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Pepperdine University

Graduate School of Education and Psychology

POSITIVE DEVIANCE DURING ORGANIZATION CHANGE: RESEARCHER'S SOCIAL CONSTRUCTION OF EXPANDED UNIVERSITY GOALS

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Education in Organization Change

by

Claire Euline Sutherland

October, 2013

Kenneth Murrell, DBA – Dissertation Chairperson

This dissertation, written by

Claire Euline Sutherland

under the guidance of a Faculty Committee, and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

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DEDICATION

To Marion

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I am very grateful to my colleagues at the University of Technology, Jamaica (UTech), who participated in this research.

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My special thanks to Dr. Kay Davis, Director of the EDOC program who was so understanding and generous with her support for my entry and completion of the doctoral program. I am also thankful to Judy Lee, Director, International Student Services, Pepperdine University and other staff, colleagues and friends in various areas of Pepperdine and the WLA

community who made my visits and integration into the graduate student community at Pepperdine much easier to manage.

My deepest appreciation and gratitude to my family and friends in Jamaica and abroad who encouraged me, gave their support in various ways, and shared with me the many consequences of my long immersion in doctoral studies, for the most part while working. Many thanks to all of you.

VITA

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1987–1998	Urban Development Corporation, Jamaica Director, Strategic Systems Head, Corporate Planning & Investments Area Manager			

Ministry of Labor, Government of Jamaica 1987 Economist

University of the West Indies, Kingston, Jamaica Administrator

Project Manager

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1985-1986

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1992–1993 European Union Fellow

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PUBLICATIONS

Davis, R. A., & Sutherland, C. E. (2002); *Organizational transformation: The experience of the University of Technology, Jamaica 1995 to 2002*. Presented at the 2nd Annual Conference of the Association of Caribbean Higher Education Administrators (ACHEA), Port of Spain, Trinidad and Tobago, 2002.

Phillips, M. E., Scott, A, Sutherland, C. E., Gerla, M., & Gilzene, A. M. (2012); Carry mi ackee go a Jamaican market: Ackee as a metaphor for the organization and environment of Jamaican business; *International Journal of Cross Cultural Management*; 12 (3).

ABSTRACT

Many universities have expanded from teaching only to include research goals, requiring shifts in organization behavior. An exploratory case study method was used to examine these dynamics among positive deviant researchers at the University of Technology, Jamaica (UTech), the single case examined, from a social construction perspective. As a participant observer in the organization, the researcher engaged in marginality and its associated risks in studying UTech's transition from low to higher research outputs to answer the research questions – significant norms influencing positive deviancy patterns of the researchers and, their perceptions and experiences during transition. A qualitative case report and mini-organization ethnography of UTech was produced to enhance contextual understanding of positive deviance among university researchers, an area not previously described in the literature. Several important organizational findings emerged from the analysis of interviews of 6 participants who received the President's Research Initiative Award (PRIA), artifacts of the organization, and participant observation. The results detail early development of a descriptive typology of positive deviance during organization change, including motivation, feelings of being marginalized and coping strategies. Three patterns – (1) teaching versus research (2) disorder, and (3) personal resilience – and 9 interrelated themes enhance understanding of role adaptations and the meanings and beliefs that these faculty associate with their research environment. The results also indicate organizational factors and personal dimensions in a research subculture that is emerging amidst strong pivotal teaching norms and culture; social costs involved in such a transition, and; some challenges and opportunities for building a research culture and a high performance research environment at UTech. A construct of organizational and individual adaptation to stress was hypothesized, subject to future research. The main conclusions included that research is a peripheral norm;

doing teaching and research involved tensions, challenges, incongruence, disequilibria as new identities and the implied research subculture are emerging at UTech; there are anti-research risks to the transition, and; organizational tradeoffs might be required. The findings, although not a template, are of potential usefulness in any organizational setting where organization growth and change are contemplated. Recommendations are made for UTech and future research.

PREFACE

Who I Am and How I Came to Conduct This Research

This research was preceded by years of trying to understand and make a difference in human systems including the organizations in which I have worked. My 14 years at the University of Technology, Jamaica (UTech) is very relevant to this research study. I worked first as a part-time member of faculty, joining the university from industry. Then, as Management Analyst/Organization and Methods Specialist, an internal consultant, at UTech, I was integral to the design and leadership of changes to organizational systems and the structure and profile of its human resources during the organization's transition from a 40-year old college to a university. My work at UTech continued from the role of Senior Director for International and Institutional Linkages from which I examined and constructed mechanisms and processes to connect the internal organization to its external environment in order to make a difference. Those organizational interventions were complex albeit successful in the transition goals that they were intended to achieve at the time. The experiences as a practitioner in organization development and change triggered a lot of reflection on my work and its impact on me and the organization and accelerated personal transitions and growth. My reflections developed into a curiosity about studying organizations from a scholar-practitioner perspective and eventually to my pursuit of the doctoral studies of which this research study is a part.

My experience at UTech has led me to regard the university as a dynamic organization which has been undergoing change for many years. In my view, the knowledge that resides within the university is a great potential resource for enhancing changes being pursued, if it can be understood and tapped. These beliefs influenced my decision to pursue a doctoral degree in organization change and to engage in research within the university at which I work.

Additionally, for many years I have envisioned that there are many potential research opportunities in the organization sciences at UTech that could contribute to understanding an organization undergoing change within the Caribbean, an under-researched area in which UTech could develop capabilities.

Social Construction and Action Research Foundations

This study is grounded in two significant and related foundational values and beliefs about organizational knowledge that shaped it. First, social construction which affirms that knowledge is socially constructed and, therefore, there are multiple realities that exist and situational knowledge is best tested rather than assumed. Second, action research which is underpinned by beliefs that vital knowledge for a system's evolution/development exists within it, and such knowledge is best learnt and harnessed from within to achieve system goals and new knowledge. I have embraced these values and beliefs personally and they are imprinted in the design and product of this research which should be of interest as much to practitioners as to theorists and organization change agents who, as I do, continually seek to operate in organizational settings from the theory-practice nexus.

Pre-Understandings About Being a Researcher at UTech

As a researcher in organizational development and change, I had to adopt new mindsets and understandings about the organizational world in which I work. In addition, of necessity, I engaged in on-going internal reflection and dialogue to identify congruence among my personal goal to become a doctor of organization change, my organizational roles and the goals of UTech. As I deepened my immersion into my role as a researcher in my organization while holding, except for a three year period of study leave, my former administrative role some tensions surfaced personally and perhaps in the organization regarding the new identity that I was creating

for myself. My interactions with faculty and other developing researchers within the university have led me to believe that these felt tensions are not unique to me and should be understood within the context of the personal and organizational transitions involved in increasing research capacity, and personal decisions to deviate from formerly accepted norms of operating.

Through this research study I was able to test my pre-understandings about positive deviant researchers at UTech with whom I feel a strong affinity, and my pre-understandings about building personal and organizational research capacity during UTech's transition from low to higher research outputs. Because of my belief that knowledge is socially constructed and that several realities can exist within a single organization, I chose to use a qualitative research design in which positive deviant researchers are engaged as sources of knowledge about themselves and their organization. I hope that this study will stimulate discussions about these aspects of organizational change and development at UTech and through its findings, conclusions, and recommendations, contribute to deeper understandings of and enhancements to the process of transition.

Researcher Assumptions and Limitations

The assumptions and limitations of the researcher were bound up in the personal context of this study. The researcher is an insider to the organization that was studied – the University of Technology, Jamaica at which I have been employed in a senior administrative position for 14 years. I, therefore, had some vulnerability in the design and implementation of this study, which are reflected upon and made transparent throughout this study. Being an insider to the university, a developing researcher in organization change, and an aspirant of future academic roles have all influenced my choice of this research topic and the design of the study. To this extent, I have a personal investment in this study as a researcher and also as an employee of the organization. As

an employee of UTech, I have wondered why the university had not had higher research outputs which is the context within which I desired to do research and practice upon completion of my doctorate. In developing my topic for dissertation, I wanted to produce research in organization development and change that would be applicable and useful to UTech. I then decided to convert my lingering interest in UTech's transition to a university recognized for research into a research study for my doctoral dissertation. In that way, I could achieve two objectives in one effort; that is, understanding the transition to higher research outputs and completing my doctoral dissertation. My personal context for this study posed some risks and benefits. Chapter 3 describes strategies that were used to limit my personal insider influence on the collection of data, particularly interview data, and analysis and interpretation of the results.

We are reminded that "The researcher is fallible and vulnerable within the research context" (Bell, 1998, p. 184). My personal views and perceptions about research at UTech had the potential to lead to bias through unconscious assumptions developed over years of familiarity as a member of the organization. The potential limiting effect of bias on the research design was also mitigated through my use of bracketing or epoche. Moustakas (1994) explained that bracketing allows a researcher to be transparent about personal biases and relationship to the subject matter being researched. In this research, my personal assumptions, interpretations, and biases were bracketed in order to explore positive deviant researcher behavior at UTech from an unbiased perspective. Despite these limitations, there were advantages in being close to and knowing more about the system being studied than would a stranger to UTech. For example, there was ease of access to the research site and participants and the researcher had extensive understanding of the social setting; this facilitated developing rapport with the participants.

Chapter 1: Introduction to the Study

Background

Writing during World War II, Truscot (1951) advocated that the role of research is:

To reveal hidden knowledge, to present fresh modes of thought, and to train one's successors to do both these things are amongst the noblest activities in which anyone can hope to engage. And of all people on earth, members of universities – and most of all, university teachers – have the greatest opportunities and obligations, to engage in them. (Truscot, 1951, p. 149)

Truscot's statement is as relevant today as it was back then in 1951, and universities across the world including the University of Technology, Jamaica (UTech), have acknowledged research as a central part of their institutional identity.

UTech, a former college (The College of Arts, Science, & Technology (CAST)) that was established in 1958, is a university with an emerging institutional identity, which incorporates a transition from low to higher research outputs. In reviewing the first seven years of UTech, E. L. Miller (2007a) reported on the status of research in the university. His report identified improvement in research output as a component of the future development of UTech and he posed questions about how UTech could make the transition from a college with low research outputs to a university with higher research outputs. This issue of research at UTech is important, not only as a scholarly endeavor, but also it is crucial for Jamaica's development and, therefore, it is imperative to study this type of transition at UTech; publicly owned and one of three universities in the Jamaican national research system.

The research capacity and outputs of UTech have also been assessed in various ways over the past 22 years. An assessment of capabilities of CAST in 1989 had noted that limitations in research and development were due to overworked staff (Silcox & Miller, 1989). After becoming a university in 1995, it was noted that "... the overall research and publications output over the

first decade of the University's operation was small" (E. L. Miller, 2007a, p. 61). For the four year period 1997-2000, 30 publications emanated from research in the university. In 2002, the university acknowledged four reasons for what it considered to be limited research at UTech – (a) the need to build a research culture in light of the fact that UTech was formerly a teaching college with a scant history of research (b) few qualified research personnel (c) a high turnover among newly recruited faculty, and (d) scarcity of good postgraduate students and technical personnel. It was also reported by E. L. Miller (2007a) that several research capacity issues hindered the research output of UTech. For example, research and teaching compete for academics' time; expanded enrollment; inadequate research facilities; and the terms and conditions of service of faculty. Ivey, Streete, Henry, and Oliver (2012) conducted a count of research publications for the five-year period 2007-2011 and found that the total from all Faculties and colleges of the university was 77 resulting in a total of 54 citations. When pro-rated annually, this represents an increase – approximately double the output from the 1997-2000 count. The perspective taken in the research design of this study was to examine and extract knowledge from what is good and working in research at UTech, instead of taking an approach of understanding its research outputs from a point of view of deficiency or from only performance statistics.

This perspective on the research design was influenced by appreciative inquiry (AI) which is an approach that seeks to identify and enhance that which is positive and life-giving to a system (Rossi, 2003) and which values the importance of local tacit knowledge (Fitzgerald, Murrell, & Newman, 2001). Rossi explained that the assumptions of AI include that we co-create reality, and that asking questions influences the system's reality.

Most importantly AI is an affirmative worldview that shapes what we look for in organizational inquiry. It involves a conscious value choice to seek the most affirmative, valuing, and generative information available. The intention is to discover and build upon the strength and vitality of human systems as experienced and reported by their members (Fitzgerald et al., 2001) Therefore, the approach taken in this study was a positive perspective in the research design and in the strategies for inquiry. A global view on the value of research further introduces the need for this study.

University Research Advances Society

University research is a critical input into national and global development (Uzoka, 2008). It advances the knowledge society and the knowledge economy (Kogan & Teichler, 2007). For example, universities make an indirect contribution to innovation and scientific advancement. Globally, university researchers are associated with some of the most significant social and scientific breakthroughs in history. This relevance of university research to global and national development is supported by the official website of The Nobel Prize which shows that 912 prizes have been awarded since its inception in 1901 up to 2012 and of these awardees, the website shows that approximately 441Nobel Laureates, an estimated 48 %, were associated with universities at the time they were awarded the Nobel Prize (Nobelprize.org, 2013).

It was found that in the United States, university research has a significant effect on the number of corporate patents (Jaffe, 1989) which is an indicator of national development. From their study of USA patent data, J. Kim, Lee, and Marschke (2005) found that university research influences industrial innovation in the United States and industry is increasingly utilizing the knowledge and skills of inventors with university research experience. The potential of university research for national development in Jamaica is proposed by E. L. Miller (2007b) who

sees an inextricable link between university research and the future development of Jamaica. Historically, Jamaican researchers have made marked contributions in critical areas in the country's growth and development. For example, contributions in tropical agriculture by the Honorable Dr. Thomas P. Lecky (Tortello, 2003), in tropical medicine by Professor Graham Serjeant ("Tropical Medicine Research Institute for UWI," 1999), and in pharmaceuticals by Professor Manley West and Dr. Albert Lockhart ("Doctors develop first eye medication in the Carib," 2009). These examples illustrate the value of university research to society and national development and, therefore, makes it imperative to understand universities in transition from low to higher research outputs and how best to support the valuable work of researchers during such a transition. Furthermore, it was noted by Kogan and Teichler (2007) that academics are faced with challenges as universities try to align themselves with and also become drivers of development. These challenges underscore the need to take a closer look at researchers at universities such as the University of Technology, Jamaica, in order to explore their knowledge and experience of their transition process.

There are macro challenges in the Jamaican context for research which could be further understood from the micro institutional level. Statistics show that research investment in Jamaica is significantly below the internationally accepted benchmark of 1% of gross domestic product (RICYT, 2002; WorldBank, 2002). It is, therefore, not surprising that Jamaican research output is also below international standards despite rising numbers of researchers in the country. This situation of low research output in Jamaica has prevailed for several years and very little research has been conducted on research output nationally or on research institutions in Jamaica. One notable exception has been made by Gibson, Morgan, Abel, and Hickling (2007) on organizational aspects of university research in Jamaica. Their study examines interventions to

University of the West Indies, Mona campus. However, more studies of organizational aspects of university research in Jamaica are needed in order to identify appropriate strategies for increasing national research output from its current low levels. For example, the organizational context within which research is produced, changes in the research institutions and the behavior of researchers all need to be examined. The new knowledge derived will enhance understanding of statistics on research output in Jamaica and also of cross-national comparisons.

In addition to research statistics, it has been suggested by UNESCO (2010) and OECD (2012) that contextual information also enhances our understanding of the unique national framework within which research systems operate. The contextual information derived in this research study of UTech will contribute to a greater understanding of organizational aspects of the Jamaican national framework for research.

The Challenge/Problem Statement

UTech is in transition from being a producer of low research outputs to a producer of higher research outputs. It has been proposed by E. L. Miller (2007a) that this is a challenge for the future of the university. E. L. Miller also poses critical questions for UTech regarding institutional questions that the university faces during this transitory stage (a) How best can research be institutionalized as an activity in UTech, given the imperatives of teaching for the institution? (b) What optimal strategies should be employed to build research capacity with respect to both its human and physical aspects, at this stage of development of UTech? (c) How can the research capacity of UTech be organized to make it relevant to the sectors that it serves? (E. L. Miller, 2007a).

Very little can be found in the organizational sciences literature that describe or explain universities in transition from low to higher research outputs nor which can assist in arriving at answers to the questions that E. L. Miller (2007a) poses to UTech. Moreover, study of researchers and the organizational environment in which research activities occur at UTech has received little research attention. One such study was done by Onyefulu and Ogunrinade (2005), however, the research environment at UTech is still not sufficiently understood. Any plan to address these organizational transition issues cannot ignore the human and organizational dimensions of UTech's challenge. The problem or challenge that this study examined was how to enhance understanding of the human and organizational dimensions of transition from low to higher research outputs in a university such as UTech in Jamaica, and how such transition might be best supported.

The intention was to develop contextualized knowledge about organization behavior during UTech in transition. Many organizational scholars identified organizational context as a critical factor in understanding organization behavior (Berg & Smith, 2002; Johns, 2001, 2006; Liden & Antonakis, 2009; Rousseau, 1985; Rousseau & Fried, 2001). In the interactional approach to psychology and organization behavior it is argued that both person and situation influence each other and are important in organization behavior (Endler & Magnusson, 1976; Hanges, Schneider, & Niles, 1990; James & James, 1989; Ostroff, 1992; Schneider, 1983; Terborg, 1981).

The Purpose of this Study

The purpose of this research study was to understand a university in transition from low to higher research outputs from the perspective of its members. Specifically, the purpose was to explore the perspective of early adapters in research at UTech where individual faculty members who are actually practicing research are an exception to existing norms.

Research Objective and Questions

The objectives of this research was to describe UTech in transition through the perceptions and behaviors of some of the best researchers in the UTech organizational context, and to make recommendations for enhancing the experience of the process of transition at UTech for this group of researchers and hence their capacity for even greater contribution to higher research outputs at the university. In this research study, an exceptional performer in research is considered to be a positive deviant. A positively deviant researcher is generally defined as a researcher who goes against the prevailing norm among faculty by being an active practitioner of research at UTech, and who has been recognized for research by the university through granting of the President's Research Initiative Award (PRIA). The award has been made annually since 2004 to full-time academic staff members at UTech based on their achievement of predetermined criteria (see Appendix A). The purpose of the award is to provide a stimulant for research and scholarly activities from faculty.

This research tapped into tacit knowledge about UTech that exists among positive deviant/exceptional performers in research. According to (Lam, 2000), the knowledge of the organization is made up of explicit and implicit or tacit knowledge. Tacit knowledge which is socially embedded within organizations "can only be acquired through practical experience in the relevant context, that is, "learning by doing" (Lam, 2000, p. 490) and such knowledge can be used by organizations as a source of organizational learning and innovation. The analysis in this study is expected to yield tacit knowledge about UTech in its transition to higher research outputs through answers to the following research questions:

- 1. What are the significant norms that are shaping the organizational environment for research at UTech and positive deviance patterns of PRIA researchers?
- 2. What are the perceptions and experiences of PRIA researcher participants about being researchers in the UTech research environment?

Naturalistic research paradigm guided the decision to use an exploratory case study design to develop answers to the research questions. The choice of this methodology is supported by the purpose of this study to gain organizational knowledge from its human elements – its members; and also by the assumption that knowledge is socially constructed. Naturalistic inquiry uses the human as instrument and takes place in the natural setting of those under study as their constructed realities cannot be separated from the context (Lincoln & Guba, 1985) of their day to day organizational existence. "Everyday life presents itself as a reality interpreted by men and subjectively meaningful to them as a coherent world" (Berger & Luckmann, 1966, p. 19).

Assumptions and Limitations

This study was limited to active researchers at UTech as confirmed by their receipt of public recognition by the organization through the President's Research Initiative Award (PRIA) that their research activities and outputs attained exemplary standards for UTech. As a result, there was a further limitation in terms of the low numbers of researchers at UTech who have been so recognized since the Award was established in 2004. Because of the low numbers, there was limited room for choosing awardees who would be the best key informants (Spradley, 1979) about positive deviant researcher behavior at UTech. Steps were taken to mitigate this limitation through triangulation which is the use multiple sources of data. It was also assumed that although each researcher's experience would be unique, there would be some convergence as they all operate within a single institution (Creswell, 2007; Miles & Huberman, 1994; Spradley, 1979).

Additionally, it was assumed in this study that exceptional/positive deviant researchers at UTech would be accessible for this study and willing to reflect on and divulge information about how they perceive and experience their behaviors and organizational environment at UTech.

Significance of the Study

This study should be of interest to the growing body of researchers at UTech and other universities for a number of reasons. First, it provides contextual information on exceptional performing researchers at UTech which could be useful to other researchers as they adapt to similar organization transition from low to higher research outputs.

Second, this is the first qualitative research on positive deviance in a Jamaican organization or university and the insights gained can inform cross-national knowledge about universities in transition from low to higher research outputs as it cannot be assumed that the context for research at UTech is the same as that known about universities in other countries. This assumption about the context for research which is implicit in international comparative statistics on research also ignores institutional differences among universities. As noted by Kotter (1978), there are institutional differences regarding productivity even among similar types of organizations. "Two organizations that are identical except for their employees' norms regarding 'productivity' will generate different processes; the organization with high productivity norms will produce more. And so on" (Kotter, 1978, p. 18).

Third, the findings and recommendations of this study could be useful to university leaders, policy-makers and practitioners of organization change at UTech and other similar universities, who are concerned with research capacity-building.

Fourth, this study contributes to literature on organizational behavior, in particular, positive deviance and organizational transition at UTech. After reviewing over 1000 publications

in cross-cultural organization behavior, Gelfand, Erez, and Aycan (2007) advocate that more cross-cultural research from emic, culture-specific or indigenous perspectives should be done to build a more comprehensive and global understanding of organization behavior. These scholars also view indigenous perspectives as a critical contribution to more universal knowledge and for enhancing understanding of western cultures in which there is the predominance of organization behavior research.

Fifth, by describing a university in transition from low to higher research outputs and researchers who are early adapters in such a setting, this study lays a foundation upon which other scholars can build and conduct further research on the nature of such transitions for universities and researchers and ways in which such transitions might be supported.

Conceptual Framework

A conceptual framework establishes the structure (Merriam, 1998) and essence (Miles & Huberman, 1994) of a study. The essence of this study is captured in the concept of organization behavior, specifically, as it relates to positive deviance during organizational transition. The concept of positive deviance was used as a theoretical lens or perspective (Creswell, 2003) to guide the research objectives, questions and the choice of method for the research.

Definition of Terms

The following terms used throughout this study, are defined. Operational definitions are included where necessary.

Positive Deviance

Theoretical definition: Positive deviance has been defined as "behavior that people label (i.e., publicly evaluate) in a superior sense. As such, that labeling will usually result because that behavior departs from that which is considered normal or normative in the particular case or

behavior" (Heckert, D. M., 1985, p. 30). Employee deviance has been defined as "behavioral departures from norms" (Warren, 2001, p. 1).

Operational definition: Active involvement and practice of research at UTech where participation in research is not the norm for faculty.

Positive Deviant

Theoretical definition: Successful exceptions or those "outliers who succeed against all odds" (Pascale, Sternin, & Sternin, 2010, p. 3).

Operational definition: Exceptional performers in research at UTech; faculty who are actually practicing research at UTech and have received the President's Research Initiative Awards (PRIA) from UTech.

Norm

Theoretical definition:

Patterned behavior and activities (D. Katz & Kahn, 1978) in relation to shared values, assumptions (Schein, 1992) and pivotal goals (Schein, 1988) in an organization.

Operational definition:

Patterned behavior and activities (D. Katz & Kahn, 1978) in relation to shared values, assumptions (Schein, 1992) and pivotal goals (Schein, 1988) in an organization.

Research environment

Operational definition:

The natural and created context (background, circumstance, situation, framework, milieu or perspective) in an organization that influences its researchers and the conduct of research activities.

Faculty

Operational definitions:

At UTech, the word *Faculty* refers to an academic division of the university comprised of academic units which offer degree programs and conduct research. When the word is written in common letters i.e. *faculty*, it refers, as in the setting in the United States of America, to academic staff.

Summary

The University of Technology, Jamaica, a former college and now a university is in transition from low to higher research outputs. Researchers and universities that are experiencing such transition need to be studied so that we may understand how it might be supported. An exploratory case study design was used to describe tacit knowledge about UTech from the perspective of some of its best researchers who are engaged in research in an organizational environment where the practice of research by faculty is not yet the norm, and to make recommendations on how the transition might best be supported. This study contributes to the organization behavior literature, particularly positive deviance and organizational transition and should be of value to scholars, researchers, university leaders, policy-makers and practitioners of organization change concerned with research capacity-building, and future researchers of the topic.

Chapter 2: Review of the Literature

The objective of this review of the literature is to provide a conceptual context and support for the research questions. It reveals the importance of understanding the socially constructed world and tacit knowledge of exceptional performers in research at UTech, a university in transition from low to higher research outputs, and where practice of research is not yet the norm among faculty. The research questions, repeated here, guide the literature review:

- 1. What are the significant norms that are shaping the organizational environment for research at UTech and positive deviance patterns of PRIA researchers?
- 2. What are the perceptions and experiences of PRIA researcher participants about being researchers in the UTech research environment?

The organization behavior literature refers to persons who deviate from the norms of groups, societies or organizations as deviants. The concept of deviance is chosen because it recognizes that society, and organizations – one of its subsets, operates according to norms and there are circumstances that cause some members to deviate from norms. Relevant literature on deviance was explored to determine what is known about deviance that can assist our understanding of early adapters to transition at UTech who go against existing organizational norms, and the tacit organizational knowledge that they accumulate in doing so.

The first section of this literature review categorizes early theories about deviance in its more widely known and studied negative form (Clinard, 1968; Galperin, 2002; Hawkins & Tiedeman, 1975; Herman, 1995; Kelly, 1979; Lemert, 1967; Liska & Messner, 1999; Merton, 1957, 1995; Raelin, 1994; Scarpitti & McFarlane, 1975; Schur, 1971; Thio, 2005; Traub & Little, 1999; Wilkins, 1965).

In the second section limitations and proposals for further development of the concept of negative deviance into a more balanced theoretical concept that embraces its antithesis – positive deviance (Dodge, 1985; A. Heckert & Heckert, 2002, 2004; D. M. Heckert, 1985, 1989, 1998; J. M. Miller, Wright, & Dannels, 2001; Robinson & Bennett, 1995; Warren, 2001, 2003) – are discussed. This area of the literature not only acknowledges the existence of positive deviance but also postulates that it can co-exist with negative deviance in organizations.

The third section discusses literature on positive deviance (Applebaum, Giulio, & Matousek, 2007; Dodge, 1985; Dorsey, 2000; Goode, 1991; D. M. Heckert, 1985; R. Hughes & Coakley, 1991; Lewis, 2009; Marsh, Schroeder, Dearden, Sternin, & Sternin, 2004; Ochieng, 2007; Sagarin, 1985; Zeitlin, Ghassemi, & Mansour, 1990), a relatively new concept compared to negative deviance. Two main theoretical differences in the concept of positive deviance – honorable behavior (Applebaum et al., 2007; Cameron, 2003; Cameron, Dutton, & Ouinn, 2003; Dutton, Glynn, & Spreitzer, 2006; Fineman, 2006; Peterson, 2002; Spreitzer & Sonenshein, 2003, 2004), and exceptional performers (Bloch, 2001; Bradley et al., 2009; Day, 2009; Dorsey, 2000; Pascale & Sternin, 2005; Pascale et al., 2010; Seidman & McCauley, 2009; J. Sternin, 2003; J. Sternin & Choo, 2000; M. Sternin, Sternin, & Marsh, 1997; Tarantino, 2005; Zeitlin et al., 1990) are distinguished, and they are explored in terms of their relevance to organizations and organization transition, which were central concerns of this study. Additionally, recent literature on attitudes towards positive deviants/exceptional performers in organizations (Abrams, Marques, Brown, & Dougill, 2002; Abrams, Marques, Brown, & Henson, 2000; Feather, 1989, 1991, 1994; Fielding, Hogg, & Annandale, 2006; Marques, Abrams, Paez, & Martinez-Taboado, 1998; Marques, Abrams, & Serodio, 2001; Marques & Paez, 1994) was examined. The absence of similar studies in universities in Jamaica was noted.

By using the concept of deviance to study tacit knowledge of exceptional performers in research at UTech, within the context of their organization, this study provides insights into the belief systems, modi operandi, and context of positive deviants researchers at UTech, and paves the way for further theoretical and empirical development about positive deviants within UTech and Jamaica.

Early Theories about Deviance

Early theorists connoted deviance as mainly a negative phenomenon (Dodge, 1985; Galperin, 2002; Herman, 1995; Scarpitti & McFarlane, 1975; Thio, 2005) and with some exceptions, most theories have been developed in sociology. The concept of deviance is still emerging and there is no overarching theme, single theory or cohesiveness in thought about deviance. The wide range and number of theories is a reflection of the complexity of the phenomenon. To come to an understanding of the field, the best form of analysis is to categorize it so that a picture evolves of the wide variation in the landscape of theories that exist.

