official processes. For instance, communication can be slowed down due to the various mandatory stages involved in sending information. It is therefore a good sign that some public universities have realized the implications of slow communication and have started using the internet as a platform for sending students' examination results, information about admission, reopening and sending academic schedules such as examinations time-table, etc.

Furthermore, it is interesting to note that in terms of private universities, they have some focus on people, unlike the public universities. Students in private universities perceive their settings as quite open and more congenial atmosphere as described by most participants, the key response line being that: private universities do have a formalized way of doing things, but it is an atmosphere of friendliness, and care; there is a lot of focus on the people. So, the key features here reflect a clan type of culture, which to a large extent regulated by rules, but appears to provide warmth for generation of shared love among staff and students due to the orientation towards people instead of formal rules. Most private universities have a kind of atmosphere that provides conducive environment for good interpersonal relationships. It is therefore not surprising that such a

culture prevails in a private university because as a faith-based institution, their belief is that life would be governed by tenets that touch the very core of the religion and doctrine upon which the school was founded. Although free and peaceful atmosphere may persist, the general culture certainly cannot be too different from the religion and basic principles that govern the establishment of the institutions.

Change Readiness for Technology Acceptance among students

Participating students from both public and private universities endorsed the prime importance of ICT in education delivery and learning. The indication from them was that they are willing and ready to embrace ICT driven change because it is a fruitful process that can minimize the challenges they face as students, and they also believe that it would enhance efficiency among the teaching and non-teaching staff. Their readiness for technological change is notwithstanding the challenges of slow internet connectivity, poor ICT infrastructure on the various campuses and the mounting pressure to be good students to reflect current global standards.

Students have a way of doing their own assessment of the existence and utilization of ICT infrastructure in teaching and learning, and for administrative work in their respective universities. It was observed that they base their assessment on several elements, such as the availability of ICT centres to serve the students and lecturers, taking on-line courses, accessibility of internet facility (both wireless and broadband/cables), the use of computers and internet facilities in teaching and communicating the results to students, accessing the library for assignments preparation and submission, sending e-mails, among other things. These assertions are indications that in recent times, the use of ICT has become an integral part of the teaching and

learning activities, and administrative work in universities as students are desirous of living that experience of using advanced technology in their studies and work life in the future.

The application of ICT appears indispensable in modern university administration, as well as teaching and learning as all the universities involved in this study seem to direct their change drives towards ICT related change initiatives.

There is also a concern about the slow pace nature of ICT change in the universities. Students get frustrated when there is somewhat slow pace of ICT changes in the various universities. It was evident that among students, there is positive spirit and attitude toward ICT initiatives, they indicate willingness and readiness for accepting technology related changes, but they would prefer that there should be some sense of urgency attached to the ICT introduction and implementation. When it comes to planning that relates to the use of ICT, students indicated they feel left out. They feel alienated, with the conclusion that their views are not solicited. The implication is that the final intention to introduce ICT-related change may not necessarily be what the students think they need. It has further implications in the sense that when they are not part of the planning process, there is the tendency for them to minimize their involvement and commitment that would have been there if they took part in the decision to introduce the change. Psychologically, participation in setting such goals could produce results better than exclusion from the decision making process.

In their assessment of their respective universities as learning organisations, students indicated that they are not listened to by the authorities (management and employees—lecturers and non-teaching staff). Usually, organisations have a duty to learn in order to

innovate and remain alive. This tendency positions organisations to be more responsive to the needs and concerns of stakeholders. That is, there must be systems for encouraging communication between management and staff and people outside of the institutions, and students should not be left out of the process. The indication is that the universities take the steps to have cordial relations with outside community and individuals, but not with the students who are part of the internal constituents. Respondents have indicated further that there is regular communication among employees in the various universities. However, it is not translated into positioning the universities as listening organisations, at least not with the students. The common thread of responses from the students in this study was that members of staff could be seen working together on daily basis, indicating cordiality and cooperation among them but disregarding students indicating a lack of learning and sharing of experiences with students, and between students and staff. The same can be said of private universities. Perhaps due to their strategy to get attention from outsiders, the universities listen to them (i.e., outsiders), foster proper communication channels between the staff and an excellent relationship between the school and the outside world, to the neglect of students.

The implications are usually expected, that is, they (staff) continuously commit avoidable repetitive mistakes. The conclusion to be drawn reflects the tendency for universities to become learnable, sharing information especially about what works well and what causes failure.

5.5 Contributions of the Present Study

The study has made findings that have implications for theory and methodology in the areas of change readiness, organisational culture and change implementation success in

organisations. In the literature of organisational change, and specifically in the area of change readiness, the tendency has been to consider readiness as a variable that can be manipulated to achieve desired results in implementation of change initiatives. It is therefore critical to understand the role change readiness plays with respect to getting individuals within organisational setting to be ready enough to accept change, as suggested by scholars in the area (Armenakis *et al.*, 2007; Burke, 2011; Lewin, 1947). Given this background, and the observation that organisational culture is a very important variable that has influence on certain behaviours in organisation (Deal & Kennedy, 1982; Tichy, 1982) the main assumption was that a relationship could exist among these variables: readiness, culture and success. That is, it was proposed at the beginning of the study that where culture provides a facilitating atmosphere, there is the tendency for the people in organisations, in this case universities, to be ready for change, which then becomes pivotal in achieving success in change initiatives. In other words, readiness would mediate the relationship between organisational culture and change implementation success. The findings reveal that this proposal was supported, when change readiness (the mediator) predicts the relationship between organisational culture and successful change implementation as independent variable and dependent variables respectively. The implications are presented in the observed model that follows.

5.6 Observed model of the relationship between organisational culture, change readiness and successful change implementation

The observed model is presented in Figure 5.1 that follows, detailing the relationship among the key variables of interest in this study.

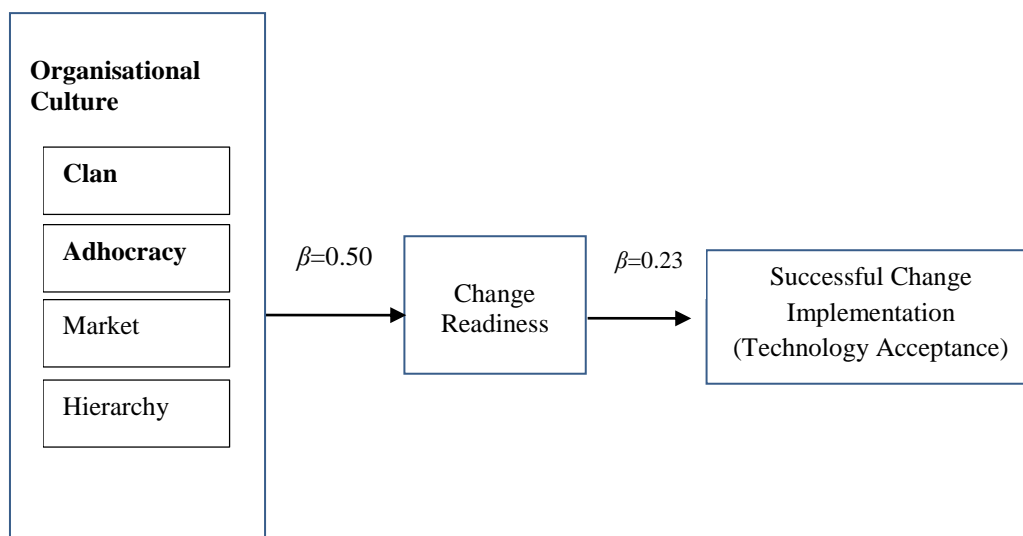


Figure 5.1: The Observed Model: Change Readiness mediating the relationship between organisational culture and successful change implementation

In Figure 5.1, it was found that the key positions of the main variables in the hypothesized model were sustained with slight modifications. The hypothesis that readiness for change would play a mediating role in the relationship between organisational culture and successful change implementation within organisations was supported. The model shows that change readiness fully mediated the relationship between organisational culture and successful change implementation. This means that change readiness is necessary for organisational culture to have impacted successful change implementation. The implication is that without change readiness, organisational culture in itself would not have influenced successful change implementation because there is not direct relationship between the independent variable (organisational culture)

and the dependent variable (successful change implementation). For the dimensions in organisational culture, it was *clan* and *adhocracy cultures* that were highlighted in the model because it was found that public and private universities differ significantly on these variables (i.e., clan and adhocracy cultures).

Learning organisation as a variable did not mediate the relationship between organisational culture and successful change implementation as hypothesized in the present study, and so it is not part of the observed model.

Moreover, the hypothesis that there would be significant difference between public and private universities in terms of change implementation success was not supported, just as the two groups do not differ significantly on the extent to which they could be described as learning organisations. As a result, the model details the linkages that were found to be significant from data in the present study.

Responses from students also confirm the usefulness of readiness for change if change initiatives would have to be successful.

In terms of practical relevance, this study contributes knowledge by drawing attention to the importance of creating the necessary readiness prior to the introduction of change. This would be beneficial as a step towards building research data base in the area of change management in tertiary education especially in Ghana, from psychological perspective. The study can be considered as one side of contributions from academia and scholars toward finding solutions to challenges facing university education in Ghana. For instance in their study, Manuh *et al.* (2007) recommended among other things, that there is the need to have sustainable systems in place that could facilitate the use of advanced technology for the improvement of Ghanaian universities, in a manner that contribute to

national development. Therefore, the observations made in this study serve as ground breaking in the area of psychology, available for use in organisations especially by institutions of higher learning in Ghana and beyond.

5.7 Limitations of the study

The study reveals general findings which cannot be tied to a particular university.

It should also be mentioned that readiness for change in an ideal situation should have been commenced prior to specific change initiative. However, since this is an academic exercise and the researcher has no opportunity to have foreknowledge of university-specific change initiatives, a general assumption was made, basing it on the observation that all universities are undergoing a kind of change or the other, and therefore qualified to be studied. This notion would have been taken care of in a practical research situation (had it not been the limited time frame within which the study was to be conducted).

These limitations notwithstanding, the study has made insightful revelations, which are worthy of sharing. The following paragraphs detail recommendations for university management effectiveness and for future research.

5.8 Recommendations for Practices in Universities

The study has explored the area of organisational culture and change readiness in universities, and how these two important variables relate successful implementation of change initiatives.

The empirical objective was to start with a study that breaks the ground by drawing the framework for universities to consider in implementing change initiatives. The findings are general, such that interested universities could arrange for a university-specific study

to be conducted for them. This objective of coming with a ground-breaking finding was achieved and based on the findings of the study, the following views are shared in the form of recommendations, first for practical use in university administration, and then for future research direction in the study areas.

Using Readiness Barometer before and during change implementation saves resources. The observation that there is a positive relationship between change readiness and how change would succeed tells the need for universities to engage in measuring readiness and awareness creation, especially taking the steps that would inform (and involve in the planning stages) the people who would be affected by change initiatives, prior to the introduction of any major change. This strategy serves as a control mechanism for starting, monitoring and completing change programmes in a manner that brings or generates involvement and commitment to the achievement of change objectives. The finding discourages the practice whereby leadership of organisations sometimes plan to introduce change initiatives without thinking about the steps involved in getting the affected people well psyched up for the effects. Readiness creation and gauging change readiness even in the middle of programme implementation saves resources in terms of having to spend money and precious time dealing with avoidable resistance to change. Moreover, it is important to minimize power struggle before, during and after implementation of change initiatives. The process of planning and implementing change initiatives should not be focusing on ‘showing people where power lies’ (i.e a Ghanaian perception of leaders who think they are the heads, and have all the power vested in them to take the decisions without being challenged). Planning should rather take advantage of the opportunity to achieve change objectives by putting in place strategies that can motivate people to accept and be committed to change implementation.

Related to the above point is the need for culture profiling prior to introduction of change initiatives in organisations including universities. It is important for organisations to leverage on their strengths in the kind of culture types they have before implementing change initiatives. It was observed in this study that readiness for change mediates the relationship between organisational culture and successful change implementation; this tells universities the critical role that change readiness can play, and the importance of some elements of culture for change implementation success. This would require a culture profiling as part of planning the change, to determine which environmental factors are likely to facilitate the success of the intended change. Therefore, the recommendation is for the individual universities to constantly gauge the type of culture by having in place a culture profile, and readiness barometer. The culture profile can be conducted specifically for the individual universities and would usually involve the key stakeholders of the institution, preferably a cross-section, instead of limiting contacts and deliberations to top level discussions.

The change readiness indicator is necessary and can even be incorporated in recruitment and selection systems such that before employment, the human resource system would be sure to have individuals who are willing and ready to go by the institution in attaining set objectives.

Moreover, the findings imply that generally, university administrators should encourage the practices and behaviours that reflect cohesion and generate closeness between the people as constituents of university education. For instance, the observation that private universities exhibit clan cultural characteristics is a good sign for private universities,

and so they could consider benefiting from the positive sides of this kind of culture. This would be very practical if given the atmosphere, the individual universities take steps to encourage learning within the organisation, the culture of learning would bring out the strength that could be harnessed to achieve success. Those things that worked well could be replicated in other units, and the aspects that do not work well taken care of so that mistakes could be avoided.

It is further recommended that the public universities should get ready to develop a type of culture that helps in streamlining their systems and cultural settings in a manner that is people-centred. That is, they could engage the necessary levers that will get them to bring about the needed cohesion in their institutions for effectiveness in implementing change programmes in the future. This is necessary because in this era of globalization and fast-paced technology advancement, coupled with managerialism in universities, there is the tendency for leadership to want to focus on running universities as private business enterprise, and as such it is vital to know the type of culture that could facilitate the achievement of such objectives, and to take note of other inhibitory tendencies likely to emanate from certain cultural tendencies.

It is also recommended that universities should take steps at pursuing ICT aggressively by professionally upgrading the systems, fixing the infrastructure and broken down networks on their campuses, to help take care of the frustration that users go through when using the facilities. This will also contribute to having a strategy with a sustained ICT-base change, and a mindset that would be oriented towards the culture of maintenance. Perhaps when students and other stakeholders are involved in decision

making towards planned change initiatives, it could move the universities towards achieving desired results.

Lastly, from the study, it was clear that universities in Ghana are ready for change, only that there is no significant difference in terms of the comparison made between the two main groups of public and private universities. What this means is that the universities are on track of succeeding in implementing change initiatives, with a conscious effort. It is important to note that even though there are different models scholars have proposed for use as guide when discussing organisational change and culture, this study is of the view that universities should avoid using existing textbook responses for solutions; there are experts in the area of culture and change who could be of use to the universities, that is, if they want to be helped. Psychologists who specialize in the area are available, and could be contacted for consultation and implementation of programs especially because of the human behavior elements involved in the process of diagnosing cultures and implementing programmes that relate to culture and change.

5.9 Future Research Direction

Studies of this nature could incorporate the views of university management if they are available. Attempts have been made to contact university management but due to their busy schedules it was difficult to get them to participate.

In future, attempts could be made to do a longitudinal study and focus on less number of universities, instead of using many universities. The use of smaller number of universities has the potential of getting the university administration to practically use

the research finding as it is, but this will lead to low external validity, the extent to which the finding can be generalized to other universities.

Future studies may benefit from specific change case-studies in specific universities and collaboration is needed in similar research areas.

5.10 Overall Conclusion

This study sought to examine the extent to which organisational culture will have influence on change implementation success of public and private universities when the people to be affected by the change initiative are ready. It further compared public and private universities on the extent to which they can be said to be ready for change, learning organisations and have unique cultures that have the tendency of influencing the how successful they can be in terms of implementing change initiatives. Of the nine hypotheses tested, five were supported, and four were not supported. Key findings include the observation that private universities have significant features of clan and adhocracy cultures, compared with public universities. Moreover, it was observed that readiness for change mediates the relationship between organisational culture and technology acceptance as a measure of successful change implementation. These are reflected in the observed model of the study. The use of technology in universities cannot be downplayed in terms of the contribution this continues to make in reducing the burden on employees, and students who use it. It is therefore necessary to introduce and implement changes that will boost the extent to which universities will continue to deliver value for their patrons. In the process, all relevant factors such as cultural environment and readiness for change should be considered among other things, if such initiatives are expected to succeed. A very important psychological variable like

readiness for change could release some form of energy in the individuals, putting them in the mood to be ready to work with improved ways and tools. Moreover, given the appropriate culture, people would like to identify with their organisation to the extent that their thinking and behaviours could be influenced by the prevailing culture.

It must also be noted that because of individual differences, and differences in perceptions, readiness could vary from person to person considerably. This important factor should not be downplayed when getting involved with change readiness creating and profiling organisation culture.

It is expected that the findings will help contribute to successful university administration in Ghana and beyond.