Non-sociological theories. As such, Scarpitti and McFarlane (1975) identify a period prior to the twentieth century as a time when people believed that demons and evil spirits were the cause of deviance in society. In the early twentieth century, scientific approaches to theories about deviance began to emerge. For example, biological theories of (negative) deviance attributed criminal behavior to human biological characteristics. It was proposed that persons were predisposed to crime and delinquent behavior if they had certain physical features believed to resemble those in earlier evolutionary stages of humans (Lombroso, 1912); a muscular body type (Glueck & Glueck, 1956; Sheldon, 1949); red hair (Von Hentig, 1947); an XYY chromosome abnormality (Stock, 1968). Some psychologists believed that personality traits were predictors of deviant behavior (Herman, 1995; Scarpitti & McFarlane, 1975) although Schuessler

and Cressey (1950) found that the results of 113 such studies were in fact inconclusive (Scarpitti & McFarlane, 1975). These theories entrenched the negative perception of deviance which was also present in sociology, in which deviance is the most studied topic (Spreitzer & Sonenshein, 2004).

Sociological theories. Early theorists in sociology adopted the negative view of deviance which was started by the non-sociologists. The literature shows a range of concepts in sociology about negative deviance within organizations, which has been studied using various terms such as employee deviance (Hollinger & Clark, 1982), workplace deviance (Bennett & Robinson, 2000; Galperin, 2002; Robinson & Bennett, 1995), corruption (Ashforth, Gioia, Robinson, & Trevino, 2008; Pinto, Leana, & Pil, 2008), white collar crime (Croall, 2001; Sutherland, 1939), and organizational crime (Braithwaite, 1989). However, in the sociological literature theories on deviance have been categorized according to three main groupings of theoretical ideas (Herman, 1995; Thio, 2005).

First, sociological functionalist theories (Braithwaite, 1989; Durkheim, 1933; Merton, 1957) argue that deviance is an outcome of social functions and dysfunctions. The pathological form (Durkheim, 1933) of such behavior is evident in suicide. However, Durkheim believed that deviance could also be of benefit to society by providing some societal functions – enhance conformity, strengthen solidarity among law-abiding citizens, provide a safety valve for discontented people, and induce social change (Thio, 2005). Durkheim also described a state of society which he called anomie in which norms are absent, weak or in conflict. According to Merton (1957) anomie, also called strain theory, can arise when there is an inconsistency or discrepancy in society between goals and legitimate means for achieving those goals. A state of anomie leads to a strain in society and individuals respond to the strain by exhibiting a range of

behaviors depending on whether or not they accept or reject the institutionalized means of achieving their goals. Merton suggests five types of individual behavioral responses to societal strain regarding the achievement of goals – (a) criminal innovation, (b) conformity, (c) ritualism, (d) retreatism, and (e) rebellion (Thio, 2005). The functionalist group of theories on deviance also include control theory (Hirschi, 1969) in which it is proposed that social bonds are a control against deviance in society, and shaming theory (Braithwaite, 1989) which argues that society uses shaming to control its members.

Second, other sociologists theorized that deviance results from societal conflict.

Proponents of social conflict theory (Balkan, Berger, & Schmidt, 1980; Chambliss, 1969;
Greenberg, 1981; Thio & Thio, 2004; Vold, 1979) argue that various types of inequalities and power differentials exist in society. These inequalities are caused by unfair and unjust discharge of the law by legal authorities who favor the rich and the powerful over the poor and the weak.

These unjust applications of the law result in deviance in society and create relatively more criminals among the less powerful and the poor. Quinney (1974) sees the system created by these unfair and unjust applications of the law as not only creating deviance in society, but also protecting the capitalist system on which many societies are based by paying low wages to the poor and the powerless. In his seminal work Sutherland (1939) argued that these power imbalances in society cause white collar crime in organizations to be overlooked.

Third, proponents of the symbolic interactionist perspective hold the view that deviance is a process of interaction among the deviant and the rest of society (Thio, 2005). In this group, differential association theorists such as Sutherland (1939), Sutherland and Cressey (1979) believe that deviance is learned through interactions with other people. Through these interactions, individuals learn how to perform and define deviant acts. An individual is likely to

become deviant if he has greater association and stronger relationships with persons who view violation of norms and law favorably than if he has these with those who view it unfavorably.

Among the symbolic interactionists, labeling theorists Becker (1963), Lemert (1967), Scarpitti and McFarlane (1975) focus on society's reaction to violation of norms and laws as opposed to the causes of such violations. According to labeling theorists, the acts that are considered deviant are dependent on the label given to the act or behavior by society. The view has been put forward that "Nothing is inherently good or bad, but becomes so when defined as such in a process of social interaction" (Scarpitti & McFarlane, 1975, p. 5). Scarpitti and McFarlane extend the sociological concept of deviance from just behavioral aspects to include characteristics and beliefs that observers evaluate as being deviant (Scarpitti & McFarlane, 1975). They suggested that deviant acts include crime, and on the opposite end of the evaluative continuum, heroism. According to Scarpitti and McFarlane (1975), deviant attributes are usually physical characteristics like extreme beauty which influence the way that the possessor of the characteristic is evaluated and responded to by others in society and deviant beliefs are ideas such as religious or political ideas held by an individual or group and which influence the way that others interact with holders of such beliefs. The view of phenomenologists within the social interactionist group of theories on deviance is that deviance is determined and best understood from the subjective interpretations of human subjects of study (J. Katz, 1988). These theorists focus on an individual's subjective interpretations of their own deviant experiences by getting their views and interpretations of their perceptions, feelings, consciousness and experiences of being a deviant. This view underscores the need to inquire into the subjective interpretations of exceptional performers in research at UTech about their behaviors and the organizational context within which they function. The labeling interactionist sociological perspective of deviance

constitute the essence of this study which seeks to understand exceptional performers in research at UTech who have been so labeled by virtue of The President's Research Initiative Award (PRIA) for research that they have received from UTech.

Norms. The social nature of organizations has been confirmed by D. Katz and Kahn (1978) who consider organizations to be social systems which function according to patterned behavior and activities, or norms. Sociological theories of deviance are based on two core premises about society - (a) society operates on a set of norms which when internalized by its members are considered in a normative way to be valid and right (Scarpitti & McFarlane, 1975), and (b) deviance is a departure from accepted social norms. Various definitions of social norms have been put forward. Gibbs (1965) surveyed the sociological literature and found that there was a lack of consensus on conceptual treatment and little agreement on the definition of norms except that a norm refers to uniformity of behavior. Akers (1973) refers to norms as expected behavior. Cohen (1959) refers instead to institutionalized expectations, and Scarpitti and McFarlane (1975) refer to the cultural nature of social norms. Norms make human interaction predictable and orderly and are transferred generationally within groups and societies and as such are a central component of culture. Schein (1992) argued that norms are culturally embedded and describe the influence of shared assumptions on individual and organization behavior. He sees organization culture as the intersection of the shared assumptions from the history of an organization, individuals' prior assumptions, those of subcultures and global occupational cultures that inhabit organizations, and our own assumptions and biases as inquirers. Schein defines organization culture as "the set of shared, taken-for-granted implicit assumptions that a group holds and that determines how it perceives, thinks about, and reacts to its various environments" (Schein, 1996, p. 236). He further argues that norms are fairly visible

manifestations of these deeper taken-for-granted assumptions which most members of a culture never question or examine. Bryson (2008) citing previous work by Williams (1980) makes the point that society and by extension organizations are in "a state of constant cultural change and negotiation" (Bryson, 2008, p. 747). As a result, in society and in organizations there is constant negotiation for hegemony among dominant, emergent and residual cultures and subcultures. Schein (1988) suggests two main categories of norms in an organization. *Pivotal* norms are absolutely essential to membership and goals of an organization and must be adhered to, while *relevant* or *peripheral* (Boisnier & Chatman, 2003) norms are desirable but are not as important to the organization and members can choose whether or not to adhere to them. Such a choice results in the response of creative individualism (Schein, 1988) which Boisnier and Chatman (2003) argue creates a space for the emergence of subcultures within an organization. Organizational subcultures are of potential benefit in enhancing the agility and adaptation of an organization to changes over time, without disrupting pivotal organizational norms (Boisnier & Chatman, 2003).

Members of society may also not strictly adhere to norms for three reasons given by Scarpitti and McFarlane (1975). Firstly, society tolerates acceptable variation in relation to social norms. Secondly, there is no uniformity in how members of society or groups internalize social norms. Thirdly, because we live in a heterogeneous society where persons have membership in several groups and perform several roles (e.g. occupational, family), conflicting norms can be internalized and the expectations of roles can be in conflict. Individuals must, therefore, make choices, from time to time, about the norms to which they are committed and which they display. This argument by Scarpitti and McFarlane (1975) highlights the role of interpretation and hence social construction in the nature of norms. Social constructionists assert that knowledge is

socially constructed and is reflected in the subjective experience of everyday life (Berger & Luckmann, 1966) and through various processes people interpret the world in which they live. As a result, multiple realities are constructed through social interaction among people, including in organizations. It is possible that people in the same organization can produce different social constructions of reality (Patton, 2002) as social relations can differ according to one's place or role in an organization. What we perceive as real is experienced as real to us (Thomas & Thomas, 1928, p. 572) as cited in (Patton, 2002, p. 96).

Fitzgerald et al. (2001) point out the dynamic nature of social reality in organizations and its on-going co-creation by members as a fundamental assumption of appreciative inquiry. An organization's story is constantly being co-authored. Moreover, pasts, presents, or futures are endless sources of learning, inspiration, or interpretation — much like the endless interpretive possibilities in a good piece of poetry or literature. This is the essence of AI's Poetic Principle. The important implication is that we can study virtually any topic related to human experience in any human system or organization. We can inquire into the nature of alienation or joy, enthusiasm or low morale, efficiency or excess. There is not a single topic related to organization life that we could not study. (Fitzgerald et al., 2001, p. 7)

Warren (2001) points out that reference groups are important in determining norms to which an individual may or may not adhere, in order to determine deviant behavior. Warren also makes a distinction between formal and informal norms. Formal norms are explicit desired behaviors of a reference group that have been codified in formal documents. Informal norms are the behaviors that are exhibited regularly by a reference group but which are not sanctioned by the group through formal documentation (Warren, 2001). Warren also distinguishes hypernorms, otherwise called meta-norms. These hyper-norms are basic societal beliefs and values

regarding human survival that exist even beyond organizational and national boundaries (Warren, 2001). Scarpitti and McFarlane (1975) suggest that subcultures possess distinctive values not shared by other groups within a society, and are somewhat opposed to the values and norms of the larger society.

It is proposed that the historical concept of negative deviance limits the understanding of the full range of deviant organization behavior in organizations (Dodge, 1985). The following section presents shifts in the literature on deviance towards acknowledgement of its positive features.

Recognition of Positive Deviance

Recognition of positive deviance by scholars in sociology and organization studies began to take root at a time when there was an observed decline in sociological study of negative deviance. J. M. Miller et al. (2001) examined the rise and fall of research specializations in sociology, with particular emphasis on deviance. Regarding the sociology of deviance, they showed that research in this area had lost its momentum and vitality and declined significantly after 1975, except in the area of criminology. J. M. Miller et al., conducted citation analysis of the scholars and works in the sociology of deviance who were cited the most in 263 textbooks, articles and research notes published between 1993 and 1999, and concluded in like manner as Sumner (1994) that the fact that the field had not produced a central set of theories that could explain legal and illegal forms of anti-norm behavior or deviance up to 1975 had contributed to its decline. However, J. M. Miller et al. (2001) and Sumner (1994) focused on only specific journals and sources dealing specifically with sociology during specified times. Positive deviance and integrative typologies which was by then a concept on the rise was being published in other disciplines and journals – in management, organization studies, and medicine.

Social interactionists such as Scarpitti and McFarlane (1975) who wrote about negative deviance had begun to further explore the concept of deviance to capture the nuances of deviant behavior. Scarpitti and McFarlane (1975) importantly recognized three other related characteristics of deviance that are relevant to understanding why it is important to study exceptional performers in organizations, specifically, at UTech. First, they indicate that there are degrees of deviance where evaluations of deviance lie on a continuum that ranges from good to bad. This suggests that there is no cookie cutter form of deviant behavior that is applied in all situations, or exists in organizations. Although exceptional performers in research at UTech are so labeled because they have received an award from UTech for research, the degree of deviant behavior that they each display is not necessarily the same. Exceptional performers, depending on their location in the organization may experience different challenges and enablers of their research and, therefore, adopt the nature and degree of deviant behavior that they perceive to be necessary for success in research at UTech.

Second, Scarpitti and McFarlane (1975) suggested that social deviance varies according to the particular setting, time or era, and context. This implies that in order to understand exceptional performers in research at UTech, the researcher should explore the context and setting within which they operate, at this stage and time of organizational transition. The setting at UTech differs socially and culturally from other universities. With respect to social deviance in a given time or era, Axelrod (1986) points out that, norms are not static but rather dynamic, and are adapted in an evolutionary process over time. The institutional changes that UTech have been experiencing since 1995 could possibly have been challenged and modified norms among faculty, including norms related to doing research. In addition, the context of UTech as a university is uniquely shaped for example, by interaction of its history, people and culture, and

institutional expectations about universities by Jamaican society. It could be expected that such unique context would produce relevant norms about research that are universal to universities across the world, but also produce norms that are situationally relevant to UTech. Schur (1971) draws our attention to the possibility of variation in the labeling of deviance, depending on the level of context that is examined for a particular group. Schur proposes that deviance can vary at different levels of social interaction such as collective rule making, interpersonal relations and organizational processing. As a result, individual behavior that is considered to be positively deviant in one group may not be considered so by another group such as society, depending on the contextual lens through which the behavior or actions are viewed.

As positive deviance is increasingly recognized, there needs to be caution regarding assumptions about cross-cultural interpretations and applicability of the concept. H. Kim and Markus (1999) pointed out that cultural values and attitudes towards some concepts can differ. Using the examples of the United States and East Asia, they showed that deviance does not have positive connotations in East Asian cultures where conformity is valued and emphasized. However, in the United States, deviance is considered positively as uniqueness, and "conformity to group norms is associated with relinquishing of one's autonomy, not being in control, and being pushed around...Consequently, people [in the USA] follow the norm not to follow norms" (H. Kim & Markus, 1999, p. 787). By studying positive deviants in research at UTech, more will be understood about deviant behavior regarding the practice of research and the values and attitudes associated with such behavior in the PRIA group.

The third characteristic of deviance that is relevant to understanding the importance of studying exceptional performers in research at UTech is that deviance can perform both positive and negative functions in society, at the same time, "depending on the level of social action

examined" (Scarpitti & McFarlane, 1975, p. 9). For example, it can be a signal of a malady, such as low research output, that needs attention, and a signal of possible change, in a group, society, or organization, such as UTech.

Markova (2006) expanded ideas about the nuances of deviant behavior by considering whether or not, and in what ways, it affected the behavior of other members within an organization. Markova discovered that deviance has a vicarious social effect. In a study of negative deviants in an organization, Markova found that there were vicarious or social learning effects from the presence of a (negative) deviant in the workplace and identified positive effects of the presence of a (negative) deviant in the workplace. This suggests that the presence of deviants can influence other members of the organization. It is, therefore, important for organizations to understand the perceptions and behaviors of deviants in their midst as they could have an effect on the direction of and social learning during organizational transition, hence, the objective of this study. From the perspective of focusing on the outcomes of deviant behavior rather than the process, Warren (2001) examined constructive and destructive deviance in organizations. He proposed that both require a deviation from social norms and hence the management literature on constructive and destructive deviance should be integrated. Warren developed a typology of constructive and destructive deviance that takes into account hypernorms or societal norms and the various levels and types of norms and groups that impact an employees' behavior.

Thus, issues regarding how different the norms of the groups are, how many groups an individual is associated with, and how strongly an individual identifies with a group, all add to the complexity of understanding deviance. Specifying reference groups facilitates discussions and research on deviance by focusing attention on the norms in question. (Warren, 2001, p. 14)

Several other scholars similarly argued for the concept of deviance to be more widely applicable to the range of behaviors in organizations by changing the negatively skewed perspective to a holistic one that includes both negative and positive deviance (Dodge, 1985; A. Heckert & Heckert, 2002, 2004; D. M. Heckert, 1985, 1989, 1998; Robinson & Bennett, 1995; Warren, 2001, 2003). D. M. Heckert (1985) at the time of her study reported no other sociological studies on positive deviance but showed that the concept had begun to be acknowledged although not studied in sociology, by earlier sociological theorists of negative deviance. For example, Scarpitti and McFarlane (1975) had acknowledged that social deviance could be in either a positive or negative direction but did not go on to explore the implications of an expanded concept of deviance to include its positive form. Dodge (1985) lamented that no work by deviance theorists had, up to the time of his assessment, addressed this gap. D. M. Heckert (1985) suggested that further research be undertaken to empirically investigate positive deviance in general, in order to illuminate its nature. This study of positive deviance at UTech assists in filling such a gap in the literature.

Emerging Theories of Positive Deviance

Spreitzer and Sonenshein (2003) liken the range of organizational behavior to a normal distribution curve in which the majority of organization behavior falls within the middle of the curve. The majority of the literature on deviance in organization behavior is focused on the extreme left of the curve which represents negative departure from norms. They consider the extreme right of the curve which represents positive departures from norms to be largely ignored in the organization behavior literature (Bennett & Robinson, 2000; Robinson & Bennett, 1995; Spreitzer & Sonenshein, 2003). Spreitzer and Sonenshein (2003) refer to these positive departures from norm as positive deviance.

When deviance is conceptualized as being on a continuum that ranges from negative to positive as in the example of a normal distribution curve that is used by Spreitzer and Sonenshein (2003), the characteristics that have been proposed for (negative) deviance can help us to frame an understanding of how positive deviance might be studied. Thus the approach of this study of positive deviance at UTech was to look at exceptional performers in research i.e. those whose research behavior falls to the extreme right of the curve. Whereas on the one hand, negative deviance has been studied from the perspective of unacceptable behavior, positive deviance is studied on the other hand, as a behavior that should be encouraged or emulated. According to D. M. Heckert (1985), there is more than one type of positive deviance which she defines as "behavior that people label (i.e., publicly evaluate) in a superior sense. As such, that labeling will usually result because that behavior departs from that which is considered normal or normative in the particular case or behavior" (D. M. Heckert, 1985, p. 30). From postulated examples reflecting the several ways that positive deviance had been defined in sociology, D. M. Heckert, developed a typology/classificatory model of five types of positive deviance – innovative behavior, supra-conforming behavior, altruistic behavior, possessors of innate characteristics, and charismatic behavior. All of which are applicable to organizations, including UTech. There is further support in the literature for studying positive deviance at UTech to determine its nature. D. M. Heckert made the case for empirical research on positive deviance. "Although many studies have been conducted in regard to groups or individuals deemed to be negative deviants, there is a relative dearth of theoretical or empirical analysis of positive deviance" (p. viii).

Like negative deviance, the growing literature on positive deviance in organization behavior has not been conceptually cohesive despite D. M. Heckert's contribution to the field.

Two main streams of thought were distinguished in the positive deviance literature. One stream

presents a normative approach to positive deviance which focuses on honorable behavior or acts and extraordinary counter-role behavior which is considered to be right. The other stream presents positive deviance as a process to bring about change by uncovering exceptional performers within the system. Both of these streams of thought influenced the researcher's design of this study of positive deviance at UTech.

Honorable behaviors as positive deviance. The work of (Spreitzer & Sonenshein, 2003, 2004) and other like-minded theorists are representative of the stream of the literature on positive deviance that considers it to be honorable behavior. This group of theorists refer to themselves as positive organization scholars and argue for behaviors that have positive affects in organizations be recognized and studied. Positive Organizational Scholarship builds on several scholarly foundations from corporate social responsibility, pro-social behavior, community psychology, citizenship behavior, business ethics, appreciative inquiry, and positive psychology (Bernstein, Cameron, Dutton, & Quinn, 2003).

It has been said that positive deviance is "intentional behaviors that depart from the norms of a referent group in honorable ways" (Spreitzer & Sonenshein, 2003, p. 209). These scholars use a social interactionist approach, specifically labeling the referent group to determine what organizational behaviors are considered to be positive in an honorable way. Their concept of positive deviance is also a normative one. That is, those labeling the behavior consider it in the balance of right and wrong. Based on their definition, (Spreitzer and Sonenshein (2003), 2004)) specify three characteristics that are required of behavior in order for it to be labeled as honorable and praiseworthy – it must be voluntary; intentional behavior and not accidental behavior and, it must also depart significantly from the applicable norms. These characteristics of honorable behavior are considered applicable to the behaviors of researchers at UTech.

Also Spreitzer and Sonenshein (2003) recognized that social systems are designed to preserve the status quo through norms that influence and control behavior. They, therefore, considered it important to understand the mindset of individuals who become involved in honorable behavior that departs from norms in positively deviant ways. Spreitzer and Sonenshein proposed five psychological conditions which although not necessary for positively deviant behavior to occur, create the individual mindset which makes an individual more willing and able to engage in positive deviance. These psychological conditions are not considered to be dispositional or personality conditions but rather psychological factors that are considered to be malleable and open to influence by contextual changes. The five psychological conditions are (a) a personal sense of meaning involving deep care that what is being done matters to the doer in important ways, (b) focus on the other rather than achievement of personal glory, (c) having a sense of self-determination, (d) personal efficacy –confidence and belief in one's ability to succeed, and (e) courage – being willing to confront risks to do what one thinks is right (Spreitzer & Sonenshein, 2003). This study provides insights into the individual mindsets of exceptional performers in research at UTech to identify common patterns of thinking that are involved in their experiences at UTech.

Further, Spreitzer and Sonenshein (2003) made a link between positive deviance and organization change. They perceive positive deviance as honorable behavior; as an element within the broader process of the development and adaptation of norms. Such adaptation occurs as the behavior of positive deviants within an organization becomes the norm, a view that concurs with the view of Axelrod (1986) which was stated before, that norms are adapted in an evolutionary process.

Spreitzer and Sonenshein (2003) encourage further research on positive deviance to determine "the performance outcomes of positive deviance" (Spreitzer & Sonenshein, 2003, p. 221), how it can "make a difference to both individual and organizational outcomes" (p. 220), its impact on various stakeholder groups that extends it from an individual behavior concept to an organization behavior concept. In addition, they encourage further research on other possible facilitators of positive deviance besides the five psychological conditions that they propose. They also suggest that further research be conducted "to identify the contextual enablers, such as [organizational transition,] transformational leadership and contexts of crisis, for example, organizations under intensive threat, that encourage or discourage the likelihood of positive deviance" (p. 219), to consider what happens to organizational and business norms, how they evolve, when they are challenged by positive deviant behaviors. They describe positive deviance as an underdeveloped area of the study of organization behavior. This study of positive deviance at UTech assists in filling such a gap in the literature.

Exceptional performers as positive deviants. In looking at the right-hand side of a normal distribution curve of behaviors in organizations, we identify the positive deviants/exceptional performers in organizations. However, literature on the emerging concept of positive deviance as exceptional performers in organizations is scant. Insights into the behavior of such individuals are drawn mainly from examples in healthcare of nutrition challenges that were experienced by rural communities in Haiti and Vietnam (Bradley et al., 2009; Day, 2009; Dorsey, 2000; Pascale & Sternin, 2005; Pascale et al., 2010; Seidman & McCauley, 2009; J. Sternin, 2003; J. Sternin & Choo, 2000; Tarantino, 2005; Zeitlin et al., 1990). These insights have been used to understand positive deviants that are found in organizations.

For example, Pascale and Sternin (2005) suggest that there are groups and individuals who are prevailing against the odds and doing better than everyone else under the same constraints. "These innovators' uncommon practices and behaviors enable them to find better solutions to problems than others in their communities" (Pascale & Sternin, 2005, p. 74) – tacit knowledge. The potential of positive deviants to change their organizations is highlighted by Pascale and Sternin who suggest further that positive deviants, who are sometimes overlooked, should be engaged by their organizations and brought from the periphery into the mainstream. These members of the organization prevail against the odds and become indigenous sources of change if the organization is able to identify these cases of isolated success – positive deviants – learn from their behavior and experiences and bring their success strategies into the mainstream. When members of an organization are achieving better than their peers in the same situation and with the same constraints, it begs the question to be asked about their perceptions and experiences of the organization in order that their tacit knowledge and coping strategies could be known and understood.

In a further development to their work on positive deviants in organizations, Pascale and Sternin (2005) describe a process for problem-solving and change in organizations. Pascale et al. (2010) argued that positive deviance can serve as a problem-solving process. This positive deviance process which begins with observing successful exceptions and

Is founded on the premise that at least one person in a community, working with the same resources as everyone else, has already licked the problem that confounds others. This individual is an outlier in the statistical sense – an exception, someone whose outcome deviates in a positive way from the norm. In most cases this person does not know he or she is doing anything unusual. (Pascale et al., 2010, p. 3)

It has been argued that the positive deviance process is appropriate "when behavioral and attitudinal changes are called for – that is, when there is no apparent off-the-shelf remedy and

successful coping strategies remain isolated and concealed" (Pascale & Sternin, 2005, p. 81). However, organization leaders at the top must be prepared to change their approach from top-down where they are the champions of change to an approach to change in organizations that is bottom-up. Pascale and Sternin (2005) report that the concept of positive deviants in organizations has been used by a number of large organizations – Goldman Sachs transformed its national force of investment advisers, Hewlett-Packard engineers use it to tackle technical challenges, Genentech identified positive deviants among its national sales force, and Merk and Novartis were involved in experimentation on the positive deviance concept. It has been observed that context is important in a positive deviance approach to change as "Although most often the company is not aware of it, there are certain things that work in their unique environment, and others that do not" (Crom & Bertels, 1999, p. 164). Tapping the value of positive deviants in organizations involves an understanding of their perceptions of their organization, their success strategies and overall or tacit knowledge of their organizational context, and this study begins development of such knowledge at UTech.

Positive deviants/exceptional performers' perceptions and success strategies. No studies were found in the literature that described the perceptions, experiences or success strategies of individuals who are positive deviants/exceptional performers in organizations. This underscores the need for this study which will help to fill this gap in the literature on positive deviants/exceptional performers in organizations by gaining insights into the tacit knowledge, beliefs, attitudes and successful practices of exceptional performers in research at UTech.

Enablers and barriers experienced by positive deviants/exceptional performers. The literature is scant on describing or explaining enablers and barriers positive deviants/exceptional performers in organizations may experience. A few studies were found on reactions to positive

deviants, which suggest that these individuals are not favorably perceived. Research has shown that reactions to positive deviants or exceptional performers are not always favorable (Abrams et al., 2002; Abrams et al., 2000; Feather, 1989, 1991, 1994; Fielding et al., 2006; Marques et al., 1998; Margues et al., 2001; Margues & Paez, 1994). Fielding et al. (2006) studied reactions to individuals who are exceptional or outstanding, particularly those who exceed expectations, that is, positive deviates within the context of social identity and their attributions for their success. Positive deviates are "Exceptional, high achieving individuals are extreme group members who exceed the normal or average level of performance in a group...." (Fielding et al., 2006, p. 200). Positive deviates were evaluated within their social groups and the experiments showed that positive deviates were evaluated more favorably within their group when they attributed their success to the group rather than only to themselves. They noted that this pattern of evaluation associated with the attribution of the positive deviate did not hold when the positive deviate failed. Fielding et al. (2006) found that the reactions to positive deviates by their groups are even more complex when considered from the perspectives of social comparison and social identity. When social identity is prominent for evaluators, being outperformed by high achievers can be threatening, unless the high achievement also benefits those feeling a sense of threat to their selfconcept (Fielding et al., 2006). Further, reactions to positive deviates who are exceptional in a direction that validates group norms are evaluated more favorably that those whose deviance is in a direction that is anti-group norms (Abrams et al., 2002; Abrams et al., 2000; Fielding et al., 2006). The experiments in the study of (Fielding et al., 2006) did not establish baseline control data, and the direction of the effects cannot therefore be firmly concluded from the results. Feather (1989) conducted three studies to determine attitudes towards a person in high position – called tall poppies in Australia – and also to their fall from their high position. In separate studies of 531 high school students and 361 university students, the results showed that the high school students were more pleased about the fall of a high achiever compared to the fall of an average achiever. The results from the study of the university students showed that they were more punitive and more pleased at the transgression of a high achiever who cheated on a test compared with their reaction to an average achiever in similar circumstances. The studies by (Feather, 1989, 1991, 1994) ignore social comparisons relating to the evaluator and the high achiever. Other studies point to subjective pressures towards group uniformity. Marques et al. (2001) and Marques and Paez (1994) studied "the black sheep effect" which they suggest operates to preserve a positive social identity (Marques & Paez, 1994).

The results of studies on attitudes towards positive deviants/exceptional performers indicate that they are likely to be perceived unfavorably by their peers. Further research is needed to explore how such negative perceptions might have an impact on the perceptions of positive deviants on the enablers and barriers that they experience in organizations. This study will begin to address this gap in the literature by exploring the perceptions and experiences of positive deviants/exceptional performers in research at UTech.

Summary

This review has shown that there is support in the wide literature on deviance for the purpose and research questions of this study of positive deviants at UTech. Positive deviance is still an emerging concept in sociology and studies such as this one help to fill gaps in our understanding of the concept and the individuals who display the behavior within their organization. The literature suggests that positive deviants have different behaviors and ways of thinking (Scarpitti & McFarlane, 1975). Care needs to be taken in this study to understand the

perceptions and experiences of positive deviants in research at UTech as it has been shown that there is variation in cultural interpretations of the concept of deviance.

Exceptional performers within a human system are potentially valuable change agents who possess tacit knowledge that, if understood and learnt by the rest of the system could solve problems and advance organization transition. However, there is individual variation in how norms are internalized and the degree of deviance that individuals display. This was a significant finding from the literature that suggested inquiring into exceptional performers in research by getting subjective interpretations of such behavior and the context within which it occurs.

The literature also revealed gaps in research on positive deviance – in organizations experiencing organization transition; and in cultures outside of the USA such as in Jamaica. Little research was discovered on positive deviants as exceptional performers. Spreitzer and Sonenshein (2003) describe positive deviance as an underdeveloped area of organization behavior. This study helps to fill that gap by adding qualitative research on positive deviant researchers at UTech to existing knowledge in this area of organization behavior.

Chapter 3: Research Methodology

The purpose of this exploratory case study was to understand an organization in transition from the perspective of its members. Specifically, it explored the perspective of early adapters in research at UTech, a university in transition from low to higher research outputs, where individual faculty who are actually practicing researchers are an exception to the norm. An exploratory case study design was used to discover the organizational context for exceptional performers in researcher through their own descriptions of the context and their perceptions and experiences of being a researcher in UTech. The research methodology of exploratory case study and the appropriateness of this chosen method used in this study are explained within the context of naturalistic paradigm. Other details of the research design are also described.

Research Design

The case report has been developed from a social constructionist perspective on knowledge, where knowledge is believed to be constructed through social interaction (Gergen, 2009), and which perspective is consistent with the qualitative paradigm. The case report comprises a mixture of qualitative inquiry traditions and approaches - phenomenology in which commonalities in the lived experiences of participants as researchers at UTech are reported through transcending themes from the stories of participants; ethnography which involves underlying interpretation of data collected using the language and meanings of the participants; grounded theory in which elements of constructs and beliefs were captured, and; reflexivity of the researcher to enhance transparency in the research process.

Among these qualitative traditions, the ethnographic nature of the analysis represented in this case report is significant as an organizational micro ethnography of UTech as a research organization and is produced through realist tales (Rosen, 1991; Van Maanen, 1979) which

shape a re-description of the organization using the language of the participants (G. Miller, 1997b).

The analysis of the data involved interpretations by the researcher based on detailed examination and report of the responses of the participants to give a combined re-description of meanings, perceptions and experiences of the socially constructed world of the participant researchers. "Although disciplined in various ways, the core of ethnographic methodology is an intuitive grasp of the nature of the organization that is then used to shape a persuasive narrative redescription for the reader" (G. Miller, 1997b, p. 143), using the language of the organization's members. The language of participants is used in the analysis as "... without such analyses, the ethnographer has no way to warrant his or her account other than the claim to have 'been there and seen'" (p. 143). G. Miller (1997b) further explains that ethnographic tradition requires "the detailed examination of members' talk, from transcripts or near verbatim field notes, its hard ground for analytical inference" (p. 143).

The research involved formal interview of seven out of a total of nine recipients of the President's Research Initiative Award (PRIA) who are still in the employ of UTech and who volunteered to participate in this study. One participant was removed by the researcher in the latter stages of the study for reasons of potential role ambiguity and conflict in a university matter in which both the participant and the researcher were involved. As this researcher has been an employee at UTech in an administrative capacity for 14 years, the accumulated prior knowledge and experience of UTech greatly aided access to and within the research site. In addition, being a part of the organization over the years allowed a heightened understanding of the social setting and recognition of subtleties existing within it. On the other hand, it was difficult to distinguish between the researcher's knowledge as a native in the organization and

the knowledge that developed during the data collection period. This is a known challenge with insider qualitative inquiry studies (Hale, 1970) and is compounded by the fact that an insider never really leaves the field. These facts likely influenced the analysis of the data. These challenges were met through reflexivity and ongoing consideration of alternative interpretations on the part of the researcher and supported by the passage of time which allowed sufficient intellectual and emotional detachment from the data so as to fulfill the rigors of the qualitative method of inquiry.

Naturalistic/qualitative inquiry. The paradigm and principles of qualitative inquiry Creswell (1998), also are called naturalistic inquiry. Lincoln and Guba (1985), frame the approach to this study of the perceptions, experiences and context of positive deviant researchers at UTech. Qualitative inquiry has been referred to as a paradigm that embodies "A systematic set of beliefs together with their accompanying methods" (Lincoln & Guba, 1985, p. 15) which determine how the researcher explores social and human problems. According to Lincoln and Guba (1985) based on its naturalistic foundations, qualitative inquiry produces idiographic (gives the idea of a thing) rather than nomothetic (states scientific laws) knowledge. Naturalistic inquiry takes place in the natural setting or context of the persons under study as realities cannot be separated from their context. Bate (1997) reminds us of a root concept of anthropology. That is, "thought and behavior cannot be properly understood outside the context in which they are situated; it is knowledge of context that renders them intelligible" (Bate, 1997, p. 1156). The naturalistic paradigm also uses the human as instrument, involves thick rather than thin descriptions of the phenomenon under study, and acknowledges the values of both the subject of the research and the researcher. When naturalistic inquiry is used, the researcher "builds a

complex, holistic picture, analyzes words, reports detailed views of informants. . ." (Creswell, 1998, p. 255) in their natural setting.

Use of a naturalistic paradigm for a qualitative inquiry was considered to be appropriate for this study because of its characteristics as well as the researcher's epistemological beliefs about the nature of knowledge that this study was seeking to discover. The researcher was working from a social constructionist view about positive deviance at UTech. This view which is based on the belief that there are multiple realities of the world suggests that there was no single understanding or interpretation of being a positive deviant in UTech, nor a pre-determined frame within which these realities should fit. Therefore, multiple realities of the persons under study must be explored and taken into account. For example, positively deviant researchers at UTech are likely to have different views of the world than their peers who operate under the same circumstances and conditions but do not achieve results. They might also have differing perceptions and descriptions of the organizational context within which they operate. The social constructionist viewpoint (Gergen, 2009) also suggests that the researcher has perceptions and understandings about the organizational context for research at UTech. The researcher of this study is a member of staff at UTech and the potential of bias in the conduct of this research were mitigated through means to ensure internal validity which are explained later in this Chapter.

This study explored exceptional performers' perceptions of their organization context and the way that they achieve success in research at UTech. The researcher relied primarily on the positive deviants' own perceptions and experiences to understand the organizational context for research at UTech. The researcher being a part of the UTech social setting (G. Miller, 1997b), was aware of the risk of being *blind* to one's own culture. Goetz and LeCompte (1984) asserted that one cannot learn a culture from inside it but rather, must be exposed to other cultures to

enable him to see his own culture critically from comparisons. As a result, ethnographers, for example, must be trained and prepared for studying their own culture. My own training and preparation involved studying at a university in another country and culture and undertaking specific training to become competent in cross-cultural comparisons and also competent in doing research in my own organization.

As the topic of this research was a subject that had not been researched before and needed to be explored to understand the nuances of being a positively deviant researcher at UTech, naturalistic inquiry facilitated development of a thick description of the organizational phenomenon from the multiple realities of the positive deviants themselves. The approach built patterns from the data by induction rather than to try to fit the data into a pre-determined frame by deduction.

In qualitative inquiry the researcher assumes an inductive rather than a deductive stance to develop meaning from the data. "Inductive analysis begins with specific observations and builds towards general patterns in contrasts with the hypothetical-deductive approach of experimental designs that require the specification of main variables and the statement of specific research hypotheses *before* data collection begins" (Patton, 2002, pp. 55-56). This study of positive deviants in research at UTech sought to uncover general patterns and themes about how positively deviant researchers at UTech perceive and function within their organizational context. No prior assumptions were made about general patterns and themes. Instead, these categories emerged from data collected. The inductive approach to research is also an emergent process. That is, data collection and analysis are intertwined. This allowed the researcher, through constant comparison, to explore the issue according to the particular data that emerges from a human description of what is considered relevant and important in order to enhance

understanding of the data. A case study was chosen for this study from among the range of inductive methods available in qualitative inquiry.

Appropriateness of case study. The choice of the case study method was based on how the findings are intended to be used. The findings of this study are mainly intended to inform recommendations to the university on enhancing the transition from low to higher research outputs. This entails using the findings to enhance practices within the institution as a priority over developing abstract theoretical constructs about the behavior of the positively deviant researchers. For this reason, the case study method was chosen over other inductive approaches such as grounded theory. However, it is noted that theories might also be built from case studies (Eisenhardt, 1989), and as will be explained later, there are elements of grounded theory in a qualitative case study which draws on several traditions in qualitative inquiry. However, the intention of the study was to contribute more to practical rather than theoretical understandings of positive deviants/exceptional performers in research at UTech.

In a case study method we are interested in understanding how persons function in their daily lives and milieus, putting any presumptions that we may have on hold while we learn (Stake, 1995). Understanding the organizational context of positively deviant researchers within the UTech context was important to enhancing knowledge about their behaviors. Qualitative inquiry was appropriate for exploring the context within which an issue and the research participants of a study were situated (Creswell, 2007) and to follow up quantitative research to get a deeper understanding of findings. It has been suggested that a case study method would be used "because you deliberately wanted to cover contextual conditions – believing that they might be highly pertinent to your phenomenon of study" (Yin, 1993, p. 13) and because concrete, context-dependent knowledge is more valuable in the study of human affairs than predictive

theories and universals (Flyvbjerg, 2006). Understanding of context is best learned from those in the situation as "We cannot separate what people say from the context in which they say it" (Creswell, 2007, p. 40). Merriam (1998) emphasizes the usefulness of case study in gaining deep understanding of a situation and meaning for those involved, through a focus in the research on process rather than outcomes, to understand context rather than specific variables and to discover rather than to confirm what is thought to already be known.

Insights gleaned from case studies can directly influence policy, practice and future research (Merriam, 1998). In this study the "silenced voices" (Creswell, 2007, p. 40) of exceptional performers were pursued to get an in-depth understanding of the issue. Creswell proposes that qualitative inquiry is conducted when a complex and detailed understanding of an issue is required which can only be established by talking to people in their natural setting — for example, their homes or places of work — and hearing their stories unencumbered by our own expectations or what is said in the literature.

Origins and traditions of case study. The appropriateness of a case study for the issue being researched in this study also stems from its origins and traditions. The exploratory case study approach to qualitative inquiry in this study drew upon several of its origins and traditions that provided important strategies and tools for collection of data. Creswell (2007) explains five traditions in qualitative inquiry – narrative research, phenomenology, grounded theory (the discovery of theory from data) (Glaser & Strauss, 1967), ethnography, and case study – and points out that each has a particular disciplinary origin, but the boundaries are not precise as there are overlaps in the disciplinary origins associated which each tradition. For example, grounded theory has a single disciplinary origin in sociology but ethnography is founded in both anthropology and sociology (Goetz & LeCompte, 1984; Van Maanen, 1979). The chosen

approach or tradition for a particular research design "need not be 'pure' and one might mix procedures from several approaches... [especially in] complex studies where features from several approaches may be useful" (Creswell, 2007, p. 45). The qualitative inquiry tradition of case study has a broad interdisciplinary origin and background (Creswell, 2007). This suggests that elements of the other four qualitative inquiry traditions may be found in the case study approach. Data collection strategies vary depending on which traditions are emphasized in a case study (Creswell, 2007). In the research methods employed in this study, several of the disciplinary origins and traditions of case study were evident.

The exploratory case study. The method used in this study was an exploratory case study of UTech, looking at the organization from the perspective of individual actors within the university. Case study research has been around for a long time (Creswell, 2007) and has been used in organization studies, with good effect. D. Katz and Kahn (1978) attribute a major input into the growth of the field of organization studies to sociological case studies. Case studies that increased understanding of single social units or organizations were developed about – the Tennessee Valley Authority (Selznick, 1949), a coal mine (Gouldner, 1954), a hospital psychiatric ward (Stanton & Schwartz, 1954), a labor union (Lipset, Trow, & Coleman, 1956), a prison (Sykes, 1958), and a mental hospital (Stotland & Kobler, 1965).

A case study is "An in-depth study of a bounded system or a case...." (Creswell, 2007, p. 77) in which "the researcher explores in-depth a program, an event, an activity, a process, or one or more individuals" (Creswell, 2003, p. 15). It is bounded by time and activity and researchers collect a variety of data over a sustained period of time (Creswell, 2003). The type of the qualitative case study may be distinguished according to the intent of the case analysis (Creswell, 2007, p. 74). This study of positive deviants in research at UTech was an exploratory

instrumental case study (Stake, 1995). It has been argued that case studies are appropriate when research is exploratory and discovery-oriented and "examine a topic in which there has been little previous research" (Schumacher & McMillan, 1993, p. 376). In addition, case studies "are designed to lead to further inquiry" (p. 376). Single cases are used to represent a unique or extreme case (Yin, 1993). In a single instrumental case study (Stake, 1995), the researcher focuses on an issue or concern, and then selects one bounded case to illustrate this issue (Creswell, 2007, p. 74). Selection of cases should allow maximization of what can be learned, knowing that time is limited (Stake, 1995)"The final written report or presentation includes the voices of participants, the reflexivity of the researcher, and a complex description and interpretation of the problem, and it extends the literature or signals a call for action" (Creswell, 2007, p. 37).

The bounded system. The single case studied was UTech, formerly the College of Arts, Science and Technology (CAST) which transitioned from a college to a university in 1995. Subsequently, research became a significant objective of the university in keeping with its Charter. A research office was initiated in the administration of the university in 2000 and it was later expanded to the five Faculties and two colleges in eight disciplinary foci – education and liberal studies; built environment; engineering and computing; business and management; sport sciences; health sciences; law, and; medical sciences. The case study was conducted between July and May, 2013. It is bounded by the following criteria for selecting key informants (Spradley, 1979) from among faculty members at UTech, for interview. The selected interviewees were: (a) recipients of an award for research excellence from UTech within the past ten years, (b) actively engaged in the practice of research at UTech during the past five years, and (c) from various disciplines and gender within UTech.

Sources of data. As with ethnographic studies (Hammersley & Atkinson, 1995; Spradley, 1979), data collection in case studies typically draws upon multiple sources of information and involves a wide range of strategies (Creswell, 2007). Stake (1995), Yin (1993) and Yin (1994) identify potential sources of data in case studies – documents, archival records, interviews, direct observation, participant observation, physical artifacts. From the perspective of anthropology, the intent is to understand "... the everyday experience of a society or organization, the everyday things that people get up to in the course of their everyday lives" (Bate, 1997, p. 1164).

Three sources of data long used in ethnographic tradition and methods informed this study. The primary source of data was interviews of 7 key informants (Spradley, 1979) among positive deviants in research at UTech, who provided their perceptions and participant meanings of the UTech organizational context for their research. Spradley describes an informant as "native speakers...teachers for the ethnographer" (Spradley, 1979, p. 25). Participant meanings have been described as "how individuals conceive of their world and how they explain or 'make sense' of important events in their lives" (Schumacher & McMillan, 1993, p. 423). The key informants are actual exceptional performers who are actively involved in the process and practices of research at UTech. Learning what they do can indicate recommendations that may influence the organization.

The second source of data was artifacts of the organization. Artifacts of the organization, are described as "personal documents, official documents, objects, and erosion measures (Schumacher & McMillan, 1993, p. 433) which are "tangible manifestations of the beliefs and behaviors that form a culture, and they describe people's experience, knowledge, actions and

values" (p. 433). Both the physical and virtual aspects of the organization were explored to locate artifacts relevant to this study, as well as those provided or suggested by the primary sources, who were the key informants. The aim was to identify what else existed in the institution that helped understanding of the perceptions, experiences and context of positive deviants in research at UTech.

The third source of data was participant observation by the researcher who is a member of staff of UTech, and a developing researcher. Participant observation, also called fieldwork and field research takes place in the field or social setting, which for organizational development researchers is an organization (Patton, 2002), and produces observational data. Becker and Geer (1969) define participant observation as the method in which the observer participates in the daily life of the people under study over a period of time, observing things that happen, listening to and questioning people. The participant observer might operate openly in a researcher role, or covertly in a disguised role. Becker and Geer (1969) suggest that participant observation provides the most complete form of sociological datum. It gives much information about the social event under study by allowing observation of not only the social event but also the events which precede and follow it, and also provides opportunities for the researcher to hear the explanations of its meaning from other participants and spectators. Participant observation, therefore, provides a yardstick against which to judge the completeness of data gathered in other ways (Becker & Geer, 1969).

The purpose of observational data was to "describe the setting that was observed, the activities that took place in that setting, the people who participated in those activities, and the meanings of what was observed from the perspectives of those observed" (Patton, 2002, p. 262). Participant observation involved being in and around the field for the purpose of qualitatively

analyzing that social setting (Lofland & Lofland, 1995). Patton (2002) explains that the extent to which an observer researcher is a participant in the setting being studied varies along a continuum from being fully immersed in the setting as a full participant to being a spectator who is completely detached from the setting, and the extent of participation can vary over time. Being a full participant observer constitutes what Patton calls an "omnibus field strategy" (Patton, 2002, p. 265). It "simultaneously combines document analysis, interviewing of respondents and informants, direct participation and observation, and introspection" (Denzin & Lincoln, 2003, p. 183). Participant observation in this study combines all of these elements to varying degrees. As the researcher is also a member of the organization under study, there were distinct benefits gained from including direct observation in the research strategy, and some risks which were mitigated by being a "skilled observer" (Patton, 2002, p. 260). One significant benefit of being a participant observer and a member of UTech, the organization under study, was understanding the native language of the group under study. Becker and Geer (1969) point out that the culture of social groups that are distinct units differ from that of other groups. That is, such social groups possess a different set of shared understandings around which action is organized, and which is expressed in language nuances peculiar to that group and only fully understood by its members. These differences in language occur even when members of social groups speak the same language such as English. Becker and Geer (1969) use, as an example, the comparison of the native language of church groups and tavern groups. Both of these groups in an English-speaking country would speak English but the nuances of the language of each group would be different. In Jamaica, such differences are compounded by the fact that a second, unofficial language – patois – is spoken and used in varying degrees by different social groups. As a result, researchers who have not learned the native language of a particular social group, run the risk of making

errors in interpreting what is said. The researcher being a member and participant observer in the organization in which she is employed, had already learned the nuances, meanings and implications of words with great precision through study of their use in context and through an extensive use of them, under the scrutiny of other capable speakers of the language (Becker & Geer, 1969).

Data collection strategies. Data were gathered from July, 2012 to May, 2013. During participant observation, it was suggested in a discussion that the recipients of the President's Research Initiative Award (PRIA) were not necessarily the most productive or accomplished researchers in UTech. It was asserted by a knowledgeable administrator and fellow researcher that some of the best achievers in research at UTech had declined nomination for the PRIA. While following up on this assertion, another member of staff suggested the possibility that some UTech researchers might not acknowledge their affiliation with the university in their publications and that it is known informally that UTech faculty have multiple affiliations, suggesting that there was a possibility that the research outputs of some UTech researchers might not be known by the university. While these possibilities seemed interesting to pursue to understand the social issues at play, including the organizational culture, in which such disinterest and weak organizational affiliation would exist among faculty and other researchers in the university, the strategy of inquiry was not adjusted to include non-PRIA researchers as participants. However, note was taken of these and other related comments during data collection for this study.

One objective of the data collection strategy was to triangulate data collection by discerning stories, meanings, or values that corroborate or disconfirm other data. The description and interpretation of UTech developed from the data was verified by asking participants to

review and give feedback on an advanced draft of this case report. For the review they were asked to consider the question – Is the researcher's description in the case study accurate? The comments of participants from their review were studied and considered in developing the final version of the case report in Chapter 4.

Interviews. Interviews were the primary data collection strategy since the objective of the study was to learn the perceptions and experiences of positive deviant researchers. The use of interviews allowed the key informants (Spradley, 1979) to share their perceptions and experiences in an unencumbered way, within the constraints of approximately 90 minutes. Bate (1997) explains that everyday occurrences are the sources of anthropological understanding of the past. "It is in the everyday that the anthropologist searches for the past, in such things as rites and rituals, myths, stories and sagas, ballads, and anecdotes" (Bate, 1997, p. 1156). Bearing this in mind, participant interviewees were granted maximum freedom in responses and the ability to lead the researcher to questions that should be asked. This strategy was enhanced through the use of a combined approach of interview guide and structured interview using open-ended questions. At the interview, interviewees were provided with a copy of the interview guide/protocol which was retrieved at the end of the interview. Sharing the guide/protocol allowed the interviewee to follow or divert from the proposed line of questioning according to what he or she saw as necessary in order to express his or her *voice* or tell the story of their experiences and perceptions in the best way. This approach created a more participatory environment for the interview, while still allowing the interviewer to steer the interview to cover key aspects of experience and perceptions of the interviewee. When responses from interviewees to particular questions went beyond the expected scope or interpretation, some later aspects of the guide/protocol then became redundant and these were omitted to eliminate repetition.

Interviewees were selected based on purposeful criterion-based sampling (Denzin & Lincoln, 2003; Goetz & LeCompte, 1984; Merriam, 1988; Miles & Huberman, 1994; Stake, 1995; Yin, 1993) of potential key informants who met the selection criteria described previously. Eight potential key informants (Spradley, 1979) of positive deviance/exceptional performance in research at UTech were invited via email for voluntary participation in interview. The interviewees/key informants were chosen from the recipients of UTech's President's Research Initiative Award (PRIA) described in Appendix A. From the potential sample of 10 awardees since 2004, 8 key informants were invited to participate. All consented and one later had a change of mind at the beginning of the interview. Of the remaining 7, one interviewee opted for documentation of informed consent. Eight interviews were audio-taped, and then transcribed for analysis. This resulted in 11 hours, 6 minutes and 45 seconds of audio-tape and over six hundred pages (double-spaced) of transcribed data. The average length of each interview was 98 minutes.

A total of 8 interviews, including a pilot, were conducted between July 4, 2012 and August 2, 2012. All interviews were conducted on the Papine campus of the university, although in different rooms or offices. The location for each interview was chosen with the consent of the interviewee, bearing in mind that privacy and soundproof conditions were necessary to maintain the anonymity and confidentiality of the interviewees. There were three female and four male interviewees whose employment at UTech ranged from about 6 to 30 years. The interviewees were from different academic disciplines and were located across six Faculties and colleges of the university. Each interview was preceded with a brief set of startup procedures which included asking each interviewee if he or she wished to have documentation of his or her informed consent, in keeping with the relevant USA Federal Guidelines and Pepperdine University IRB approval. The researcher removed one participant from this study in May, 2013.

Interview pilot study. A pilot study was conducted to test the proposed interview data collection procedures within the UTech context. That is, to test the procedures for contacting participants and scheduling interviews in appropriate locations for the purpose of confidentiality as agreed with each participant, and to test the interviewing of persons who were colleagues at work, whom I had known and with whom I was familiar to various extents. This allowed the researcher to practice an effective balance between simultaneous roles of work colleague and researcher. The pilot also provided an opportunity to test the start-up procedures and the interview guide/protocols which was estimated to require approximately 90 minutes for completing each interview.

The interview guide/protocol was pilot-tested in July, 2012 with a trusted member of faculty who was engaged in research but was not one of the awardees to be interviewed. This was done to obtain feedback about how to refine the interview protocols and to test the timing of an interview. "The interview protocol is a pre-designed form used to record information collected...." (Creswell, 2007, p. 135) during an interview. Pilot-testing the protocol/guide with a member of the academic staff/faculty who was not a recipient of the President's Research Initiative Award (PRIA), but was engaged in research, provided an alternative perspective on the guide/protocol that was very useful.

The pilot interviewee was selected because of the researchers knowledge of his/her involvement in research and also because there was a fair extent of familiarity between us as colleagues, such that the researcher felt confident that there would be a high level of comfort and understanding in the interviews and that frank feedback would be received during the pilot interview process. This anticipation was realized. The pilot interviewee provided rich, in-depth, and illuminating responses to the questions posed; this provided an emic perspective that

deepened my understanding of the experiences of researchers at UTech. The pilot interviewee confirmed the emphasis placed on the perceptions and experiences of researchers in this study as the pilot interviewee emphasized the need for the study to zoom in on the human side of research at UTech, that is, the human person of the researcher. "It's really the human effort. It hasn't been from an institutional point of view. It has been on an individual basis." (Pilot interviewee, personal communication, July, 2012). The pilot also confirmed my assumption that doing research is not currently a norm among faculty of UTech. "... one or two persons are... but many persons are really not doing research... the norm here is not to do research." (Pilot interviewee, personal communication, July, 2012).

The pilot interviewee validated the proposed line of questioning and the length of time required for the interview. The feedback from the interviewee was very useful and validated the line of questioning in the interview protocols/guide, except that the interviewee recommended that a question be added that would elicit responses about the human intangible aspects of being a researcher at UTech. In terms of the completeness of the line of questioning, the pilot interviewee suggested that a question that would capture personal HR issues facing researchers should be added as it did not appear that any of the questions would elicit such information which was considered important by the pilot interviewee. As a result of that feedback, a part (a) was added to item number 12 in the guide/protocol which read "(a) Are there incentives and disincentives to being a researcher at UTech?"

A typical interview start-up procedure to be used with participants was pre-determined by the researcher/interviewer. This included an offer to the interviewee of documentation of informed consent, which the pilot interviewee accepted. Although the total length of time for the pilot interview and feedback was 2 hours, 4 minutes and 46 seconds, the estimate of 90 minutes

for completing the interview component only, was validated in the pilot if the length of prior discussions and the startup procedure are excluded.

Testing the procedures for digitally recording the interview dialogue in the pilot interview was also important as there were potential risks to the collection of data, such as loss of data, if I did not have adequate training with the Sony ICD-UX512 recorder that was used. As the researcher and interviewer I also needed to test and arrive at a procedure for documenting my notes, asides, commentary, questions and reactions during the interview for review at a later time. To ensure that the audio data collected in the interview could be effectively converted into text, the audio recording of the pilot interview was transcribed and then checked by the pilot interviewee for accuracy. Once that transcription process was underway, I became satisfied that it would produce high quality data as text and proceeded with the interview of participants. The results of the pilot heightened my confidence that the planned interview process was workable and that the line of questioning was very relevant and appropriate for the UTech context. The data from the pilot helped to orient my entry into the world of PRIA researchers at UTech, and my early understanding of some perceptions and beliefs that later emerged in the study.

Other interviews. Participants in this study were all employees of UTech and their service to the university ranged from 6 to 30 years. Three were female and 4 were male and the 7 participants were from different academic disciplines and represented 6 of the 8 colleges and Faculties of the university. All participants have been involved in research for many years, and some even before joining UTech. All participants were actively engaged in research and the majority had recently published research papers as evidenced in searches on Google Scholar. As shown in Table 1, participants each performed multiple roles such as teaching, academic

administration, and being researcher, with the exception of one participant who was solely engaged in research.