REFERENCES

- Agbodeka, F. (1998). *A history of University of Ghana: Half a century of higher education (1948–1998)*. Accra: Woeli Publishing Services.
- Ajzen, I. (1991). The theory of planned behaviour. *Organisational Behaviour and Human Decision Processes*, 50, 179–211.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour*. Englewood-Cliffs, NJ: Prentice-Hall.
- Alemna, A. A., & Sam, J. (2006). Critical issues in information and communication technologies for rural development in Ghana. *Information Development*, 22 (4), 236-241. doi: 10.1177/0266666906074181
- Armenakis, A. A., & Bedeian, A. G. (1999). Organisational change: A review of theory and research in the 1990s. *Journal of Management*, 25, 293-315.
- Armenakis, A. A., Bernerth, J. B., Pitts, J. P., & Walker, H. J. (2007). Organisational Change Recipients' Beliefs Scale: Development of an Assessment Instrument. *The Journal of Applied Behavioural Science*, 43 (4). 481-505.
- Armenakis, A. A., Harris, S. G., & Feild, H. S. (1999). Paradigms in organisational change: Change agent and change target perspectives. In R. Golembiewski (Ed.), *Handbook of organisational behaviour* (pp. 631–658). New York: Marcel Dekker.
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organisational change. *Human Relations*, 46, 681-703.

- Badu, E. E. (2001). The African corporate culture: An obstacle to strategic planning in Ghanaian university libraries. *Library Management*, 22(4/5), 212-220.
- Bandura, A. (1977) Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bartell, M. (2003). Internationalization of universities: A university culture-based framework. *Higher Education*, 45, 43-70.
- Bartholomew, T. T., & Brown, J. R. (2012). Mixed Methods, Culture, and Psychology: A Review of Mixed Methods in Culture-Specific Psychological Research. *International Perspectives in Psychology: Research, Practice, Consultation*, 1(3), 177–190.
- Bartunek, J. M., Rousseau, D. M., Rudolph, J., & Depalma, J. (2006). On the receiving end: Sensemaking, emotion, and assessments of an organisational change initiated by others. *Journal of Applied Behavioral Science*, 42, 182-206.
- Becher, T., & Trowler, P. (2001). *Academic Tribes and Territories: Intellectual Enquiry and the Cultures of Disciplines (2nd edition)*. Buckingham: Open University Press/SRHE.
- Beehr, T. A. (1996). *Basic organisational psychology*. Boston: Allyn & Bacon.
- Beer, M., & Nohria, N. (2000). *Breaking the code of change*. Boston, MA: Harvard Business School Press.
- Bellot, J. (2011). Defining and Assessing Organisational Culture. *Nursing Forum*, 46(1), 29-37.

- Bercovitz, J., & Feldman, M. (2008). Organisational change at the individual Level. *Organisation Science* 19(1), pp. 69–89.
- Bergquist, W. H. (1992). *The four cultures of the academy*. San Francisco: Jossey Bass
- Bergquist, W. H., & Pawlak, K. (2008). *Engaging the six cultures of the academy*. San Francisco: Jossey-Bass
- Bernerth, J. (2004). Expanding our understanding of the change message. *Human Resource Development Review*, 3(1), 36-52.
- Bess, J. L., & Dee, J. R. (2008a). *Understanding college and university organisations: Theories for effective policy and practice—I: The state of the system*. Virginia: Stylus.
- Bess, J. L., & Dee, J. R. (2008b). *Understanding college and university organisations: Theories for effective policy and practice—II: Dynamics of the system*. Virginia: Stylus.
- Birnbaum, R. (1988). *How colleges work*. San Francisco: Jossey-Bass.
- Block, G. L., & Keller, P. A. (1998). Beyond protection motivation: An integrative theory of health appeals. *Journal of Applied Social Psychology*, 28(17), 1584–1608
- Boan, D. M. (2006). Cognitive–Behavior Modification and Organisational Culture. *Consulting Psychology Journal: Practice and Research*, 58(1), 51–61.

- Bollag, B. (2004). Improving Tertiary Education in Sub-Saharan Africa: Things that Work, Working Paper Series. *Human Development Sector, Africa Region*, The World Bank, Washington DC, USA.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77 — 101.
- Brown, A. (1998). *Organisational Culture*. London, UK: Pitman Publishing.
- Buchholz, A. R., & Rosenthal, B. S. (2004). Stakeholder theory and public policy: How governments matter. *Journal of Business Ethics*, 51 (2), 43-153.
- Budu, J. M., Acheampong, V., & Quartey, A. (2002). In T. Manuh, S. Gariba, & J. Budu, *Change and transformation in Ghana's publicly funded universities: A study of experiences, lessons & opportunities*. Higher Education in Africa. Oxford: James Currey.
- Burke, W. W. (2011). *Organisation Change: Theory and Practice*. (3rd Edition). California: SAGE Publications.
- Cameron, K.S. (1984). Organisational adaptation and higher education. *Journal of Higher Education*, 55, 122-144.
- Cameron, K. S., & Ettington, D. R. (1988). The conceptual foundations of organisational culture. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research*, 4, (pp. 356-396). New York: Agathon Press.
- Cameron, K. S., & Freeman, S. J. (1991). Cultural congruence, strength, and type: Relationships to effectiveness. *Research in Organisational Change and Development*, 5, 23-58.

- Cameron, K.S., & Quinn, R. E. (1999). *Diagnosing and Changing Organisational Culture: Based on the Competing Values Framework*. Reading, MA: Addison-Wesley.
- Cameron, K.S. & Quinn, R. E. (2006). *Diagnosing and Changing Organisational Culture: Based on the Competing Values Framework*, revised edition. New York, NY: Wiley.
- Chaffee, E. E., & Tierney, W. G. (1988). *Collegiate cultures and leadership strategies*. New York: American Council on Education: Macmillan.
- Choi, M. (2011). Employees' attitudes toward organisational change: a literature review. *Human Resource Management, 50*(4), 479–500. doi:10.1002/hrm.20434
- Church, A. T., & Katigbak, M. S. (2002). Indigenization of psychology in the Philippines. *International Journal of Psychology, 37*, 129–148.
- Clark, B. (1998). *Creating entrepreneurial universities: Organisational pathways of transformation*. Oxford: Pergamon.
- Clark, B. (2004). Delineating the character of the entrepreneurial university. *Higher Education Policy, 17*, 355–370.
- Clark, B. R. (1972). Organisation saga in higher education. *Administrative Science Quarterly, 17*(2), 178-9.
- Clark, B.R. (1984). *Academic culture*. Yale Higher Education Working Group Paper.
- Coady, T. (2000). *Why universities matter: A conversation about values, means and directions*. Sydney: Allen and Unwin.

- Coaldrake, W. (1996). Architecture and authority in Japan. In J. L. Bess, & J. R. Dee. (2008a). *Understanding college and university organisations: Theories for effective policy and practice—1: The state of the system*. p 365. Virginia: Stylus.
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences*. (2nd Ed). Hillsdale, NJ: Lawrence Erlbaum.
- Cohen, M., & March, J. (1974). *Leadership and ambiguity: The American college presidency*. New York: McGraw Hill.
- Considine, M. (1990). Managerialism strikes out. *Australian Journal of Public Administration*, 49, 166-78.
- Cook, C. W., & Hunsaker, P.L. (2001). Organisational Change, Development and Innovation. *Management and Organisational Behaviour*. Chap 15, pp. 526-56. New York: McGraw-Hill Companies Inc.
- Cooke, R . A., & Rousseau, D. M. (1988). Behavioural norms and expectations: a quantitative approach to the assessment of organisational culture. *Group & Organisation Studies*, 13, 245-273.
- Cooke, R. A., & Szumal, J. L. (1993). Measuring normative beliefs and shared behavioural expectations in organisations: the reliability and validity of the organisational culture inventory. *Psychological Reports*, 72, 1299-1330.
- Cooper, S., Hinkson, J., & Sharp, G. (2002). *Scholars and entrepreneurs: The universities in crisis*. Melbourne: Arena Publications Association.
- Costley, D. L & Todd, R. (1987). *Human Relations in Organisations*. New York: West Publishing Company. 434-466.

- Daft, R. L. (1983). Learning the Craft of Organisational Research. *Academy of Management Review*, 8, 539-546.
- Daniels, G.F. (1996). *The universities in Ghana*. The Commonwealth Universities Year Book 1997-1998, Vol. 1, pp. 649-56.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1002.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace. *Journal of Applied Social Psychology*, 22(14), 1111-1132.
- Davison, R., & Martinsons, M. (2003). Guest editorial cultural issues and IT management: Past and present. *IEEE Transactions on Engineering Management*, 50(1), 3-7.
- De Zilwa, D. (2007). Organisational culture and values and the adaptation of academic units in Australian Universities. *Higher Education* 54(4), 557-574.
- Deal, T., & Kennedy, A. (1982). *Corporate cultures: the rights and rituals of corporate life*. Reading, MA: Addison Wesley.
- Deal, T.E., & Peterson, K.D. (1994). *The leadership paradox: Balancing logic and artistry in schools*. San Francisco: Jossey-Bass.

- Deem, R. (2001). Globalisation, new managerialism, academic capitalism and entrepreneurialism in universities: Is the local dimension still important? *Comparative Education*, 37(1), 7-20.
- Denison, D. (1984). Bringing corporate culture to the bottom line. *Organisational Dynamics*, 13, 4-22.
- Denison, D. (1990). *Corporate culture and organisational effectiveness*. New York: Wiley.
- Denison, D. R. (1996). What is the Difference between Organisational Culture and Organisational Climate? A Native's Point of View on a Decade of Paradigm Wars. *The Academy of Management Review*, 21(3), 619-654.
- Denison, D., & Mishra, A. (1995). Toward a theory of organisational culture and effectiveness. *Organisation Science*, 6, 204-223.
- Denison, D., Hooijberg, R., Lane, N., & Lief, C. (2012). *Leading culture change in global organisations: Aligning culture and strategy*. San Francisco, CA: Jossey-Bass.
- Dent, E., & Goldberg, S. (1999). Challenging resistance to change. *Journal of Applied Behavioural Science* 25-41.
- Diaz-Loving, R. (2005). Emergence and contributions of a Latin American indigenous social psychology. *International Journal of Psychology*, 40, 213–227.
doi:10.1080/00207590444000168

- DiMaggio, P., & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organisational fields. *American Sociological Review* 48(2) 147–160.
- Drucker, P. F. (1998). *Peter Drucker on the profession of management*. Boston, MA: Harvard Business School Publishing.
- Duncan, W. (1989). Organisational culture: “Getting a fix” on an elusive concept. *The Academy of Management Executive* 3(3), 229-236.
- Evans, L. C. (1990). Can questionnaires objectively assess organisational Culture? *Journal of Managerial Psychology*, 5(4), 4 – 11.
- Fjortoft, N., & Smart, J. (1994). Enhancing organisational effectiveness: The importance of cultural type and mission agreement. *Higher Education*, 27, 429-447.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Fugate, M., Kinicki, A., & Prussia, G. (2008). Employee coping with organisational change: An examination of alternative theoretical perspectives and models. *Personnel Psychology*, 61, 1-36.
- Gamson, Z., Kanter, S., & London, H. (1992). General education reform: Moving beyond the rational model of change. *Perspectives: The Journal of the Association of General and One of the same time Liberal Studies*, 22(1), 58–68.
- Garvin, D. A. (1993). Building a learning organisation. *Harvard Business Review*, 78-91.
- Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.
- Gelo, O., Braakmann, D., & Benetka, G. (2008). Quantitative and qualitative research: Beyond the debate. *Integrative Psychological and Behavioural Science*, 42, 266–290. doi:10.1007/s12124-008- 9078-3

- Gordon, G. G., & Ditomaso, N. (1992). Predicting corporate performance from organisational culture. *Journal of management studies*, 29, 783-798.
- Gornitzka, A. (1999). Governmental policies and organisational change in higher education. *Higher Education* 38, 5–31.
- Greenwood, R., & Hinings, C. R. (2006). Radical organisational change. In S. Clegg, C. Hardy, T. Lawrence, & W. R. Nords, (Eds.), *The Sage Handbook of Organisational Studies*, Sage Publications Ltd., London, UK, 814–842.
- Hambrick, D. C., & Brandon, G. L. (1988). Executive values. In D. C. Hambrick (Ed.), *Executive effectiveness. Concepts and methods for studying top managers* (pp. 3-34). Greenwich, CT: JAI Press.
- Harkness, S., Moscardino, U., Ri'os Bermu'dez, M., Olaf Zylicz, P., Welles-Nyström, B., Blom, M., & Super, C. M. (2006). Mixed methods in international collaborative research: The experiences of the international study of parents, children, and schools. *Cross-Cultural Research*, 40, 65–82. doi: 10.1177/1069397105283179
- Harris, G. S. (1994). Organisational culture and individual sensemaking: A schema-base perspective. *Organisation Science*;5(3) 309.
- Harrison, D. A., Mykytyn, P. P., & Riemenschneider, C. K. (1997). Executive decisions about adoption of information technology in small business: theory and empirical tests. *Information Systems Research* 8(2), 171-195.
- Hatch, M. J. (1993). The dynamics of culture. *Academy of Management Review*, 18, 657-693.

- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical Mediation Analysis in the New Millennium. *Communication Monographs*, 76 (4), 408-420, DOI: 10.1080/03637750903310360
- Herscovitch, L. & Meyer, J. P. (2002). Commitment to Organisational Change: Extension of a Three-Component Model. *Journal of Applied Psychology*, 87 (3), 474–487.
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organisational Research Methods*, 1, 104-121.
- Hinkin, T. R., & Tracey, J. B. (1999). An Analysis of Variance Approach to Content Validation. *Organisational Research Methods*, 2(2), 175-186.
- Hofstede, G. (1980). *Culture's consequences*. Beverly Hills, CA: Sage.
- Hofstede, G. (1991). *Culture and organisations: Software of the mind*. New York: McGraw-Hill.
- Hofstede, G. (2000). *Culture's consequences: Comparing values, behaviours, institutions, and organisations across nations*, CA: Sage, Thousand Oaks.
- Hofstede G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organisations Across Nations*. Thousand Oaks, CA: Sage. 2nd ed.
- Hofstede, G., & Bond, M. H. (1988). The Confucius connection: From cultural roots to economic growth. *Organisational Dynamics*, 16(4), 5-21.

- Hofstede G., & Hofstede, G.J. (2005). *Cultures and Organisations: Software of the Mind*. New York: McGraw-Hill.
- Holt D. T., & Vardaman J. M. (2013). Towards a comprehensive understanding of readiness for change: The case for an expanded conceptualisation. *Journal of Change Management*, 13(1), 9-18.
- Holt, D. T., Armenakis, A. A., Feild, H. S. & Harris, S. G. (2007). Readiness for organisational change: the systematic development of a scale. *The Journal of Applied Behavioural Science*, 43(2), 232-255. DOI: 10.1177/0021886306295295
- Holyoke, B. L., Sturko, A. P., Wood, B. N., & Wu, J. L. (2012). Are academic departments perceived as learning organisations? *Educational Management Administration & Leadership*, 40(4) 436–448. DOI: 10.1177/1741143212438219.
- Jackson, S. (2011). Organisational culture and information systems adoption: A three-perspective approach. *Information and Organisation* 21 57–83.
- James Y. L. Thong, J. Y. L., Hong, W., & Tam, K. Y. (2002). Understanding user acceptance of digital libraries: what are the roles of interface characteristics, organisational context, and individual differences? *International Journal of Human-Computer Studies*, 57, 215–242.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Jones, R. A., Jimmieson, N. L., & Griffiths, A. (2005). The impact of organisational change culture and reshaping capabilities on change implementation success: the

mediating role of readiness for change. *Journal of Management studies*, 42 (2), 361-386.

Jongbloed, B., Maassen, P., & Neave, G. (1999). *From the eye of the storm: Higher education's changing institution*. Dordrecht: Kluwer

Judge, T. A., & Kristof-Brown, A. (2004). Personality, interactional psychology, and person-organisation fit. In B. Schneider, & D. B. Smith (Eds.), *Personality and organisations*. (pp. 87-109). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999). Managerial coping with organisational change: A dispositional perspective. *Journal of Applied Psychology*, 84(1), 107–122.

Jung, C. G. (1973). *Four Archetypes, Mother/Rebirth/Spirit/Trickster*. Princeton, NJ: Princeton University Press

Kantor, J. R. (1924). *Principles of psychology* (Vol. 1). Bloomington, IL: Principia.

Karasz, A., & Singeli, T. M. (2009). Qualitative and mixed methods research in cross-cultural psychology. *Journal of Cross-Cultural Psychology*, 40, 909-916.

Katz, D., & Kahn, R. (1978). *Social Psychology of Organisations*. New York: Wiley.

Kezar, A. J., & Eckel, P. D. (2002). The effect of institutional culture on change strategies in higher education: Universal principles or culturally responsive concepts. *The Journal of Higher Education*, 73, 435-460.