Table 1

Organizational Roles of Participants

	Active Researcher	Senior Academic Manager/ Administrator	Lecturer/ Teaching
Participant 1			
	X		X
Participant 2			
	X		X
Participant 3			
	X	X	X
Participant 4			
	X	X	X
Participant 5			
	X	X	X
Participant 6			
	X	X	X
Participant 7			
	X		

Each interview was preceded by a brief set of startup procedures which included asking each interviewee if he or she wished to have documentation of his or her informed consent, in keeping with USA Federal Guidelines 45 CFR 46.117(c)(1) and Pepperdine University IRB approval. During each interview, notes were made by the researcher in relation to each question

asked or category of information given by a response. These notes included points for personal reflection by the researcher. The notes were reviewed as soon as possible after the end of each interview. Particular notes were expanded on in personal reflections on the interview and the emerging themes and organizational picture captured regarding PRIA researchers at UTech. A journal was maintained in which personal reflections, preliminary insights regarding the data and follow-up actions regarding emerging themes or data, were recorded.

and instrumentation used to record and transcribe voice into text and their limitations and advantages for the design and interviewing circumstances in this research study at UTech, I took the decision on a particular combination of electronic and manual method. This method included the services of a Jamaican transcriber with strong English Language and computer skills and a lived experience of various language and speech variations in Jamaica. Although a fully electronic method would have been preferred, it was found that a customized method would be required as the current technology for Voice Recognition Software (VRS) still has significant limitations, the primary ones being the inability to distinguish between more than one voice in a conversation, and the inability to accurately recognize non-standard accents or mixed languages such as English/Spanish, English/Nigerian, English/Jamaican dialect.

The interviews were recorded using a Sony ICD-UX512 digital recorder which had the capability of recording in an MP3 file format. During each interview, I made notes/jottings against questions in the interview guide/protocol and after the interview I reviewed the jottings to gain an even deeper understanding of them and the trend of the interview in totality. Sometimes, that review triggered reflections on the interview or my research questions, or on the organization, and these were captured in my journal. Each interview suggested or confirmed

emerging categories of data and codes. Categories and codes that were emerging were reviewed after each interview and with the collection of new data.

The MP3 files were saved on the Sony ICD-UX512 recorder by date and the number of the interview for that day, and the files on the recorder were protected using a special feature on the recorder. The audio files were copied to the desktop computer of the transcriber and backup audio copies of each interview were kept on the personal computer of the researcher in the event of any mishap during the transcription process. The verbatim transcribed interviews were received from the transcriber along with the MP3 file from which it was made. All Microsoft Word files of transcriptions and audio files were erased from the computer of the transcriber.

During the transcription process, from time to time, the transcriber requested consultations with the researcher to try to get clarity of the spoken words in the audio file. The quality of the audio- recordings produced by the Sony ICD-UX512 recorder was excellent. However there were a few issues which gave the researcher a deeper understanding of conducting interviews and the importance of interviewer/transcriber consultations for the production of accurate verbatim transcriptions during the transcription process. Some interviewees spoke rapidly, lowered their voice, spoke with an accent, used jargon or spoke simultaneously with the interviewer, and because of this the transcriber had to consult with the researcher in order to understand what was being said. The times in the interviews when both the interviewer and interviewee were speaking at the same time, made some words and sentences indistinct. The interviewer and interviewee speaking at the same time on occasion is a natural part of normal conversation and speech. However, this poses some difficulty during transcription. The overlap in speech occurred mostly at those times when the interviewer interrupted the interviewee to ask a follow-up question, while the idea being presented by the

interviewee was still fresh in the interviewee's mind, or when the response of the interviewee became repetitive or digressed significantly from topics or information that were germane to the research objectives and the interviewer had to re-focus the interviewee.

The interviewer also used discretion to appropriately interrupt the interviewee so that adequate time could be spent on the remaining line of questioning in the interview/guide protocol, which often took on greater or lesser significance and urgency, depending on the prior responses of the interviewee. Interruption of the interviewee by the interviewer was also necessary for clarification of indistinct phrases or words, to ensure that the interviewer had a clear understanding. This type of clarification was also triggered by the fact that although all interviewees spoke English, it was not the mother tongue for three of the interviewees some of whom developed their English Language skills while living and working in Jamaica where a dialect is also spoken. In those cases the accents and some words were a cross between English, their mother tongue, Jamaican dialect and the vocabulary specific to their academic discipline/profession or micro-environment (Faculty, college, academia) at UTech. In addition, there were some words or acronyms used that were specific to the academic discipline, or micro-environment at UTech of the particular interviewee.

The transcriber produced each transcript within an average of 1 week or 35 hours of transcription time for each 90 minutes of audio-taped interview. After receipt of the transcriptions, the researcher checked the accuracy by going through them while listening to the corresponding MP3 file. This process also allowed the researcher to listen to the interviews afresh and to hear the voices of the participants in a more focused way. The researcher's experience of hearing the interviewee and her own voice again, was profound as the audio recordings are unique oral pieces of living history (Malinowski, 1945) of a changing

organization and of the experiences of the researchers. Living history has been referred to as "the ways of thinking and behavior that continue to "live on" in, and mold and shape, the present – in other words, culture" (Bate, 1997, p. 1155). The transcriptions were 100% accurate and I had no cause to request any changes from the transcriber.

The transcribed interview data along with jottings, documents reviewed, field notes, reflections, and participant observation were analyzed manually. This proved to be better than using one of the qualitative data analysis software programs as the data were in multiple formats - screenshots, photographs, printed documents, handwriting and electronic files.

Each interviewee was asked to check the transcribed interview data for accuracy to ensure that it was an accurate representation of the interview. All interviewees accepted the transcription of their interview without any significant corrections.

Artifacts. The secondary data collection strategy was a review of organizational artifacts. It has been said that artifacts take four forms – "personal documents, official documents, objects, and erosion measures..." (Schumacher & McMillan, 1993, p. 433). Erosion measures typically relate to physical artifacts and suggest selective wear on material by groups. For example, pathways created on the grounds by students walking across the campus. The concept of erosion measures might be applied to organizational interactions involved in a particular activity such as research in a university. Frequency of interaction might not be observed physically but can be identified from the practices and experiences of an organizational group, in this case, President's Research Initiative Award (PRIA) recipients. Documents pertinent to research at UTech in general and to exceptional performers in research were identified. This was an emergent process as the research proceeded and data were collected and analyzed. Some artifacts were identified

and discovered during the interviews. UTech artifacts reviewed included mainly documents of the institution, and to a lesser extent, buildings and spaces.

Institutional texts were analyzed to get a deeper and clearer understanding of the organization context and its interrelations with perceptions and experiences of the participants. G. Miller (1997b) argued that organizational texts "are inextricably linked to the social contexts in which they are produced" (G. Miller, 1997b, p. 77) and that qualitative researchers are in a unique position to study organization texts. Organizational texts are an integral and pervasive aspect of life in institutions as they depict "the practical social contexts of everyday life within which they are constructed and used" (G. Miller, 1997b, p. 77) and are usually produced within the very settings in which they are used. These texts include manuals, statistical, annual and other types of reports, case files, charters and policy documents, and also "member's talk" (p. 143) as, for example, in transcripts (G. Miller, 1997b). They constitute a part of the sensemaking (Weick, 1993) through which members of organizations "construct, sustain, contest and change [their] our senses of social reality" (G. Miller, 1997b, p. 77). The study of organizational texts has been used to enhance sociological understanding of how organizations work. The tradition of studying organizational texts is exemplified in the work of Cicourel and Kitsuse (1963), Garfinkel (1967), Kitsuse and Cicourel (1963), Sudnow (1965), Sudnow (1967) and Zimmerman (1969).

Organization and other social contexts are treated as "interpretive domains" (G. Miller & Holstein, 1995; 1996, p. 77) which influence how organization texts are interpreted by their members, in part through organizational texts. However, G. Miller (1997b) notes that the meanings constructed by members of the organization may vary depending on their particular

institutional setting, practical issues, aspects of decision-making, interests and the micro-political organization of the setting.

Observing organizational texts within their organizational contexts can yield local knowledge about the practical and sociological significance of these texts. Qualitative researchers by observing organizational texts become immersed within the social setting in which these texts are constructed and used and can therefore see and analyze the interrelationship between institutional texts and their context and between "textual and non-textual interpretive resources provided by settings" (G. Miller, 1997b, p. 84). The immersion of the researcher in the UTech setting, observational methods and formal (interviews) and informal conversations used in data collection for this study provided opportunities for observing the use of institutional texts and their roles and relationship with the organizational setting, as well as drawing upon knowledge of UTech through talk in social interaction.

G. Miller (1997b) reminds us that institutional settings are ongoing and some have a long history so qualitative researchers need to be aware that they tap into these settings at a particular time in their development and might also "wish to consider the circumstances associated with the initial production of the texts" (G. Miller, 1997b, p. 85) and that might be problematic if the researcher only relies on reading the texts or asking institutional actors about the circumstances under which the texts originally came about. G. Miller (1997b) suggests that the problems associated with such strategy for learning about institutional texts might be mitigated by an alternative strategy whereby the qualitative researcher becomes immersed within an interpretive domain similar and related to that in which the texts were constructed. This alternative strategy allows the qualitative researcher to use this knowledge and "to 'see' the kinds of practical and sociologically significant factors that are likely to have been associated with the construction of

texts at issue" (p. 85). The researcher in this study pursued a doctoral degree at a university outside of Jamaica – Pepperdine University, USA – and in the process was immersed in another university setting albeit in a different national culture.

G. Miller (1997b) also points out that researchers should recognize that the production of texts in organizations is "micropolitically organized" (G. Miller, 1997b, p. 82) and may involve assessment of the motive of members of the setting as "politically oriented and meaningful" (p. 82). One implication is that member's interpretation of organizational texts may not be stable and could vary depending on different decision-making frameworks in which the member might be involved. Members have the capacity "to assign different, but still contextually defensible, meanings to [organizational] texts" (p. 82). Additionally, "the meanings of institutional texts are always potentially unstable, because they are always open to reinterpretation based on new information or changes in institutional actor's orientations to them" (p. 83).

Observational data. In the process of this study, observational data were captured in field notes, journaling and memos, and these were used to understand and capture the context/social setting. Observations were sensitized and oriented (Patton, 2002) according to the purpose of the study and the research questions. A sensitizing concept "is a starting point in thinking about the class of data of which the social researcher has no idea and provides an initial guide to her research" (Van den Hoonaard, 1997, p. 2). The observational data also allowed the researcher to draw on personal knowledge, impressions and feelings from reflection and introspection during the interpretation stage of data analysis. In this way, interpretation can move beyond the selective perceptions of interviewees to and arrive at a comprehensive view (Patton, 2002; Vaill, 2007) of the UTech setting. Undue influence of my personal knowledge, impressions and feelings was mitigated through internal validity measures such as member-checking (Creswell, 2003) of the

case report. The researcher, being conscious of the possible influence of her personal knowledge and experiences in the social setting, also considered alternative explanations and interpretations of the data gathered to minimize undue influence of being an insider to the university and its culture. For member-checking, each participant was asked to review the verbatim transcript of their interview to ensure accuracy (Creswell, 2003). In addition, the draft case report was shared with the participants for review and they had the opportunity to highlight any inaccuracies or omissions to ensure that the case report reflects a social setting and reality at UTech that was familiar and true to each of them.

Instruments/tools. The instruments/tools used for the interviews is the interview protocol which also allowed for notes to be made by the researcher during the interviews, and a digital audio recording made of the interview which facilitated verbatim transcription of the interview data. Observational data were recorded in the researcher's field notes. Additionally, the researcher conducted journaling and writing various memos (Emerson, Fretz, & Shaw, 2011; Saldana, 2009) which recorded reflections on fieldwork and developments in data collection. Writing memos gave the researcher an opportunity to record her thinking and analysis about what was going on and what was being recorded in field notes about data collection strategies, data and related experiences. Memos are data (Saldana, 2009) and can also be analyzed by the researcher. Analytic memos are sites for reflecting on the coding process and emergence of categories, themes and patterns in the data (Saldana, 2009). Integrative memos elaborate on ideas that emerge and tie codes and pieces of data together in order to explore relationships and examine themes or issues (Emerson et al., 2011). According to Saldana (2009), periodic review of the stock of memos developed in a research study allows the researcher to view the study from higher levels of abstraction (Corbin & Strauss, 2008) and develop memos about previous

memos. In so doing, previous memos are summarized and integrated into meta-memos (Saldana, 2009) which provide the researcher with a reality check of the research study and analysis thus far. The researcher found it necessary to reflect in the final stages of this study on the codes that she had developed while being so close to the data. She began to sense a larger picture of the entirety of data rather than her initial coding and categorizing of specific themes that she easily saw in the data. Saldana (2009) recommends periodic review and summary of analytic memos developed earlier to compose "meta-memos" (Corbin & Strauss, 2008, p. 108; Saldana, 2009, p. 39), a way of making a reality check of the study in totality and the data analysis in progress. These meta-memos generated revised and broader perspectives of the themes and pattern that emanated from the data and are incorporated into the case report in Chapter 4.

Human Subjects Considerations

The researcher prepared herself for undertaking research involving human subjects by becoming certified by the National Institutes of Health (NIH). A copy of NIH Certificate No. 573308 is included in Appendix B. Steps were taken to ensure that all the IRB requirements of Pepperdine University and UTech were met. An application was made to Pepperdine University's Graduate and Professional School's Institutional Review Board (IRB) for a claim of exemption based on the criteria for exempted research under USA Federal Guideline 45 CFR 46.101(b)(2). In addition, an application was made for waiver or alteration of documented informed consent procedures to omit documentation of informed consent in order to facilitate participation in the research.

Pepperdine University's approval of exemption of the research proposal including proposed methods was received on June 14, 2012 (see Appendix C). Upon receipt of IRB clearance from Pepperdine, an application was subsequently made to UTech's Research Ethics

Committee for approval of the research to be conducted in the organization. This was in keeping with USA Federal Guidelines regarding research involving human subjects which required that approval of the proposal and proposed methods was also sought from the University of Technology, Jamaica, the site for this study. The approval of the Chair of UTech's Research Ethics Committee was received; a copy is included in Appendix D. These included approval of the waiver of the documented informed consent of interviewees. However, USA Federal Guidelines require that participants should still be asked if they would like documentation of their informed consent, prior to the beginning of the interview. The pilot and one interview participant responded in the affirmative and the Informed Consent Form included in Appendix E was completed for those interviewees. The other six interview participants declined documentation of their informed consent. Interviews were transcribed and the transcriptions stored confidentially. Each participant will be provided with a summary of the findings from this research study, within one year of completion of the study.

Potential that risk of fatigue might be experienced by participants during the interviews was minimized by taking a short break during the interview. However, this was not requested nor necessary in any of the interviews. Kelman (1969) highlights the manipulative potential of behavioral science knowledge researchers and practitioners, and the inherent ethical dilemmas. He argues that the researchers must concern themselves with the question of how the knowledge developed is likely to be used "given the historical context of the society in which it is produced" (Kelman, 1969, p. 582) and the wider social context in which the research is embodied. To mitigate the potential for adverse manipulation of the knowledge developed in this exploratory case study by the organization, steps were taken to ensure that a summary of the findings might be accessed by participants, other researchers and research administrators at UTech.

Additionally, being an employee in the organization being studied, the researcher engaged in "reflexivity" (Gall, Gall, & Borg, 2005, p. 314) throughout the study to raise her awareness of the ethical issues.

Steps were taken to maintain anonymity and confidentiality of key informants; they were invited confidentially to participate as interviewees in this research project. All data collection records and transcriptions of interviews were kept in a locked cabinet accessible only to the researcher of this study. Electronic files were stored in a designated folder on the personal computer and backup device of the researcher of this study.

As the number of participants in this study was small and known as recipients of the President's Research Initiative Award (PRIA) in the university, extra care was taken in reporting of results of the analysis so as to ethically balance confidentiality and anonymity with the rigors required in the qualitative method of inquiry. The researcher knew all the participants prior to this study through infrequent professional or collegial contact. The interviews were the first conversation between the researcher and the participants about research and UTech in general.

Analysis

Data analysis in qualitative research involves a spiral of – preparing and organizing the data; reducing the data into themes through a process of coding, and; representing the data in figures, tables or a discussion (Creswell, 2007). These steps and elements of data analysis were applied to this exploratory case study to develop a "detailed description of the case and its setting" (Creswell, 2007, p. 163) to be presented in a case report. Schumacher and McMillan (1993) point out that the type of data analysis is determined by the purpose and intent of the research and the data collection strategies. In general, the approach to analyzing the data from this exploratory case study was typical of qualitative research – inductive analysis – using a mix

of descriptive narration and topology as part of an interpretational analysis. The interpretational analysis employed in analyzing the case involved descriptive narration to capture the activities, perceptions and experiences of exceptional researchers at UTech over time. It also involved topological analysis to categorize the findings into "categories of experiences, beliefs, perspectives, or actions of participants" (Schumacher & McMillan, 1993, p. 508).

According to Emerson et al. (2011), members' meanings are "interpretive constructions assembled and conveyed by the ethnographer" (p.129) and which represent what members consider to be meaningful and important to them. Therefore, field notes are a very important mechanism for capturing "local knowledge and indigenous understandings" (p. 129).

Content analysis (Patton, 2002) was used to analyze the texts of transcripts of participants' interviews and the researcher's field notes and journal entries. Generally, content analysis is "any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings" (Patton, 2002, p. 453), as for example, in case study content. The core meanings that emerge from content analysis are usually descriptive findings or patterns. Within each pattern are categories or topics called themes (Patton, 2002; Schumacher & McMillan, 1993). Schumacher and McMillan (1993) also make a distinction between emic and etic categories. Emic categories represent the views of insiders as represented by the terms they use, actions they take and the explanations that they give regarding the setting in which they are found. On the other hand, etic categories represent the views of outsiders, such as those of the researcher – their "concepts and scientific explanations" (Schumacher & McMillan, 1993, p. 493), personal experiences, academic discipline and social science literature. Care was taken to ensure that the researcher's etic categories were not imposed until the later stages of data analysis so as not to obscure

participants' meaning. Through inductive analysis, patterns and themes were discovered in the data

Inductive analysis is a cyclical process of abstraction to determine categories and patterns that emerge from the data rather than being imposed on the data (Schumacher & McMillan, 1993). Data collected in the field was prepared and analyzed. The data was then coded and ordered into topics. Constant comparison (Glaser & Strauss, 1967) was then used to compare and contrast topics to "determine the distinctive characteristic of each" (Schumacher & McMillan, 1993). Topics were then synthesized into categories from which broad patterns and themes were interpreted by the researcher. As a part of the process, the researcher returned to the prior level of abstraction to double-check and refine her analysis and interpretation of the data and to build reliability and consistency in the data analysis. The entire process involved cognitive activities and the intellectual rigor of the researcher (Creswell, 2007; Schumacher & McMillan, 1993).

Analysis of the data was emergent, and as a result the data analysis began upon commencement of data collection, which although it occurred during a particular temporal period (July, 2012 to May, 2013), drew on accumulated tacit knowledge of the researcher about the UTech environment and the experience of being a researcher herself. To preclude possible bias or short-sightedness on the part of the researcher, the analysis of the data also involved an on-going conscious and deliberate searching for alternative interpretations of the data and emerging themes. However, no Appreciative Inquiry filters were placed on the data gathered or their analysis and interpretation.

The case report. According to Lincoln and Guba (1985), the case report is the presentation of a case study which enhances readers' understanding of the topic. It should contain – explanation of the problem; description of the context or setting of the inquiry; an in-

depth description of the processes or transactions observed in the context or setting; discussion of the important elements at the site that are studied in-depth; discussion of the outcomes or working hypotheses from the inquiry/study. The report should be the subject of a comprehensive member check to ensure that the data is complete and accurate, and provide evidence of credibility/internal validity (Lincoln & Guba, 1985).

Patterns within the data were identified along with related themes, and an overarching construct hypothesized. Patterns reflect relationships among phenomena in the data (Gall et al., 2005). "A theme is a salient, consistent, recurrent feature of a case" (Gall et al., 2005, p. 307). Schumacher and McMillan (1993) argue that through constant comparison and inductive thinking, an abstract name or category that "represents the *meaning* of similar topics" (Schumacher & McMillan, 1993, p. 492) can be identified, noting that the explicit meaning of a topic can have several implicit meanings and thereby, a single topic may be a part of more than one category, or theme. In anthropological tradition, Schumacher and McMillan suggest that "...etic categories in the later phases of data analysis are essential for making a distinctive social situation comprehensible to other researchers for knowledge development" (Schumacher & McMillan, 1993, p. 494).

Constructs are higher-level concepts (Schumacher & McMillan, 1993) which may be inferred or hypothesized from observed commonalities (Gall et al., 2005) in the data, such as patterns and themes. Constructs are not directly observable (Schumacher & McMillan, 1993) and are complex abstractions which are meaningful combinations of concepts. As meaningful combinations of concepts, constructs become pieces of theory and are subject to changes in meaning, or are discarded during theory development and accumulation of further empirical evidence (Schumacher & McMillan, 1993). Constructs are observed, measured or classified

through indicators or variables (Schumacher & McMillan, 1993), such as those identified in patterns and themes.

Means to ensure internal validity. Validity refers to the appropriate rigors of quality in the research process. According to (Rubin & Rubin, 1995), the credibility of qualitative research is judged by how transparency, consistency and communicability are demonstrated in the research. Transparency allows the reader to see the processes used to generate data and for this purpose the researcher maintained records including field notes, memos, and databases used in the analysis and interpretation of the study. For consistency, the researcher investigated and explored any inconsistencies in the data. Also, for communicability, the detail of the context should resonate with informants and readers, and this was achieved through member checking of the case report. These aspects of internal validity were achieved through engagement (Lincoln & Guba, 1985, 2000) with informants and the research setting and a review of interview transcripts and a draft of the findings by informants to ensure that it represented the story they wished to tell.

Because the researcher is a member of staff of the institution being studied, this raised the risk of bias in the interpretation of data. Moustakas (1994) argues that a researcher can use epoche/bracketing to isolate her/his prior ideas about a situation or phenomenon. Yin (1993) and Yin (1994) propose three remedies to mitigate the potential of researcher subjectivity or lack of construct validity in case study research – triangulation; establishing a chain of evidence, and a review of the draft case study report by key informants, all of which were employed in this study.

Even if convergence of the data was not achieved, triangulation ensured trustworthiness (Schwandt, 1997) and validity of the research process.

It can also capture a more complete, *holistic*, and contextual portrayal of the unit(s) under study. . .[it] may be used not only to examine the same phenomenon from multiple perspectives but also to enrich our understanding by allowing for new or deeper dimensions to emerge. (Jick, 1979, p. 604)

In this study, interviews, review of artifacts, and observational data were compared and cross-checked to enhance interpretation of the data collected and to ensure internal validity of the research process and data.

Summary

This chapter presented the research methodology used in the study. The methodology followed the choice of a research design based on and following the principles of naturalistic paradigm. An exploratory case study approach was selected and a single case study of UTech will be developed in Chapter 4. Data were collected primarily from 7 participant interviews conducted between July and August, 2012. Secondary data were collected from organization artifacts and participant observation. A pilot interview was conducted with a trusted colleague in the institution, who is actively engaged in research at UTech, but who was not in the sample of researchers to be interviewed. An inductive process was used to analyze and interpret the data collected to produce the case report of the university which follows in Chapter 4.

Chapter 4: Results

The challenge that this study examined is how to enhance understanding of the human and organizational dimensions of organizational transition in a university which is moving from low to higher research outputs. The case study method was used to produce a case report on UTech from the perspective of positive deviants in research at the university where the engagement of faculty in research is not the norm. The purpose of this Chapter 4 is to present the case report developed from content analysis and interpretation of the socially constructed organizational world of these researchers. The case report presents a fusion of emic and etic themes based on the participants' meanings as well as the researcher's understanding of those meanings from the perspective of the organization change and development literatures. The findings are woven into a mini-organizational ethnography of the institution from the perspective of PRIA researchers, between July, 2012 and May, 2013.

The Research Study

The transition process in research outputs at UTech is studied through the perceptions and experiences of some of the most accomplished researchers in the university. That is, those researchers who have been recognized by UTech through award of the President's Research Initiative Award (PRIA) – positive deviant researchers at UTech. While each of these awardees, except one, has multiple roles in the university, the focus in this study is on their role as a researcher.

Approval was granted for this research study by both the Institutional Review Board of the Graduate School of Education and Psychology, Pepperdine University, USA (see Appendix C) and by the Research Ethics Committee of the University of Technology, Jamaica, the single site for investigation (see Appendix D). Data was gathered for 11 months between July, 2012

and May, 2013. This exploratory case study was bounded by time and its focus on particular researchers – recipients of the President's Research Initiative Award (PRIA).

Three types of data collected and analyzed in this study – participant interviews, review of artifacts, participant observation – were interwoven in this case report to generate answers to the following research questions:

- 1. What are the significant norms that are shaping the organizational environment for research at UTech and positive deviance patterns of PRIA researchers?
- 2. What are the perceptions and experiences of PRIA researcher participants about being researchers in the UTech research environment?

Findings

The findings comprise a description of the UTech setting. Patton (2002) explains that physical and social environments can differ so description of a setting, including historical perspectives on that setting, is important for understanding what happens in that environment. The description of the setting also provides the context (Emerson et al., 2011) that is necessary to understand comments made by participants and other informants.

Three patterns (Patton, 2002) in the data and nine related themes (Gall et al., 2005) were identified through processes of content analyses and inductive analyses. Each pattern and theme was chosen according to "core consistencies and meanings" (Patton, 2002, p. 453) that emerged in analysis of the data. Together these findings create a mosaic of the socially constructed worlds of the PRIA participant researchers at UTech. Description of the UTech setting is first presented and followed by description of each of the three patterns and the themes that emerged in each of them. Together, the findings provide a description of the University of Technology, Jamaica, during transition from low to higher research outputs, the research objective of this study.

The UTech Setting

UTech is a government-owned and funded university that was in 1995 the College of Arts, Science and Technology (CAST). CAST provided programs to train professionals in various fields such as in engineering, education, building, commerce, and the sciences and after 28 years was upgraded to a degree-granting institution in 1986. Nine years later in 1995, CAST was further upgraded by the government of Jamaica to the UTech and the legislation and Charter were made retroactive to 1995 (University of Technology, Jamaica, 2009a). CAST had a traditional culture of teaching only (Onyefulu & Ogunrinade, 2005) and at the time of the institutional change to UTech many academic staff had not attained master's degrees which subsequently became the new qualification for lecturers in 1997. As a part of its capacity-building, the university supported faculty in various ways to attain terminal degrees.

As at March 31, 2010, there were on staff 64 persons with PhDs, representing 15% of total full-time academic staff. In addition, 39 members of the academic staff were pursuing terminal degrees, locally and overseas, and will complete their programs by 2013. The University's target is for a minimum of 30% of its full-time academic staff to have terminal degrees (PhDs) by 2015 (University of Technology, Jamaica, 2010). Since 1995 the university has grown in programs, enrollment, staffing, access and research under the leadership of three successive presidents. The president at the time of this study was an established researcher in the fields of medical sciences and biochemistry; prior to joining UTech he had responsibility for graduate studies and research at the neighboring University of the West Indies, Mona, and was another advocate for increased research at UTech.

An office of Research and Graduate Studies was established in 1998 (Onyefulu & Ogunrinade, 2005) to build the foundations for research and graduate studies in the university .

The function was expanded and re-positioned in 2007 as an income-generating centre for UTech with the establishment of the School of Graduate Studies Research and Entrepreneurship (SGSRE) headed by a Vice President of the university (University of Technology, Jamaica, 2009b). The SGSRE coordinates research, consultancies, and the attendant policies and processes in the university. The SGSRE structure is partially virtual and includes faculty research officers who report to both the Dean of the Faculty and to the Vice President, SGSRE. The implementation of the President's Research Initiative Award (PRIA) is managed by the SGSRE. Additional initiatives that were implemented since 1998 to enhance research activities in UTech include establishment of a research seed grant, development of research policies, and launch of university journals for publications from staff.

The President's Research Initiative Award (PRIA) has been made annually since 2004 to full-time academic staff members at UTech based on their achievement of pre-determined criteria (see Appendix A). The purpose of the Award is to provide a stimulant for research and scholarly activities from faculty. Candidates are nominated in response to an annual call for nominations that is advertised to the entire university. Recipients receive J\$150,000 (approximately US\$1,500 or approximately 75% of one month's basic salary of a lecturer, after taxation) and a plaque at the annual staff awards ceremony. The pictures of recipients are also mounted inside the office of the School of Graduate Studies, Research and Entrepreneurship (SGSRE).

The main campus of UTech is located on 45 acres at Papine in the parish of Kingston. The Papine campus is the main site for research activities. The university has been expanded in recent years to eleven other locations across the island to widen access. There were 12,978 enrolled students of which 311 were graduate students during academic year 2011/2012. There

were also 558 permanent academic staff and 807 non-academic staff at that time (University of Technology, Jamaica, 2012).