- Khan, I. U., Usoro, A., Majewski, G., & Kuofie, M. (2010). An Organisational Culture Model for Comparative Studies: A Conceptual View. *International Journal of Global Business*, 3(1), 53-82.
- Kim, U., & Berry, J. (1993). Introduction. In: U. Kim & J. Berry, eds. *Indigenous Cultural Psychologies: Research and Experience in Cultural Context*, (pp. 1–29). Newbury Park, CA: Sage.
- Klein, A. (2008). Organisational culture as a source of competitive advantage. *E-Leader Bangkok*, 1-10.
- Kotter, J. P. (1995). Leading Change - Why Transformation Efforts Fail. *Harvard Business Review*, 59-67.
- Kraatz, S., J. Moore. (2002). Executive migration and institutional change. *Academy of Management Journal*, 45(1) 120–143.
- Krucken, G. (2003). Learning the ‘New, New Thing’: On the role of path dependency in university structures. *Higher Education*, 46, 315–339.
- Kuada, J. (1994). *Managerial behaviour in Ghana and Kenya – a cultural perspective*. Aalborg: Aalborg University Press.
- Kuh, G. D., & Whitt, E. J. (1988). *The invisible tapestry: Culture in American colleges and universities*. ASHE-ERIC Higher Education Report, No. 1. Washington, D.C.: Association for the Study of Higher Education
- Latham, G. P. (2003). Goal setting: A five-step approach to behavior change. *Organisational Dynamics*, 32(3), 309-318.

- Lawler, E. E. III, & Worley, C. G. (2006). *Built to change: How to achieve sustained organisational effectiveness*. San Francisco: Jossey-Bass.
- Lewin, K. (1935). *A dynamic theory of personality*. New York, NY: McGraw-Hill.
- Lewin, K. (1946). Action research and minority problems. In Lewin, G.W. (Ed.), *Resolving Social Conflict*. London: Harper & Row.
- Lewin, K. (1947a). Frontiers in group dynamics. *Human Relations*, 1, 5-41.
- Lewin, K. (1947b). Quasi-stationary social equilibria and the problem of permanent change. In W. W. Burke, D. G. Lake, & J. W. Paine (Eds.), *Organisation Change: A Comprehensive Reader* (pp 73-77). San Francisco: Jossey-Bass.
- Lewin, K. (1951). *Field Theory in Social Science*. New York: Harper and Row.
- Lewin, K. (1952). Group decision and social change. In G. E. Swanson, T. N. Newcomb, & E. L. Hartley (Eds.), *Readings in social psychology* (rev. ed., pp. 459-473). New York: Holt, Rinehart & Winston.
- Linnenluecke, M. K., & Griffiths, A. (2010). Corporate sustainability and organisational culture. *Journal of World Business*, 45, 357–366, DOI: 10.1016/j.jwb.2009.08.006
- Lippitt, R., Watson, J., & Westley, B. (1958). *Planned change: A comparative study of principles and techniques*. New York, NY: Harcourt, Brace, & World.
- Luhmann, N. (1995) *Social Systems*. Stanford: Stanford University Press.
- Magnusson, D. & Endler, N. S. (1977). *Personality at the crossroads: Current issues in interactional psychology*. New York: Willey.

- Manuh, T, Gariba, S., & Budu, J. (2007). *Change and transformation in Ghana's publicly funded universities: A study of experiences, lessons & opportunities*. Higher Education in Africa, Oxford: James Currey
- Marginson, S., & Considine, M. (2000). *The enterprise university: Power, governance and reinvention in Australia*. Cambridge: Cambridge University Press.
- Marsick, V., & Watkins, K. (2003). Demonstrating the value of an organisation's learning culture: The dimensions of the learning organisation questionnaire. *Advances in Developing Human Resources*, 5, 132-151.
- Martin, J. (1992). *Cultures in Organisations: Three Perspectives*. New York: Oxford University Press.
- Mathieson, K. (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behaviour. *Information Systems Research*, 2(3), 173-191.
- McKenna, E. (2012). *Business psychology and organisational behaviour*. (5th Ed) New York: Psychology Press.
- McNay, L. (1999). Gender, habitus and the field Theory. *Culture & Society*, 16(1), 95-117.
- Meek, V. L. (2003). Governance and management of Australian higher education: Enemies within and without. In A. Amaral, V. L. Meek, & I. M. Larsen (Eds.), *The higher education managerial revolution?* (Vol. 3, pp. 179–201). Dordrecht: Kluwer Academic Publishers.

- Meyer, J.P., & Maltin, E. R. (2010). Employee commitment and well-being: A critical review, theoretical framework and research agenda. *Journal of Vocational Behaviour, 77*, 323–337.
- Miller, R. (1998). *Reforming higher education: As if learning mattered*. Ithaca: Cornell University Press.
- Mintzberg, H. (1979). *The structuring of organisations*. Englewood Cliffs, NJ: Prentice-Hall.
- Mitroff, I. (1983). Stakeholders of the organisational mind. In K. S. Cameron, & D. R. Ettington, (1988). *The conceptual foundations of organisational culture*. p 370.
- Molina Azorín, J, M & Cameron, R. (2010). The Application of Mixed Methods in Organisational Research: A Literature Review. *The Electronic Journal of Business Research Methods, 8*, (2). (pp.95-105),
- Morera, O. F., Johnson, T., Freels, S., Parsons, J., Crittenden, K., Flay, B., & Warnecke, R. (1998). The measure of stage of readiness to change: Some psychometric considerations. *Psychological Assessment, 10*, 182–186.
- Morse, J. M. (1991). On funding qualitative proposals [Editorial]. *Qualitative Health Research, 192*, 147-151.
- Muñler, U., Carpendale, J. I. M., & Smith, L. (2009). *The Cambridge companion to Piaget*. New York, NY: Cambridge University Press. doi: 10.1017/CCOL9780521898584
- National Council for Tertiary Education (NCTE, 2013). *About us*. Available online at <http://www.ncte.edu.gh/index.php/about-us/the-ncte-act>

- Newmann, E. (1955). *The great mother: An analysis of archetype*. Princeton: Princeton University Press.
- O'Reilly, C. (1989). Corporations, culture and commitment: Motivation and social control in organisations. *California Management Review*, 31(4), 9–25.
- O'Reilly, C.A., & Chatman J.A. (1996). Culture as social control: Corporations, cults, and commitment. *Research in Organisational Behavior*, 18, 157–200.
- Offerman, L. R., & Gowing, M. K. (1990). Organisations of the future: Changes and challenges. *American Psychologist*, 45, 95–108.
- Oreg, S. (2006). Personality, context, and resistance to organisational change. *European Journal of Work and Organisational Psychology*, 15(1), 73–101.
- Oreg, S., Vakola, M., & Armenakis, A. (2011). Change recipients' reactions to organisational change: A 60-year review of quantitative studies. *Journal of Applied Behavioral Science*, 47, 461-524.
- Ouchi, W. G. (1980). Markets, Bureaucracies, and Clans. *Administrative Science Quarterly*, 25, 129-141.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128, 3-72.
- Parliament, Ghana (1961). Act 79: Establishment of Valley View University. (www.vvu.edu.gh: Accessed on 27th January, 2013)

- Peltokorpi, A., Alho, A., Kujala, J., Aitamurto, J., & Parvinen, P. (2008). Stakeholder approach for evaluating organisational change projects. *International Journal of Health Care Quality Assurance*, 21(5), 418-434.
- Peters, T. & Waterman, R. (1982). *In search of excellence: Lessons from America's best run companies*. New York: Harper & Row.
- Pettigrew, A. M. (1979). On studying organisational cultures. *Administrative Science Quarterly*, 24 (4), 570-581.
- Pettigrew, A. M. (2000). Linking change processes to outcomes: A commentary on Ghoshal, Bartlett, and Weick. In M. Beer & N. Nohria (Eds.), *Breaking the code of change* (pp. 243-265). Boston, MA: Harvard Business School Press.
- Piderit, S. K. (2000). Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organisational change. *Academy of Management Review*, 25, 783-794.
- Porras, J. I. & Robertson, P. J. (1992). Organisational development: Theory, practice and research. In M. Dunnette, L. Hough (Eds.), *Consulting Psychologist Press*, Palo Alto, (pp.719 – 822).
- Porras, J. I. & Silvers, R. C. (1991). Organisation development and transformation. *Annual Review of Psychology*, 42, 51-78.
- Procaska, J., & Velicer, W. (1997). The transformational model of health behavior change. *American Journal of Health Promotion*, 12(1), 38-48.
- Puplampu, B. B. (2004). Belling the cat – towards a taxonomy of organisational culture in Ghana: A research note, *Ife Psychologia*, 12 (1), pp. 1-6.