Increasingly, there is generally a space shortage that affects students and staff at the 45 acre Papine campus of UTech. The acreage of the campus has grown incrementally by a few acres and it accommodates a growing number of students and staff. There are few designated spaces for research and, therefore, PRIA researchers have to contend with other faculty, students, and administrators for limited available space in offices, laboratories, library facilities and other types of spaces necessary to support and facilitate their research activities. Most participants spoke of their experiences with office and or laboratory spaces in the context of the research environment at UTech. There was variation in office accommodation for PRIA researchers. Most of those observed in their offices by the researcher had small office spaces from which to conduct research activities. One participant was accommodated in a cubicle within a larger office shared by several other lecturers and administrative staff who were also accommodated in cubicles. The cubicle had a door but it would be difficult to keep it closed when occupied as the space is so tiny. Another participant described in the following excerpt how academic staff in her Faculty was accommodated.

Excerpt from field notes, July, 2012:

Now tell me, are all faculty . . . members of faculty given an office? "It depends. If you are like holding a position, you could have . . . [Like you're Head of School, Program Director] But the average lecturer has the . . . the . . . the . . . what I call the warehouse situation where you have cubicles . . . as you may have seen when you were coming in. So, for example, some of the . . . lecturers they would be In the open space . . . Yeah, it's an open space with a little bit of partition . . . the partition that if you are standing you will see across, because it's not high. It's like width, length Waist height and no closed doors. Telephone you have in your . . . on your desk you have your Yes, you have your phone . . . extension. At times the extensions could be shared with several other persons, but you have a . . . everybody has a computer, but you have the . . . printer is shared". So are there faculty . . . members of faculty who do not have office

space? Maybe the part-time don't have office . . . But the full-time are accommodated in some way." (personal communication, July, 2012)

The space inadequacy also applies to research laboratories which are needed for several of the disciplines in which research is being done at UTech. Another participant's office was inside a small laboratory and shared with equipment, sinks and lab furniture, and also a graduate student who was conducting experiments at the time this researcher visited the lab. In contrast, another participant had a spacious and nicely furnished office with a view.

UTech has consistently added to its physical space since 2000 and at the time of this study was implementing a large enhancement project which is expected to add to its institutional capacity in a number of ways including additional physical space at the Papine campus for classrooms, laboratories and administrative offices. There were two large construction sites – one in the center of the campus where additional floors were being added to a building in the School of Hospitality and Tourism Management and the other on the westerly end of the campus to construct parking spaces for a recently acquired adjoining property which now houses the Faculty of Science and Sport. These activities required the relocation of some staff, classes and parking, and closure of portions of road on the campus. At the same time, new and expanded spaces were being acquired at several of its other eleven locations island-wide, for offices and teaching.

The limited funding available for research at UTech is another feature of the setting for researchers at UTech. Historically the institution has been funded by the government of Jamaica, its owner. When the institution was CAST, government funds supported its main functions — teaching and the delivery of mostly undergraduate programs — and along with student fees covered the operational expenses of the university. Research became an additional objective of

the institution when it was subsequently upgraded to UTech. However, the funding received from the government continued to only cover costs associated with teaching and the delivery of programs and, therefore, research at UTech is not explicitly funded by the Government of Jamaica. The funding available to the university must therefore be stretched to accommodate research along with teaching.

Patterns and Themes

The combined description of the individual experiences of participants describe the socially constructed world of PRIA researchers at UTech. Through inductive analysis the description is molded from common threads or patterns in their experiences which they ascribe as important elements of their existence as researchers at UTech. Within each pattern are salient categories or themes of experience. The following three related patterns, each having related themes, emerged from analysis of participant descriptions in interviews, and these patterns remained distinct and valid upon comparisons from review of artifacts and participant observation: (a) teaching versus research – wherein it was perceived by PRIA researchers that there was an absence of integration between these two functions of UTech and as a result they often experienced their roles as being in conflict; (b) disorder – as a researcher at UTech, several challenges were experienced in the working environment that made their progress with research activities more complex than they anticipated, and; (c) personal resilience– challenges experienced were mitigated by individual buoyancy. Schein (1996) argued that norms are fairly visible manifestations of deeper taken-for-granted assumptions which most members of a culture never question or examine. Together, the three patterns and their related themes which emerged from the analysis give an indication of emerging shared taken-for-granted implicit assumptions and values among PRIA research participants at UTech.

The researcher had to make some choices regarding which findings should be included in this study, given its focus and the need to be mindful about the length of the final manuscript. Findings that were considered to be central to answering the research questions are the main focus of attention of this chapter. Those that did not directly contribute answers to the research questions were omitted from the results. A careful balance also had to be struck between polyphony in reporting the findings and maintaining confidentiality and anonymity of participants. Participants described meanings that they associated with their organizational context which they viewed as being critically intertwined with their success as a researcher at UTech.

Pattern 1: Teaching Versus Research

This pattern refers to the perception by PRIA researchers that there was an absence of integration between these two functions at UTech – teaching and research – and as a result they often experienced their roles as being in conflict. The research environment at UTech was described by all PRIA participant researchers as being highly supportive of teaching compared to research. This situation, in their view, is a source of tensions for them and a major hindrance to their research activities and outputs.

Theme – Tensions

According to participants, tensions arose for them as they worked to fulfill their roles as both lecturer and researcher. Tensions refer to low integration of seemingly conflicting goals in the university. Participants explained that their terms of employment require them to teach. It is considered by them that doing research is optional and research is not given the institutional significance and support that is given for teaching. Direct compensation is based on teaching and hence the system and norms for teaching take priority over research. Participants related that

compensation from research is not immediate and might only be realized over a long time and hence, monetary gain for taking on research can be uncertain in the short term. This is especially so when research has to be given secondary attention compared with the necessary primary attention that is necessary for contractual teaching obligations. PRIA researcher participants also consider the imbalance in the relative institutional support between teaching and research to be inconsistent with UTech's stated intentions to increase its research outputs.

Excerpt from field notes – Researcher's analytic memo re teaching versus research: February, 2013:

One participant expressed skepticism with the messages communicated by UTech leadership about the importance of research. "I think for UTech there is a big talk about research... people have to do research but we don't do research. We are ... so involved in teaching ..." (personal communication, August, 2012). Participants and other informants within UTech spoke of the competing and contradictory organizational environment that exists for faculty who try to undertake research. In addition, they expressed that insufficient organizational support is in place for researchers and so those who decide to do research face challenges that could be avoided by focusing on what the university is most organized to do - teaching.

Several PRIA recipients suggested that their organizational reality is structured in ways that do not sufficiently acknowledge or validate research and their occupational role as researchers. E. C. Hughes (1971) as cited in G. Miller (1997a) describes an occupation as consisting in part in an implied or explicit license which is either claimed or given to carry out unique activities in an organization in exchange for remuneration - money, goods or services.

Excerpt from field notes – Researcher's metamemo re Charter and License, December 8, 2012:

Reflecting on this study during the latter stages of data collection brought to mind issues of legitimization of research. Based on the recurring sentiments of hindrances and struggle expressed by interview participants, there was obviously an issue of legitimacy of research in relation to the university's purpose. This issue seemed to me to be also relevant to UTech in terms of its ability to access

funding from its owner, the Government of Jamaica, to carry out its purpose to conduct research which resulted from its legal change in status from a college to a university. The concepts of Charter and License seemed to capture these issues and to be good metaphors for understanding this particular aspect of the changes that occurred for UTech when it was upgraded from a college to a university and the issues that PRIA recipients are facing with organizational acceptance of research and researchers in the university. (Personal journal entry, December 8, 2012)

At the time of this research there was no link between faculty doing research and their remuneration. Therefore, if E. Hughes' definition is used, participants could not claim that doing research at UTech was a part of their occupation. Participants explained that the performance evaluation system for faculty does not adequately recognize, capture or evaluate research activities being undertaken. In addition, there is no direct or consistent link between performance evaluation of faculty engaging in research and academic promotion.

Excerpt from field notes – Researcher's integrative memo re License to do Research: October 20, 2012

The license to do research goes right back to hiring and evaluation. One participant made that link. "... another policy I'd change is that of ... their hiring policy. If you hire people with the idea that they'd be able to do research and so on, then you should make it that it's an understanding that you will conduct research and you will have certain outputs . . . to come out, you know, and you'll be reviewed over a period" (personal communication, July, 2012). The participant explained that there is a yearly review of performance in which faculty indicate the activities including research that they have undertaken during the review period but there are no outputs that were previously established. "There's a yearly review . . . it just has a section for activities. So then as a researcher I put my activities. . . even though it's a requirement [when] you're hired . . . So you could do anything . . . or nothing . . . sometimes I actually feel stupid going through all this research when I could have just as well not done it. I could have spent more time teaching, gotten overtime, and then I would have been more compensated than I am now" (personal communication, July, 2012). It was explained by a member of the academic staff Union that there is one performance evaluation form with the same evaluation criteria for all faculty whether they engage in research or not. However, depending on the role of the particular faculty, the

goals and objectives might be stated differently and different weights would be assigned to three areas of activities that should be undertaken - teaching, research and service

It appeared to this researcher that although the activities of faculty in the areas of research and service would not be detrimental to compensation and their employment contract, the area of teaching, if missing, would definitely be so. When asked about rules that facilitated their research, one participant commented:

Excerpt from field notes, July, 2012:

"I don't know about rules, because if there were rules there would be many researchers" (personal communication, July, 2012).

There are also few incentives available to faculty to do research. I wanted to know if, for example, faculty would be better off in terms of pay if they took on research.

Excerpt from field notes, July, 2012:

"... right now as it is, there is no difference ... [except for] the President's [Research] Initiative Awards, that's all."(personal communication, July, 2012). "... things are still geared towards teaching and just not towards research." (personal communication from a UTech researcher informant, July, 2012)

It was observed by the researcher and confirmed in organizational artifacts such as policies, annual reports, messages and communications from leadership, and the UTech website, that the general expression of *what we are here for* by organizational members and participants is teaching. Such a mission is not in conflict with the university's charter.

Overall, the university's relative emphasis and facilitation of teaching, research and service is questioned by participants but none suggested that UTech should make a clear choice of either one to the exclusion of the others. Currently the bulk of UTech's income is derived from taught undergraduate programs. The university could not survive without this income; so

the choice between teaching and research of necessity is relative rather than an absolute exclusion of one or the other. The tensions that PRIA researcher participants associate with their dual activities of teaching and research also have an impact on their feeling a part of and supported by the UTech academic community and the university overall rather than feeling alienated or being on their own with research.

Theme – Being on Your Own

A sense of being on your own with research was expressed by all PRIA researcher participants and this permeated all interviews. Being on your own reflected a feeling of being marginalized as researchers in the university, which retarded progress on research activities and outputs.

Excerpt from field notes, August, 2012:

At UTech we are somewhere in between as an isolated entity or things are not . . . it's not very well enshrined into the rules and regulations. Well I feel a sense of pride. . . but I [also] feel a sense of isolation . . . which is not good . . . Yeah, the research environment is not . . . is not there. I mean you are like on your own . . . you push on your own in the struggle . . . in the look for . . . avenues to . . . accomplish that . . . work . . . research. (personal communication, August, 2012)

Some participants expressed that they try to avoid administrative interactions in order to focus on research. However, such practice heightens their sense of *being on your own* as a researcher at UTech. The situation of being on your own with research is also attributed by participants to the weak research culture and the strong teaching culture which have a combined effect of their being marginalized as researchers in the university. This situation is also attributed by participants to insufficient support for researchers in the university and absence of full license to conduct research. One participant explained some of the factors that contribute to their sense of being on your own.

Excerpt from field notes, July, 2012:

Several factors in the UTech environment for research work together to give researchers a sense of being marginalized of 'being on your own'. A participant spoke of a perceived lack of support and commitment to research and researchers at UTech on the part of most faculty as being a "major deterrent, a demotivation." It was reported that faculty do not show interest in research seminars organized by PRIA researchers and rarely show up to hear presentations. I enquired about the perceived significance of faculty's absence from research seminars and conferences. "One of the key things to any researcher is for a researcher to have an audience. And that's the reason why researchers publish . . . so they can have an audience . . . So persons can know what they have to say about a particular issue. So if you do not have an audience . . . then it pretty much dampens your spirit. . . . it doesn't speak well of the institution at the end of the day that you don't have buy in from the staff. They don't see the importance ... and that is a major deterrent in any research thrust". When I probed to understand what the participant felt accounted for displays of disinterest, the following was suggested: "It has a lot to do with the culture you know I think it has a lot to do with the culture I do not like to blame [organizational] culture, but it is so prominent that it must be something related to the [organizational] culture. (personal communication, July, 2012)

The feelings of being on your own and the tensions associated with their dual activities of doing research and teaching occurred within a research environment which was characterized in various ways as being not as integrated and as was expected by PRIA researcher participants.

Pattern 2: Disorder

All participants were of the view that there has been some positive but only incremental change in the UTech research environment over the past 3 to 5 years. However, their experience of pursing research activities at UTech is also characterized by disorder. That is, as a researcher at UTech, several challenges were experienced in the working environment that made their progress with research activities more complex than they anticipated.

Theme – Incongruence

The UTech research environment was described by participants as incongruent and reflected organizational contradictions that were antithetical to productivity of a researcher and more generally to higher research outputs in the university. Various participants in describing the incongruent research environment referred to their own experiences of it which, in summary, were generally described as including frustrations, tensions, anxiety, and lack of clarity, trust, and support.

Excerpt from field notes – analytic memo, May, 2013:

A participant explained how he or she was totally confused and frustrated by mixed messages regarding resources needed for their research project. The participant described his/her frustration and lack of clarity as to the scope of support and facilitation from UTech for research. Having gone through all the hoops presented the participant thought that his/her progress with the research project would be smooth sailing thereafter, but this was not so. Another participant explained how the unreliable support and facilitation further contributes to feelings of being on your own as a researcher at UTech. I asked what is it that they were up against when the expected support and facilitation was not forthcoming to them. "That you were the only one out there doing this thing. You're on your own. So they say do research . . . but you're not getting the support. It's not like you say I'll help you. What do you need to get this thing . . .? Cause you know you're starting from the ground up . . ." (personal communication, July, 2012)

Another example of the incongruent nature of the research environment at UTech is the shortage of physical space for research. It was noted by a participant that the lack of sufficient and appropriate physical space for research is a challenge and a primary limiting factor for the growth and expansion of research in the university. None of the participants saw a research environment at UTech. Some expressed that they saw UTech's potential to be a more functional research environment or context and hope that the limited improvements that they have seen in the research environment over the past 3 to 5 years would continue. The disorder which they

consider to be threat to UTech realizing its potential in research was seen to be sustained by the fundamental incongruence of a generally heavy workload for faculty.

Theme - Heavy Workload

The issue of heavy workload among faculty was described as another example of disorder and incongruence in the UTech research environment. Heavy workload for faculty predates the institution becoming a university in 1995. Participants generally describe heavy workload as high teaching contact hours and increasing administrative responsibilities that accompany expansion of programs and in some instances, increasing enrollment. Teaching is identified by participants as a barrier to research even though researchers are eligible for reduced working hours if they are involved in research. One participant explained that even though there is a policy for reduction in teaching hours for researchers, anecdotal evidence suggests that it is not applied consistently across the university. Faculty required teaching hours may be reduced upon request to facilitate research, based on the discretion of the Dean of the College or Faculty. Participants who had benefited from such reduction in teaching load nonetheless experience a tension between their research activities and teaching activities as they sometimes still end up teaching beyond the reduced hours out of necessity to ensure delivery of programs and that the academic needs of the students are met. Hence less time was available for their research activities.

Lecturers are required to teach 15 contact hours per week. However, the number of contact hours decline with higher academic positions or with assigned academic administrative responsibilities, or research, according to policies on academic responsibilities and promotions. Basically, there are either inadequate numbers of faculty or a mismatch between teaching personnel in each discipline and the academic needs in relation to credit hours, student numbers

and the general responsibilities of the university in the delivery of its programs. As a result, some faculty members are asked to and do take the opportunity to teach overtime contact hours in order to fill the gap. In fact, the university could not meet its teaching obligations in the existing situation if many members of faculty do not consistently work overtime teaching hours. This situation of a heavy workload is perceived by participants and other informants to be incongruent with higher research outputs from the same member of faculty. The unresolved situation of heavy workload is considered by participants to be a major constraint to an orderly research environment for faculty who choose to be engaged in research as teaching time detracts from research time.

Excerpt from field notes, July, 2012:

A researcher informant highlighted the impact of a heavy workload on young researchers who he/she feel need to be supported, mentored and groomed at the early stages of their career as researchers. According to this informant, a deliberate and structured approach should be taken to encourage and develop researchers at UTech, especially the new entrants to research who have just completed doctoral studies. With no such structures and mechanisms in place, young faculty researchers have to grapple with a heavy workload, sometimes teaching upwards of 15 contact hours and also doing administrative work and service. "... It basically made my research stagnant It made my research very stagnant ... so, I did [publish] basically nothing for like two more ... or three more years, and I had a paper working on before and I've still not submitted it [for publication] as yet. So, I have found that time ... the work load here has been a major hindrance to me doing my research." (personal communication, July, 2012)

It appears from the participant responses that the issue of heavy workload also had the impact of encouraging a teaching culture and discouraging the desired research culture.

Excerpt from field notes, July, 2012:

The practice of consistent and high overtime teaching needs to be examined and re-considered. "The overtime hours thing is ridiculous. We should even get rid of that because I think that it . . . encourages persons to do overtime . . . [it is not a requirement to do overtime] . . . It's more of a necessity [for UTech] . . . "As a result more persons . . . people are doing up to all 25 hours a week teaching. So,

you see . . . there is no possibility of doing research if you're teaching that much . . ." (personal communication, July, 2012). I asked why then is there a necessity, for additional teaching hours? To which the response was: "We don't have enough teaching staff . . . and not just lecturers, but also post-graduate students who could become teaching assistants . . ." (personal communication, July, 2012)

Participants also lamented the fact that some faculty for various reasons choose not to contend with the tension between research and teaching and instead have stuck with teaching only; this is more in tandem with organizational norms and expectations at UTech regarding research.

Although concerned that more faculty have not also taken on research activities, participants explained that they recognize that the university through its words, actions and seeming inactions or inertia, sends mixed messages to faculty regarding the importance of research.

Excerpt from field notes, July, 2012:

Firstly, it was suggested by an informant involved in research that the university must be clear on the priority it accords to research and there should be follow up with action. "I mean, if it's not research you want to do, then fine, they need to say that and make it very clear and tell us persons who are researchers that you are in the wrong place. But if it is that we really want to push research ahead, I think we have to change the fact that the workload . . . the workload is just too much. Secondly, more financial resources are needed for research. We need to reduce the workload . . . but I know that has financial implications. So, I think as a university we need to lobby . . . as . . . as a national university . . . we need to lobby. It's more than just the researchers in the university. We need to lobby the government, for example, to provide more support. Or the university needs to, as a body, seek out more support . . . towards the research agenda, if we are going to really push research ahead . . ." (personal communication, July, 2012)

Mixed messages regarding the importance of and support for research contributes to participants' sense of disorder in the UTech research environment.

Theme – Mixed Messages

The research environment at UTech was described by participants as lacking clarity as there are some contradictions between the university's stated strategic priority regarding research and what they actually experienced as researchers. There was a general feeling among

participants that the mixed messages from leadership were one sign of lack of clarity about the university's identity going forward. In fact, participants suggested that the mixed messages also highlight the university's struggle with competing organizational identities for itself.

Excerpt from field notes, July, 2012:

A participant shared his/her lack of clarity about the direction of the university in terms of research. "... I'm not so sure what is the main area of the university research right now I think now the focus of the university is to grow student population" (personal communication, July, 2012). To demonstrate how this has implications for the identity of UTech and the potential for research in the university, reference was made by the participant to the website of MIT, USA in comparison with the UTech website. The points were made that MIT brands itself as a research institution and also uses its website to convey that identity. Except for a few pages on procedures, there is hardly anything in words or pictures that regularly show research in action at UTech on its website, a major interface between the university and the global public. In addition, this participant felt that UTech should have a research vision to be a contemporary of MIT in terms of our research focus and capability. To do so, the participant explained, we need to get our goals and priorities right regarding research and its place in the future of the university. In terms of building the UTech identity, it appeared to this participant that the current focus is in the area of Sport, not research. "So if our vision is sport . . . we supposed to be doing something really serious in sport. So if the money is coming from the sport, we supposed to be getting people all over the world to come to Jamaica to be in sport." (personal communication July, 2012)

Additionally, participants were cynical about UTech's rhetoric regarding research as they were of the view that it was not believable. One informant said he/she was engaged in research on their own initiative. However, he/she ensure that the name UTech does not appear as associated in any way with any publication they make as they are of the belief that the university is not helping them as a young researcher to get published and, therefore, should not get any credit for what publications they are able to accomplish. Another informant spoke about incongruence between talk and action by the university.

Excerpt from field notes, July, 2012:

"I'm not sure why, but I have the . . . I've gotten the impression that . . . although we say at UTech that we are interested in becoming a research institution and all of that . . . that it's a lot of . . . it's a lot of talk, unfortunately . . . and I'm not saying there may not be good intentions, but I think that it is really a lot of talk to say that we want to become a research institution when we're really not doing what is necessary to become a research institution. So, I think, like I said, although we talk about being or wanting to become a research institution, I don't think we are actually putting the measures or the things in place to make it happen." (personal communication, July, 2012)

Another area of mixed messages that emerged consistently in interviews and other dialogue and is considered by participants to be a sensitive one is related to academic promotion. Several participants expressed a lack of clarity on the issue and some expressed their hesitance and caution in discussing this matter which they raised as being an important aspect of their research environment at UTech. Nonetheless, enough was conveyed by participants to confirm that the matter of academic promotions was considered to be highly important to them but politically delicate matter to discuss openly. Some participants shared their view that others in the university who were perceived as not being accomplished researchers have been promoted or assigned high academic titles.

Excerpt from field notes, July, 2012:

Researcher: So do you think the . . . the academic staff, in general, have this understanding that of . . . of . . . of the research being really the potential for promotion? "They don't see it. They do not accept the fact and I think we are to be blamed as an institution. We've not displayed to the staff that you do need to be involved in research in order to achieve these particular milestones and positions, because persons are promoted . . . Persons are promoted without the necessary requirements and that in itself is a de-motivation to the staff". Researcher: So they may be getting mixed signals? "Exactly." (personal communication, July, 2012)

The cynicism about mixed messages from leadership regarding academic promotion was consistent in all conversations held between the researcher and faculty members during participant observations.

Theme – Busy

A busy work routine was in the main described as a high teaching load that is the bane of their everyday activities as researchers and this was a point that transcended all of the participants' description of their research setting at UTech. All except one of the participants spoke of a very busy work routine which they considered to be the norm at UTech. The one participant who differs took deliberate steps to avoid what he/she consider to be the usual busy, competing and contradictory routine which detracts significantly from doing research. According to that participant:

Excerpt from field notes, August, 2012:

"Well you have to find time . . . to do research because otherwise you'll do all sorts of [administrative work] . . . by being there you'll be attracting . . . more attention to do . . . other work which basically is not related to research. [You] basically keep a low profile if you have to be . . . a good researcher at UTech. . . . Keep a low profile and do . . . do that particular work Otherwise you are high profile then you should expect to . . . to face that kind of . . ." (personal communication, August, 2012)

Participants reported that they have much larger teaching responsibilities than they believe should be accorded to their research role in the university.

The participants also describe their busy work routines as involving a lot of multi-tasking and long hours. They were varyingly involved in the following types of activities in a given work day – teaching, meetings, and other administrative tasks, student supervision and advising, research, and mentoring other faculty who were new to research. They related that the onus is

upon each of them to eke out whatever available time during the day to do their research as there is insufficient designated time for research and there are other competing work activities.

However, that approach does not guarantee that sufficient time is allocated to research.

Excerpt from field notes, July, 2012:

"... even if it is just creating a questionnaire this week, reading up the literature next week. But there is no day ... week that passes by that I don't do something pertaining to research despite my heavy work schedule But I must confess that the research suffers because it's one person doing everything." (personal communication, July, 2012)

According to participants, meetings also contribute to a busy work routine. It is their view that many of the meetings convened by administrators, which they are expected to attend, are unnecessary. However, because of inadequate staff support structures in some instances, they are often unable to send a representative where appropriate, so their attendance is often unavoidable.

"And this points to a critical area in that part of the structure that limits research is that you spend so much time doing other activities than what you'd really want to do in terms of, you know, if research is a primary interest So you may find that you have to use additional time or time external to the regular workday to get those things done and that's where weekends and nights come in. So a lot of the . . thrust in terms of the research achievements based on the current structure has to come through your individualistic approach, in a sense." (personal communication, July, 2012)

Pattern 3: Personal Resilience

Excerpt from field notes, July, 2012:

Intertwined within all participants' responses were expressions of their personal reactions and ways of coping in the UTech research environment. Participants expressed their personal resilience wherein the challenges that they experienced were mitigated by individual buoyancy and their push to do more research is fueled by their motivation.

Excerpt from field notes – Metamemo, December 8, 2012:

Then there is the theme of personal impacts of all this on PRIA researchers and how they cope or rather survive. Interestingly, these researchers are sticking with it despite their frustration and questioning of many things in the university that have an impact on their research plans. Although several feel that they are guinea pigs and sacrificing their personal research goals so that they can help the university achieve its research goals, they show a sense of pride and achievement in what they are doing and in UTech and are for the most part highly motivated and strongly committed to doing research at UTech and have hope that things will be better. In fact, all of them suggested that the university is creating a track in the right direction, albeit a fuzzy track and moving slowly. One researcher in the university put it this way "UTech is in the burgeoning phases as a research institution and only saw the tail of the elephant." (personal communication, July, 2012)

Theme – Feelings

At the personal level, participants expressed a range of feelings about doing research at UTech.

An informant reflected deeply on tensions associated with progress of his/her career as a researcher and the slow pace of advancement of his/her own research agenda at UTech.

"... to be honest, I don't feel I have accomplished very much since I've been here ... for the first couple of years at UTech, things were slow-going as far as research. I guess settling in, lots of teaching etc. and then for falling into administrative responsibilities" (personal communication, July, 2012). According to this participant, his/her own personal research agenda could have been much further ahead and he/she expressed the feeling that he/she had made a sacrifice that had not helped to advance his/her career as a researcher.

Participants' feelings about being researchers at UTech ranged from being depressed to fulfillment, sometimes within a single participant researcher.

Excerpt from field notes, July, 2012:

Excerpt from field notes, July, 2012:

"I don't feel much like a researcher at UTech . . . from the point of view of . . . when I compare myself to my counterparts at other institutions who are involved in research I find that I am very stagnant. It is, in fact . . . very depressing. It is . . .

it is very depressing. It is . . . it makes you wonder, resent even . . . So, I have seriously considered if I am in the right place. If I didn't make this happen, if we didn't create this environment, then I couldn't do my research either. So I've basically been working at that, more than even my own research, and as a result, I look back now and I feel a little depressed because I feel that I could have been further ahead . . . it's actually a little depressing." (personal communication, July, 2012)

However, the general tendency was mixed feelings among participants, and three of them responded "I love it" to the question "How do you feel about being a researcher at UTech?"

Table 2 shows the range of feelings that participants associate with being researcher at UTech.

This data emerged in the participant interviews.

Table 2

Participants' Positive and Negative Feelings About Being Researchers at UTech

Positive Feelings	Negative Feelings
Pride	Isolated
Satisfaction	"you're on your own"
"nice to be a part of something new	Frustrated
and young"	Anxiety
Fulfillment	Disappointment
Accomplishment	Depressed
Good	Discouraged
Mixed feelings	"Why am I here?"
"I love it"	
Achievement	
Hopeful	
"I love what I do"	
Нарру	

Participants associate both positive and negative feelings with being a researcher at UTech.

Theme – Motivation

Participants expressed their intrinsic motivation as a driving force and enabler behind their persistence and achievements with research at UTech. Ryan and Deci (2000) define intrinsic motivation as "doing something because it is inherently interesting or enjoyable" (Ryan & Deci, 2000, p. 55) and extrinsic motivation as "doing something because it leads to a separable outcome" (p. 55). Some participants expressed that personal dispositions such as having a persistent and tolerant nature also contributed to their ability to achieve as a researcher despite all the challenges that they face in the UTech organizational environment.

Excerpt from field notes, July, 2012:

"[In my former job as a researcher] . . . I would stay awake at night thinking about possibilities and options and how experiments and so on and . . . and I was excited by that and I'd still go in the next day refreshed 'cause I know I had these ideas and I can do them." (personal communication, July, 2012)

Excerpt from field notes, August, 2012:

"What propel . . . what has helped me? Individual push really . . . because once you start publishing . . . you get kind of satisfaction . . . and then you continue doing this, the same . . . continue doing the same, there is no more material gain here but at least you get satisfied." (personal communication, August, 2012)

Although intrinsically motivated, there were feelings of not being sufficiently valued by UTech and being powerless to influence the organizational context within which they worked as researchers.