- Puplampu, B. B. (2005). Toward a framework for understanding the distressed organisation: Practitioner based insights from an emerging economy. *Consulting Psychology Journal – Research and Practice*, 57,(4), pp. 246-258.
- Puplampu, B. B. (2012). Organisational culture: variable, elastic and malleable: a study of how variable practises may construct organisational culture in an African setting. *Asia Pacific Journal of Business and Management*, 3(2), 1-21.
- Quinn, R.E. & Rohrbaugh, J. (1981). A Competing Values Approach to Organisational Effectiveness. *Public Productivity Review*, 5, 22-140.
- Quinn, R.E. & Rohrbaugh, J. (1983). A Spatial Model of Effectiveness Criteria: Towards a Competing Values Approach to Organisational Analysis. *Management Science*, 29(3), pp. 363-377.
- Ramachandran, S. D., Chong, S. C. & Ismail, H. (2011). Organisational culture: An exploratory study comparing faculties' perspectives within public and private universities in Malaysia. *International Journal of Educational Management*, 25 (6), 615-634.
- Robbins, S. P. (1993). *Organisational Behaviour: Concepts, Controversies, and Applications*. (6th Ed). New Jersey: Prentice-Hall Inc.
- Rossmann, G. B., Corbett, H. D. & Firestone, W. A. (1988). *Change and effectiveness in schools: A cultural perspective*. Albany: SUNY Press.
- Rousseau, D. (1990). Quantitative assessment of organisational culture: The case for multiple measures. In B. Schneider (Ed.), *Organisation climate and culture* (pp. 153–192). San Francisco: Jossey-Bass

- Rucker, D. D., Preacher, K. J., Tormala, Z. L. & Petty, R. E. (2011). Mediation Analysis in Social Psychology: Current Practices and New Recommendations. *Social and Personality Psychology Compass*, 5(6). 359–371
- Ryan, B., & Gross, N. (1943). The Diffusion of Hybrid Seed Corn in Two Iowa Communities. *Rural Sociology*, 8(1), 15-24.
- Saffold, G. (1988). Culture traits, strength, and organisational performance: Moving beyond 'strong' culture. *Academy of Management Review*. 13, 546-558.
- Salancik, G. R. & J. Pfeffer (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23, 224-253.
- Sathe, V. J. (1985). How to decipher and change Organisational culture. In R. Kilmann, M. Saxton & R. Serpa (Eds.). *Gaining control of corporate culture*, San Francisco: Jossey-Bass.
- Savage, T. G., Nix, W. T., Whitehead, J. C & Blair, D. J. (1991). Strategies for assessing and managing organisational stakeholders. *Executive*, 5, 61-75.
- Sawyer, A. (2004). Challenges Facing African Universities: Selected Issues. *African Studies Review*, 47(1) 1-59
- Schall, S. M. (1983). A communication – Rule approach to organisational cultures. *Administrative Science Quarterly* 28(4).
- Schein, E. H. (1964). The Mechanisms of Change. In W. W. Burke, D. G. Lake & J. W. Paine (Eds.), *Organisation Change: A Comprehensive Reader* (pp. 78-88). San Francisco: Jossey-Bass.
- Schein, E.H. (1983). The role of the founder in creating organisational culture. *Organisational Dynamics*, (Summer), 13–28.

- Schein, E. H. (1985). *Organisational Culture and Leadership*. San Francisco, CA: Jossey-Bass.
- Schein E. H. (1986). What you need to know about organisational culture. *Training & Development Journal*, 40 (1), 30-34.
- Schein, E. H. (1987). *Process consultation* (Vol. 2). Reading, MA: Addison-Wesley.
- Schein, E. H. (1990) Organisational culture. *American Psychologist*, 45(2), 109-119.
- Schein, E.H. (1992). *Organisational culture and leadership* (2nd Edn.). San Francisco: Jossey-Bass.
- Schein, E. H. (1995). Kurt Lewin's change theory in the field and in the classroom: Notes toward a model of managed learning (74 paragraphs).
- Schein, E. H. (1996). Culture: the missing conception in organisation studies. *Administrative Science Quarterly*, 41, 229–240.
- Schein, E. H. (1999). *The corporate culture survival guide: Sense and nonsense about culture change*. San Francisco: Jossey-Bass Publishers.
- Schein, E.H. (2000). Commentary: Sense and nonsense about culture and climate. In N.M. Ashkanasy, C.P.M. Wilderom, & M. Peterson (Eds.), *Handbook of organisational culture and climate* (pp. 1–18). Thousand Oaks, CA: Sage.
- Schein, E.H. (2004). *Organisational culture and leadership* (3rd Edn.). San Francisco: Jossey-Bass.
- Schneider, B. (1975). Organisational climate: An essay. *Personnel Psychology*, 28, 447-479.

- Schneider, B. (1985). Organisational behavior. *Annual Review of Psychology*, 36, 573-611.
- Schwartz, H., & Davis S. (1981). Matching corporate culture and business strategy. *Organisational Dynamics*, 10, 30-48.
- Self, D. R., Armenakis, A. A. & Schraeder, M. (2007). Organisational change content, process, and context: a situational analysis of employee reaction. *Journal of change management*, 7 (2), 211-229.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organisation*. New York: Currency/Doubleday
- Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). The Theory of Reasoned Action: A Meta-Analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research* 15(3), 325-343.
- Shweder, R.A., & Bourne, E.J. (1982). In A.J. Marsella & G.M. White (Eds.), *Cultural conceptions of mental health and therapy*. Dordrecht, The Netherlands: Kluwer.
- Silver, H. (2003). Does a university have a culture? *Studies in Higher Education*, 28 (2). 157-169. DOI: 10.1080/0307507032000058118.
- Slaughter, S. & Rhoades, G. (2004). *Academic capitalism and the new economy: Markets, state and higher education*. Baltimore: The Johns Hopkins University Press
- Smart, J. C., & Hamm, R. E. (1993). Organisational culture and effectiveness in two-year colleges. *Research in Higher Education*, 34, 95 -106.

- Smart, J. C., & St. John, E. P. (1996). Organisational culture and effectiveness in higher education: A test of the “culture type” and “strong culture” hypotheses. *Educational Evaluation and Policy Analysis*, 18(3), 219-242
- Smart, J. C., Kuh, G. D. & Tierney, W. G. (1997). The roles of institutional cultures and decision approaches in promoting organisational effectiveness in two-year colleges. *The Journal of Higher Education*, 68 (3), pp. 256-281. Ohio State University Press
- Smith, I. (2011). Organisational quality and organisational change: Interconnecting paths to effectiveness. *Library Management*, 32, (1), 111 – 128.
- Spicer, E. H. (1952). *Human problems in technological change: a casebook*. New York: Russell Sage Foundation.
- Sporn, B. (1999). *Adaptive university structures: An analysis of adaptation to socioeconomic environments of US and European universities*. Oxford: Jessica Kingsley.
- Sporn, B., (2001). Building Adaptive Universities: Emerging Organisational Forms Based on Experiences of European and US Universities. *Tertiary Education and Management*, 7, 121-134.
- Stair R. & Reynolds G. (2008). *Principles of information systems*. Canada: Thomson.
- Straub, D., Keil, M., & Brenner, W. (1997). Testing the technology acceptance model across cultures: A three country study. *Information & Management*, 33(1), 1-11.
- Su, D. Y. (2011). Organisational culture and knowledge creation capability. *Journal of Knowledge Management* 15 (3), 363 – 373.

- Sudharatna, Y. & Laubie, L. (2003). An organisation's readiness to change towards the development of a learning organisation. *Organisational Learning and Knowledge 5th International Conference*, Theme: Strategy, Competitiveness and Learning (Friday, 30th May – Monday, 2nd June).
- Tashakkori, A. & Teddlie, C. (1998). *Mixed Methodology: Combining Qualitative and Quantitative Approaches*. Sage, Thousand Oaks.
- Taylor, J. (2006). “Big is Beautiful.” Organisational Change in Universities in the United Kingdom: New Models of Institutional Management and the Changing Role of Academic Staff. *Higher Education in Europe*, 31(3).
- Taylor, L. M. (2011). *The importance of school culture in the advancement of 21st Century learning environments: A qualitative study* (Doctoral dissertation, Department of Curriculum and Instruction Morgantown, West Virginia). Retrieved from http://www.theedventuregroup.org/documents/Taylor_Lydotta_dissertation.pdf
- Taylor, P. (2006) *Employment Initiatives for an Ageing Workforce in the EU-15*, Office for Official Publications of the European Communities, Luxembourg.
- Taylor, S. & Todd, P. A. (1995). Assessing IT usage: The role of prior experience. *MIS Quarterly* 19(2), 561-570.
- Taylor-Bianco, A., & Schermerhorn Jr, J. (2006). Self-regulation, strategic leadership and paradox in organisational change. *Journal of Organisational Change Management*, 19(4), 457– 470.
- Terborg, J . R . (1981). Interactional psychology and research on human behaviour in organisations . *Academy of Management Review*, 6, 569-576.