Excerpt from field notes, July, 2012:

"If you notice, I haven't really said anything . . . about money per se It's more . . . it's more emotional . . . or a sort of an impression, a perception, point of view that you're really not viewed as being anything important in the institution, and that, you know,. . . they're trying . . . they're trying to hold you down to all

these various things. And when you're somebody who's at a Ph.D. Level, you know, you're at the top of your profession and you're being told all these things . . persons don't feel encouraged and actually feel very despondent . . . you know, because then you're telling persons who are at the top of their field, who are experts in their particular subject areas, and you really can't go any higher than a Ph.D. . . . in terms of qualifications, that you don't know what you're talking about, and that you're really nothing and you don't deserve to be here and all of that. It . . . it really is very discouraging and it doesn't make persons feel that they should even be getting involved in the various . . . just come and do the work and leave." (personal communication July, 2012)

Excerpt from field notes, August, 2012:

"Yeah, the culture isn't . . . to encourage. It is not to encourage. As if it's nothing . . or they just don't see relevance. It's only those who do these other little work of administering, those are the ones who get praise, not . . . not those who publish . . . and . . . yeah. I might say that there is this some sort of jealousy in that aspect." (personal communication, August, 2012)

Some participants felt the system worked against their efforts to be a successful researcher in the university, and two described challenges that they viewed as emanating from professional jealousy among their colleagues and superiors who had negative or at best neutral attitudes to their research achievements. In one case, the participant reported that their research activities were negatively affected.

One participant compared work as a researcher at UTech to going through a minefield and various areas of influence and control, requiring his/her patience, tolerance and a personal commitment to research.

Excerpt from field notes, July, 2012:

Researcher: How have you been able to achieve your results and going forward, what are the essential things that worked in allowing you to do all of this research and publication? "Self-motivation. Setting the goals that you can achieve. I don't set goals like I have to write five papers. I will say I will write one paper, and then if I happen to write two or three, then that's a bonus. So self-motivation, setting goals that are achievable . . . knowing that you are not only here at UTech. You might find yourself somewhere else in the future and the question is 'Would you measure up?' . . . if you limit yourself within the UTech context" (personal communication, July, 2012). Researcher: So you're looking at perhaps the wider world stage? "Yes. I spend the most money on research Because I get the

results at the end. Yeah, so even though we don't get money per se to conduct research, I spend my own money if it requires travelling, if it requires hiring research assistants . . . if it requires making copies of the questionnaires . . . or whatever it is I'm doing. So I don't restrict myself by not spending my own personal money, because I get the results at the end." (personal communication, July, 2012)

Theme – Coping Strategies

Exceptional performers in research at UTech described what enabled their practice of research in the university. Enablers mentioned were – the Dean to whom they reported; a few colleagues in their College/Faculty; and; facilitation from the School of Graduate Studies, Research and Entrepreneurship (SGSRE) in writing research grant proposals. At the same time, there was also the view that there were very few enablers.

Excerpt from field notes, July, 2012:

"Enablers? Unless you say . . . the library is a support structure . . . the computers that we get in our personal offices. Yeah, that's it. Even the offices we have don't lend themselves . . . as you walked in, you would have seen partitions. Such an environment doesn't promote research, because you don't even have anywhere to store your book. You don't have anywhere to read in silence, without the next lecturer talking . . . and it's affecting you. Right. So the . . . the support system at UTech, if we are really serious about research, needs to improve. They have tried to give us the award . . . which when you see your name being mentioned on the day they're awarding it, and then subsequently they will put your picture on the wall . . . that . . . can motivate other persons to say, "You know what, in another two years I want to see my name on the wall. I want to win that award." (personal communication, July, 2012)

Although recognizing enablers in their personal and organizational contexts, participants also spoke of various hindrances to their research activities within the university. Namely, insufficient support, funding and physical space for researchers; lack of interest in research among their colleagues, and therefore no internal audience for their research activities; power imbalance between researchers and administrative personnel who do not facilitate the research activities of participants sufficiently; inadequate policy framework for researchers; lack of

attention to human resource issues affecting researchers, and; an overall organizational culture that is incompatible with research.

This group of researchers also spoke about the competencies they have had to develop to maneuver their research activities within the UTech system. The competencies related are in the areas of communication and internal organizational politics, and being innovative in their approach to the various challenges that they encounter. Most PRIA recipients said they used political savvy in negotiating for advancing their research. As one interview participant shared "Like most things at UTech...you need to I...do [a lot of] lobby work...for research you definitely need that" (personal communication July, 2012).

In order to navigate hindrances, especially those having to do with administrative processes such as the procurement of goods and services for research, PRIA recipients reported that they rely heavily on communication strategies such as face to face interactions with the administrators involved, keeping the communication channels open and taking steps to become known as a researcher personally to those administrators and the rest of the university.

Overall, participants related a research context that was complex and difficult to operate within. The complexity and difficulty involved tensions, being marginalized, a heavy workload, absence of clarity, and structure, and being busy. The resulting disorder was, therefore, also mentally challenging to maneuver. Participants described themselves as being self-motivated, persistent, patient, tolerant and personally committed to doing research.

Summary

Through an inductive cyclical process of abstraction to determine categories and patterns that emerge from the data a detailed description developed of the perceptions, experiences and beliefs of positive deviants at UTech about their research environment and their existence as

researchers within their social setting. The findings of this research study describe the UTech setting, three patterns and nine themes which emerged from transcribed interview data. The findings describe meanings and beliefs of PRIA research participants about socially constructed reality in their research environment at UTech. The patterns which transcended all participants' perceptions and experiences are – teaching versus research; disorder, and; personal. Within each of these three transcendent, inter-related and overlapping patterns there are organizational and personal themes about PRIA positive deviant researchers' perception and experiences at UTech during transition from low to higher research outputs. Chapter 5 examines and discusses the three patterns and the inter-related themes from the findings to arrive at answers to the research questions; draw conclusions, and make recommendations.

Chapter 5: Discussions, Conclusions, and Recommendations

In this chapter, the findings discussed in Chapter 4 are used to arrive at conclusions and answers to the challenge that this study and the two related research questions investigated. The findings from Chapter 4 and the conclusions arrived at in Chapter 5 are juxtaposed to extant literature to illuminate their significance for the setting and organization behavior. The findings and conclusions also inform a discussion of implications for the literature. The researcher's reflections on this study and recommendations for UTech and for future research are also presented.

Conclusions, and Answers to the Research Questions

Research Question 1. What are the significant norms that are shaping the organizational environment for research at UTech and positive deviance patterns of PRIA researchers?

Answer: The findings suggest that teaching is a significant norm in the university which also has the effect of overshadowing weak emerging research norms. From the perspective of Schein (1988), teaching norms are pivotal and research norms are peripheral to the university. The emerging research norms among participants are not significant in shaping the research environment at UTech and the positive deviance patterns of PRIA researchers. However, teaching norms influence the absence of a research culture at UTech.

The findings further suggests that a research culture does not yet exist in the university or is at most embryonic, and the positive deviance patterns of PRIA researchers are obscured by pivotal teaching norms. As reflected in the several themes which emerged from patterns in the data, there is an absence of strong research norms except the weak and diffused norms of only a few participants in the university. Notwithstanding, the weak and diffused research norms among participants is a signal of an emerging research subculture (Boisnier & Chatman, 2003) in the

university. It is possible, although not proven in this research, that there may be some extent of creative individualism (Schein, 1988) by other faculty, wherein the pivotal teaching norms are accepted and other emerging norms are generally rejected.

Until there are strong formal norms (Warren, 2001) pertaining to faculty engaging in research, UTech runs the risk of a research counterculture (Boisnier & Chatman, 2003) and antiresearch informal norms (Warren, 2001) being developed as faculty such as PRIA researcher recipients who have begun to internalize the desired norm to research but continue to have less than favorable experiences. According to Warren (2001), formal norms are explicit desired behaviors of a reference group that have been codified in formal documents; informal norms are the behaviors that are exhibited regularly by a reference group but which is not sanctioned by the group through formal documentation. The potential existence of an anti-research informal norm at UTech could be a threat to higher research outputs, especially if it should gain strength and become entrenched in the university, then the desired norm to do research would become even more difficult to achieve. The concept of culture being dynamic and in constant negotiation in organizations lends perspective to the existence and state of teaching and research norms at UTech. Bryson (2008) reminds us that there is constant cultural change happening in organizations. As a result, there is constant negotiation for hegemony among dominant, emergent, and residual cultures and subcultures in UTech.

Research Question 2. What are the perceptions and experiences of PRIA researcher participants about being researchers in the UTech research environment?

Answer: Table 3 shows the combined patterns and themes that emerged from the findings. These patterns and themes represent inter-related and overlapping dimensions of meanings and beliefs within the perceptions and experiences of PRIA positive deviant

researchers at UTech. A construct of organizational and individual stress (Hall and Mansfield, 1971) is hypothesized from the patterns and themes regarding the perceptions and experiences of positive deviant researchers at UTech during transition.

Table 3

Dimensions of Meanings and Beliefs of Positive Deviant Researchers During UTech's Transition

From Low to Higher Research Outputs

Patterns From the Data	Themes Within the Patterns	Construct of Positive Deviant Researchers at UTech During Transition
Teaching Versus Research - wherein it was perceived by PRIA researchers that there was an absence of integration between these two functions of UTech and as a result they often experienced their roles as being in conflict	Tensions – low integration of seemingly conflicting goals Being On Your Own - marginalized as researchers in the university	Organizational and Individual Adaptations to Stress

(continued)

Patterns From the Data	Themes Within the Patterns	Construct of Positive Deviant Researchers at UTech During Transition
Disorder - as a researcher at UTech, several challenges were experienced in the working environment that made their progress with research activities more complex than they anticipated	Incongruence - organizational contradictions that were antithetical to productivity of a researcher and more generally to higher research outputs in the university	
	Heavy Workload - high teaching contact hours and increasing administrative responsibilities	
	Mixed Messages - lacking clarity as there are some contradictions between the university's stated strategic priority regarding research and what they actually experienced as researchers	
	Busy - a high teaching load that is the bane of their everyday activities as a researcher	
Personal Resilience - challenges experienced were	Feelings - feelings about doing research at UTech	
mitigated by individual buoyancy	Motivation - driving force and enabler behind their persistence and achievements with research at UTech	
	Strategies - what enabled their practice of research in the university	

First, the analysis of the findings regarding the meanings that participants associate with their research environment at UTech suggests some turbulence being experienced by both the participants and also the organization as new individual and institutional identities are shaped.

Secondly, to fulfill expectations of a university in the Jamaican context, both teaching and research appear to be important activities for UTech. However, how these dual objectives are translated into the day to day experiences of the participants appears to be in a state of flux. Some steps have been taken by the university to encourage research in an institution that previously existed for 40 years as a teaching institution. However, it would seem that more organizational adjustments are necessary to reduce the friction at the interface of these two objectives in the university, especially to enhance how the participants, who of necessity must deal with this interface daily, find ways to cope and reduce individual stresses and tensions associated with the reality of their work experience. The meanings and beliefs among these few members of an emerging research subculture at UTech give some insights into their positive deviance patterns and behaviors and opportunities and challenges for further development of a research culture in UTech.

Commonly held beliefs derive from the history and the internal and external environments of an organization. "Beliefs refer to information that people in an organization hold to be true about a person, an institution, a group, a policy; indeed about anything" (Pratt, Margaritis, & Coy, 1999, p. 45) whether or not the facts are right or wrong. In particular, they highlight examples of beliefs that contribute to organizational culture – "the nature of the organization's environment; acceptable levels of organizational performance; what is necessary for the organization's success; the organization itself; and; work behavior" (p. 46).

Meanings and beliefs also shape how we perceive and experience our world. Senge (1990) suggested that we develop beliefs as we make reflex-like inferences about our world. The perceptions and experiences of PRIA researcher recipients are reflected in their inferences about their organizational world at UTech as represented in Table 3. These inferences or interpretations

give insights to the underlying meaning and belief structure that support them, and the socially constructed world of the participants. Socially constructed knowledge is reflected in the subjective experience of everyday life (Berger & Luckmann, 1966) and through various processes people interpret the world in which they live. These interpretations are shaped by meanings and beliefs that derive their significance from the traditions and relationships within the particular environment to which they relate. Gergen (2009) highlights the significance of relationships and tradition in the creation of meaning. "Here it is possible to say that each piece in the chess set acquires its meaning from the game as a whole. The small wooden chess pieces would mean nothing outside the game..." (Gergen, 2009, p. 8). Meanings and beliefs held by faculty are central to building a research culture in a university.

According to Pratt et al. (1999), "whole sets of beliefs must be changed" (p. 46) if a research culture is to be built in a university, and in order to do so the beliefs that exist in an organization must, of necessity, first be understood. Beliefs that exist in organizations are learned through the behavior of other members of the organization; oral and written communication; policies, systems, and rules, and the behavior of the organization's management (Pratt et al., 1999) such as, what is rewarded and what is punished. They give six examples of the types of beliefs that must be changed in order to build a research culture – "what it takes to get promoted; the probability of success; the levels of support for research; the social norms in the organization; there being sufficient time for research; and what research is necessary to keep your job" (p. 46).

Overall Conclusions

Some overall conclusions can be drawn from the findings and answers to the research questions. The answers to the two research questions suggest that UTech cannot yet be characterized as having a research culture in the size and scope it may be desiring, although the

existence of a small number of PRIA researcher recipients who are engaged in research signals some challenge to the status quo teaching culture and pivotal teaching norms in the university. The findings and answers also suggest that there are organizational and personal instabilities at this stage of the transition. Organizationally, this instability is marked by disorder and incongruence as related in the inferences and interpretation of these researchers of their research environment. At the personal level, the instability is reflected in participants' descriptions of their feelings, motivation and strategies for coping within the research environment.

It seems that some clear adjustments and tradeoffs are necessary to arrive at harmony, if that is desired by UTech, between the teaching and research functions of the university as UTech makes the transition to higher research outputs. This would be important as it appears that there is interdependence between teaching and research for UTech. Johnson (1996) uses the concept of polarity management to describe an approach to situations of interdependence which pose a dilemma that requires on-going management rather than a problem with a specific solution to be identified and applied. This may be applicable to teaching and research at UTech.

Additionally, organizational and individual stress and strain (Hall & Mansfield, 1971) are suggested by the findings. Individual and organizational strain detected in the findings in this research could be indicating some impact of organizational responses to external stress, such as a transition from low to higher research outputs consequent on UTech becoming a university from a former college. This is an area deserving of further research to verify and to determine the possible manifestations in the university and how best such strain could be managed individually and organizationally.

Implications for the Literature

The literature on positive deviance has not previously described university researchers who deviate from the norm of limited engagement in research during transition from low to higher research outputs. The description in this study of the social existence and organization context of positively deviant faculty of UTech contributes to bridging that gap.

The intent of this study was to describe UTech, a university in transition from low to higher research outputs, so that more could be understood about the nature of such transitions and how they might be supported. The findings and conclusions from this study highlight interrelated personal and organizational dimensions of UTech's transition from low to higher research outputs, as perceived and experienced by PRIA researcher participants. This underscores the need for the literature to describe positive deviants within their organization context to offer contextualized understanding of positive deviants and early adapters during organization transition, and opportunities for support. This study also contributes to filling that gap in the literature and the case study tradition was particularly suited to developing the contextually informed descriptions. However, much more research is needed in differing contexts for fuller understanding of positively deviant researchers and their existence during transition from low to higher research outputs at a university.

By encouraging and fostering emerging norms, positive deviants can influence the emergence of positive subcultures in organizations (Boisnier & Chatman, 2003). A relationship between positive deviance and emergence of subcultures, which is suggested from the findings in this study, is a new area of investigation for research and the literature that would deepen understanding of positive deviance in organizations and its potential benefits for change.

Recommendations for UTech

Based on the conclusions, the following recommendations are made to UTech regarding positive deviant PRIA researchers and the organizational transition. Given the nature of the dual objectives of teaching and research and the tradeoff choices that are needed to be made to manage the polarity, it would be advantageous to PRIA recipients if both the tradeoffs and the desired future state are made known explicitly. This could be communicated in a guiding institutional plan for transition from low to higher research outputs, which should give basis for resolution of the workload and contractual issues regarding research and could be updated as changes become necessary.

Although, a noteworthy initiative to encourage a research norm at UTech, the PRIA could also be a possible deterrent to other faculty who are adapting to and internalizing the desired norm to do research but are not yet at the point where they would be recognized through PRIA for their steps in the direction of research. The university could broaden its program to incentivize adoption of a research culture by faculty. That might include review of the two-tier system that is entailed in how the PRIA is currently designed. Scarpitti and McFarlane (1975) noted that there are variations in how social norms are internalized. One reason given is that there is no uniformity in how members of society or groups internalize social norms. This is a possible scenario at UTech regarding internalizing of a norm to do research by the faculty. In such a situation, review to broaden the incentive framework to encourage research could have a net effect to proliferate the desired norm to do research.

Finally, the PRIA recipients should be engaged by the university as a group with the experience and tacit knowledge of doing research at UTech during this stage of its transition from low to higher research outputs. The combined situational knowledge of this group of

faculty is great and should be tapped and applied, appropriately and with due regard to the wellbeing of these researchers, in the university's quest for higher research outputs.

Recommendations for Future Research

There are some issues that this study does not address but are necessary for fuller understanding pertaining to the research challenge. Firstly, this case study method may be replicated in other universities undergoing similar organization transition to test the applicability of the findings to other universities in transition from low to higher research outputs.

Secondly, an investigation of the wider organizational culture, social issues, including organizational affiliations and the mindsets of non-PRIA researchers at UTech was outside the strategy of inquiry and boundary of this case study. However, future research on these topics can add value to understanding UTech's organizational transition from low to higher research outputs.

Thirdly, the hypothesized construct of organizational and individual adaptation to stress in relation to positive deviant researchers at UTech should be further investigated and developed to determine its meaning and relevance in the university over time. Through future research this construct could also be tested in another similar setting.

Discussion

Several studies from organization behavior literatures lend support to and give further insight to the findings, conclusions and answers to the two research questions in this research. The notion of incongruence during transition from low to higher research outputs was previously referred to in relation to universities in the USA. According to Perkins (1973) who wrote about USA universities in the nineteenth century, universities needed to make institutional and organizational changes when they expanded their mission from teaching to include research. He

further suggested that the growth of university research precipitated organizational change and conflict. New university organizational structures for research which extended outside "formal traditional university patterns" (Perkins, 1973, p. 8) were frequently in contradiction to the existing structures such as those for teaching. Perkins also suggested that researchers needed to adopt entrepreneurial behavior by referring to them as "research entrepreneurs" (p. 8). He proposed that research entrepreneurs need special provisions in the university to be effective – such as protection from distractions like heavy teaching schedules and that special "administrative devices" (p. 8) that cut across the university are required to bring like-minded researchers together. The findings in this research which suggest organizational incongruence and further support to enable positive deviancy behaviors and patterns among participants is supported by Perkins' conclusions regarding universities in the USA which expanded their mission from teaching only to include research.

The findings regarding what appears to be organizational instability can be viewed from this perspective of how organizations change, develop and grow. Gersick (1991) in describing the paradigm of evolution of systems, highlighted that there is "...a highly durable underlying order or deep structure" (Gersick, 1991, p. 12) in organizations. According to the punctuated equilibrium paradigm of how organizational systems develop and change, a system displays long alternate periods of equilibrium or incremental adaptations in which deep structures are maintained, and short revolutionary upheaval or disequilibrium in which deep structures of a system are changed. However, Gersick argued that "It is important to note that human systems in equilibrium may look turbulent enough to mask the stability of the underlying deep structure as the deep structure of an organization is self-preserving and very resistant to change. As long as the deep structure is intact, it generates a strong inertia, first to prevent the system from

generating alternatives outside its own boundaries, then to pull any deviations that do occur back into line" (Gersick, p. 19). The organizational instability and disequilibrium suggested from the findings of this research could be indicative of organization change involved in the transition from low to higher research outputs at UTech, and a degree of organizational inertia in which some superficial mechanisms are employed to embrace research as another objective of the university while the deep structures and familiarity of the teaching culture are left intact.

Additionally, studies about improving research productivity in universities confirmed that organizational factors are also involved (Dundar & Lewis, 1998; Ramsden, 1994) in the research environment that influences research productivity. Bland and Schmitz (1986) reviewed the pertinent literature and described a twelve-point profile, incorporating environmental factors, of a faculty member who is more likely to become a productive researcher in family medicine - (a) has in-depth knowledge in a particular research area in their discipline; (b) has mastered fundamental methodological and advanced skills that are relevant to the researcher's area of investigation; (c) is highly socialized to the norms, expectations, values, attitudes, and sanctions of the academic profession; (d) has been mentored before, during and after training by distinguished scientists; (e) establishes scholarly habits early in their careers, such as frequent publications and many citations within the first five years post doctorate; (f) maintains professional contacts with their research peers and colleagues outside their institution, as research is both a highly independent and dependent profession; (g) has continued support, reinforcement, recognition and stimulation from peers in the researcher's local environment, as researchers are likely to produce more when located among productive researchers; (h) pursues several research projects simultaneously; (i) has significant uninterrupted time devoted to research, approximately 40 to 50 percent of work time; (j) is oriented externally and internally to

his organization; (k) has autonomy after about one year post doctorate, matched by commitment to the organization; and (l) receives the total effect of concrete support from the organizational environment. This last characteristic was considered to be the most powerful of the factors that affects research productivity. This profile, developed in the USA, lends support to some issues arising from the findings in this research. Notably, the issue of significant uninterrupted portion of work time devoted to research. Additionally, the profile supports the finding of this research that positive deviant researchers in the UTech setting desire greater organizational support for their research activities and in relation to their feelings of being marginalized, having a heavy workload and being busy.

Research was conducted within the context of a large medical school in the USA to further understand the link between the research environment and the productivity of researchers, and to propose how elements within the research environment interact and facilitate high research productivity. A comparison can be made with the findings in this research to ascertain the extent of congruence with findings from other research environments in which a similar objective of increasing research outputs is being pursued. It has been proposed (Bland & Ruffin, 1992) that research productivity is influenced by both personal and environmental factors. They identified twelve interdependent factors that seem to be consistently present in high performance research environments: "(1) clear goals that serve a coordinating function, (2) research emphasis, (3) distinctive culture, (4) positive group climate, (5) assertive participative governance, (6) decentralized organization, (7) frequent communication, (8) accessible resources, particularly human, (9) sufficient size, age, and diversity of the research group, (10) appropriate rewards, (11) concentration on recruitment and selection, and (12) leadership with research expertise and skill in both initiating appropriate organizational structure and using participatory management

practices" (Bland & Ruffin, 1992, p. 385). The factor of distinctive culture indicates the importance of a research culture for increasing research outputs in a university. The findings and conclusions in this research about, pivotal and peripheral norms, the teaching and research cultures and positive deviancy patterns of participants are supported by the significance given to a distinctive culture regarding research in the USA study. In the case of UTech, as shown from the findings and conclusions in this research, the research culture is not yet developed and the research subculture among the few participants is weak in the university. Moreover, the suggestion of the USA study regarding the interdependence of personal and environmental factors supports the findings and conclusions of this study which describes interrelated individual and organizational dimensions of meanings and beliefs of positive deviant researcher participants during the transition from low to higher research outputs at UTech.

The findings and conclusions also together suggest the existence of individual strain among participants. Although the construct of individual and organizational adaptations to stress needs to be tested in future research, conceptually the existence of such stress could be associated with role adaptations which are required by UTech faculty who become engaged in research. Turner describes role change as "a change in the shared conception and execution of typical role performance and role boundaries" (Turner, 1990, p. 88). Adaptations to role changes have social, psychological and human resource implications. Lewin (1951) described force-field analysis as a process of how individuals and organizations grow and adapt in a dynamic psychological field, which (Brager & Holloway, 1992) argue is useful for understanding organization change. In the same vein, Weisbord (1987) describes how forces in a dynamic psychological field are reconfigured in response to the introduction of new facts from the both the person and the environment. This is a period of transition in which "new behaviors are

tested" (Segal, 1997, p. 287) as is the case with positive deviants in research at UTech. The change from college to a university and the consequent objective of increasing research outputs in a university which previously had no significant record of producing research would likely pose some challenges to faculty roles as they were formerly designed and perceived. Hence, the significance of findings in this research, especially those regarding tensions, disorder, incongruence and personal resilience, The concept of role was applied to organizations by Gross, Mason, and McEachern (1958) and Kahn, Wolf, Quinn, Snoek, and Rosenthal (1964). Since then organization role theory (ORT) has been applied extensively in human resources management to explain expectations and behavior of organizations and their members regarding the movement of individuals into new occupational roles (Biddle, 1986; Levesque, 2001; Miner, 1985, 1987) and from one occupational role to another over a career (Ashforth & Saks, 1995; Nicholson, 1984). Some social, psychological and human resource implications of role change among participants in this research are described in the findings regarding dimensions of meanings and beliefs of these positive deviant researchers at UTech.

From a social constructionist perspective, the conclusions that have been drawn from the findings should not be considered as endings or what is known but rather as beginnings that invite us to question what we know (Gergen, 2009) to uncover new views and understandings. The conclusions and answers to the research questions invite us to consider and question obvious and taken for granted assumptions that are inherent in the socially constructed worlds of the PRIA researcher participants and the conclusions drawn by the researcher of this study who is also a member of UTech. For example, is there currently or likely to be in the short-term more support and resources and a critical mass of researchers at UTech who can make a significant difference with attainment of the transition? What purpose does such a transition serve for a

university that is so heavily reliant on and committed to teaching? How might other additional supports for building a research culture in the university be identified and developed? Other possible questions can be asked that are capable of revealing other alternative ways of perceiving the perceptions, experiences and beliefs of PRIA researcher participants and a possible future of the transition from low to higher research outputs at UTech.

In this regard, the questions posed by E. L. Miller (2007a) in the first Septennial Review of UTech and which influenced the problem/challenge of understanding organizational transitions in universities that this research study set out to investigate, are still relevant for UTech today: (a) How best can research be institutionalized as an activity in UTech, given the imperatives of teaching for the institution? (b) What optimal strategies should be employed to build research capacity with respect to both its human and physical aspects, at this stage of development of UTech? (c) How can the research capacity of UTech be organized to make it relevant to the sectors that it serves? (E. L. Miller, 2007a).

Epilogue

This epilogue is used to give a closing summation of this research and to present my personal reflections on this research study, as well as my reflections on the limitations of this research, and on the research method that was used in the UTech situation.

Closing Summation

This qualitative study has described and scrutinized the everyday and taken-for-granted aspects of being a positively deviant researcher at UTech in order to generate tacit knowledge that can be of practical use to the researchers and the organization. Using the case study method it reveals, through the voices of the positively deviant researchers themselves, the social milieu and dynamics of early adapters to organization transition from low to higher research outputs in

the university. The significant perceptions, experiences and meanings in the socially constructed world of the positively deviant participants were discovered through analysis of the results to arrive at answers to the research questions. The overall conclusions suggest that the positively deviant researchers experience individual and organizational turbulence as adjustments associated with disequilibrium and polarities occur during the transition in the university. The social construction epistemology that frames the intent and design of this study demands critical reflection upon what has been discovered as knowledge and the conclusions. As Gergen (2009) explains, the intent of such reflection is to question taken-for-granted assumptions, traditions and culture that are embedded in that knowledge and to arrive at alternative meanings that can chart a better future:

Thus, our "considered judgments" typically suppress those alternatives lying outside our tradition. For constructionists, such considerations lead to a celebration of critical reflexivity; that is, the attempt to place one's premises into question, to suspend the "obvious", to listen to alternative framings of reality, and to grapple with the comparative outcomes of multiple standpoints. For the constructionist this means an unrelenting concern with the blinding potential of the "taken-for-granted". If we are to build together toward a more viable future then we must be prepared to doubt everything we have accepted as real, true, right, necessary or essential. This kind of critical reflection is not necessarily a prelude to rejecting our major traditions. It is simply to recognize them as traditions – historically and culturally situated; it is to recognize the legitimacy of other traditions within their own terms. And it is to invite the kind of dialogue that might lead to common ground". "... That is, they invite us to ask, how did we come to hold these views; why do they seem so very obvious; what do they do for us; who is silenced by such assumptions, and are there reasons to explore alternatives? (Gergen, 2009, pp. 12-13, 32)

This study contributes to research as praxis (Lather, 1986) in that it involves and gives voice to the researched and allows critique of the status quo. In this way, the researched participate in generating knowledge about themselves and such generated knowledge can be emancipatory and empowering to the researched. Patton (2002) observes that power is involved in the social construction of reality.