- Tetenbaum, T. J. (1998). Shifting paradigms: From newton to chaos. *Organisational Dynamics*, 26 (4), 21-32.
- Tetteh, E. N, & Ofori, D. F. (2010). An exploratory and comparative assessment of the governance arrangements of universities in Ghana. *Corporate Governance*, 10(3), 234-248. doi 10.1108/14720701011051884
- Tomàs, M., Bernabeu, M. D., & Fuentes, M. (2011). Change processes in the university: a diagnosis of institutional culture and social dynamics. *eLearning Papers*. ISSN: 1887-1542. (www.elearningpapers.eu n.º 24
- Trader-Leigh, K. E. (2002). Case study: Identifying resistance in managing change. *Journal of Organisational Change Management*, 15(2), 138-155.
- Triandis, H.C. (1994). *Culture and Social Behavior*. New York: McGraw-Hill
- Turner, J.R., & Simister, S.J. (2000). *Gower handbook of project management* (3rd ed.). Gower, Hampshire.
- Tylor, E. (1920) [org. 1871]. *Primitive Culture*. New York: J.P. Putnam's Sons.
- Uys, P. M., Nleya, P. & Molelu, G. B. (2004). Technological Innovation and Management Strategies for Higher Education in Africa: Harmonizing Reality and Idealism. *Education Media International*, 41, (1), 67-80. ICTS in Education in Eastern Europe. DOI: 10.1080/0952398032000105120
- Vakola M. (2013). Multilevel Readiness to Organisational Change: a conceptual readiness to organisational change: a conceptual approach. *Journal of change management*, 13(1), 96-109.

- Van den Berg, P., & Wilderom, C. (2004). Defining, measuring and comparing organisational cultures. *Applied Psychology, An International Review*, 53(4). 570-582.
- Van Maanen, J., & Barley, S. R. (1985). Cultural organisation: Fragments of a theory. In P. Frost, M. Louis & L. Moore (Eds.), *Organisation Culture*. Newbury Park, CA: Sage Publications, 31-53.
- Venkatesh, V., Morris, M. G., Davis, G. B. & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
- Walinga, J. (2008). Toward a Theory of Change Readiness: The Roles of Appraisal, Focus, and Perceived Control. *The Journal of Applied Behavioural Science*, 44(3) 315-347. DOI: 10.1177/0021886308318967
- Wang, G. (1992). *China and the Overseas Chinese*. Singapore: Times Academic Press.
- Watkins, K. E. & Golembiewski, R. T. (1995). Rethinking organisation development for the learning organisation. *The International Journal of Organisational Analysis*, 3(1), 86-101.
- Watkins, K. E. & Marsick, V. J. (2003). Summing Up: Demonstrating the Value of an Organisation's Learning Culture. *Advances in Developing Human Resources*, 5 (2) 129-131.
- Watkins, K., & Marsick, V. (1997). *Dimensions of the learning organisation questionnaire*. Warwick, RI: Partners for the Learning Organisation. Reprinted in Marsick, V., & Watkins, K. (2003). Demonstrating the value of an organisation's learning culture: The dimensions of the learning organisation questionnaire. *Advances in Developing Human Resources*, 5(2), 132-151.

- Weick, K. (1979). *The social psychology of organizing* (2nd ed.). Reading, MA: Addison-Wesley.
- Weick, K.E. (1976). Educational organisations as loosely coupled systems. *Administrative Science Quarterly* 21, 1-19.
- Weick, K.E. (1983). Educational organisations as loosely coupled systems. In J.V. Baldrige & T. Deal (Eds.), *The Dynamics of Organisational Change in Education*, 15-37. Berkeley, California: McCutchan..
- Weick, K. E., & Quinn, R. E. (1999). Organisational change and development. *Annual Review of Psychology*, 50, 361-386.
- Weiner B. J. (2009). A theory of organisational readiness for change. *Implementation Science*, 4, 67-75.
- Weiner, B.J., H. Amick, & S.D. Lee (2008). Review: Conceptualization and measurement of organisational readiness for change. *Medical Care Research and Review*, 65 (5), 379-436.
- Wilkins, A. L. (1983). Organisational stories as symbols which control the organisation. In L. R. Pondy, P. J. Frost, G. Morgan, & T. C. Dandridge (Eds.), *Organisational symbolism* (pp. 81-91). Greenwich, CT: JAI Press.
- Yang, Z. (1997). On the estimation of ancestral population sizes. *Genetic Research*, 69, 111–116.
- Yoshikawa, H, Weisner, S. T., Kalil, A., & Way, N. (2008). Mixing qualitative and quantitative research in developmental science: Uses and methodological choices. *Developmental Psychology*, 44(2), 344–354.

Zaltman, G., & Duncan, R. (1997). *Strategies for planned change*. New York, NY: John Wiley & Sons.

Zammuto, R. F., & Krakower, J. Y. (1991). Quantitative and qualitative studies of organisational culture. *Research in Organisational Change and Development*, 5, 83-114.

Questionnaire

Dear valued Participant,

You are invited to participate in an academic research project being conducted by Inusah Abdul-Nasiru, a Lecturer and PhD candidate at the Department of Psychology, University of Ghana. Broadly, this study is focused on exploring organizational culture and change readiness in universities in Ghana, and is set to explore the extent to which organizational culture provides the context for change readiness, and how this influences successful change implementation. It will bring out elements of organizational culture in public and private universities in Ghana that are amenable to change, and those that tend to inhibit change implementation success. This study will contribute to the researcher's effort at meeting the requirements for the award of PhD in Industrial-Organizational Psychology, at University of Ghana.

PARTICIPATION: Your participation is important but voluntary. It will take about 20 minutes to complete the questionnaire. There are no right or wrong answers to the statements provided; please respond independently and do not write your name or any code that could be linked to your name. You may decline to participate without any penalty. If you decide to participate, you may withdraw from the study at any time without penalty. If you choose to withdraw from the study before data collection is completed, your data will be destroyed at your request.

CONFIDENTIALITY: Your responses will be treated with utmost confidentiality. Only the researcher, Inusah Abdul-Nasiru (and approved research assistants) will have access to the individual data you will provide. The results will be reported in an aggregated format (e.g., as averages, etc.), and under no circumstance will any individual participant be identified in a publication or presentation describing this study.

POTENTIAL BENEFITS: This project will hopefully benefit you by giving insight into some of the methods and procedures used in the field of Industrial-Organizational Psychology for research purposes. You will receive no compensation for participating in this study. The final project output in the form of a completed dissertation will be made available to University of Ghana, and copies could be accessed for references in future research and/or practical application for relevant solutions.

RISKS AND DISCOMFORTS: There are no known risks/discomforts associated with your participation, and there are none foreseeable.

CONTACTS: For further questions/comments, or need for clarifications on the study please contact the researcher: **Inusah Abdul-Nasiru**, PhD Candidate, Industrial-Organizational Psychology, Department of Psychology, University of Ghana, Legon. Or through E-mail: abdulnasiru@ug.edu.gh OR: nainusah@gmail.com and your concerns will be addressed.

A Very Important Notice:

If you have been in this university for **2 YEARS OR MORE**, please indicate your consent to take part in this study (by ticking) below:

YES, I have been working in this university for 2 years or more, and I am willing to take part in this research.

[If you responded **YES**, please proceed to the next page.]

If you have been in this university for **Less than 2 years, please do not continue**, and thank you for your time.

SECTION E:

Referring to the change(s) in SECTION D: What do you think about technology in the university?					
<i>Indicate the extent to which each statement below is true: It's your view, there are No RIGHT or WRONG Answers</i>	<i>Never True</i>	<i>Rarely True</i>	<i>Sometimes True</i>	<i>Usually True</i>	<i>Always True</i>
1. Using the new technology enables me to accomplish tasks more quickly in my university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Using the new technology improves my performance in the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Using the new technology increases my productivity in the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Using the new technology enhances my effectiveness.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Learning to use the new technology is easy for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I find it easy to use the new technology to do what I want to do in the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. My interaction with the new technology does not require much effort.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. It is easy for me to become skillful at using the new technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I find the new technology easy to use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. People who influence my behaviour think that I should use the new technology in the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. People who are important to me think that I should use the new technology in the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. When I encounter difficulties in using the new technology, a specific person is available to provide assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. When I encounter difficulties in using the new technology, I know where to seek assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. When I encounter difficulties in using the new technology, I am given timely assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Once I start using the new technology, I find it hard to stop.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I look forward to those aspects of my job that require the use of the new technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I like working with the new technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I intend to continue to use the new technology in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I expect that I would use the new technology in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I plan to use the new technology in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. The changes are having the desired results.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. The costs resulting from the change program are more than the benefits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. The changes made are consistent with the reasoning behind the whole change program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. The change initiative has contributed to the achievement of objectives of the change program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. There is sufficient evidence that attitudes are changing in significant ways as a result of the change program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. There is improvement in the quality of delivery by academic and administrative staff as a result of the change initiative.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. There is evidence of improvement in students' academic performance and development because of the change.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. There is improved efficiency in administrative processes and procedures as a result of the change.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

THANK YOU VERY MUCH FOR YOUR TIME!

QUESTIONNAIRE—STUDENTS ONLY**Dear valued Participant,**

You are invited to participate in an academic research project being conducted by Inusah Abdul-Nasiru, a Lecturer and PhD candidate at the Department of Psychology, University of Ghana. Broadly, this study is focused on exploring organizational culture and change readiness in universities in Ghana, and is set to explore the extent to which organizational culture provides the context for change readiness, and how this influences successful change implementation. It will bring out elements of organizational culture in public and private universities in Ghana that are amenable to change, and those that tend to inhibit change implementation success. This study will contribute to the researcher's effort at meeting the requirements for the award of PhD in Industrial-Organizational Psychology, at University of Ghana.

PARTICIPATION: Your participation is important but voluntary. It will take about 20 minutes to complete the questionnaire. There are no right or wrong answers to the statements provided; please respond independently and do not write your name or any code that could be linked to your name. You may decline to participate without any penalty. If you decide to participate, you may withdraw from the study at any time without penalty. If you choose to withdraw from the study before data collection is completed, your data will be destroyed at your request.

CONFIDENTIALITY: Your responses will be treated with utmost confidentiality. Only the researcher, Inusah Abdul-Nasiru (and approved research assistants) will have access to the individual data you will provide. The results will be reported in an aggregated format (e.g., as averages, etc.), and under no circumstance will any individual participant be identified in a publication or presentation describing this study.

POTENTIAL BENEFITS: This project will hopefully benefit you by giving insight into some of the methods and procedures used in the field of Industrial-Organizational Psychology for research purposes. You will receive no compensation for participating in this study. The final project output in the form of a completed dissertation will be made available to University of Ghana, and copies could be accessed for references in future research and/or practical application for relevant solutions.

RISKS AND DISCOMFORTS: There are no known risks/discomforts associated with your participation, and there are none foreseeable.

CONTACTS: For further questions/comments, or need for clarifications on the study please contact the researcher: **Inusah Abdul-Nasiru**, PhD Candidate, Industrial-Organizational Psychology, Department of Psychology, University of Ghana, Legon. Or through E-mail: abdulnasiru@ug.edu.gh OR: nainusah@gmail.com and your concerns will be addressed.

A Very Important Notice:

If you have been studying in this university for **2 YEARS OR MORE**, please indicate your consent to take part in this study (by ticking) below:

YES, I have been in this university for 2 years or more, and I am willing to take part in this research.

[If you responded **YES**, please proceed to the next page.]

If you have been in this university for **Less than 2 years, please do not continue**, and thank you for your time.

SECTION A:

This section seeks information on the biographical details of participants, for reporting purposes only. Please tick the relevant responses or write (where necessary).

1. Gender: Male Female
2. Age: Below 18 years 18-22 years 23-27 years 28-32 years 33-37 years 38 years+
3. Your institution falls under: Public University Private University
4. At what LEVEL are you studying?: Non-Degree BSc/BA Masters PhD Level
5. Section: Sciences (Physical, Biological, Mathematical, Engineering, etc.)
 Humanities (Arts, Social Sciences, Business School, etc.)
 Other (Please specify) _____
6. Number of years with this university so far: 2years 3years 4years 5years 6 years+

SECTION B:

Guidelines: Provide your opinion (as a student) about your university.

1. I see my university as (PLEASE CHOOSE ONE):
 - i. a much formalised place where everything must go through particular procedures (which can take a lot of time to complete).
 - ii. a personal place where people interact freely.
2. What is the environment like, in terms of how students, lecturers and administrative workers interact?

3. How fast can one get official information or a document worked on, in your university (e.g., information about registration, exams results, complaints of omission of exams results/student ID, etc.)?

4. If there is something you have observed about your university, what would that be, in terms of:
 - i. What holds the people together (lecturers, administrators, students)?

 - ii. What does your university predominantly **care about**? (Choose one):
 - i. **People**
 - ii. **Formal rules and policies**

SECTION C:

1. Do you see anything in your university which points out to you that workers in the university (lecturers and administrative staff) *communicate with each other*, concerning the things that 'work well' and those that 'do not work well'? Yes or No?

Explain your response:

2. Are there any mistakes that have been repeatedly occurring in the university, which you think should not have been the case? Yes or No?

Explain your response:

3. How would you describe the relationship between people in your university and those outside?

Poor

Fair

Good

Very Good

Excellent

4. What are some of the *positive* and *negative things* that you think have contributed to the current relationship that exists between people in your university and those outside?

Positive: _____

Negative: _____

SECTION D:

Guidelines: Thinking about your university, provide responses that reflect the extent to which your university is ready for change, and provides a conducive environment for innovation to take place, especially in the area of:

- i. Using computer system and the Internet in teaching and learning efforts, as well as for administrative work;
- ii. Using computers and Internet for Admission, sharing information within (and outside of) the institution;
- iii. Using information technology to change administrative procedures so as to remove “administrative bottlenecks” (e.g. to improve the process of academic registration, viewing statements and examination results online, etc.).

1. With respect to any of the above, how do you see the university as a whole in terms of how people are willing and *ready to accept change*?

2. If you are to compare your university with other universities in the country, what would you say about people’s *behavior and attitudes* towards using computers and the Internet in their daily activities in the university setting?

3. If you were to advise your university authorities about *how* they should go about *to introduce change initiatives* in the university to achieve the set objectives, what *steps* would you recommend they take (which they have not taken in the past)?

4. Is your university *well-prepared for the future*, given the advanced technological changes taking place in the world?

Yes or No

Explain your response:

SECTION E: This is about Information and Communication Technology in your university.

Guidelines: The following describe new technological change initiative(s) undertaken by your institution within the past few years. Assume they have reached a stage whereby you can comment on their success or failure:

1. The use of computer system and the Internet in teaching and learning efforts;
2. The use of computer system and Internet for Admission procedures, sharing information within (and outside) the institution.

<i>Indicate the extent to which each statement below is true: It's your view, there are No RIGHT or WRONG Answers</i>	<i>Never True</i>	<i>Rarely True</i>	<i>Sometimes True</i>	<i>Usually True</i>	<i>Always True</i>
1. Using the new technology in my university enables me to accomplish learning tasks more quickly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Using the technology in my university improves my performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Using the new technology increases my ability to learn so many things within a short time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Using the new technology enhances my effectiveness.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Learning to use the new technology is easy for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I find it easy to use the new technology to do what I want to do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. My interaction with the new technology in this university does not require much effort.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. It is easy for me to become skillful at using the new technology in the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I find the new technology easy to use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. People who influence my behaviour think that I should use the new technology in the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. People who are important to me think that I should use the new technology in the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. When I encounter difficulties in using the new technology in my university, a specific person is available to provide assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. When I encounter difficulties in using the new technology, I know where to seek assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. When I encounter difficulties in using the new technology, I am given timely assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Once I start using the new technology in my university, I find it hard to stop.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I look forward to those aspects of my learning tasks that require the use of technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I like learning /working with technology in my university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I intend to continue to use the new technology in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I expect that I would use the new technology in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I plan to use the new technology in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

THANK YOU VERY MUCH FOR YOUR TIME!

INTERVIEW GUIDE: UNIVERSITY EMPLOYEES: AT LEAST 2 YEARS WORKING EXPERIENCE

Begin with: Personal introduction and consent seeking procedures, permission to record voices, confidentiality issues, duration of interview, etc.

Purpose: The focus of this study is to explore how culture within organizations can influence the extent to which people will be ready for change, and how this relationship can influence the success of change that is introduced in organisations.

1. What would you say is the **culture** in this university, generally? (I mean the critical behaviours or issues defining the way and manner people do things in this university)
2. Given the **culture you just described** and the way ICT/IT is advancing everywhere, how is the university **ready** to embrace any technological changes? (that is using ICT for teaching, administrative work, etc.).
3. In your opinion, how different is the story, in terms of other public universities? What about Private universities?
4. For the number of years that you have been working here, what specific **readiness programme** has been carried out by university authorities, prior to introducing change programmes (like ICT use etc)
5. In your opinion, how different is the story in other public universities? What about Private universities?
6. To what extent do the people in this university share experiences about **what works well** OR **what does not work well** for them? Please explain your response.
7. How does the university see **innovative ideas (methods, strategies, etc) generated by individuals** working here? Are they encouraged? Discouraged? Please explain your response.
8. In your opinion, how many people, what percentage (%) of university workers, share in this view you just expressed about the university?.
9. Please remind me of the motto of this university? Vision? Mission?
10. Please share any final comments on this interview.

Thank you very much!!

Inusah Abdul-Nasiru (PhD Candidate), Department of Psychology, University of Ghana, Legon