Power comes into the picture here because, as views of reality are socially constructed and culturally embedded, those views dominant at any time and place will serve the interests and perspectives of those who exercise the most power in a particular culture. By exercising control over language, and therefore control over the very categories of reality that are opened to consciousness, those in power are served. (Patton, 2002, p. 100)

Given that this is a research study of a single case, the findings are specific to the UTech context. However, the study might also be of practical value to other researchers and universities around the world which are also in transition from low to higher research outputs.

Because the potential for the use of the findings of this study in future applied behavioral science interventions at UTech, the ethical considerations noted by Kelman (1969) were considered to be applicable and have been adhered to. This study has been designed and specific steps have been taken to minimize potential ethical risks if the findings were to be used for future applied behavioral science interventions in the university.

Reflections on this Study

Reflections by the researcher. This study has enhanced my understanding and sensitivity to some issues involved in studying a group within an organization with which the researcher also has membership. Through interaction with participants and the data during the course of this research, I have had to question my taken-for-granted and implicit assumptions about the research topic. At first, many of these were unnoticeable to me and unknowingly at the time this was at the root of my senses of frustration with analysis of the data. Particularly in the latter stages of data analysis, it took some effort and time to rise above what I knew about the university from my fourteen years of working there, in order to see clearly what the data was showing while trying to understand the influence of my prior knowledge of the organization.

Sufficient, but not complete, separation from the data was necessarily facilitated by time and that forced revision of my perceptions of a realistic completion schedule based on what was required

for proper analysis of the data. As I was intricately tied to, immersed in, and a part of the organizational setting, my separation from the data was relative rather than absolute over time and was also aided by time during which I lived with the data and challenged and reviewed my analysis several times to critique and consider alternative meanings. Interestingly, those two processes- relative separation and critique of the data – also revealed some of my own assumptions and biases about UTech and its future, some of these likely shaped from my being a key architect during its transition from a college to a university. These two processes also showed me how significantly I had bought into some of the same assumptions, ideals and biases that showed up in the data. I believe that these have been rich opportunities for reflections and further development for me as a researcher, especially in the area of marginality. Browne and Cotton (1975) described marginality as the ability to stand within a system and at the same time being able to stand back from it and critique it. This ability they consider to be a key competence required by organizational development and change (ODC) practitioners. The preparation and training that I received from the Doctor of Organization Change program at Pepperdine University, Los Angeles, California, gave me competences and skills such that I could become aware of and understand how these issues were likely affecting the design and analysis of this research study, and to recognize this as an important aspect of the data collected.

Reflections on limitations of this study. Firstly, the results of this single case study are not generalizable outside of UTech. However, the method might be replicated in other universities undergoing transition from low to higher research outputs.

Secondly, this study did not attempt to investigate the contributory value of research outputs from PRIA participants. Although the contributory value of their research would be important for standing and accreditation of UTech as a research institution, this study was not

designed to investigate that issue for a number of reasons. First, the use of the word *contribution* instead of *outputs* would require making assessments on the quality of the outputs which would be tangential rather than central to arriving at a description of the experiences and organizational context. That is, the socially constructed world of the participant researchers at UTech. Second, there are various ways of measuring contribution, such as impact, citations, publication in peer reviewed journals etc. That again, I believed to be tangential, and possibly debatable as to an indication of contribution. For example, there are many journals that meet the criteria of being a peer reviewed journal and there is no standard as to the quality of the publications that should be accepted in peer reviewed journals so there is inconsistency as to whether articles in a peer reviewed journal are always articles that make a contribution or signal a certain quality of research. Again, because I considered such qualitative assessment of the research outputs to be tangential to the purpose of my study, I stuck with the term "research outputs" which is also the term on which I could find data and some previous research in relation to Jamaica and UTech. To have changed the research focus from outputs to contribution would have required revisiting the entire research strategy.

Thirdly, during participant observation, it was suggested in a discussion that the recipients of the President's Research Initiative Award (PRIA) are not necessarily the most productive or accomplished researchers in UTech. It was asserted by a knowledgeable administrator and fellow researcher that some of the best achievers in research at UTech have declined nomination for the PRIA. While following up on this assertion, another member of staff suggested the possibility that some UTech researchers might not acknowledge their affiliation with the university in their publications and that it is known informally that some UTech faculty have multiple institutional affiliations, suggesting that there is a possibility that the research

outputs of some UTech researchers might not be known by UTech. While these possibilities seemed interesting to pursue to understand the social issues at play, including the organizational culture, in which such disinterest and weak organizational affiliation would exist among faculty and other researchers in the university, the strategy of inquiry was not adjusted to include non-PRIA researchers as participants.

Fourthly, this study only explored the socially constructed worlds of researchers at UTech, particularly PRIA recipients who are members of faculty and represent 5 out of the 7 Colleges/Faculties of the university. However, it cannot be determined from this study whether sentiments expressed by participants about the organization are unique to PRIA researchers or research, or if they apply to any other area or the entirety of the university. Further studies would be needed to determine the applicability of the findings of this research regarding the organizational context to the rest of UTech. Additionally, although the data collected reflects their perception of their organizational reality which this study set out to describe, it cannot be assumed that the reality conveyed is the only one that exists in the university, and this could also be tested in future research.

Finally, this is not a longitudinal study. The findings reflect the socially constructed reality of a group of researchers at UTech at a point in time and might not be reflective of their socially constructed worlds at later stages of the organization's transition to higher research outputs.

Reflections on the research methodology. In a relatively small organization, persons could be identified through relating of incidences in which they were involved. The sample from which participants were chosen is small in number and their receipt of the PRIA Award is known and publicized in the university. By virtue of deduction, it might be possible for identities to be

known. As a result, some data was filtered and not used in the case report in order to ensure anonymity of participants. This issue I believe would arise in qualitative studies of small organizations or groups. The experience of encountering it in this study has made me more aware of the challenges and limitations of writing a qualitative case report developed from a small group of participants in a relatively small organization.

Additionally, doing insider research has its challenges. One that cropped up in this study was separation of organizational from research roles which sometime require choices to be made about which role would take precedence if a situation of potential conflict arose. The researcher had to make such a choice and this resulted in one participant being removed from this study.

REFERENCES

- Abrams, D., Marques, J. M., Brown, N., & Dougill, M. (2002). Anti-norm and pro-norm deviance in the bank on the campus: Two experiments on subjective group dynamics. *Group Processes and Intergroup Relations*, *5*(2), 163-182. doi:10.1177/1368430202005002922
- Abrams, D., Marques, J. M., Brown, N., & Henson, M. (2000). Pro-norm and anti-norm deviance within and between groups. *Journal of Personality and Social Psychology*, 78(5), 906-912. doi:10.1037/0022-3514.78.5.906
- Akers, R. L. (1973). Deviant behavior: A social learning approach. Belmont, CA: Wadsworth.
- Applebaum, S. H., Giulio, D. L., & Matousek, A. (2007). Positive and negative deviant workplace behaviors: Causes, impact and solutions. *Corporate Governance*, 7(5), 586-598. doi:10.1108/14720700710827176
- Ashforth, B. E., Gioia, D. A., Robinson, S. L., & Trevino, L. K. (2008). Re-viewing organizational corruption. *Academy of Management Review*, 33(3), 670-684. doi:10.5465/AMR.2008.32465714
- Ashforth, B. E., & Saks, A. M. (1995). Work-role transitions: A longitudinal examination of the Nicholson model. *Journal of Occupational and Organizational Psychology*, 68(2), 157-175. doi:10.1111/j.2044-8325.1995.tb00579.x
- Axelrod, R. (1986). An evolutionary approach to norms. *American Political Science Review*, 80(4), 1095-1111. doi:10.2307/1960858
- Balkan, S., Berger, R. J., & Schmidt, J. (1980). *Crime and deviance in America: A critical approach*. Belmont, CA: Wadsworth.
- Bate, S. P. (1997). Whatever happened to organizational anthropology? A review of the field of organizational ethnography and anthropological studies. *Human Relations*, *50*(9), 1147-1175. doi:10.1177/001872679705000905
- Becker, H. S. (1963). *Outsiders: Studies in the sociology of deviance*. New York, NY: Free Press.

- Becker, H. S., & Geer, B. (1969). Participant observation and interviewing: A comparison. In G. J. McCall & J. L. Simmons (Eds.), *Issues in participant observation: A text and reader*. Reading, MA: Addison-Wesley.
- Bell, S. (1998). Self-reflection and vulnerability in action research: Bringing forth new worlds in our learning. *Systemic Practice and Action Research*, 11(2), 179-191. doi:10.1023/A:1022981402690
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85(3), 349-360. doi:10.1037/0021-9010.85.3.349
- Berg, D. N., & Smith, K. K. (2002). First findings: New voices examining context and embeddeness. *Journal of Applied Behavioral Science*, 38(3), 273-275. doi:10.1177/0021886302038003001
- Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge* (First Anchor Books ed.). New York, NY: Anchor Books.
- Bernstein, S. D., Cameron, K., Dutton, J. E., & Quinn, R. E. (2003). Positive organization scholarship: Meet the movement An interview with Kim Cameron, Jane Dutton and Robert Quinn. *Journal of Management Inquiry*, *12*(3), 266-271. doi:10.1177/1056492603256341
- Biddle, B. J. (1986). Recent developments in role theory. *Annual Review of Sociology, 12*(1), 67-92. doi:10.1146/annurev.so.12.080186.000435
- Bland, C. J., & Ruffin, M. T. (1992). Characteristics of a productive research environment: Literature review. *Academic Medicine*, 67(6), 385-397. doi:10.1097/00001888-199206000-00010
- Bland, C. J., & Schmitz, C. C. (1986). Characteristics of the successful researcher and implications for faculty development. *Journal of Medical Education*, 61(January), 22-31. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/3941419
- Bloch, S. (2001). Positive deviants and their power on transformational leadership. *Journal of Change Management*, 1(3), 273-279. doi:10.1080/714042473

- Boisnier, A., & Chatman, J. A. (2003). The role of subcultures in agile organizations. In R. S. Petersen & E. A. Mannix (Eds.), *Leading and managing people in the dynamic organization*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bradley, E. H., Curry, L. A., Ramanadhan, S., Rowe, L., Nembhard, I. M., & Krumholz, H. M. (2009). Research in action: Using positive deviance to improve quality of health care. *Implementation Science*, 4(25). doi:10.1186/1748-5908-4-25
- Brager, G., & Holloway, S. (1992). Assessing prospects for organizational change: The uses of force-field analysis. In D. Bagal & H. Schmid (Eds.), *Organizational change and development in human service organizations*. New York, NY: The Haworth Press.
- Braithwaite, J. (1989). Criminological theory and organizational crime. *Justice Quarterly*, 6(3), 333-357. doi:10.1080/07418828900090251
- Browne, P. J., & Cotton, C. C. (1975). Marginality, a force for the OD practitioner. *Training and Development Journal*, 29, 14-18. Retrieved from http://search.proquest.com/
- Bryson, J. (2008). Dominant, emergent, and residual culture: the dynamics of organizational change. *Journal of Organizational Change Management*, 21(6), 743-757. doi:10.1108/09534810810915754
- Cameron, K. (2003). Organizational virtuousness and performance. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive Organizational Scholarship* (pp. 48-65). San Francisco, CA: Berrett-Koehler.
- Cameron, K., Dutton, J., & Quinn, R. (Eds.). (2003). *Positive organizational scholarship*. San Francisco, CA: Berrett-Koehler.
- Chambliss, W. J. (1969). Crime and the legal process. New York, NY: McGraw-Hill.
- Cicourel, A. V., & Kitsuse, J. I. (1963). *The educational decision makers*. Indianapolis, IN: Bobbs-Merrill.
- Clinard, M. B. (1968). *Sociology of deviant behavior* (3rd ed.). New York, NY: Holt, Rinehart and Winston.

- Cohen, A. K. (1959). The study of social disorganization and deviant behavior. New York, NY: Basic Books.
- Corbin, J., & Strauss, A. L. (2008). *Basics of qulaitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing among five aproaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Croall, H. (2001). Understanding white collar crime. Buckingham, UK: Open University Press.
- Crom, S., & Bertels, T. (1999). Change leadership: The virtues of deviance. *Leadership and Organizational Development Journal*, 20(3), 162-167. doi:10.1108/01437739910268442
- Day, A. (2009). The answer is on the ground: How the positive deviance initiative helps communities solve their own problems. *Stanford Social Innovation Review, Fall 2009*, 63-64. Retrieved from http://csi.gsb.stanford.edu/answer-ground
- Denzin, N., & Lincoln, Y. S. (Eds.). (2003). *Strategies of qualitative inquiry* (2nd ed.). Thousand Oaks, CA: Sage.
- Doctors develop first eye medication in the Carib. (2009, August 16). *The Daily Gleaner online*. Retrieved from http://www.jamaica-gleaner.com/gleaner/20090816/arts/arts11.html
- Dodge, D. L. (1985). The over-negativized conceptualization of deviance: A programatic exploration. *Deviant Behavior*, 6(1), 17-37. doi:10.1080/01639625.1985.9967657
- Dorsey, D. (2000). Positive Deviant. *Fast Company, December 2000*. Retrieved from www.fastcompany.com/magazine/41/sternin.html

- Dundar, H., & Lewis, D. R. (1998). Determinants of research productivity in higher education. *Research in Higher Education*, 39(6), 607-631. doi:10.1023/A:1018705823763
- Durkheim, E. (1933). *The division of labor in society* (G. Simpson, Trans.). Glecoe, IL: The Free Press of Glencoe.
- Dutton, J. E., Glynn, M. A., & Spreitzer, G. M. (2006). Positive organization scholarship. In J. H. Greenhaus & G. A. Callanan (Eds.), *Encyclopedia of Career Development*. Thousand Oaks, CA: Sage.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550. doi:10.5465/AMR.1989.4308385
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing ethnographic fieldnotes* (2nd ed.). Chicago, IL: University of Chicago Press.
- Endler, N. S., & Magnusson, D. (1976). Toward an interactional psychology of personality. *Psychological Bulletin*, 83(5), 956-974. doi:10.1037/0033-2909.83.5.956
- Feather, N. T. (1989). Attitudes towards the high achiever: The fall of the tall poppy. *Australian Journal of Psychology*, 41(3), 239-267. doi:10.1080/00049538908260088
- Feather, N. T. (1991). Attitudes towards the high achiever: Effects of perceiver's own level of competence. *Australian Journal of Psychology*, *43*(3), 121-124. doi:10.1080/00049539108260134
- Feather, N. T. (1994). Attitudes towards high achievers and reactions to their fall: Theory and research concerning tall poppies. In M. P. Zanna (Ed.), *Advances in experimental psychology* (Vol. 26, pp. 1-74). San Diego, CA: Academic Press.
- Fielding, K. S., Hogg, M. A., & Annandale, N. (2006). Reactions to positive deviance: Social identity and attribution dimensions. *Group Processes and Intergroup Relations*, 9(2), 199-218. doi:10.1177/1368430206062077
- Fineman, S. (2006). On being positive: Concerns and counterpoints. *Academy of Management Review*, 31(2), 270-291. doi:10.5465/AMR.2006.20208680

- Fitzgerald, S. P., Murrell, K. L., & Newman, L. H. (2001). Appreciative Inquiry: The new frontier. In J. Waclawski & A. H. Church (Eds.), *Organization development: Data driven methods for change* (pp. 203-221). San Francisco, CA: Jossey-Bass.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(3), 219-245. doi:10.1177/1077800405284363
- Gall, J. P., Gall, M. D., & Borg, W. R. (2005). *Applying educational research: A practical guide* (5th ed.). Boston, MA: Pearson.
- Galperin, B. L. (2002). *Determinants of deviance in the workplace: An empirical examination in Canada and Mexico*. (Doctoral dissertation, Concordia University, Montreal, Canada). Retrieved from http://spectrum.library.concordia.ca/2433/
- Garfinkel, H. (1967). Studies in ethnomethodology. Englewood Cliffs, NJ: Prentice-Hall.
- Gelfand, M. J., Erez, M., & Aycan, Z. (2007). Cross-cultural organizational behavior. *Annual Review of Psychology*, 58(1), 479-514. doi:10.1146/annurev.psych.58.110405.085559
- Gergen, K. J. (2009). An invitation to social construction (2nd ed.). Thousand Oaks, CA: Sage.
- Gersick, C. J. G. (1991). Revolutionary change theories: A multilevel exploration of the punctuated equilibrium paradigm. *Acdemy of Management Review*, *16*(1), 10-36. doi:10.5465/AMR.1991.4278988
- Gibbs, J. P. (1965). Norms: The problem of definition and classification. *The American Journal of Sociology*, 70(5), 586-594. doi:10.1086/223933
- Gibson, R. C., Morgan, K. A. D., Abel, W. D., & Hickling, F. W. (2007). Changing the research culture at the Section of Psychiatry, The University of the West Indies, Mona. *West Indian Medical Journal*, *56*(2), 171-177. doi:10.1590/S0043-31442007000200013
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.
- Glueck, S., & Glueck, E. (1956). *Physique and delinquency*. New York, NY: Harper and Row.

- Goetz, J. P., & LeCompte, M. D. (1984). *Ethnography and qualitative design in educational research*. Orlando, FL: Academic Press.
- Goode, E. (1991). Positive deviance: A viable concept. *Deviant Behavior*, *12*(3), 289-309. doi:10.1080/01639625.1991.9967880
- Gouldner, A. W. (1954). Patterns of industrial bureaucracy. New York, NY: Free Press.
- Greenberg, D. F. (1981). *Crime and capitalism: Readings in Marxist criminology*. Palo Alto, CA: Mayfield.
- Gross, N., Mason, W. S., & McEachern, A. W. (1958). *Explorations in role analysis: Studies of the school superintendency role*. New York, NY: John Wiley and Sons.
- Hale, J. R. (1970). The making and testing of an organisational saga: A case-study of the Lutheran Theological Seminary at Gettysburg, Pennsylvania with special reference to the problem of merger, 1959 -1969 (Ed.D. Doctoral dissertation). Retrieved from ProQuest database.
- Hall, D. T., & Mansfield, R. (1971). Organizational and individual response to stress. *Administrative Science Quarterly*, 16(4), 533-547. doi:10.2307/2391771
- Hammersley, M., & Atkinson, P. (1995). *Ethnography: Principles in practice* (2nd ed.). New York, NY: Routledge.
- Hanges, P. J., Schneider, B., & Niles, K. (1990). Stability of performance: An interactionaist perspective. *Journal of Applied Psychology*, 75(6), 658-667. doi:10.1037/0021-9010.75.6.658
- Hawkins, R., & Tiedeman, G. (1975). *The creation of deviance*. Columbus, OH: Charles E. Merrill.
- Heckert, A., & Heckert, D. M. (2002). A new typology of deviance: Integrating normative and reactivist definitions of deviance. *Deviant Behavior*, 23(5), 449-479. doi:10.1080/016396202320265319

- Heckert, A., & Heckert, D. M. (2004). Using an integrated typology of deviance to analyze ten common norms of the U.S. middle class. *The Sociological Quarterly*, 45(2), 209-228. doi:10.1111/j.1533-8525.2004.tb00010.x
- Heckert, D. M. (1985). *Toward a theory of positive deviance*. (Doctoral dissertation). Retrieved from ProQuest database.
- Heckert, D. M. (1989). The relativity of positive deviance: The case of the French Impressionists. *Deviant Behavior*, 10(2), 131-144. doi:10.1080/01639625.1989.9967806
- Heckert, D. M. (1998). Positive deviance: A classificatory model. *Free Inquiry in Creative Sociology*, *26*(1), 23-30. Retrieved from ojs.library.okstate.edu/osu/index.php/FICS/article/view/1399/1247
- Herman, N. J. (1995). *Deviance: A symbolic interactionist approach*. Oxford, England: General Hall
- Hirschi, T. (1969). Causes of delinquency. Berkeley, CA: University of California Press.
- Hollinger, R. C., & Clark, J. P. (1982). Formal and informal social controls of employee deviance. *Sociological Quarterly*, 23(3), 333-343. doi:10.1111/j.1533-8525.1982.tb01016.x
- Hughes, E. C. (1971). Good people and dirty work. *The sociological eye: Selected papers*. Chicago, IL: Adline Atherton.
- Hughes, R., & Coakley, J. (1991). Positive deviance among athletes: The implications of overconformity to the sport ethic. *Sociology of Sport Journal*, 8(4), 307-325. Retrieved from http://journals.humankinetics.com/ssj-back-issues/SSJVolume8Issue4December/PositiveDevianceAmongAthletesTheImplicationsof OverconformitytotheSportEthic
- Ivey, P., Streete, T., Henry, M., & Oliver, G. (2012). Evaluating the research performance of an emergent technological university. *Global Journal of Engineering Education*, *14*(1), 132-136. Retrieved from http://www.wiete.com.au/journals/GJEE/Publish/vol14no1/17-Ivey-P.pdf

- Jaffe, A. B. (1989). Real effects of academic research. *American Economic Review*, 79(5), 957-970. Retrieved from http://www.jstor.org/discover/10.2307/1831431?uid=3738312&uid=2&uid=4&sid=2110 2710802511
- James, L. A., & James, L. R. (1989). Integrating work environment perceptions: Explorations into the measurement of meaning. *Journal of Applied Psychology*, 74(5), 739-751. doi:10.1037/0021-9010.74.5.739
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24(4), 602-611. doi:10.2307/2392366
- Johns, G. (2001). In praise of context. *Journal of Organizational Behavior*, 22(1), 31-42. doi:10.1002/job.80
- Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review*, 31(2), 386-408. doi:10.5465/AMR.2006.20208687
- Johnson, B. (1996). *Polarity management: Identifying and managing unsolvable problems*. Amherst, MA: HRD Press.
- Kahn, R. L., Wolf, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity*. New York, NY: John Wiley and Sons.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed.). New York, NY: John Wiley & Sons.
- Katz, J. (1988). Seductions of crime: Moral and sensual attractions in doing evil. New York, NY: Basic Books.
- Kelly, D. H. (1979). *Deviant behavior: Readings in the sociology of deviance*. New York, NY: St. Martin's Press.
- Kelman, H. C. (1969). Manipulation of human behavior: An ethical dilemma for the social scientist. In W. G. Bennis, K. D. Benne, & R. Chin (Eds.), *The planning of change* (2nd ed.). London, England: Holt, Rinehart & Winston.

- Kim, H., & Markus, H. R. (1999). Deviance or uniqueness, harmony or conformity? A cultural analysis. *Journal of Personality and Social Psychology*, 77(4), 785-800. doi:10.1037/0022-3514.77.4.785
- Kim, J., Lee, S. J., & Marschke, G. (2005). The influence of university research on industrial innovation. *NBER Working Paper Series, Working Paper 11447*. Retrieved from http://www.nber.org/papers/w11447.pdf
- Kitsuse, J. I., & Cicourel, A. V. (1963). A note on the uses of official statistics. *Social Problems*, 11(2), 131-139. doi:10.1525/sp.1963.11.2.03a00020
- Kogan, M., & Teichler, U. (2007). *Key challenges to the academic profession*. Paper presented at the UNESCO Forum on Higher Education Research and Knowledge, Kassel, Germany. Retrieved from http://portal.unesco.org/pv_obj_cache/pv_obj_id_27421953D9F0A8E88100CBD8958FC208B3021200/filename/Key_Challanges_Academic_Profession_REV.pdf
- Kotter, J. P. (Ed.). (1978). *Organization dynamics: Diagnosis and intervention*. Boston, MA: Addison-Wesley.
- Lam, A. (2000). Tacit knowledge, organizational learning and societal institutions: An integrated framework. *Organization Studies*, *21*(3), 487-513. doi:10.1177/0170840600213001
- Lather, P. (1986). Research as praxis. *Harvard Educational Review*, *56*(3), 257-278. Retrieved from http://her.hepg.org/content/bj2h231877069482/?p=de6c3e7691e74d739dbd0b44c88f552 9&pi=2
- Lemert, E. M. (1967). *Human deviance, social problems and social control*. Englewood Cliffs, NJ: Prentice-Hall.
- Levesque, L. L. (2001). *Role creation processes in start-up firms*. (Doctoral dissertation). Retrieved from University Microforms International database. (UMI No. AAT 3040472)
- Lewin, K. (Ed.). (1951). *Field theory in social science: Selected theoretical papers*. London, England: Harper and Row.

- Lewis, J. (2009). Positive deviance: A case study in finding and harnessing the wisdom of organizational communities. *Business Information Review*, 26(4), 282-287. doi:10.1177/0266382109349643
- Liden, R. C., & Antonakis, J. (2009). Considering context in psychological leadership research. *Human Relations*, 62(11), 1587-1605. doi:10.1177/0018726709346374
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Newbury Park, CA: Sage.
- Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed., pp. 163-188). Thousand Oaks, CA: Sage.
- Lipset, S. M., Trow, J. A., & Coleman, J. S. (1956). *Union Democracy*. New York, NY: Free Press.
- Liska, A., & Messner, S. (1999). *Perspectives on crime and deviance*. Upper Saddle River, NJ: Prentice-Hall.
- Lofland, J., & Lofland, L. H. (1995). *Analyzing social settings: A guide to qualitative observation and analysis* (3rd ed.). Belmont, CA: Wadsworth.
- Lombroso, C. (1912). *Crime, its causes and remedies* (H. P. Horton, Trans.). Boston, MA: Little, Brown and Co.
- Malinowski, B. (1945). *The dynamics of culture change: An inquiry into race relations in Africa* (P. M. Kaberry Ed.). New Haven, CT: Yale University Press.
- Markova, G. (2006). Every cloud has a silver lining: Positive effects of deviant coworkers. (Doctoral dissertation). Retrieved from ProQuest database.
- Marques, J. M., Abrams, D., Paez, D., & Martinez-Taboado, C. (1998). The role of categorization and in-group norms in judgements of groups and their members. *Journal of Personality and Social Psychology*, 75(4), 976-988. doi:10.1037/0022-3514.75.4.976
- Marques, J. M., Abrams, D., & Serodio, R. G. (2001). Being better by being right: Subjective group dynamics and derogation of in-group deviants when generic norms are

- undermined. *Journal of Personality and Social Psychology*, 81(3), 436-447. doi:10.1037/0022-3514.81.3.436
- Marques, J. M., & Paez, D. (1994). The 'Black Sheep Effect': Social categorization, rejection of ingroup deviates, and perception of group variability. *Special Issue: European Review of Social Psychology*, *5*(1), 37-68. doi:10.1080/14792779543000011
- Marsh, D. R., Schroeder, D. G., Dearden, K. A., Sternin, J., & Sternin, M. (2004). The power of positive deviance. *BMJ*, 329(7475), 1177-1179. doi:10.1136/bmj.329.7475.1177
- Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey-Bass.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Merton, R. K. (1957). Social theory and social structure. Glencoe, IL: Free Press.
- Merton, R. K. (1995). Opportunity structure: The emergence, diffusion, and differentiation of a sociological concept, 1930s-1950s. In F. Adler & W. S. Laufer (Eds.), *The legacy of anomie theory* (pp. 3-78). New Brunswick, NJ: Transaction.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.
- Miller, E. L. (2007a). First Septennial Review Report of the University of Technology, Jamaica Retrieved from University of Technology, Jamaica website: http://www.utech.edu.jm/about/pdfs/Septennial%20Review.pdf
- Miller, E. L. (2007b). Research and higher education policies for transforming societies: Perspectives from the Anglophone Caribbean. In M. Mollis & M. N. Voehl (Eds.), *Research and Higher Education policies for transforming societies: Perspectives from Latin America and the Caribbean* (pp. 59-78). Paris, France: UNESCO. Retrieved from http://portal.unesco.org/education/admin/file_download.php/Selected_proceedings_LAC_2007.pdf?URL_ID=55152&filename=11979677755Selected_proceedings_LAC_2007.pdf&filetype=application%2Fpdf&filesize=508475&name=Selected_proceedings_LAC_2007.pdf&location=user-S/

- Miller, G. (1997a). Building bridges: The possibility of analytic dialogue between ethnography, conversation analysis and Foucault. In D. Silverman (Ed.), *Qualitative research: Theory, method and practice* (pp. 45-62). London, England: Sage.
- Miller, G. (1997b). Contextualizing texts: Studying organizational texts. In G. Miller & R. Dingwall (Eds.), *Context and method in qualitative research* (pp. 77-91). London, England: Sage.
- Miller, G., & Holstein, J. A. (1995). Dispute domains: Organizational contexts and dispute processing. *Sociological Quarterly*, *36*(1), 37-59. doi:10.1111/j.1533-8525.1995.tb02319.x
- Miller, G., & Holstein, J. A. (1996). *Dispute domains and welfare claims*. Greenwich, CT: JAI Press.
- Miller, J. M., Wright, R. A., & Dannels, D. (2001). Is deviance "Dead"?: The decline of a sociological research specialization. *The American Sociologist*, 32(3), 43-59. doi:10.1007/s12108-001-1027-2
- Miner, A. S. (1985). The strategy of serendipity: Ambiguity, uncertainty and idiosyncratic jobs (organizational structure, internal labor markets, emergent models, discovery, innovation). (Doctoral dissertation). Retrieved from University Microforms International database. (UMI No. AAT 8511335)
- Miner, A. S. (1987). Idiosyncratic jobs in formalized organizations. *Administrative Science Ouarterly*, 32(3), 327-351. doi:10.2307/2392908
- Moustakas, C. (1994). Phenomenological research methods. Thousand Oaks, CA: Sage.
- Nicholson, N. (1984). A theory of work role transitions. *Administrative Science Quarterly*, 29(2), 172-191. doi:10.2307/2393172
- Nobelprize.org. (2013). *Lists of Nobel Prizes and Laureates*. Retrieved from http://www.nobelprize.org/nobel_prizes/lists/all/create.html?active=1&cat_all=all&year1 =1901&year2=2012&laureate=Type+a+name+or+names+of+a+Laureate&born1_year=0 &born1_month=0&born1_day=0&born2_year=0&born2_month=0&born2_day=0&citati on=Type+a+word+or+words+from+the+prize+motivation+text&sorting=year

- Ochieng, C. M. O. (2007). Development through positive deviance and its implications for economic policy making and public administration in Africa: The case of Kenyan agricultural development, 1930-2005. *World Development*, 35(3), 454-479. doi:10.1016/j.worlddev.2006.04.003
- OECD. (2012). OECD Publications: Measuring R&D in developing countries: Annex to the Frascati Manual. Retrieved from UNESCO Institute for Statistics website: http://www.uis.unesco.org/Library/Pages/DocumentMorePage.aspx?docIdValue=291&docIdFld=ID
- Onyefulu, C. C., & Ogunrinade, A. F. (2005). Kick-starting research in newly emergent universities: Why faculty do not apply for research development 'seed' funding at the University of Technology, Jamaica. *Journal of Research Administration*, *XXXVI*(2), 14-22. Retrieved from http://www.srainternational.org/sra03/uploadedFiles/Vol36Issue2.pdf
- Ostroff, C. (1992). The relationship between satisfaction, attitudes, and performance: An organizational level analysis. *Journal of Applied Psychology*, 77(6), 963-974. doi:10.1037/0021-9010.77.6.963
- Pascale, R. T., & Sternin, J. (2005). Your company's secret change agents. *Harvard Business Review*, 83(5), 72-81. Retrieved from http://hbr.org/2005/05/your-companys-secret-change-agents
- Pascale, R. T., Sternin, J., & Sternin, M. (2010). The power of positive deviance: How unlikely innovators solve the world's toughest problems. Boston, MA: Harvard Business Press.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Perkins, J. A. (1973). The university as organization. In J. A. Perkins (Ed.), *Conflicting responsibilities of governing boards* (pp. 28). New York, NY: McGraw-Hill.
- Peterson, D. K. (2002). Deviant workplace behavior and the organization's ethical climate. *Journal of Business and Psychology, 17*(1), 47-61. doi:10.1023/A:1016296116093
- Pinto, J., Leana, C. R., & Pil, F. K. (2008). Corrupt organizations or organizations of corrupt individuals?: Two types of organization-level corruption. *Academy of Management Review*, *33*(3), 685-709. doi:10.5465/AMR.2008.32465726

- Pratt, M., Margaritis, D., & Coy, D. (1999). Developing a research culture in a university faculty. *Journal of Higher Education Policy and Management, 21*(1), 43-55. doi:10.1080/1360080990210104
- Quinney, R. C. (1974). *Critique of legal order: Crime control in capitalist society*. Boston, MA: Little, Brown.
- Raelin, J. A. (1994). Three scales of professional deviance within organizations. *Journal of Organizational Behavior*, 15(6), 483-501. doi:10.1002/job.4030150602
- Ramsden, P. (1994). Describing and explaining research productivity. *Higher Education*, 28(2), 207-226. doi:10.1007/BF01383729
- RICYT. (2002). Red de indicadores de ciencia y technologia (RICYT): Iberoamericana e interamericana. Retrieved from http://db.ricyt.org/query/JM/1990,2010/calculados
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, *38*(2), 555-572. doi:10.2307/256693
- Rosen, M. (1991). Coming to terms with the field: Understanding and doing organizational ethnography. *Journal of Management Studies*, 28(1), 1-24. doi:10.1111/j.1467-6486.1991.tb00268.x
- Rossi, K. (2003). Appreciative inquiry: An overview. Retrieved from http://appreciativeinquiry.case.edu/practice/toolsModelsPPTsDetail.cfm?coid=4028
- Rousseau, D. M. (1985). Issues of level in organizational research: Multi-level and cross-level perspectives. *Research in Organizational Behavior*, (7), 1-37. Retrieved from http://wweb.uta.edu/management/Dr.Casper/Spring2011/6311/Articles/WK%2010%20-%20Rouseesau.pdf
- Rousseau, D. M., & Fried, Y. (2001). Location, location, location: Contextualizing organizational research. *Journal of Organizational Behavior*, 22(1), 1-13. doi:10.1002/job.78
- Rubin, H. J., & Rubin, I. S. (1995). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage.

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68-78. doi:10.1037/0003-066X.55.1.68
- Sagarin, E. (1985). Positive deviance: An oxymoron. *Deviant Behavior*, *6*(2), 169-181. doi:10.1080/01639625.1985.9967668
- Saldana, J. (2009). The coding manual for qualitative researchers. Los Angeles, CA: Sage.
- Scarpitti, F. R., & McFarlane, P. T. (1975). *Deviance: Action, reaction, interaction*. Reading, MA: Addison-Wesley.
- Schein, E. H. (1988). Organizational socialization and the profession of management. *Sloan Management Review, Fall*, 53-65. Retrieved from http://sloanreview.mit.edu/article/organizational-socialization-and-the-profession-of-management/
- Schein, E. H. (1992). Organizational culture and leadership. San Francisco, CA: Josey-Bass.
- Schein, E. H. (1996). *Organizational culture and leadership* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Schneider, B. (1983). Interactional psychology and organizational behavior. *Research in Organizational Behavior*, *5*, 1-31. Retrieved from http://psycnet.apa.org/psycinfo/1984-10948-001
- Schuessler, K. F., & Cressey, D. R. (1950). Personality characteristics of criminals. *American Journal of Sociology*, 55(5), 476. doi:10.1086/220588
- Schumacher, S., & McMillan, J. H. (1993). *Research in education: A conceptual introduction* (3rd ed.). New York, NY: Harper Collins College Publishers.
- Schur, E. M. (1971). Labeling deviant behavior. New York, NY: Harper and Row.
- Schwandt, T. A. (1997). Qualitative inquiry: A dictionary of terms. Thousand Oaks, CA: Sage.

- Segal, M. (1997). *Points of influence: A guide to using personality theory at work* (1st ed.). San Francisco, CA: Josey-Bass.
- Seidman, W., & McCauley, M. (2009). A scientific model for grassroots OD. *Organization Development Journal*, 27(2), 27-37. Retrieved from http://www.cerebyte.com/articles/Scientific%20Grassroots%20OD.pdf
- Selznick, P. (1949). TVA and the grass roots. Berkeley, CA: University of California Press.
- Senge, P. M. (1990). *The fifth discipline: The art & practice of the learning organization*. New York, NY: Currency Doubleday.
- Sheldon, W. H. (1949). Varieties of delinquent youth. New York, NY: Harper and Row.
- Silcox, S., & Miller, E. L. (1989). *College of Arts, Science and Technology: An assessment of capabilities* (Report of The Agency for International Development Mission to Jamaica). Retrieved from USAID website: http://pdf.usaid.gov/pdf docs/pdaba840.pdf
- Spradley, J. P. (1979). *The ethnographic interview*. Belmont, CA: Wadsworth, Cengage Learning.
- Spreitzer, G. M., & Sonenshein, S. (2003). Positive deviance and extraordinary organizing. In K. Cameron, J. Dutton, & R. Quinn (Eds.), *Positive organizational scholarship* (pp. 207-224). San Francisco, CA: Berrett-Koehler.
- Spreitzer, G. M., & Sonenshein, S. (2004). Toward the construct definition of positive deviance. *The American Behavioral Scientist*, 47(6), 828-847. doi:10.1177/0002764203260212
- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage.
- Stanton, A., & Schwartz, M. (1954). The mental hospital. New York, NY: Basic Books.
- Sternin, J. (2003). Practice positive deviance for extraordinary social and organizational change. In D. Ulrich, M. Goldsmith, L. Carter, J. Bolt & N. Smallwood (Eds.), *The change champion's fieldguide: Strategies and tools for leading change in your organization* (pp. 20-37). New York, NY: Best Practice.

- Sternin, J., & Choo, R. (2000). The power of positive deviancy. *Harvard Business Review*, (January-February), 14-15. Retrieved from http://hbr.org/2000/01/the-power-of-positive-deviancy/ar/1
- Sternin, M., Sternin, J., & Marsh, D. R. (1997). Rapid, sustained childhood malnutrition alleviation through a "positive deviance" approach in rural Vietnam: Preliminary findings. In E. Keeley, B. R. Burkhalter, O. Wollinka, & N. Bashir (Eds.), *The hearth nutrition model: Applications in Haiti, Vietnam, and Bangladesh, Report of a Technical Meeting at World Relief Corporation*. Arlington, VA: Basics.
- Stock, R. W. (1968, October 20, 1968). XYY and the criminal. *The New York Times Magazine*, 30-31, 90-104.
- Stotland, E., & Kobler, A. L. (1965). *Life and death of a mental hospital*. Seattle, WA: University of Washington Press.
- Sudnow, D. A. (1965). Normal crimes: sociological features of the Penal Code in a public defender's office. *Social Problems*, 12(3), 255-272. doi:10.2307/798932
- Sudnow, D. A. (1967). *Passing on: The social organisation of dying*. Englewood Cliffs, NJ: Prentice-Hall.
- Sumner, C. (1994). The sociology of deviance: An obituary. New York, NY: Continuum.
- Sutherland, E. H. (1939). *Principles of criminology* (3rd ed.). New York, NY: Lippincott.
- Sutherland, E. H., & Cressey, D. R. (1979). Differential association theory. In D. H. Kelly (Ed.), *Deviant behavior: Readings in the sociology of deviance* (pp. 93-99). New York, NY: St. Martin's Press.
- Sykes, G. M. (1958). The society of captives. Princeton, NJ: Princeton University Press.
- Tarantino, D. P. (2005). Positive deviance as a tool for organizational change. *Physician Executive*, 31(5), 62-63. Retrieved from http://search.proquest.com/
- Terborg, J. R. (1981). Interactional psychology and research on human behavior in organizations. *Academy of Management Review*, *6*(4), 569-576. doi:10.5465/AMR.1981.4285691

- Thio, A. B. (2005). Sociology: A brief introduction. Boston, MA: Pearson/Allyn & Bacon.
- Thio, A. B., & Thio, A. (2004). Deviant behavior (7 ed.). Boston, MA: Allyn & Bacon.
- Thomas, W. I., & Thomas, D. S. (1928). *The child in America: Behavior problems and programs*. New York, NY: Knopf.
- Tortello, R. (2003). Famous Jamaican scientists: Dreamers among us The father of Jamaican cattle, Dr. The Hon. Thomas P. Lecky, PhD, O.M., O.J., O.B.E. (1904-1994) *Pieces of the past*. Retrieved from http://www.jamaica-gleaner.com/pages/history/story/0053.htm
- Traub, S. H., & Little, C. B. (Eds.). (1999). *Theories of deviance* (5th ed.). Itasca, IL: F.E. Peacock.
- Tropical Medicine Research Institute for UWI. (1999, September 14). *The Daily Gleaner online archive*. Retrieved from http://newspaperarchive.com/kingston-gleaner/1999-09-14/page-15
- Truscot, B. (1951). Red brick university. Harmondsworth, United Kingdom: Penguin.
- Turner, R. H. (1990). Role change. *Annual Review of Sociology*, *16*(1), 87-110. doi:10.1146/annurev.so.16.080190.000511
- UNESCO. (2010). UNESCO Institute for Statistics: Measuring R&D: Challenges faced by developing countries (Technical Paper No. 5). Retrieved from UNESCO Institute for Statistics website: http://www.uis.unesco.org/Library/Documents/tech%205-eng.pdf
- University of Technology, Jamaica. (2009a). *About UTech: Our history*. Retrieved from http://www.utechjamaica.edu.jm/about/overview/history.html
- University of Technology, Jamaica. (2009b). *Message from Vice President, Graduate Studies, Research and Entrepreneurship*. Retrieved from http://www.utechjamaica.edu.jm/Grad Enrolment/
- University of Technology, Jamaica. (2010). *Annual Report 2009 2010*. Retrieved from University of Technology, Jamaica website: http://www.utechjamaica.edu.jm/about/pdfs/UtechAnnualReport.pdf

- University of Technology, Jamaica. (2012). *Annual Report 2011 2012*. Retrieved from University of Technology, Jamaica website: http://www.utechjamaica.edu.jm/about/pdfs/AnnualREPORT2011 12.pdf
- Uzoka, F. E. (2008). A fuzzy-enhanced multicriteria decision analysis model for evaluating university academics' research output. *Information, Knowledge, Systems Management, 7*, 273-299. Retrieved from http://iospress.metapress.com/content/ng252258717339vl/
- Vaill, P. B. (2007). F. J. Roethlisberger and the elusive phenomena of organization behavior. *Journal of Management Education*, 31(3), 321–338. doi:10.1177/1052562906298444
- Van den Hoonaard, W. C. (1997) Working with synthesizing concepts: Analytical field research. *Qualitative Research Method Series: Vol. 41.* Thousand Oaks, CA: Sage.
- Van Maanen, J. (1979). The fact of fiction in organizational ethnography. *Administrative Science Quarterly*, 24(4), 539-550. doi:10.2307/2392360
- Vold, G. B. (1979). Group conflict theory as explanation for crime. In D. H. Kelly (Ed.), *Deviant behavior: Readings in the sociology of deviance* (pp. 134-145). New York, NY: St. Martin's Press.
- Von Hentig, H. (1947). Redhead and outlaw. *Journal of Criminal Law and Criminology*, 38(May-June), 1-6. Retrieved from http://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=3448&contex t=jclc
- Warren, D. E. (2001). A multimethod examination of constructive and destructive deviance in organizations. (Doctoral dissertation), University of Pennsylvania. Retrieved from http://search.proquest.com//docview/251765458
- Warren, D. E. (2003). Constructive and destructive deviance in organizations. *Academy of Management Review*, 28(4), 622-632. doi:10.5465/AMR.2003.10899440
- Weick, K. E. (1993). The collapse of sensemaking in organizations: The Mann Gulch disaster. *Administrative Science Quarterly*, 38(4), 628-652. doi:10.2307/2393339
- Weisbord, M. R. (1987). *Productive workplaces: Organizing and managing for dignity, meaning and community.* San Francisco, CA: Jossey-Bass.

- Wilkins, L. T. (1965). Social deviance. Engelwood Cliffs, NJ: Prentice-Hall.
- Williams, R. (1980). *Problems in materialism and culture: Selected essays*. London, England: New Left Books/Verso.
- WorldBank. (2002). *Research and development expenditure (% of GDP)*. Retrieved from WorldBank website: http://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS?page=2
- Yin, R. K. (1993). *Applications of case study research: Applied social research methods* (Vol. 34). Newbury Park, CA: Sage.
- Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Zeitlin, M., Ghassemi, H., & Mansour, M. (1990). Positive deviance in child nutrition with emphasis on psychosocial and behavioral aspects and implications for development. Retrieved from http://bvs.per.paho.org/texcom/nutricion/posdev.pdf
- Zimmerman, D. H. (1969). Record-keeping and the intake process in a public welfare agency. In S. Wheeler (Ed.), *On record: Files and dossiers in American life* (pp. 319-354). New York, NY: Russell Sage.

APPENDIX A

UTech Call and Description of President's Research Initiative Award

SCHOOL OF GRADUATE STUDIES, RESEARCH AND ENTREPRENEURSHIP (SGSRE)
University of Technology, Jamaica

Exts: 3204/3139/3124

Email: sgsre@utech.edu.jm

PRESIDENT'S RESEARCH INITIATIVE AWARD 2013 CALL FOR NOMINATIONS

Nominations are now being accepted for the 10th PRESIDENT'S RESEARCH INITIATIVE AWARD.

The President's Research Initiative Award is the University's most prestigious award in recognition of individual initiative aimed at promoting research excellence in the University.

ELIGIBILITY

- All full time Academic staff members are eligible to be considered for the award.
- The award will be based on the nominee's research track record for the past three (3) years.

Nominations are to be submitted to the respective <u>Faculty Graduate Studies</u>, <u>Research and Entrepreneurship Coordinators</u>.

DEADLINE FOR THE NOMINATIONS

The deadline for receipt of all nominations is <u>Wednesday</u>, <u>April 24</u>, <u>2013</u>. The award will be given during the Annual University Awards Function, <u>Friday</u>, <u>May 10</u>, <u>2013</u>.

Each nomination must be accompanied by:

- 1. A curriculum vitae
- 2. A short justification (including an indication of how the individual's work supports Faculty's or University's research plan)
- 3. Two written reports from anyone familiar with the individual's work. *Reports or copies of 2 research publications or other outputs that best exemplify the candidate's work.*

The guidelines for the award are attached.

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THE PRESIDENT'S RESEARCH INITIATIVE AWARD

1.0 Background

The University of Technology, Jamaica (UTech) is committed to developing its research activities and graduate studies to a world class standard. Towards this end, UTech's vision is to develop its research capability through manpower development and investments in infrastructure. One of the essential steps for achieving UTech's vision of research excellence is by giving appropriate encouragement and incentives to academic staff in the pursuit of research initiatives in all areas inclusive of the main university research themes – Business and Micro Enterprises, Information and Communication Technologies, Higher Education Policy and Research, Health Policy and Research, Alternative Energy, New Technologies and Natural Products, Housing and the Environment.

The President's award to be called **'The President's Research Initiative Award'** is the university's most prestigious award in recognition of individual initiative aimed at promoting research excellence in the university.

2.0 The Purpose

The purpose of the award is to stimulate research and scholarly activities by encouraging and supporting individuals who demonstrate exceptional ability through their scholarly activities, research publications, research income generation and secure grants making, creative research activity and other research outputs. The award will be made annually.

3.0 Eligibility

3.1 All full-time academic staff at the University of Technology, Jamaica are eligible to be considered for the award annually. It is to the candidate's advantage (but not essential) to possess a doctoral or research postgraduate degree. 3.2 The award will be based on the nominee's research track record over the past three years preceding the award.

http://www.utechjamaica.edu.jm/offices/SGSRE/RESEARCH/Presidents research initiative award.htm

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4.0 The Award

- -The award will be made to any individual who shows evidence of selfinitiated research of a novel nature, any creative endeavour in support of research or any other research output worthy of exceptional recognition.
- -The award will be in the form of a plaque and cash.
- -The awardee's name and year of achievement will be added to the University's Honour Roll in the lobby of the Administrative Building.

5.0 The Criteria for the Award

Nominees must demonstrate exceptional research initiative as indicated by either individual research creativity, team leadership in research, postgraduate research and supervision and (exceptionally), undergraduate supervision, research mentorship or any other individual/faculty initiatives which may include:

- 5.1 Publication of at least 2 peer-reviewed research and papers and/or contributions in books or chapters in books
- 5.2 Consultancy and technical reports
 - 5.3 Faculty Initiatives in Research such as:
 - Securing national approved grant schemes or industry research grants
 - National/International Research Recognition
 Major exhibitions of work/designs
 - Conference Organisation/Journal Editorship
- 5.4 Intellectual property output— copyrights and patents

6.0 The Selection Process

- 6.1 Submissions must be sent by individuals to their Faculty Research Coordinator, who
 will then forward the nominations to the ORGS.
- 6.2 Each nomination must be accompanied by a full curriculum vitae, a short justification
 (including an indication of how the individual's work supports Faculty's or University's
 research plan) and 2 written reports from anyone familiar with the individuals work.
 Reports or copies of 2 research publications or other outputs that best exemplify the
 candidate's work.
- 6.3 Nominations will be screened by the Research Committee of the Academic Board.

7.0 Granting of the Award

The Research Committee may use its discretion not to make recommendation if in its judgment, no nominee meets the criteria.

8.0 Inaugural Award

To be made in the Academic Year 2003/2004 as readapted in 2006.

http://www.utechjamaica.edu.jm/offices/SGSRE/RESEARCH/Presidents research initiative award.htm

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EVALUATION CRITERIA

The candidate will be evaluated against the following criteria:

	TOTAL	100 points
6	Research Supervision / Mentorship	10 points
5	Research Funding / Income generation	10 points
4	Leadership	10 points
3	Contribution to the University Mission	20 points
2	National or International contribution	20 points
1	Contribution to new knowledge	30 points

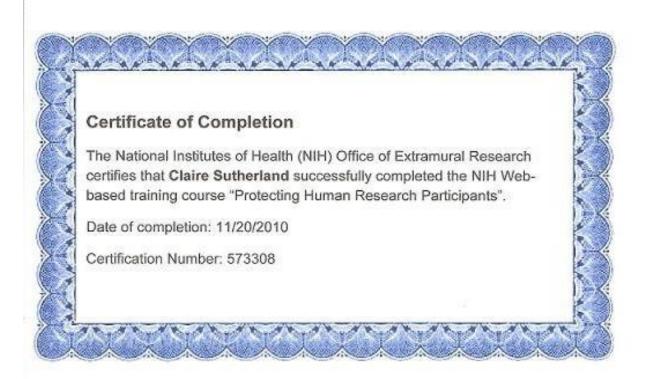
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http://www.utechjamaica.edu.jm/offices/SGSRE/RESEARCH/Presidents_research_initiative_award.htm

5/1/2013

APPENDIX B

National Institutes of Health (NIH) Training Certificate



APPENDIX C

Pepperdine IRB Approval Letter

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

June 14, 2012

Claire Sutherland

Protocol #: E0612D02

Project Title: Positive Deviant (exceptional performing) researchers in a Jamaican University and Some Implications for Organization Change: An Exploratory Case Study of the University of Technology, Jamaica

Dear Ms. Sutherland:

Thank you for submitting your application, *Positive Deviant (exceptional performing) researchers in a Jamaican University and Some Implications for Organization Change: An Exploratory Case Study of the University of Technology, Jamaica,* for exempt review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work you and your faculty advisor, Dr. Kenneth Murrell, have done on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations (45 CFR 46 - http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html) that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states:

(b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:

Category (2) of 45 CFR 46.101, research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: a) Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

In addition, your application to alter and waive documentation of consent, as indicated in your **Application for Waiver or Alteration of Informed Consent Procedures** form has been **approved**.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our

best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Jean Kang, CIP

Manager, GPS IRB & Dissertation Support

Pepperdine University

Graduate School of Education & Psychology

6100 Center Dr. 5th Floor Los Angeles, CA 90045

jean.kang@pepperdine.edu

W: 310-568-5753 F: 310-568-5755

cc: Dr. Lee Kats, Associate Provost for Research & Assistant Dean of Research, Seaver College

Ms. Alexandra Roosa, Director Research and Sponsored Programs

Dr. Yuying Tsong, Interim Chair, Graduate and Professional Schools IRB

Ms. Jean Kang, Manager, Graduate and Professional Schools IRB

Dr. Kenneth Murrell Ms. Christie Dailo

APPENDIX D

UTech Research Ethics Approval Letter

SCHOOL OF GRADUATE STUDIES, RESEARCH AND ENTREPRENEURSHIP University of Technology, Jamaica

RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE

REF: 2012/HE/06/266 PF	ROTOCOL NOMBER
PROJECT: Positive Deviant (Exceptional Funiversity and Some Implications for Organithe University of Technology, Jamaica	Performing) Researchers in a Jamaican nizing Change: An Exploratory Case Study of
INVESTIGATOR/S: Claire Sutherland	
INSTITUTION: Peperdine University	DATE CONSIDERED: June 22, 2012
DECISION OF COMMITTEE*: APPROVED	
CHAIRMAN'S SIGNATURE:	10 h l DATE: June 22, 2012
Dr. Cynthia	a Önyefulu
"Guidelines for written "informed consent" attached	where applicable.
Supervisor: Dr. Kenneth Murrell	
Copy:	
DECLARATION O	F INVESTIGATOR(S)
To be completed in duplicate and ONE COPY retur in FELS, UTech.	ned to the Office of Research and Graduate Studies,
research and I/we guarantee to ensure compliance contemplated from the research procedure as appro-	m/we are authorized to carry out the abovementioned with these conditions. Should any departure to be oved I/we undertake to resubmit the protocol to the
Committee.	- 1
DATE: June 22, 2012 SI	GNATURE:
PROTOCOL NO:	

PLEASE QUOTE THE REFERENCE NUMBER IN ALL ENQUIRIES

APPENDIX E

Documented Informed Consent if Research Participant Wishes 45 CFR 46.117(c)(1)

Inf	ormed	C	onsent	for	Partici	pation	in .	Research	ı Ac	ctiv	ities	3
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Participant:
Principal Investigator: Miss Claire Sutherland
Title of Project: Positive deviant (exceptional performing) researchers in a Jamaican university
and some implications for organization change: An exploratory case study of the University
of Technology, Jamaica.

- 1. I, agree to participate in the research study conducted by Miss Claire Sutherland under the direction of Dr. Kenneth Murrell, Graduate School of Education and Psychology, Pepperdine University, California, USA, in partial fulfillment of the requirements for a doctorate in Organization Change at Pepperdine University, USA.
- 2. My participation is voluntary, confidential and provides data for the research. It will involve verbally responding to questions, reflecting on and describing my experiences as a researcher at UTech during an approximately 90 minute interview.
- 3. The purpose of this research is to understand exceptional performing researchers and the organizational context within which they operate at the University of Technology, Jamaica (UTech).
- 4. I understand that there is no direct benefit to me from my participation in this study and I will not be compensated for my participation. Understanding exceptional performing researchers at UTech would yield knowledge of benefit to researchers and policy-makers.
- 5. I understand that there are minimal risks and discomforts that might be associated with this research. These risks might include possible fatigue from the length of the interview. In the event that I experience discomfort a break will be provided.
- 6. I understand that I may choose to not participate in this research or to not answer every question posed to me. My job status will not be affected if I refuse to participate or should withdraw my participation in this study.
- 7. I understand that my participation is voluntary and that I may refuse to participate and/or withdraw my consent and discontinue participation in the interview at any time without penalty or loss of benefits to which I am otherwise entitled.
- 8. I understand and agree that the interview will be audio-taped. The audio recordings of the entire interview will be transcribed by a transcriber and I will receive a transcript of the interview for review and correction. My name will not be associated with the audiotapes or transcripts of my interview. My name will be substituted with a code which will be maintained separate from my identity. My name will not be used in the findings of the study or in any published or unpublished document developed from this research study. All names and codes will be stored separate from the research data and all names and codes will be destroyed by the principal investigator after the dissertation is published.
- 9. The audio recordings and transcripts of my interview are for the purposes of this research study only. Interview data and audiotapes will be stored securely for five years after

- completion of this study in password secured electronic files stored on the personal computer equipment of the principal investigator, and in a locked file cabinet to which only the principal investigator has access.
- 10. I understand that Miss Sutherland, the principal investigator, will take all reasonable measures to protect the confidentiality of my responses and my identity in the study. Steps will be taken to ensure that there is no direct or indirect link between my name or personal identifiers with the interview data. My participation will be kept confidential and I will be anonymous in the resulting documents. I understand that no information gathered from my participation in this study will be released to others without my permission, unless required by law.
- 11. I will receive a copy of the case report to be developed in this study, when it is finalized, for review. I will also receive a summary of the findings generated from this study from Miss Sutherland within one year after the completion of the research.
- 12. I understand that Miss Sutherland is willing to answer any inquiries I may have concerning the research herein described, and that I may contact Dr. Murrell if I have other questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact Yuying Tsong, Ph.D., Interim Chairperson of the Graduate and Professional Schools (GPS) Institutional Review Board (IRB), Pepperdine University c/o Jean Kang, CIP, GPS IRB and Dissertation Support Manager, Graduate School of Education and Psychology, Pepperdine University, California, USA.
- 13. I understand to my satisfaction the information regarding participation in the research project. All of my questions have been answered to my satisfaction. I have received a copy of this informed consent form which I have read and understand. I hereby consent to participate in the research described above.

Participant's Signature	
Date	
*	the research procedure in which the subject has consented is and answered any questions, I am cosigning this form t.
Principal Investigator	Date